

Bet Angel Professional

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Bet Angel Professional - User guide contents The Essential Guide to Bet Angel Professional

Welcome to Bet Angel

When I joined Betfair as one of the very first customers back in June 2000, I never dreamt how far the simple concept of a betting exchange would go.

In the early days I could see many opportunities, but the market completely lacked the tools I needed to try and achieve all the things I knew were possible. Therefore I set about creating a team that could not only create the tools but also have the vision to deliver my ideas from concept to fruition. Since those early days Bet Angel has consistently been first to deliver features that have not been seen before in sports markets. Features such as 'Keep bets' and 'cash out' first appeared in Bet Angel before being adopted by Betfair. This is something we aim to continue and we are driven by a desire to continuing to be the best of class software on the market.

We want to achieve that because that is part of my edge in the market. As I explore the markets and discover new opportunities, I am pleased to say Bet Angel has continued to mature to explore all the opportunities available. I am pleased you have chosen to use Bet Angel and would like to welcome you to the journey.

Betting exchanges have changed significantly and we should be grateful to the creators, innovators and promoters of exchanges for the hard work they have put in to bring exchanges to this point. It has opened up many ways for everybody to participate in modern betting markets and more importantly, in ways inconceivable not that long ago.

I look forward to continuing to develop Bet Angel and I am indebted to the wonderful support and work of the team here and the support of the exchanges in aiding us in our development of the product and our pursuit of excellence.

Peter Webb

Risk Notice

RISK NOTICE

Trading on betting exchanges exciting way to participate in modern betting markets. Specialist software and automation can significantly enhance your ability to profit. However, just as an expensive set of golf clubs does not improve your golf swing on their own, using specialist software does not guarantee you profitability. Be aware that because of their speed of operation and capability, software such as Bet Angel can also create potential loss making positions if used poorly, incorrectly, in error or sometimes through no fault of your own. Risk can also come from outside of your use of the market as well. Systemic risks such as computer failure or unexpected outages can occur at any stage of the exchange process. You also have user risk such as accidental use of features, failure to understand the characteristics of the software and incorrect interpretation of a market or how to trade it.

We strongly advise that you familiarise yourself with all Bet Angel capabilities as much as possible before committing large amounts of money to any particular market. You should also familiarise yourself with the markets and with the way in which the odds can move, why and also the constraints, rules and oddities with certain markets. It's not possible for us to document all the facets and quirks of the market, so we recommend you proceed carefully with any strategy and also accept that ultimately it is your responsibility to do what you can to eliminate as much as risk as possible from whatever strategy you are pursuing.

Please use Bet Angel's <u>Practice mode</u> when learning and minimum stakes while testing and trading experimental strategies to make sure you feel comfortable with the level of risk and volatility you are likely to encounter. When you feel comfortable and are more familiar with strategies and how to put them to use in a market, you can use live mode or move up to larger stakes. As such we recommend that you have a clear and consistent approach to any market so that you can minimise your exposure to all the risks detailed in this notice.

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Getting the most from Bet Angel

Bet Angel was created in an era when, before it, there was no software and no trading. We have to invent both. So we believe in more than providing just Betfair trading software, Bet Angel is much more than just a bit of software!

To aid you we have created this user guide, but also a wealth of other resources for you to explore. Check out these other areas which are packed full of additional information including trading advice and strategies.

Bet Angel - Betfair trading community

A place where traders meet to not just discuss the software but ask for advice from other users and also talk about the markets and how to trade them.

Also included on the forum are ready made examples of Advanced automation: -

https://www.betangel.com/forum/viewforum.php?f=43

And Servants: -

https://www.betangel.com/forum/viewforum.php?f=57

Bet Angel - Knowledge base & support centre

Stuck, need technical support? Then please consult our knowledge base and if that can't help contact our technical team.

https://www.betangel.com/support/

Bet Angel Academy

Learn to trade in a carefully organised and structured manner at the Bet Angel Academy. Betfair trading strategies and markets explained in a clear and structured manner.

Bet Angel TV - Hundreds of free videos

BetAngel.tv is a dedicated web site that collates hundreds of Bet Angel specific videos and displays them in a nice to understand order to get you off to the best possible start.

Bet Angel Review

This section of the user guide will allow you to review Bet Angel's key features at a glance.

We want you to be at the cutting edge

Bet Angel differentiates itself from other Betfair trading software, by not only by being more feature rich, but by also being carefully engineered to maximise your opportunities in the markets through superlative speed, flexibility and execution. This is a process that continues on each release and every Betfair betting exchange API upgrade. We want all our users to have the best possible range of features but also the best execution of your Betfair trading strategies. That work is a continuous and ongoing aspect of your relationship with Bet Angel.

For direct evidence of this and to check for the very latest features, visit the release and version history area on our forum: -

Bet Angel - Release and version history

Bet Angel contains a large number of key features designed to aid your Betfair trading strategies and address specific markets needs. Each of these features were created as a result of our and our users experience in the market, so we would encourage you to explore each of them in depth. Each one has been carefully crafted to aid a specific trading strategy or gain you an edge through optimal execution of a trading strategy.

(1) - Practice mode

Use all the features of Bet Angel, including the spreadsheet interface and automation without any risk to your money. All at the same time.

(2) - Custom screen profiles and settings

Set up multiple screens, views and tailor Bet Angel to your exact needs. Then switch between profiles quickly and easily with a mouse click.

(3) - Advanced market searching

Quickly and easily find all the markets you want to trade with Bet Angel's advanced search facility. Use logical commands to find very specific markets or broad selections of them.

(4) - One-click trading screen

Fully customisable quick betting and trading grid displaying odds horizontally. Fully design your own screen layout and add powerful custom columns.

(5) - Global settings tool and editor

Semi automate your trading by letting the global settings take care of key elements of your trade. Use the editor to create custom preset settings at a single click.

(6) - Custom columns

Want to act quickly on an opportunity you see? You don't need to rely on something you see, create your own

(7) - Ladder trading screen

Completely customisable quick betting and trading screen displaying odds vertically. Spawn multiple ladders, easy to use and very flexible.

(8) - Keyboard & gaming device shortcut editor

Speed up all your key trading functions and get your trades into the market before anybody else. Highly flexible.

(9) - Advanced Charting

Highly flexible and customisable charting tool. Create, save and view your unique view of the market with just a few mouse clicks.

(10) - Advanced Automation

Bet or trade fully automatically with this very powerful and flexible too. Works alone or in conjunction with all other elements of Bet Angel.

(11) - Servants

Bet or trade manually and get your position manually intelligently and fully automatically with this very powerful and flexible too. Works alone or in conjunction with all other elements of Bet Angel.

(12) - Manual bet screen

Want to tweak something? Use the manual bet tool to do it, or completely redesign this screen for another purpose.

(13) - Dutching

Back more than one selection for a pre-defined profit or stake and get a guaranteed return if one of your selection wins

(14) - Bookmaking

Only bookmakers win? Why not be one with this tool that can offer prices on all or part of the field

(15) - Excel spreadsheet interface

The sky is the limit when you connect Bet Angel to a spreadsheet. View, analyse, bet or trade from a spreadsheet. Contains the unique Bet Angel scripting commands and can be used together with all the other functionality in Bet Angel. Have one or multiple spreadsheets open at the same time.

(16) - In-play trader

Very intuitive way to trade in-play markets. Using a point and click interface watch the action as the market develops and use a single click to nip in ahead of the action.

(17) - Market overview

Get a quick overview of everything that is going on in the market on one screen. Full market data and an undockable charting screen covering as many or as few selections as you wish on one scalable chart.

(18) - Soccer Mystic

Unique profiling tool for football / soccer matches. Examine how the odds will move on a match before the match has started, plot graphs of future price activity so you can hunt for strategies or test the limits of what you are doing.

(19) - Tennis trader

Unique profiling tool for Tennis. Examine how the odds will move on a match before the match has started. Examine key points surrounding points, games and sets won. See the impact a break of server could have on a match.

(20) - Guardian - Multi-market Management

Very powerful, true multi-market trading tool. Use Guardian to load up a set of key markets then get Bet Angel to work on those markets, gather data or actively trade or switch to each market automatically. Contains many additional features, it's a piece of software in its own right!

(21) - Watch lists

Quickly and easily organise and view data from key markets you are interested in. Switch instantly to a market with one click. View your profitability on each and or all of them from this very useful feature.

Learn to trade and to use Bet Angel with the Bet Angel Academy

We realise there is a lot to take in here, so to learn how to use all these features and what sort of strategies you may want to try, please visit: -

www.betangelacademy.com

We have hundreds of videos on specific strategies and use of all tools within Bet Angel. If you don't see what you want, then please ask and we will put a video on the roster.

Getting started

Before you use Bet Angel there are several steps you need to take. Follow the sections below	v to get started.

Downloading and installing Bet Angel

If you wish to download your software you have two choices. Downloading in one click or saving and storing the software before installing. If you want to keep a copy of the software for multiple installation then **using your mouse**, **right click on the appropriate link and use the 'save target as' option**. Confirming will download the software onto your computer; make sure you remember where you downloaded the software to! The software is contained in a self-extracting exe file. When downloaded double click on the exe file and the installation process will begin. Please follow the on screen instructions and use this guide from step two. The simplest way to install Bet Angel is to install it with one click (as detailed below)

One click downloading and installing

Step one

Locate and click on the download link you see at http://downloads.betangel.com or the link you have been provided with. After a short period to download the software, the speed of which will vary according to your Internet connection, the following dialog box will appear.



Click on the 'Run' button.

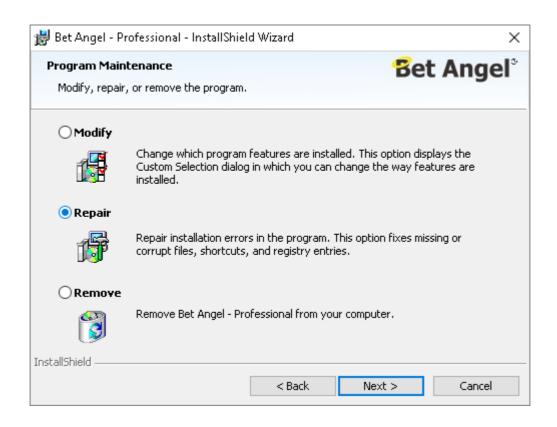
Step two

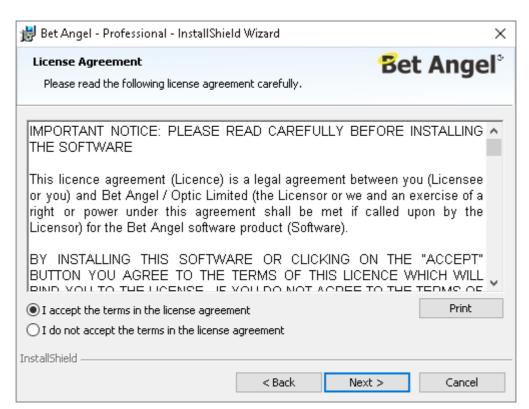
Depending upon your security settings you may see a message regarding file security. Click options and allow the file to install or run.

Follow the instructions on screen.

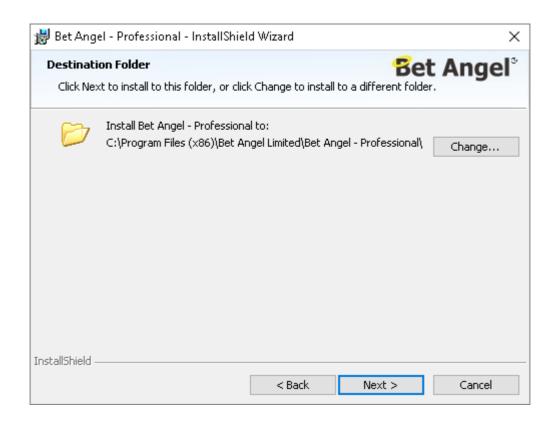
Upgrading (repairing) or removing Bet Angel Professional

If you are installing Bet Angel for the first time then you will see a confirmation screen and asked to agree to our license terms and conditions. If you have a previous version of Bet Angel installed you will be given the choice of overwriting your existing version by choosing 'Repair' or performing a fresh installation by removing the previous version. Make your choice as appropriate. If you chose to remove Bet Angel you will need to perform the installation routine again.





Before using Bet Angel Professional you will need to agree to the license agreement which Bet Angel is sold under. Read the terms of the agreement and then click next.



Choose where you would like to install Bet Angel. Most people tend to leave this to the default setting. If your computer has multiple users make your choice of whether the software should be universally available.

Click Next and 'Install' to confirm the installation and your software will be installed and ready to use! On certain versions of Windows you may see a security message checking that you wish to install into the Program Files area, you just click 'Yes' to continue with the installation.

Registering Bet Angel

Activation of your Bet Angel account

Your subscription starts from the point of registration not from when you purchase. You can purchase and register a few days prior to a current subscription expiring without losing any days (the expiry will just be extended automatically).

The software is not locked

This means you can install on new computers and/or other computers as many times as you like. Registration of the serial number activates your Betfair username on our authentication servers. So when reinstalling you will not need the serial number again. Just log in with the username that you originally registered.

Step 1

Double click on the Bet Angel icon on your desktop.



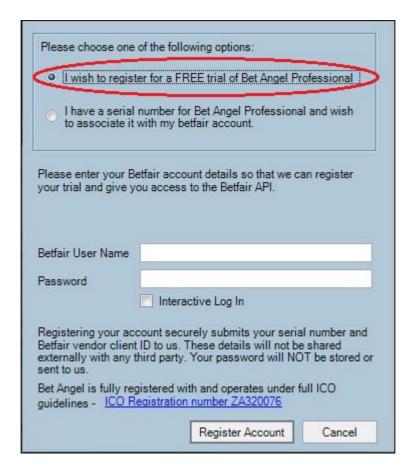
Step 2

You will see the login dialogue box. Click on the link marked 'Register Bet Angel using serial number....'



Step 3 - Free Trial. Skip to Step 4 if you have purchased Bet Angel.

The Free Trial does not require a serial number, your account will be activated when we have received your request for the trial. Please note that only one trial per person is allowed.



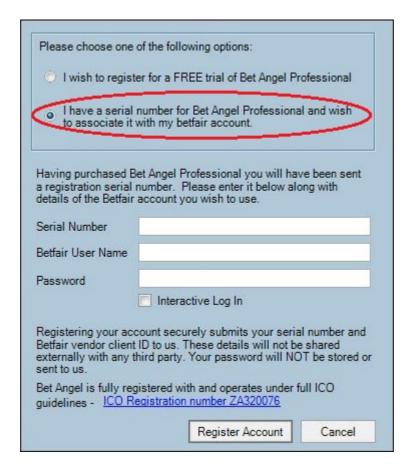
After entering your Betfair User Name and Password a new window will appear asking you to associate a <u>verified</u> <u>e-mail</u> address with your Betfair Client ID. This is a one time process and will make the activating of any future subscriptions much quicker and easier for you.

Registration Using Serial Number

If you have purchased Bet Angel you will be sent a serial number via email. Once you have installed Bet Angel Professional follow these instructions to activate your account.

Step 4 - Purchased

Click on 'I have a serial number......' You will now see a registration box in which you must enter the serial number sent to you along with the Betfair account username and password (for account verification). Your account password will NOT be stored or sent to us.



Once you have entered your details click on the 'Register Account' button.

If you have not already done so a window will appear asking you to first associate a <u>verified e-mail</u> address with your Betfair Client ID.

This is a one time process and will make activating future subscriptions much quicker and easier. Otherwise Immediate access will be granted and a confirmation message will appear on your screen.

Step 5

Once you have registered you can return to the Log In screen. Enter your Betfair username and password in the boxes; remember passwords are case sensitive so ensure you do not have CAPS LOCK on.

Click on 'Log In'.

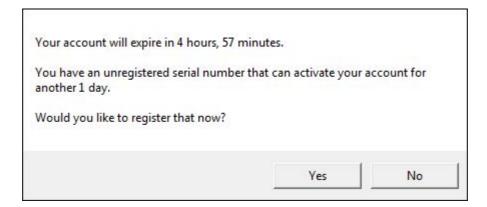
You can now enjoy using Bet Angel Professional.

Renewals

Subscriptions do not automatically renew, instead to continue to use the software after expiry you must purchase another from our website.

Shortly before your subscription expires you will begin to see a reminder message upon each login telling you exactly how long you have remaining on your current subscription.

When you buy a new serial number if you have previously verified the e-mail used Bet Angel will be able to look up the serial number for you automatically and as your current subscription approaches expiry will offer auto-activation on the next login without requiring the serial number to be entered by hand.



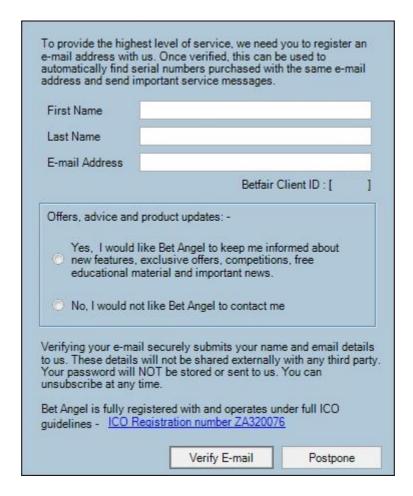
Video Tutorial



Email Verification

Bet Angel is fully ICO registered and requires you to associate a verified e-mail address with your Betfair Client ID.

When you first register a serial number or for a free trial you will be prompted at login to nominate an e-mail address (see image below) when you click the 'Verify Email' button a verification code will be sent by us to that e-mail address. Once verified, Bet Angel won't need to go through the process again for that account and will have the advantage of being able to find new serial numbers purchased with that e-mail address. i.e. As you approach expiry and buy a new serial number, Bet Angel will be able to find the serial and offer auto-activation on the next login without requiring the serial number to be entered by hand.



At this point you will need to check your email for the 6 digit verification code, once you have that you can enter it in the next window and click the 'Submit Code' button

Please check your e-mail.	
Bet Angel has sent a verification co	de to your e-mail address.
Please enter the code below to com	plete the verification process.
C F WAY OF C O	
6 digit Verification Code	Submit Code
6 digit Verification Code	Submit Code
Note: If you don't receive the e-mail	, please check Junk/Spam/Othe
Note: If you don't receive the e-mail mail folders for an e-mail from BetA	, please check Junk/Spam/Othe ngel.com. If necessary, go back
Note: If you don't receive the e-mail mail folders for an e-mail from BetA to the previous screen to check the	, please check Junk/Spam/Othe ngel.com. If necessary, go back
Note: If you don't receive the e-mail mail folders for an e-mail from BetA	, please check Junk/Spam/Othe ngel.com. If necessary, go back

You may need to check your spam/junk/other mail folders if you can not see the code in your Inbox, if you have any problems during this or any other part of the registration process please contact <u>support</u>.

The Bet Angel Professional Log-in screen and options

You have already learned how to register your trial or purchased software so the log in is next.

Logging on to Betfair

Locate the Bet Angel icon on your Windows desktop or via the Windows start menu. Double click (desktop) or single click (Start Menu/Taskbar) this icon and Bet Angel will open. Enter your Betfair username. If you want Bet Angel to remember your username, tick 'Remember User name'. Now enter your password into the Password text box; this is your Betfair password and is only known to you. For security reasons we do not know or store your Betfair password.

We will NEVER ask for your Betfair password. Never send it in an e-mail to anyone.

You should also tick the 'I accept the Betfair API terms and conditions' text. Your access to Betfair's API is reliant on acceptance of these terms.

The 'Profile' section of the window can be left as <factory default>. There is an option to create custom Screen Layout and Settings profiles from within Bet Angel and you may wish to select them during log-in at a later date.



Live Mode / Practice Mode

To place real bets into the exchange you will need to choose Live mode.

By selecting practice mode when logging in, you will be able to use all the features of Bet Angel Professional without risk to your balance as any bets placed will be simulated locally and will not be sent to the exchange. For more information click here.

Logging in

Once you have completed your user name, entered your password and set other log in features (some optional) all but your passwords will be remembered by Bet Angel. When you are ready to start click the 'Log in' button.

The Betfair API will show a splash screen when you first use Bet Angel Professional. This will explain that it is the "first time you have accessed the new Betfair API" a progress bar will appear. This is normal, please allow 2-3 minutes for permission to be granted.



Logging in errors

On attempting to log into Betfair you may experience one of a number of common log on errors. For your convenience we have listed the most commons errors in this section to provide you with the most common errors and solutions. Most are due to basic configuration issues with your computers or the permissions you have granted Bet Angel.

Error

"Error Code6"

Reason

You have installed the server edition of Bet Angel professional onto a regular PC or Laptop.

Solution

Uninstall the server version and re-download and install the latest regular version of Bet Angel Professional from this link

Error

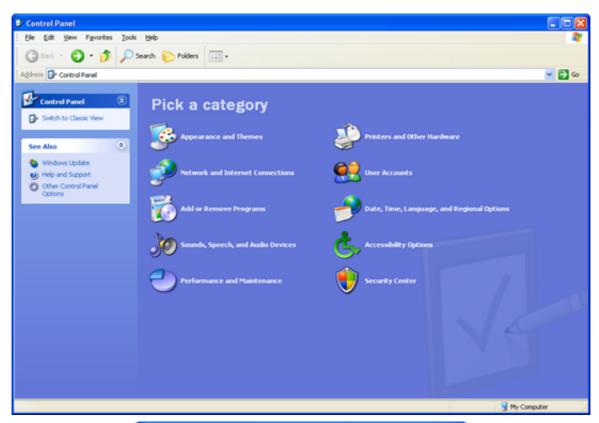
"The underlying connection was closed. Could not establish a trust relationship with remote server"

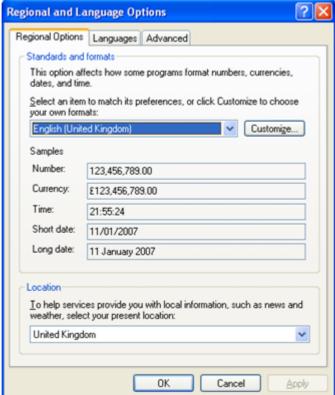
Reason

For Bet Angel to function correctly it needs to take the current time and date from your PC.

Solution

Check the time and date by double clicking on the clock in the bottom right hand corner of your Windows operating system. Also visit the Date, Time, Language and Regional Options in your control panel and check that the date and time is correctly formatted.





Here are some guides on how to change the date and time on the most common Operating Systems

Changing the date and time for:

Windows XP Windows 7 Windows 8 Windows 10

Error

"The underlying connection was closed. The remote name could not be resolved."

Reason

This usually means your firewall isn't allowing Bet Angel access to the internet.

Solution

Try temporarily switching off the firewall or internet security software and restart Bet Angel to see if now allows you to log in. If so, reconfigure your firewall to grant Bet Angel full access to the internet.

If you are still experiencing problems then visit the **Knowledge Base** area of our website.

Error

"Bet Angel Authentication successful, however unable to connect to Betfair using the supplied user name and password."



Reason

· Betfair rejected your login details.

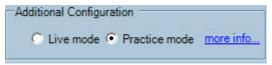
Solution

There are several possible reasons for this error:

- Incorrect password (password is case senstive)
- You are using incompatible characters in your password such as &%+=';£<>" or any language specific characters such as Chinese or Japanese script style.
- You have activated <u>2-step authentication</u> but not appended your password with the code. TIP: You must add the authentication code to the end of your password with no space between them
- · Betfair is offline
- You are in a country that has restricted access
- Time and date settings are incorrect on your computer
- You are behind a proxy server (at work for example)

Practice Mode

Bet Angel Professional has a practice mode which is selected by choosing 'Practice mode' in the login screen.



- Explore ALL software features with NO risk
- Attach and test Excel spreadsheets to explore strategies
- Practise bookmaking, dutching, automation, offsetting and more
- Simulated bet matching process gives realistic market feel
- Learn trading techniques in a safe environment
- Simulates Betfair Cross Matching algorithm
- Includes simulated 'Take-SP' & 'Keep Bets'

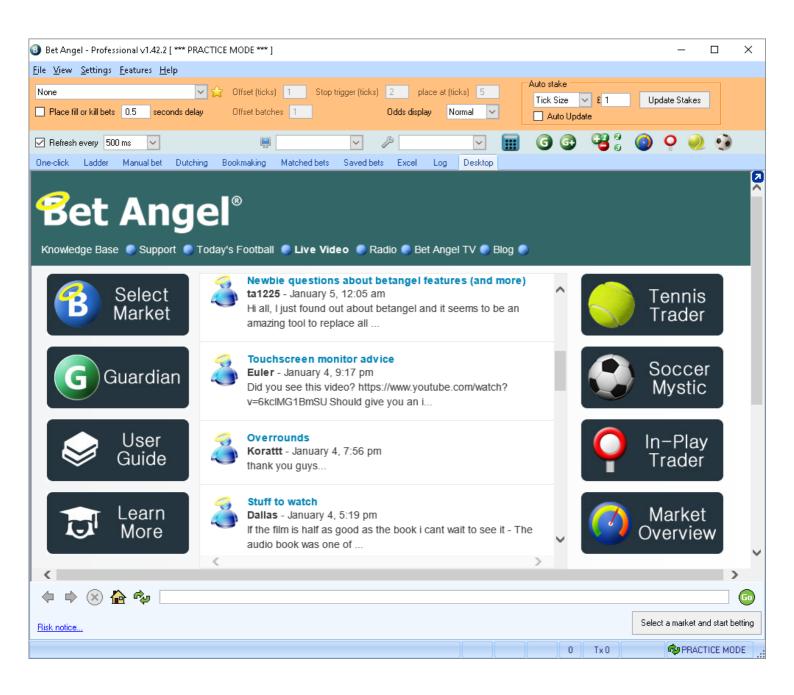


The practice mode allows you to become familiar with all features of the software and place practice bets without risk. The market data is from Betfair but no bets are placed on the exchange, they are all matched 'locally' on your computer.

Bet Angel uses unique technology to provide a second to none 'real feel' of using the exchange. However, it must be stressed that actual trading on the exchange can never be 100% accurately replicated as real bets will affect the market and thus behave differently. Using smaller and more realistic stakes will offer a better feel for the markets.

When using practice mode, the global settings area will display an ORANGE background colour, the account balance area in the bottom right hand corner of the screen will have the words 'PRACTICE MODE' displayed and the application title will have the words 'PRACTICE MODE' appended in the title bar area.

Note that continued use of practice mode for prolonged periods may result in Betfair account suspension or restriction due to the similarities this raises with commercial use. To avoid this keep your betfair account funded and place a real bet every so often. A 'restricted' account will have no matched volume information and will be given delayed price information by betfair.



The Bet Angel Desktop screen

Having logged into Bet Angel you will be presented with the Bet Angel trading screen. This is where most of your trading activity will occur and you will use it to focus in on a single market, refreshing prices rapidly. Its header area allows for the configuration of global settings, staking and profile selection as well as being the launchpad for other tools such as Guardian, In-play Trader, Tennis Trader etc. The main area of the screen contains pages dedicated to different styles of interacting with the market (e.g. One-click, Ladder, Dutching etc).

Bet Angel Desktop

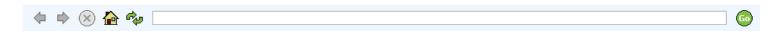
The first page you see will be the Bet Angel Desktop; this is our information portal. It links to our web site to bring you current information, advice, and support material about Bet Angel. There are links to the User Guide, Bet Angel TV and our Blog; all of which are very good places to start learning about trading on betting exchanges and the use of Bet Angel.

We will always highlight the latest version of the software on Bet Angel Desktop (you can check which version of Bet Angel you are using be clicking About in the Help menu).



Internet browser

At the bottom of the desktop you will see there is an Internet browser bar.



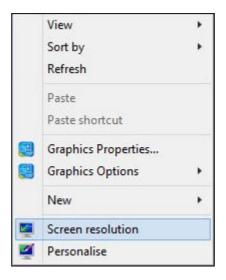
Using this area you can navigate the Internet as normal and this helps you perform other functions, such as reading your email, from within Bet Angel without the need to start up your internet browser. When you start trading we advise you to concentrate on your market activity as e-mail web browsing etc can distract you!

Starting your betting and trading activity

At the bottom right of the desktop screen is a button 'Select a market and start betting'. Press this button and Bet Angel will display a list of markets for you to select.

Select a market and start betting

If you cannot see this button, your screen resolution could be too low. This means the bottom of the Bet Angel screen is out of view as Bet Angel is slightly off centre. All monitors offer optimum resolution so ensure yours is set correctly. In windows you can simply right click your mouse on the desktop (not within Bet Angel) and then select Screen Resolution. Ensure you have chosen the Optimum setting. The screen shot below is from Windows 8 and earlier versions may differ slightly. A simple Google search of "Adjusting screen resolution for Windows X" (Enter your version in place of the X) will show you a method.



You can also select a market by using the "File" menu at the top left of the screen. We also show you a neat way to select horse racing markets using Guardian later in this guide.

Market Selection

From the Desktop screen there a three ways to open the 'Market Selection', these are highlighted below. Once you have opened a market and begun trading you can continue to select further markets without having to return to the Desktop screen by using the 'Select Market' option found under 'File' in the top left corner of your screen.



One of the things we understand well at Bet Angel is how everyone will want to trade and use the software differently, a key priority has always been to make the software as fully customisable as possible, as you'll no doubt see as you work your way through this user guide, the software and its features.

This begins right at the very start with the most basic task of 'Searching and Selecting Markets'.

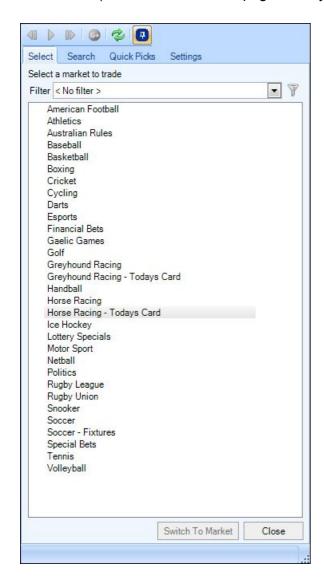
Searching Markets

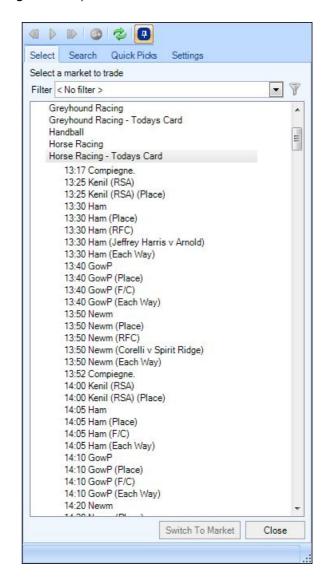
When the 'Market Selection' window opens you will see at the top it contains four tabs (Select, Search, Quick Picks, Settings) and a 'Filter' pick list. Regardless of the market types you're most interested in the following few pages will show the various options and ways you have of searching for those markets in the most efficient and quickest way.

Select Tab

This will display the markets in a similar you see on the Betfair website, to open a market from here navigate through the tree clicking the appropriate event then market required.

In the below left image I've selected 'Horse Racing - Today's Card', in the image below right you'll see the navigation tree has then expanded to list all of today's racing markets in order of start time, clicking one of these will then open that market (see further down this page on ways of opening markets).

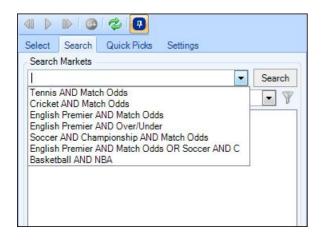




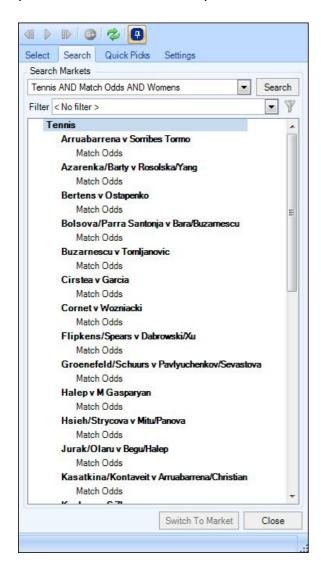
Search Tab

Rather than clicking through the navigation tree to find the market/s you want you may wish to 'Search' for specific events, market types, a team or players name etc. Any text that appears in the market tree hierarchy can be searched upon.

Choose the 'Search' tab and from here you will be able to type in what you are looking for. We have included a few commonly used search strings as presets which you can use or edit to refine further.



Below I've selected the preset search string 'Tennis AND Match Odds' and added the text 'AND Womens' to the end, after clicking search this has now returned only the women's match odds tennis markets. Select a match and press 'Switch To Market' to open the market in the main trading screen.

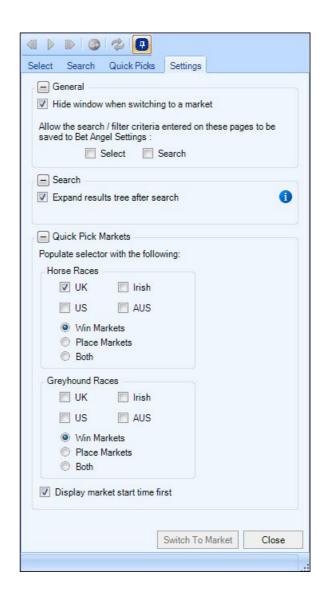


Quick Picks & Settings Tabs

For racing traders we have included the 'Quick Picks' tab as a fast and easy way of seeing the Horse and Greyhound Racing markets, exactly which racing markets you see displayed in the 'Quick Picks' can be defined using the settings tab.

In the settings image below right I've ticked Horse Racing 'UK' & 'Win Markets' only, when the quick picks tab is now selected in the image below left it is displaying ONLY those markets.





Toolbar Buttons

Guardian (G+)

At the top of the market selection window is the button. If you have clicked on and highlighted a market then this icon it will be added to Bet Angel Guardian for multi-market, monitoring or to run automation.

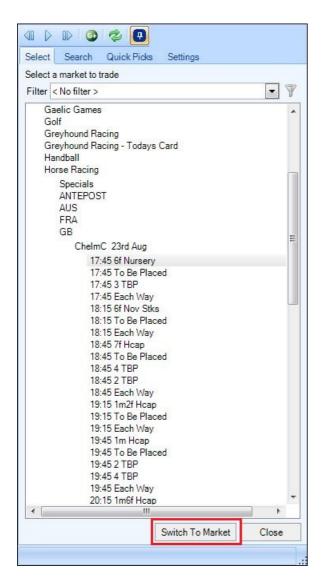
To learn more about this please see the later section of this guide detailing how to use the multi-market trading facility of Bet Angel Guardian.

Refreshing for New Markets

You also have a 'Refresh' option . If you are trading successively timed markets such as horse racing you may want to periodically press the refresh button to purge the market selection screen of any old markets. We do not automatically update the markets each time you use it, this would slow down your market selection. Make sure you refresh the screen occasionally to keep the markets 'tidy'.

Opening Markets

When you have found the market you want to open you can either select the market and click the 'Switch to Market' button located at the bottom of the window and this open that market on to the "One-click" betting screen - this screen is similar to the main Betfair screen that you would normally use.



Alternatively you can open a market by right clicking on it - when you do this a pop-up window will then appear listing several options for you, the first two allow you to choose if you want to display the market on either the main One-click or the Ladder screen.



The following two options will allow you to display the market in a <u>New</u> floating window, this is useful if you want to trade or view more than one market at a time, please see the following pages of this guide for more details on opening multiple markets on your <u>One-Click</u> and <u>Ladder</u> screens.

The next option allows you to display the market in a Quick Bet ticket, which is useful if you don't want to open it to a full trading screen and instead just want to place a quick bet.

The final option will open a floating '<u>Unmatched Bets</u>' window for that market.

Drag and Drop

Markets can also be opened by 'drag and drop' onto any trading screen.

To do this simply click on any market from the market selection tree, <u>Guardian's Market Selection</u> list or a <u>Watch</u> <u>List</u> and with your mouse button still depressed drag and drop the market onto any of the trading screens to switch to and open that market - it's just like dragging and dropping windows files and folders on your PC!

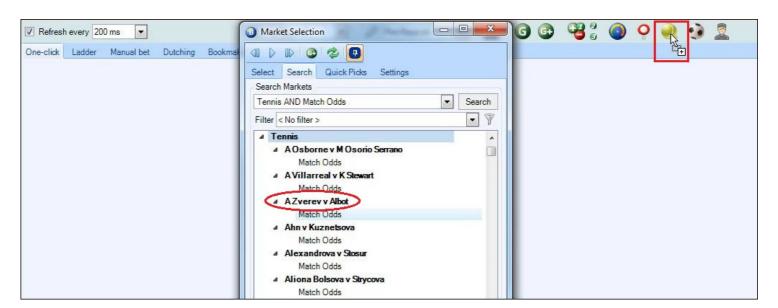
If you have spawned multiple markets onto new <u>ladder</u>, <u>one-click</u> screens or even <u>quick bet</u> tickets, then dropping a market onto that window will reuse that screen with the new market, making this method a much quicker and easier of opening multiple markets than having to first close the window and re-spawn it with a new market.

From Guardian's Odds pane or the Watch List, you can also drag a selections name and drop it on to a ladder column to switch to the market and change the ladder to that specific selection.

Toolbar Icons

When you drag and drop a market onto any of the toolbar buttons like <u>Tennis Trader</u>, <u>Soccer Mystic</u>, <u>Market Overview</u> or <u>In-play Trader</u> as well as opening the market that tool will also be launched as part of the process.

In the image below you can see the One-click trading screen is selected and the 'Zverev V Albot' market has just been chosen from the market selection window, with the left mouse button still depressed it's been dragged over the Tennis Trader ball.



Once the mouse button is released that market will open onto the One-Click screen and the Tennis Trader tool will also be launched.



If you don't wish to use this feature drag & drop, it can be disabled in the main Bet Angel settings area on the Behaviour tab.

Filtering Markets

For more flexibility when finding the markets you want quickly and easily you can configure and save as your own customised market search 'Filters' using Bet Angel's 'Market Filter Editor'.

When you first install Bet Angel it will come with several example filters already in your filter pick list denoted with the prefix 'Ex:', these are ready for you to use straight away. Using the Filter Editor you can edit them or use them as a starting point to create your own filter (saving under a new name if required); you can also create your own filter from scratch with the Editor.

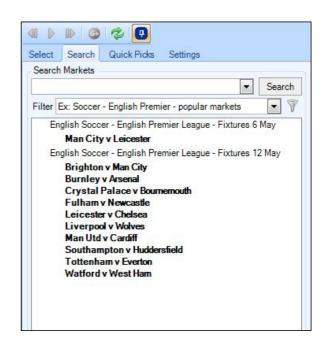
There is no limit on the number of filters you can create and save so even if you trade a wide range of sports and market types you can configure one for every need.

Once a filter has been created & saved it can be used both here in the main 'Market Selection' window on the 'Select' and 'Search' tabs or in the <u>Guardian Search</u> window where it can be used to add multiple markets into with one click Guardian.

Selecting a Filter

In the image below left you can see the list of all the preset filters you will have when you first install Bet Angel, then as you create and save your own filters they will get added to this pick list for you to select and use. In the image below right I've selected the 'Ex: Soccer - English Premier - Popular Markets', and it has instantly found and displayed only the markets fitting that filter criteria.

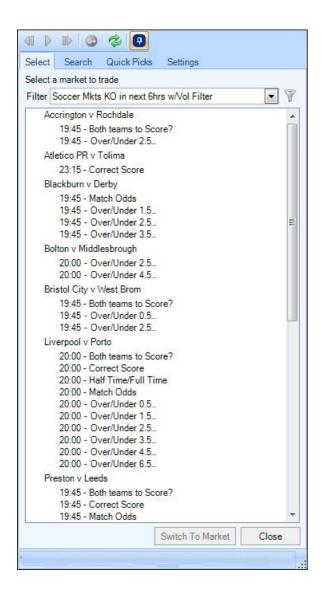




By configuring and creating multiple saved filters you will be able to easily find and display any of the types of markets you want with just a click.

Displaying Markets

As part of creating a filter you can also customise how you want the markets to be displayed in the market tree. In the images below I've created two different filters for football markets, but choose to configure each of their displays slightly different. There are of course countless other configurations you could use to display your markets - its totally up to you.





Market Filter Editor

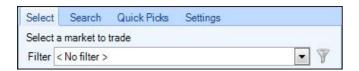
With the 'Market Filter Editor' users can configure their own unique and customized searches, this includes filtering by: Market Start Time, Event Type, Text matching, Country, Market Type, Traded Volume, In-play status, and even if the market will turn In-play or not.

The editor also allows you to define one or more <u>Filter Sets</u>; the final market tree to be displayed will then be built from the aggregated results of those sets.

The 'Preview' page at the end of the Filter Editor shows the results of your current filtering criteria and how they will be displayed to you before you save it as a named filter. That named filter will then be available in the filter pick lists ready for you to use

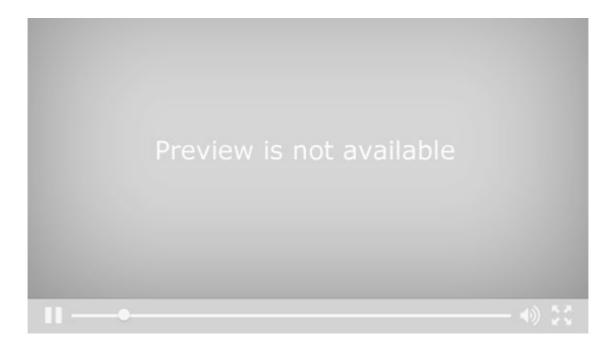
Launch Market Filter Editor

To launch the 'Market Filter Editor' and reveal all the options available to begin creating your own customized filters click on the 'Filter' icon at the side of the filter pick list on either the 'Select' or 'Search' tabs.



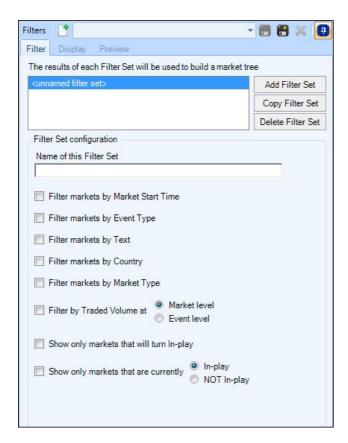
For a detailed example of creating a market filter step-by-step please see this blog

Video Tutorial



Filter

Begin creating a new filter by clicking the icon, you'll then be prompted to give the filter a name. Next you can then begin configuring your filter by working your way down through the filter options ticking those you want to use in your filter.



Start Time

Here you can configure the filter to only find markets due to start in a specific time or within a specific time window. In the example below when the filter is used it will only find and display markets that have not yet past there start time, but are due to start within the next 5hrs.



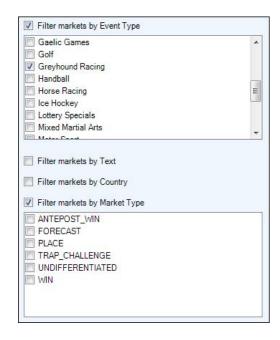
Event & Market Type

This option lets you specify the type of 'Event/s' you want the filter to include.

When you arrive at the 'Filter markets by Market Type' option a little further down only the market types relating to the Event/s you have selected will be displayed for you to choose from.

e.g. In the example below for the 'Event Type' I've chosen to filter for 'Greyhound Racing', when I reach 'Market Type' area only Greyhound related markets types are being displayed for me to chose from - making it much easier to find the market types required than if all types were displayed.

If you don't select any events when you reach the markets type every market type for every sport will be listed for you to select from - and there's a lot!



Country Filter

You can use this filter to restrict which countries' markets are included by the filter. For example you may want to find all horse racing 'win' markets but only from 'UK' and 'IRE'

Filter by Text

Filtering markets by text behaves just like it would in the regular market search area. You can insert the words 'AND', 'OR', NOT, into your search string to build more complex search criteria. e.g. a typical search string could look like 'English AND Premier AND Match Odds'

If creating a horse racing filter to find only flat races you would use something like 'NOT Chs AND NOT Hrd'

So why would you not just search for 'flat' in here?

It's due to how Betfair name their markets. Any search term you use has to somehow match with Betfairs naming of the markets, if you navigate your way through the main market tree on the 'Select' tab when you get to racing markets you'll see the word 'flat' does not appear next to any races - including those races that are run on the flat. However they do use the words 'Chs' and 'Hrd' which are abbreviations for Chase and Hurdle next to national hunt jumps races.

Therefore you can achieve your objective of filtering for flat races by eliminating jumps races using the search string 'NOT Chs AND NOT Hrd' in the text area.

It sounds hard at first but once your accustomed to how Betfair name there markets by inserting a combination of 'AND', 'OR', NOT, into your text search you can find or eliminate your required markets.

Traded Volume

This option lets you enter a minimum traded volume, its possible to filter for this at 'Market Level' i.e. if your searching for Correct Score markets of a football fixture and enter £5000 then it will only find Correct Score markets with more than £5000

Alternatively if you were searching for the same market but used 'Event Level' then as long as ANY market from that football fixture has a greater than £5000 matched (this could be the Match Odds market) then the Correct Score market from the fixture would be found for you.

Show Only Markets Going In-Play

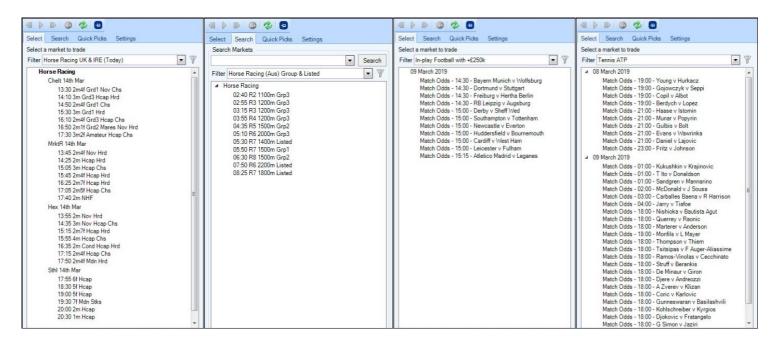
This does what it says on the tin so when used will only find markets that Betfair allow in-play betting on. This is handy on both Football and Horse Racing markets where markets from some countries and/or leagues may not be put in-play.

Show Only Markets In/Not In-Play

This filter checks the current in-play status of a market. This is especially useful if your an in-play trader and are looking for markets like Football or Tennis which have already started, or perhaps your a pre-off football trader who only wants to see markets which have not yet kicked off.

Using those filter options you should be able to home in on just the markets your want for your trading session. Remember you can create as many filters as you wish, then with a click of your mouse, flick between them to find exactly the markets you want.

In the image below I have created 4 different filters for 3 different sports showing how easy it is to find and display markets once you have created your filter.



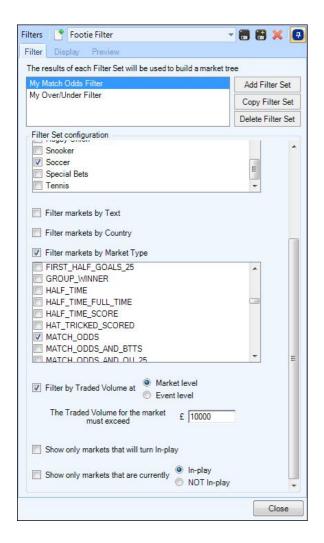
Filter Sets

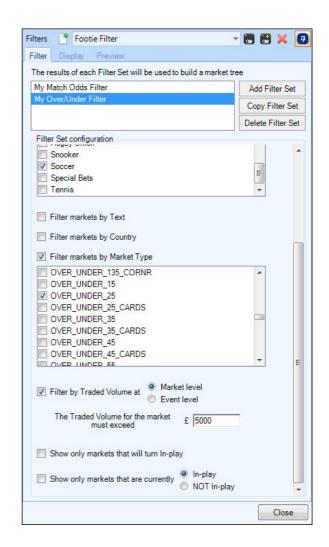
When creating filters the editor also allows you to define one or more 'Filter Sets', this lets you to display more than one type of market from one or more events with different filter parameters for different markets.

For example, you could create a filter to find Match odds and Over/Under 2.5 markets but want to filter each by different traded volumes.

With your first 'filter set' you can configure it to filter for match odds markets with a traded volume greater than £10,000

Then with your second 'filter set' you can configure that to filter for Over/Under 2.5 markets but with a traded volume greater than £5,000





When using multiple filter sets, the markets displayed will be the aggregated results from both. In the image below it is showing the markets found using the above filter configuration, notice how for some fixtures it has found only match odds markets, whereas others its found only Over/Under 2.5 markets and for a few fixtures both market types were found as they satisfied their individual volume conditions.



Once a filter including any additional filter sets has been created the default is to display the markets found in the form of Betfair's standard market tree. However, as you can see from the image above, the markets can be displayed very differently from the look of the standard tree. This is because the filter editor also allows you to configure your own tree design by using the 'Display' tab.

Filter Display

The display options of the editor will give you full control over how you have your filtered markets displayed to you. The default is to display them using Betfair's full market tree view, but here you can create your own tree design if you wish by selecting the 'Custom Tree Design' at the top of the window



To begin with you have three levels of grouping you can use, its up to you if and how many levels of grouping you want to use, when you select a 'Group level' you will be given the options to then 'Auto Expand', use 'Bold Text' and 'Set Background Colour'

Next you have the choice of the order the markets are displayed in, these consist of a primary, secondary and tertiary, like the grouping options its up to you how many (if any) you chose to use to sort your markets by. Note: The secondary choice will only need to be used when two or more markets have the same value for their primary choice. Likewise the tertiary choice only needs to apply when markets have the same value for both primary and secondary criteria.

Then finally you have the ability to supplement the market name with various prefix/suffix options.

In the image below on the left I've configured the display to 'Group by Event Grouping' sorted by Earliest start time. I've then enabled auto expand and bold text.

I've then chosen to sort markets by start time as my primary choice with a secondary sort using market name.

Finally I've added Event & Time as market name prefixes

The effects of this can be seen in the image below right





There are literally 100s of ways you could have the markets displayed depending on your own personal preference and requirements, the best way to learn and see the effect of each of the options is to experiment with them and switch onto the 'Preview' tab where you will be able to see how they will look.

Once your happy with the display and how your filter is configured click the local icon to save the filter, it will now appear in your Filter pick list ready to be used on both the 'Select' and 'Search' tab both here and in Guardian's Market Selection area.

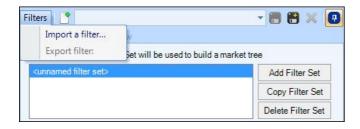
Hiding Unneeded Filters

In the top right corner of this display window is an option to 'Hide this market filter', that will allow you to keep your Filter pick list neat and tidy. i.e, you may want to hide some or all of the preset examples that you don't require, or hide some of your own filters which are currently out of season.

Import/Export a Filter

Lastly market filters can also be imported and exported into Bet Angel by clicking on 'Filters' tab in the top left corner of the 'Market Filter Editor' window. If you have Bet Angel installed on more than one computer you can use this to quickly and easily transfer filters from one to the other.

We also have a dedicated section on our <u>forum</u> where you can download market filters which other Bet Angel users have created and uploaded to share with other, or perhaps you'd like to share your filter for others to download and use.



NB; Most of the market information used for filtration is included in the standard market data downloaded from Betfair, but certain tests such as volume and in-play status will need to be requested on demand. If you use any of those as part of your filters you'll need to allow a few extra seconds for the filter to process.

Navigating around Bet Angel and additional set up features

Before you start using Bet Angel it is worth familiarising yourself with the many additional options available. This will also help you to navigate around the software and select the market you wish to bet or trade on. It can seem daunting when you first look at the software so having a quick look around will help.

Selecting or deselecting unwanted features

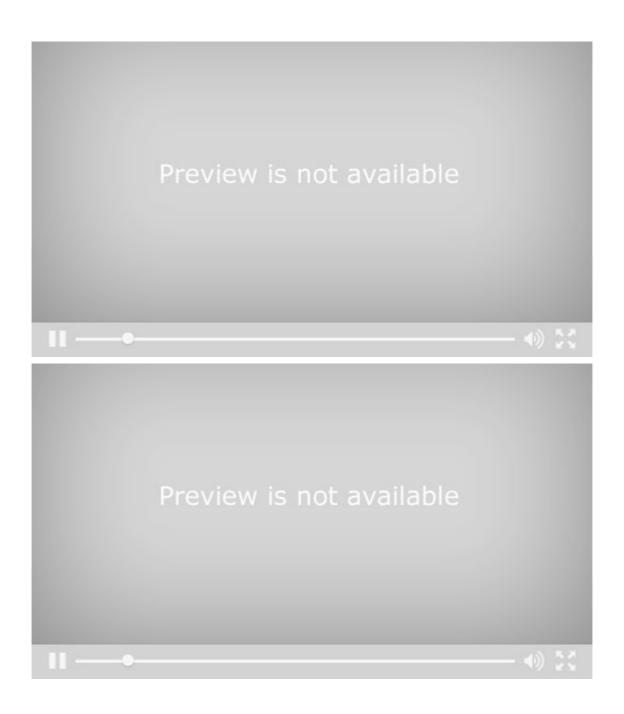
The software is feature rich but many features have been added at clients' requests. You may not want to use all features of Bet Angel, everyone is different, so we offer the ability to choose the features you need and temporarily hide the ones you don't. Select 'Features' With your mouse and a drop down list will appear, you can see them in the example image. If the feature is ticked it will be active and those not ticked will be inactive. Deselecting unwanted feature can save on system resources. If you save settings and have unselected features, Bet Angel will continue to disable these features until you re-enable them. Try switching them on and off to become comfortable with their use.



Selecting a market to trade

We showed the use of the "Select a market and start betting" button and the use of the 'File' option earlier in this guide. The latter offers a few more features. If you click on select market you can select any of the available markets on Betfair. This menu will also display the last five markets you have looked at. If you want to skip quickly between markets then you can use this menu to jump quickly between the most recently viewed markets. For example, it we want to look again at Ling 15th Oct 14:30 7f Mdn we can simply select that market with our mouse or press Ctrl + 3 on our keyboard

Select Market	
Next market	Ctrl+N
Previous market	Ctrl+P
Ling 15th Oct - 15:00 6f Nursery	Ctrl+1
Punch 15th Oct - 14:45 2m Hrd	Ctrl+2
Ling 15th Oct - 14:30 7f Mdn	Ctrl+3
Ling 15th Oct - 14:00 7f Mdn	Ctrl+4
Ling 15th Oct - 13:30 1m Mdn	Ctrl+5
Logout and Exit	



Navigating between Bet Angel functions

Once you have selected a market you will arrive at the 'One-click' trading screen. To move to other Bet Angel functions simply click on the function that you wish to use.

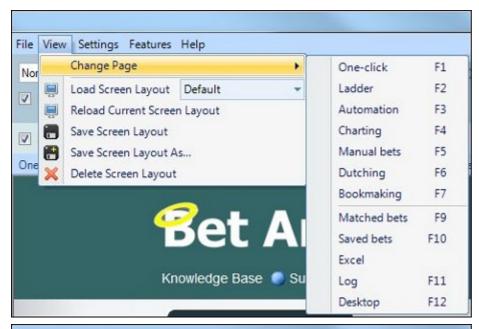
One-click Ladder Automation Charting Manual bet Dutching Bookmaking Matched bets Saved bets Excel Log Desktop

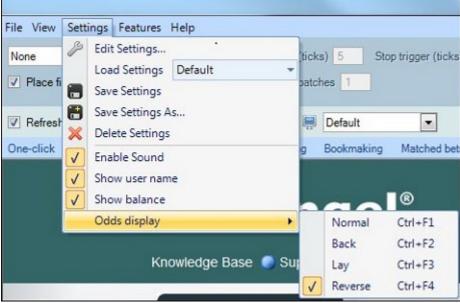
Using the keyboard to navigate

Bet Angel - Keyboard commands

It is possible to navigate around Bet Angel using your keyboard. This has been implemented so that you can gain quick and easy access to several functions almost instantaneously without the use of a mouse. Some of these options are also highlighted on the main menus.







Keyboard Result

CTRL + N

CTRL + P

CTRL + SHIFT + P

CTRL + SHIFT + N

CTRL + SHI

F2	Ladder trading
F3	Automation
F4	Charting
F5	Manual bet
F6	Dutching
F7	Bookmaking
F9	Matched bets
F10	Saved bets

F11 Bet Angel activity log F12 Bet Angel settings

CTRL + F1 Set force open to 'Normal'
CTRL + F2 Set force open to 'Back'
CTRL + F3 Set force open to 'Lay'
CTRL + F4 Set force open to 'Reverse'

NB: You can also assign over 100 further actions to shortcut keys of your choice using the <u>keyboard shortcut</u> <u>editor</u>

Main settings toolbar



Price Refresh Setting



Here we can control how frequently the Bet Angel trading screen calls Betfair for new market prices (odds). The following intervals can be selected:

Refresh Intervals			
Update	400ms		
20ms	500ms		
40ms	750ms		
60ms	1sec		
80ms	2secs		
100ms	3secs		
150ms	5secs		
200ms	10secs		
250ms	20secs		
300ms	30secs		
350ms	1min		

Refresh Intervals shaded grey can only be used with 'Exchange Streaming' enabled. See this Section of the User Guide

The Refresh Interval 'Update' will monitor the price stream and update your trading screen as soon as new information arrives, This will reduce CPU usage on slower markets, and still saves a few milliseconds even when betfair is publishing market updates at their maximum speed.

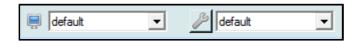
A setting of 300ms - 350ms will be sufficient for most purposes. If the market is particularly volatile then a faster setting can be selected.

Further fine tuning of your communications settings can be achieved via the main settings editor.



If you untick the refresh check box above, all prices will be frozen. If you want the latest prices then ensure 'Refresh' is ticked.

Settings Profiles



These pick lists allow for the screen layout and settings currently being used by Bet Angel to be changed from one of your saved profiles to another. This feature can be very useful if you have a different setup for different market types or strategies and wish to quickly switch from one to another. See here.

Calculator



This will bring up the built-in Windows calculator application.



Guardian



Guardian is a powerful tool for managing multiple markets. It gives access to watch lists, advanced automation, and multi-market spreadsheets. You can read more about it <u>here</u>.

Clicking on the 'G' will open up Guardian.

Clicking on the 'G+' will add the market currently open in Bet Angel's main trading screen to the list of markets managed by Guardian.

Trade Profit (Cash Out) Calculators



These tools enable you to view your position on a selection to understand the profit or loss available when closing a trade at various prices. At a glance you'll be able to see the value of offering a closing bet to the market compared to taking the current price; you can also enter a price of your choosing to understand the risk/reward of various exit points. See here - Bet Angel Trade Profit (Cash Out) Calculators.

Additional Features



On the right hand side of the Bet Angel toolbar you will be able to launch some of the additional features of Bet Angel.

The meter icon on the left will open up the **Bet Angel Market Overview** screen.

The <u>In-Play trader tool</u> can be accessed by clicking on the winning post button.

The specialist tools. <u>Tennis Trader</u> and <u>Soccer Mystic</u> represented by a tennis ball and a soccer ball. See the sections later in this guide.

Automation Servant



The concierge icon will open the Automation Servants feature

Managing Multiple Windows - Undocking and Pinning

When viewing multiple windows it is possible to undock certain features and display them on another connected monitor. You may also wish to stop an undocked windows (such as a 'Watch List') being hidden each time you click on the one click screen. This will enable you to view the one click screen and a watch list, or ladder, or chart; on the same monitor and use them at the same time.

The ladder can also hide windows as it becomes the main focus as you pass the mouse over it.

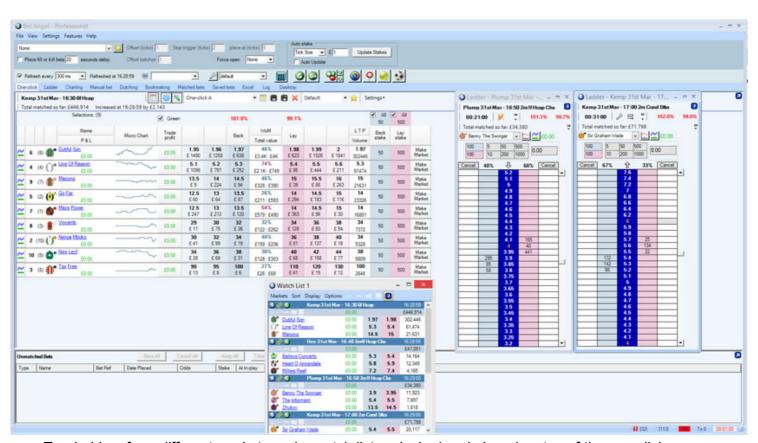
Bet Angel has an undocking feature and this allows you to move a window to a new monitor or position it where you like on the current monitor.



Clicking on this button will undock the screen. It will then be replaced by the following two buttons:



Clicking on the drawing pin symbol will then 'pin' this windows to the top so it always displays.



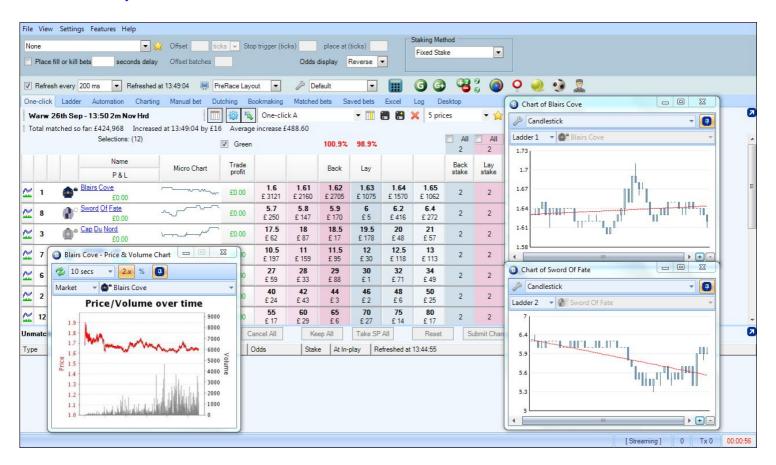
Two ladders from different markets and a watch list undocked and pinned on top of the one click screen.

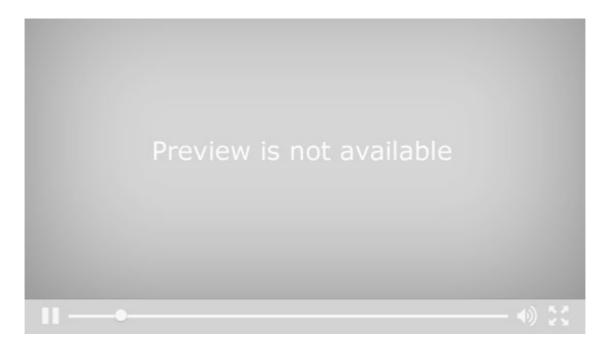
See this video for this in action:

Using Screen Layout Profiles

With all the tools and features available in Bet Angel, there is a huge combination of ways you can arrange the screens. For one type of trading you may wish to focus on the one-click screen with the watch list and the market overview tools to the side. For another trade you may wish to undock the ladder and surround it with charts. You may change between using one display on your PC to using multiple displays. It can take time getting your set-up just right, but Bet Angel has a great time saving feature. **You can save your favourite screen layouts to individually named profiles**. You can then quickly switch between them using the Bet Angel toolbar (or log-in straight into your favourite Bet Angel layout).

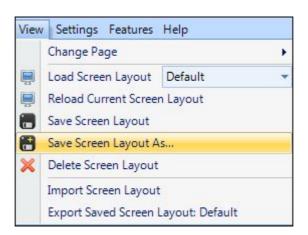
Tip: This feature is also very useful if you trade from a laptop and sometimes switch between using just the laptop's display to using multiple high resolution displays. Just create a layout profile for each setup and switch between them whenever you wish.





Saving your screen layout

Once all the tools & windows are set out just how you want them, go to the 'View' menu at the top of Bet Angel and click 'Save Screen Layout' to update the current screen layout or click 'Save Screen Layout As...' if you want to save it under a new profile name.



Loading your screen layout

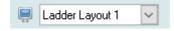
To load a saved screen layout you can choose its name from the pick list found under the View menu (against 'Load Screen Layout') or from the pick list in the Bet Angel toolbar (next to the PC Monitor icon).

Import your screen layout

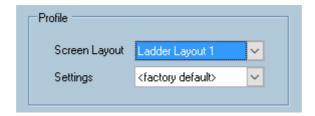
To import a saved screen layout click 'Import Screen Layout' and navigate to the folder you have it saved in

Export your screen layout

To export a saved screen layout choose its name from the pick list next to 'Load screen layout' and click 'Export Saved Screen Layout'

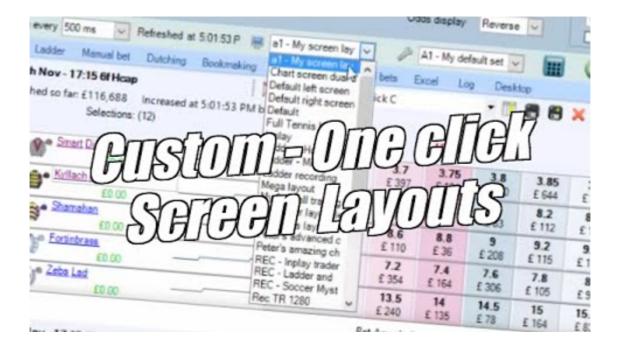


You can also select the Screen Layout from the pick list in the Profile section of the Bet Angel Log In screen when you first start Bet Angel.



To see an example of how a saved screen layout can look see this thread in our forum

Video Tutorial



Countdown timer

Concept

The countdown timer displays the amount of time until the advertised start time of an event. As it counts you down to the event start time, the display changes as displayed below. This allows you to exit all open positions before the event starts and turns either to 'in-play' or 'suspended' status.



Usage

The countdown timer is always present on Bet Angel Professional. It is located at the bottom right of the screen. To expand and bring up the countdown timer to the full screen, just click on the countdown timer. When you do this a box will appear which you can re-position on the screen at your chosen position. You can use the pin function on this box to 'pin' the countdown timer to the top of your current screen.



In its normal mode the countdown timer shows the time remain to the start of this event. Pro Tip: The timer is based on your computer's system clock so always check this is set correctly. Most Operating Systems will allow automatic time updates but always check this option is set.

When the event is less than one minute away the countdown timer changes to red to warn you that the event is about to start. When you enter the last thirty seconds the timer will flash to alert you that you have little time left and should exit all positions. When the event goes 'in-play' the timer will indicate this and when the market is re-opened it will start counting up to show you how much time has elapsed since the market turned in-play and was unsuspended.

Awareness

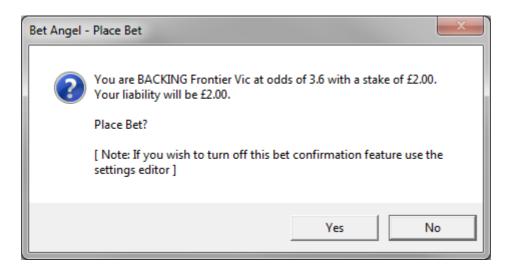
Events can start without warning or before the time that they are schedule to start. The countdown timer is only an indicator of the **expected start time**. Do not rely upon it as your only indicator. You should also take steps to ensure the time you are seeing relates to that which you expect. For continuity Bet Angel takes its time from the Betfair API but the timer also relies upon your computer system clock. Make sure that you synchronise this clock regularly to ensure the timer works correctly.

Before you start trading

For your safety

Bet Confirmation

When you first try to place a bet you may see this box:

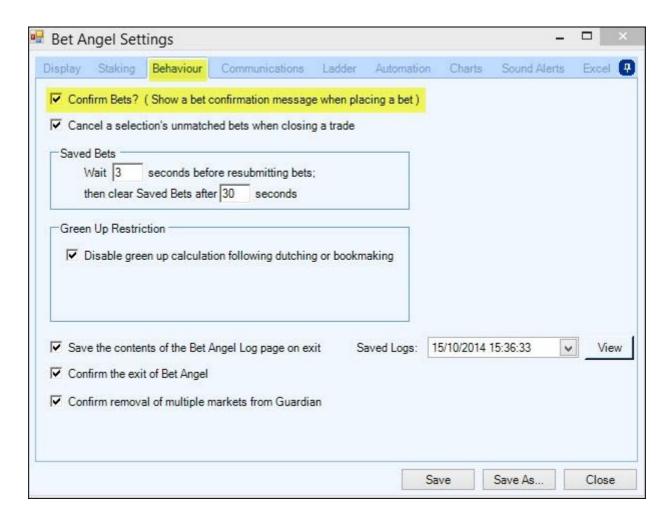


Check the details of the bet are as you expect and then click 'Yes' to place the bet.

Turning Off the Bet Confirmation Box

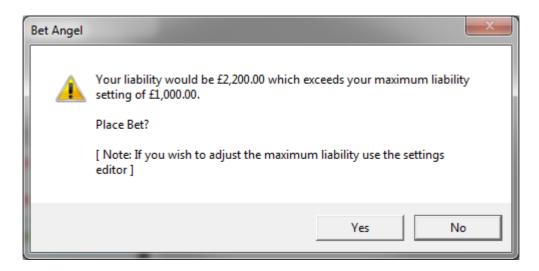
Once you are confident with the use of the Bet Angel trading screens, you can turn the confirmation message off so that your bets go straight to the market. This is done via the Bet Angel Settings window. Click the spanner

Icon in the Bet Angel toolbar to go straight to the <u>Settings Editor</u>. The bet confirmation checkbox is located in the Behaviour tab and both are highlighted in the image below, when you are ready, turn this feature off.



Maximum Liability

When you first install Bet Angel your maximum liability for any one bet is set at £1000. This is a safety feature to prevent you accidentally risking losing more than this when you place a bet. Bet Angel will ask you to confirm your bet if it has a greater liability than the setting in the Bet Angel Settings window.



If you are happy with the liability click on 'Yes'

It is important that as you progress with using Bet Angel you update the maximum liability to a level that will not only allow the level of stakes you wish to use but is set at a level you are comfortable with.

Note there is also a maximum liability setting within your Betfair account also. This setting is not affected by Bet Angel.

Reverse Greening

Concept

When closing a position or greening up instead of taking the current odds available you can instead instruct Bet Angel to offer your bet to the market at the current best reverse price, this is known as 'Reverse Greening'.

For example, if you open a trade with a lay bet to then want to close the trade or green up in the regular way a back bet would be placed by Bet Angel to 'Take' the current best price available, in the image below this would be at odds of 1.53

21.05		1.62		1.4K	•
20.27		1.61	544	0.7K	
19.44		1.6	214	0.3K	
18.57		1.59		1.1K	
17.65		1.58	284	1.0K	
16.67		1.57	541	0.6K	
15.63		1.56		2.1K	
14.52	3	1.55		4.5K	
13.33		1.54		9.0K	
12.71	83	1.53		2.8K	
12.07	874	1.52		7.0K	
11.40	790	1.51		1.0K	
10.71	429	1.5		1.6K	_
10.00	83	1.49		2.0K	
9.26		1.48		0.3K	-

Where as if you were to use 'Reverse Greening' the back bet would instead be 'offered' to the market by being placed at odds of 1.57 and be queued behind the £541 already waiting to be matched at these odds. If matched this would mean that instead of making £12.71 profit you would of increased your profit for this trade and made £16.67

This technique is best used on markets were the are large gaps between the back and lay prices, by offering rather than taking a price it can be a good way of squeezing some extra profits out of each trade. like the closing stages of the In-running UK horse racing markets.

Warning; The downside of using 'Reverse Greening' and offering any bet to the market is the chances of it being matched are greatly reduced so it does not suit every situation so you need to consider at what times it best used over regular greening.

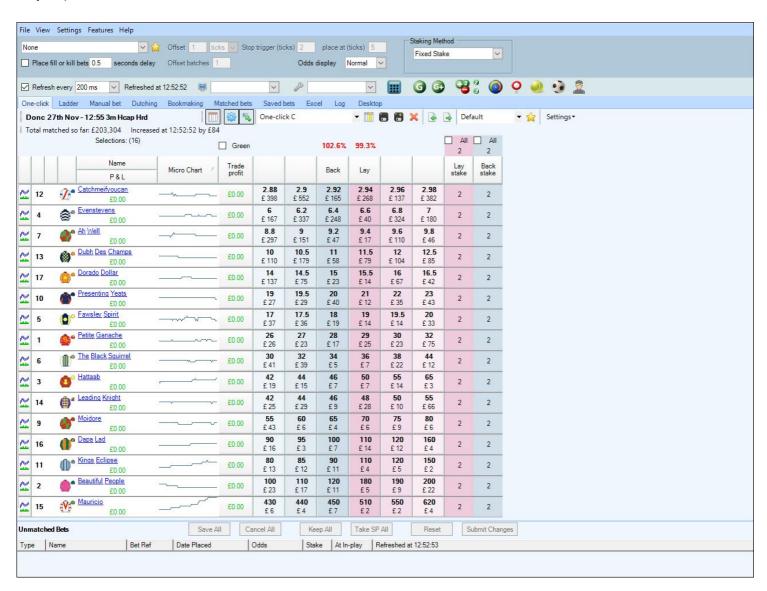
For this reason its only possible to use 'Reverse Greening' when trading manually by assigning a keyboard short cut to do the task, see this section of the user guide for further details on the <u>keyboard short cut editor</u>.

It can also be added to and used as part of an Advanced Automation file, for further details on this see the <u>advanced</u> <u>automation</u> section of the user guide.

For a detailed example of using Reverse Greening please see this thread from our forum

One-Click Trading Screen

The one-click trading screen shows all the selections in a market and allows you to place a bet with a single click. The layout is similar to the market view display on the betfair web site. Market prices can be refreshed up to fifty times every second (20ms) and the stake to be used can be pre-configured. So it is a simple but effective screen way to place orders into the Betfair market.



One Click Trading Interface Overview

The toolbar

The toolbar of the one-click screen allows you to quickly modify the layout and behaviour of the one-click trading grid



The first picklist selects the layout profile to be used in the trading grid. The second picklist selects the <u>custom</u> <u>column</u> profile to be applied to any custom columns visible in the grid.

Note: Toggle buttons will have a red cross drawn through them when they are in an 'off' state.

Explanation of each toolbar item:

Shows or hides the column headings. Hiding the headings will allow more market selections to be shown in the trading grid.

Toggles on and off the use of Global Settings when placing a bet from this grid

Toggles One-click betting on and off. When 'on', clicking on a back or lay price button in the trading grid will place a bet. When 'off', clicking on a back or lay price button will copy its price to the 'Manual Odds' column. Typical usage: Leave this 'on' for the One-click screen and 'off' for the Manual Betting screen.

Displays the column chooser. The column chooser allows you to add of remove columns to the trading grid.

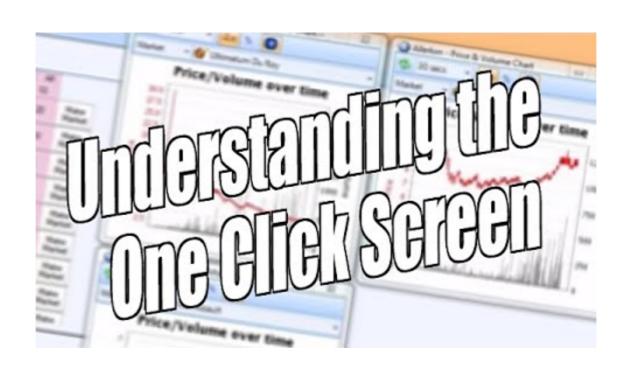
Displays the <u>Custom Columns</u> editor to help define one of the twenty customisable columns that can be added to the trading grid.

Saves the current layout of the trading grid.

Saves the current layout of the trading grid as a new named profile.

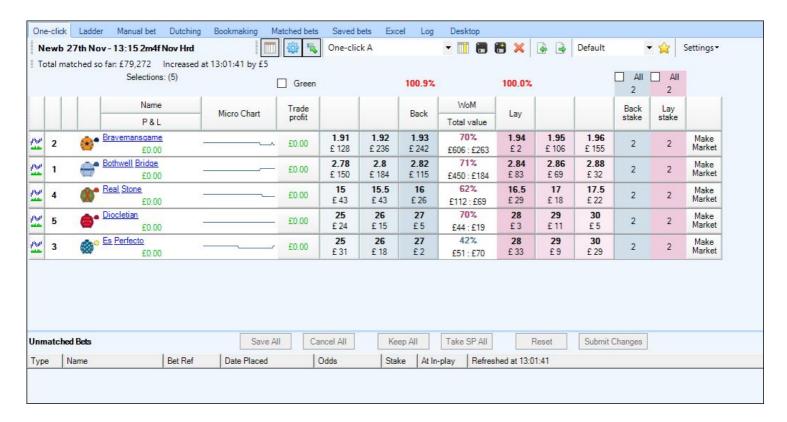
Deletes the current layout profile.

Import and Export Grid layout profiles



One Click Orders

The main difference between this screen and the normal Betfair screen is that you only need to point and click your mouse on a price to enter a bet or order into the market. You can do this because you pre-set the stakes you wish to use. This means that when you click Bet Angel already knows how much you want to place in the market.



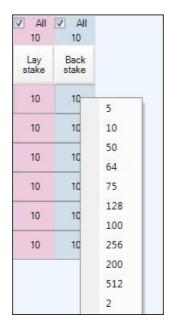
The main screen is colour coded so you can see at a glance what type of order you are placing in the market. If you see a blue shaded price and click on it Bet Angel will place an order into the market on that selection at the price you clicked at. The amount it placed is determined by the stake value on the far right of this screen. In this example if we click on the row containing 'Bravemansgrave' at a price of 1.91, Bet Angel would place an order into the market by backing 'Bravemansgrave' with £2 at 1.93. Because the current best market price is better than 1.91 to back, the exchange will fill your order at the best available price. In this case your order would fill at 1.93

If you click on the red / pink areas instead of placing a back order Bet Angel will place a lay order into the market. If there is not enough money to fill your order the remaining portion of the unmatched bet will appear in the unmatched bet area of Bet Angel below the main one click trading screen.

Adjusting the value of your one click stakes

To adjust the value of your one click orders you need to adjust the values you see in the 'stakes' boxes to the right of the main odds.

Adjusting these means that if you click on any selection in the market you will place an order into the market for the value you see in theses boxes. There are two prices, one for the back price and one for the lay price. For speed there is also a stake all tick box. Ticking this box will mean that you can apply the stake to the right of this area to every selection in the market. This is useful for broad strategies or for simply making sure that you do not place a bet in the market for too much by accident.

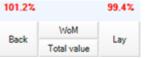


You can also select from the 'Preset' stakes you have saved on your ladder screen by right clicking on a stake value, the list of your presets will then appear for you to quickly select the one required. By right clicking in either of the top 'All' boxes you can select a preset stake for ALL selections in one go

Understanding the screen

There are other numbers, functions and columns on the screen that display information or perform specific functions. In the middle of the rows is a percentage number, this number represents the **weight of money** in a market on the selection. If there is £2500 to back and £5000 to lay the weight of money will show £3.6K:£1.9K 33%. This is indicating that there is more money on the lay side than the back side. If we assumed, theoretically, that money was arriving in the market at the same rate on both sides then would hypothesise that the back side would be 'eaten' through first. Therefore the price would likely come in and the price £1.7K:£6.3K will get smaller. Therefore when this number is less than 50%, indicating more money on the lay than the back side it shows in blue. If the price is higher than 50% it will show in red indicating pressure on the price to drift.

The figures at the top of the list of selections are the book % value. This is the total value of the book on either the back or lay side. Layers could make money by laying a book above 100% and backers by backing below 100%. This number will give you a feel for how much money is 'lost' to both sides of the book and how efficient the market is. If a situation occurs



where the book slips under or over 100% the column number will turn green to indicate that you could have performed book arbitrage on the market. Read the book making or dutching section of this user guide to learn how you can do this.

Ling 27th Feb - 14:00 1 m2f Claim Stks
Total matched so far: £42,768 Increased at 11:48:09 by £0

The current market you are on is displayed on the top left of the screen along with how much money has been matched on this market and the last and average increase in volume. You can set the average volume settings from

the settings editor, there is no pre-set standard for average volume and it is simply user defined.

On the left of the screen are the selections available in this market. If you are in a horse racing market each selection will display supplementary information such as the jockey silks, the saddlecloth number and, if you hover your mouse over that selection, additional details about the runner. Each selection is displayed along with the current profit and loss underneath each selection. The number in brackets is the stall draw number. As you place orders in the market you will see your potential profit or loss on each selection if that selection goes on to win. If you click on

the name of the selection you will bring up the Betfair charts for that selection. Click on the refresh button to bring the latest chart to this area. If you wish you can also get the chart to automatically refresh at a pre-defined time interval.



The chart on the left represents the range in which the price / odds have traded since the market was opened. This will give you a feel for how volatile the market is and whether the price is predominately moving in one direction or another. The grey lines underneath the red odds line is the amount of money, the volume, bet at that price, at that particular moment in time. The charts are linear, they move with time, but because there are Betfair generated Bet Angel can't interpret over which time period the charts were generated.

The chart on the right is the implied chance graph; this is the inverse of the odds available. If a selection is trading at digital odds of 2.00 on the implied chance chart it will be display at 50%. The calculation is 1/2.00 = 0.50 or 50%. The implied chance, unsurprisingly, is telling you what chance this selection has of being a winning bet. At least this shows the markets interpretation of that chance. If you felt it was more than this then there is value backing the selection, if you think there is less you would lay it. From a trading perspective you should use these graphs to instantly asses if there is any long term trend, what that trend is and how much the price has been moving. This is a good way to understand the general market movements.





To the very far left of this section there is the Bet Angel Graphing button. Clicking on this button will take you to the dedicated streaming charting area of Bet Angel. This allows you to plot custom made charts based on a variety of prices and indicators. If you would

like to know more about this function please refer to the **Bet Angel Charting** section of this user guide.

The Make Market button

£ 33 £ 46 £ 38 £117 : £89 £ 23 £ 29 £ 37 4859 Market	10.5 £ 33	11 £ 46	11.5 £ 38		12.5 £ 23	13 £ 29	13.5 £ 37	12 4859	5	5	Make Market
--------------------------------------------------------------	--------------	------------	--------------	--	--------------	------------	--------------	-------------------	---	---	----------------

Where is the make market button?

The make market button is available on the 'One click' trading screen.

What does it do?

The make market button offers two prices to the market one tick apart. It does this by offering money to the market by backing at the current lay price and laying at the current back price. If both orders are matched then you will create a profitable position.

Background

In traditional financial markets 'market makers' are often recruited to provide liquidity for illiquid company shares so that that there is a free market for people to buy and sell those shares. To achieve this market markers quote prices to people wishing to buy and sell in the market. However, the prices they quote to buy and sell also include a spread. This spread includes margin for the market maker. In financial markets you would quote a price to buy and sell, say 1.74 to 1.75. People looking to buy shares would buy at 1.75 and sell them at 1.74. If they bought and sold instantly they would make a loss as they are buying at a higher price than they can sell at. That difference in price goes to the market maker in profit. A market maker makes money purely by offering prices to buy and sell at in the market with some margin in between these prices. They don't really care about the underlying asset they just quote two prices to buyers and sellers and move their prices to reflect market demand.

The concept behind introducing the make market button was to allow people to price a market with little effort, in a similar manner to a traditional market maker. Laying an entire book to the market in the same way traditional bookmakers would, is a difficult strategy. This is because with big fields you have many orders to manage and the possibility of many unmatched bets, all of which need some sort of management. Failing to get these orders completed may result in a loss or a potential loss. The make market button was introduced to allow you to 'make a market' on a single selection in a sports events thus giving you an excellent chance of profit without substantial risk or management of unmatched bets. Using the make market button you can be a market maker.

The 'make market' button is useful in markets where you expect to see little price movement in either direction or lots of rapid price movement around the same price. One click on the 'make market' button allows you to place two orders in the market simultaneously with just one click. The 'make market' function is located to the far right of the screen on the selection you are viewing selection.

When you click on the make market button it place two orders in the market, not only this it **places both orders on the 'reverse' side of the book**. By 'reverse' we mean it will lay at the current back price and back at the current lay price. It does this because if both these orders are filled, taken by other market participants, you will create a profit by netting the spread in between these two prices. Bet Angel will place these orders at the prevailing stake in the stake boxes so if you use the make market button make sure both stakes are set at the same level.

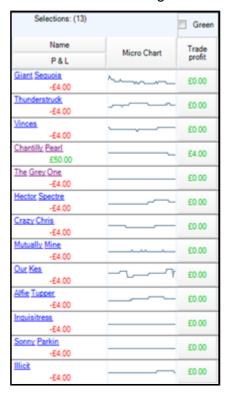
For a detailed example of using the 'Make Market' button to scalp please see this blog



One Click Trade Profit column and Greening Up

Overview

The 'Trade profit' column allows you to see your net trading position in the market if you were to close the open positions at the current price. It can be found to the right of the selection's name and current Profit & Loss. The values will be displayed in green when positive and red when negative.



Usage (choice of two modes)

a) Green All selections (also called Hedge up or Cash Out)

First **tick** the **'Green'** check box at the top of the column - this now enables '**Greening**' via the Trade Profit column. Below the Trade profit column header you will now see the predicted profit or loss if you were to 'Green Up' all selections at the current market prices - as the odds of the selections change so to will this figure until you have 'greened up'.

To start the Green All selections process all you need to do is **click** one of the figures under the Trade profit column header. The software will automatically check through every selection, calculating and placing the bet/s to green up any open positions, once done any profit or loss will be spread equally across all other selections.

Once you have successfully 'Greened Up' the figures next to the selections names will update and will now show the same profit or loss amount for each selection.

b) Close a trade on a selection

For this mode of usage, the 'Green' check box must be unticked.

Now each selection is treated individually and you can use its 'Trade profit' button to close an open trade. A trade will be considered 'open' if you have backed the selection with more money than you've laid, or if you've laid the selection with more money than you've backed.

The figure shown in the 'Trade profit' column for the selection will be the expected profit/loss from the trade if you close it now at the current market price. To close the trade just **click** that figure and Bet Angel will calculate place the appropriate stake required into the market to close the trade on that selection.

In the above image, Chantilly Pearl has a closing Trade profit of £4.00, if you were to press that button you'd see the P & L values next to the selections name change so that there was £4.00 profit on that runner and no loss on any of the other runners. Effectively a free bet on Chantilly Pearl.

Note: If you have not backed or laid the selection then the 'trade profit' value will be £0.00. When all trades are closed the P & L values under the selection name should match the values displayed in the Trade profit column.

TIP: Remember that when the market settles you will win/lose the value shown in the P & L column against the winning selection. We encourage you to **Green All selections** so that you win/lose the same amount regardless of who wins the market.



This image shows the same market once Green All selections has been used

Notes

It is not possible to close an open Back position on a selection if that selection does not have a lay price. (e.g. It's currently 1000.0 to back).

Likewise, it is not possible to close an open Lay position on a selection if that selection does not have a back price (e.g. It's currently 1.01 to lay).

This column is not designed to be used with the bookmaking or dutching feature.

When closing a trade or greening all selections, you should get into the habit of checking your unmatched bets. If you are trading a fast moving and/or illiquid market, some of the closing bets may not be filled and you may have to close/green again.

To see a detailed example and video tutorial of this please see this thread from our forum.

For details on how to add custom buttons for example to green up at the reverse price and at custom ticks please see this thread from our forum.



Sort columns by price via column header

Sort by name, price or any column.

If a column header is clicked upon then the grid is sorted by the values in that column. This means it is possible to sort the field alphabetically if you click on the 'Name' header. Or you could sort by price by clicking on the back or lay header. You could also sort by stall number in a horse race or even saddle cloth number.

To sort by price order click on the column header marked 'Back'



Here, the field has been sorted by saddle cloth number by clicking on that column header:

		Name Micro Chart	Trade			Back	WoM	Levi			L.T.P	Back	Lay	
		P&L Wild Chart	profit			Dack	Total value	Lay			Volume	stake	stake	
h _i lihin Maran	1	Rocking Blues -£8.96	-£0.30	8.6 £3	8.8 £ 11	9 £ 14	21% £28 : £107	9.4 £ 15	9.6 £ 13	9.8 £ 79	9.2 2875	50	50	Make Market
h _i lihin Taran	2	Peachey Moment £8.29	-£0.30	13 £ 25	13.5 £ 11	14 £2	44% £37 : £46	15 £ 20	15.5 £ 17	16 £ 10	14.5 733	50	50	Make Market
hilipii	3	Pamak Dairy £8.29	-£0.30	9.8 £ 20	10 £ 39	10.5 £ 26	81% £85 : £20	11.5 £2	12 £ 10	13 £8	10.5 1073	50	50	Make Market
hilipii	4	<u>Cooldine Run</u> -£8.96	-£0.30	6 £ 210	6.2 £ 12	6.4 £ 16	70% £238 : £101	6.6 £ 44	6.8 £ 38	7 £ 20	6.8 1674	50	50	Make Market
hilling.	5	£8.30	-£0.30	3.15 £ 133	3.2 £ 99	3.25 £ 48	57% £280 : £212	3.3 £ 16	3.35 £ 101	3.4 £ 95	3.25 10669	50	50	Make Market
halan Taran	6	<u>Saddle Pack</u> <u>£8.26</u>	-£0.30	16 £5	19 £5	20 £ 32	49% £43 : £44	22 £ 35	27 £ 7	30 £ 2	21 761	50	50	Make Market
hilling.	7	Indian Voyage -£8.96	-£0.30	4 £ 178	4.1 £ 102	4.2 £ 179	57% £459 : £345	4.3 £ 66	4.4 £ 117	4.5 £ 163	4.2 10369	50	50	Make Market



If sorting by dynamic values i.e. In play then be aware the order can change rapidly. An example is a win market for a UK horse race. If you have selected to sort by price and there are two or more runners at the same price then these can rapidly flip position meaning you could accidentally choose the wrong horse. This is particularly true of the Horse Race is in play!



Custom columns

To open the custom column window select a profile and click the 'Star' icon

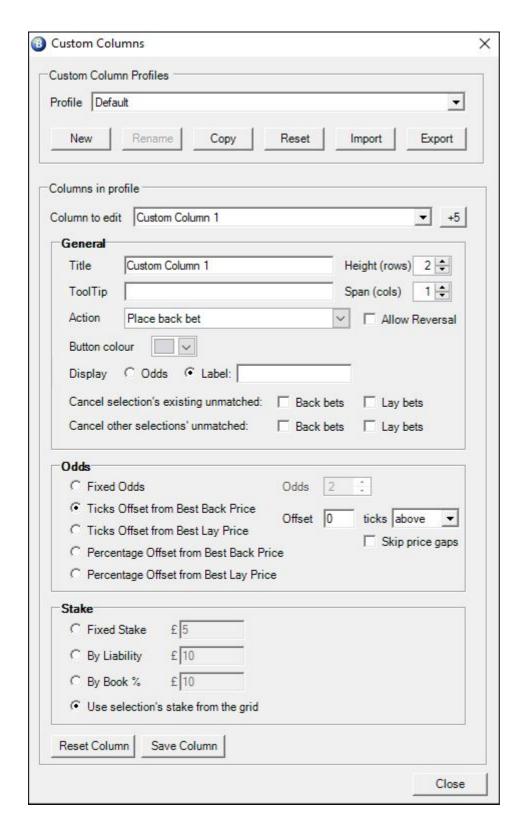


You can create custom columns for a range of actions, from placing regular back/lay bets at the current price, offset or fixed price using preset staking methods and values to cancelling unmatched back or lay bets to controlling Servants or display a Stored Value. They can also be used just to display additional information like SP, Reduction Factors etc

Custom Columns can also be Imported or Exported if you wish to transfer them to Bet Angel on another computer or share with someone else.

To begin creating a custom column select the profile you wish to load into the custom column editor. There are two provided - 'Default' and '5 prices' which you can edit or you can click 'New' if you want to create your own additional profiles.

There are 20 columns per profile ready for you to customize, if you require anymore you can add them (5 at a time) by clicking the +5 button up to a maximum of 100 columns, although we would recommend only adding additional ones as and when needed.



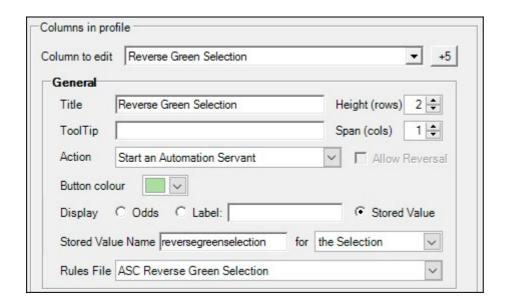
Action

In addition to creating custom columns to place regular back, lay and cancel unmatched bets there are also a number of other actions you can choose from, these include: Starting and Stopping a <u>Servant</u>, Displaying Additional Information, Displaying a named Shared <u>Stored Value</u> and Displaying values held in <u>History Lists</u> from any point in time. Stored Values and History Lists having been populated by <u>Automation</u> and/or Servant rules.

Starting a Servant

The 'Action' of start an Automation Servant allows you to assign a Servant to a custom column button, the editor also allows you to configure what is displayed in your custom button, you can chose between displaying the current odds, a label of your choice (ie, this could be the Servants name) or a Stored Value

In the image below I've created a custom column that when clicked will start a saved Servant named 'ASC Reverse Green Selection'.



For the display I've opted to show the Stored Value named 'reversegreenselection' for each selection, this stored value is coming from an automation rule in Guardian, this rule continually stores the profit/loss for each selection at the reverse market price.

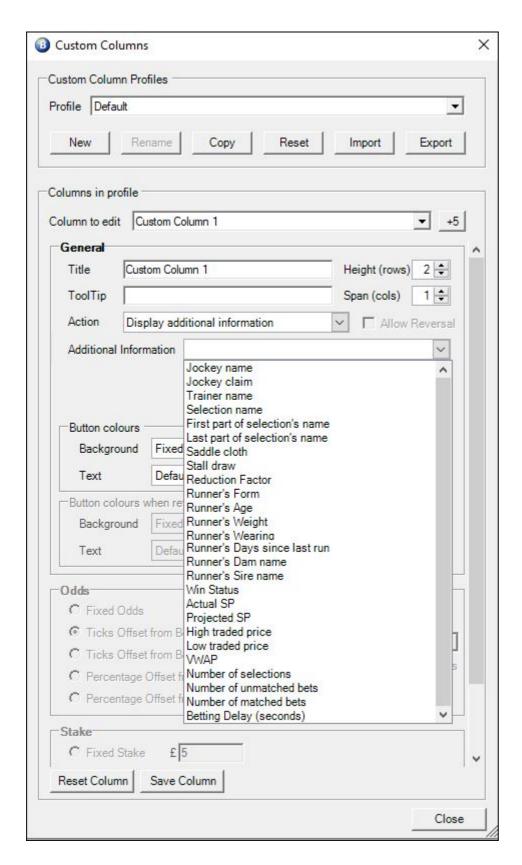
In the image below a custom column is now displaying the profit or loss at the best reverse price for each selection, then when clicked it will start a servant that will place the bets required to green up for that displayed profit/loss.



Used in this way you have a custom column to display a value from one rule, then clicking it starts a servant to perform a task of its own effectively giving the custom column a duel purpose.

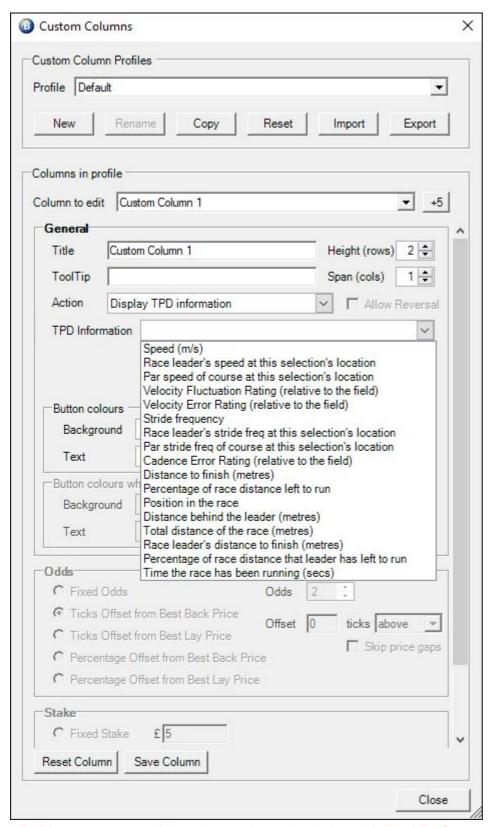
Additional Information

The action of 'Display Additional Information' allows you to use a column to display preset additional information you might want or need, you can see in the image below the list of preset information that is available to be displayed. When creating a column for this purpose you can't place bets from them so none of the betting options below that are required.



Total Performance Data (TPD) Information

The action of 'Display TPD Information' allows you to use a column to display preset information from TPD's real time GPS feed sent directly from a horses saddle, you can see in the image below the list of all preset information that is available to be displayed. When creating a column for this purpose as stated above you can't place bets from them so none of the betting options below that are required.

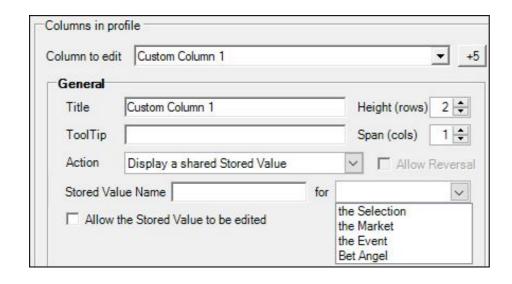


NB; Please note you will need an active subscription with Total Performance Data to receive any of the data listed in the image above

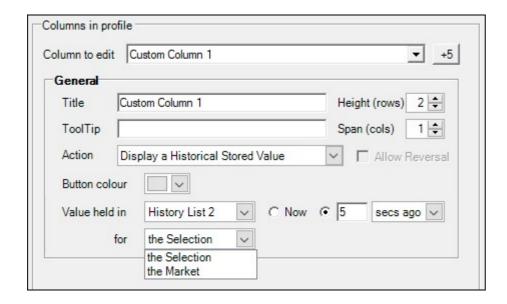
Other 'Actions' you can choose from when creating a custom column are to 'Display a Stored Value' and 'Display a Historical Stored Value', that have been set by Automation or Servant rules.

This is similar to what was discussed further up this page but without using a Servant, ie, these options allow you to display a value you have from a rules file - but doesn't t perform any action when clicked.

To do this enter is the Shared Stored Value name (which you used when creating the rule) then select if its for the Selection, Market, Event or Bet Angel.



If you want to display an Historical Stored Value then similar to above you just need to select which 'History List' the value you want to display is held in and if its for the Selection, Market or Event, you can then set the point in time to use when looking up the value to display (use 'now' if you want the most recent value from the list).



For example, in the following image I have created and saved 6 custom columns to look up the values from the History List 2 for the selection (there is a automation rules file running in Guardian storing the back prices for each selection every second to the History List 2)

The first custom column has been set to display the time 5sec ago, the 2nd custom column 10sec ago, the 3rd for 30secs ago, then 60secs, 120secs and 240secs.

Once saved and those new custom columns can be selected with the 'Column Chooser' (detailed further down this page), the one-click screen will now look like the image below, displaying the historic prices for each selection at those specified intervals in the past.

	Name	Micro Chart	Trade			Back /	Lav			Price 5 Secs	Price 10 Secs	Price 30 secs	Price 60 Secs	Price 120 secs	Price 240	Lay	Back
	P&L	Micro Chart	profit			Dack	Lay			ago	ago	ago	ago	ago	secs ago	stake	stake
Prints	4. Cawbourne Dixie £0.00	~~~~	£0.00	3.45 £ 81	3.5 £ 27	3.55 £6	3.65 £ 38	3.7 £ 29	3.75 £ 57	3.55	3.6	3.5	3.8	3.7	3.75	5	5
physic .	1. Rittos Hanger £0.00		£0.00	5.4 £ 55	5.5 £ 109	5.6 £ 11	5.7 £ 29	5.8 £ 71	5.9 £ 42	5.6	5.6	5.6	5.4	5.1	5.5	5	5
philippi 	2. Jamie Marie £0.00	~	£0.00	6.2 £ 100	6.4 £ 73	6.6 £ 19	6.8 £ 24	7 £ 72	7.2 £ 28	6.2	6	6.2	6.2	6	5.6	5	5
ilitiiti	5. Weeona Lucky £0.00		£0.00	6.6 £ 78	6.8 £ 28	7 £ 17	7.4 £ 59	7.6 £ 19	7.8 £ 14	6.8	6.8	7	7.2	7.2	9.2	5	5
phippi and the	6. Minor Details £0.00		£0.00	9.6 £ 25	9.8 £ 19	10 £ 37	10.5 £ 11	11 £ 73	11.5 £ 37	10.5	10.5	10.5	9.8	9.6	7.2	5	5
physical section in the section in t	7. Agent Nat £0.00		£0.00	10 £ 31	10.5 £ 25	11 £ 24	11.5 £ 24	12 £ 107	12.5 £ 51	12	12	12	11.5	11.5	14	5	5
physic sector	8. Sublime Chance £0.00		£0.00	22 £ 7	23 £ 16	24 £ 9	25 £ 7	26 £ 9	27 £ 5	24	23	24	22	27	23	5	5
ilini	3. Buster Norris £0.00		£0.00	29 £ 7	30 £ 11	32 £ 1	34 £2	36 £ 6	38 £8	32	32	32	29	34	26	5	5

This gives you a nice clear overview on your one-click screen of where there prices of each selection were in the past

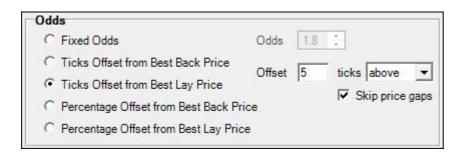
The ability to display present and historical stored values means you can create as many custom columns as you want and add them to your one-click trading screen allowing you to see almost any market information you need and from whatever period of time you require.

For details of all the different types of data that can be stored with a rule then displayed on your one-click screen see the full list on this <u>page</u>

Price Gaps

Going back to creating custom column to place regular back and lay bets you have the option to tick 'Skip Price Gaps' this allows you to expand on the default best 3 and 5 prices and create a fuller market depth on the one-click screen

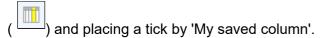
This is especially useful on illiquid and in-play markets where there could be large gaps between the price, using this option you can 'skip' the gaps and show the next price where there is money waiting, it therefore works best when full market depth is refreshing at a high rate or exchange streaming is on.

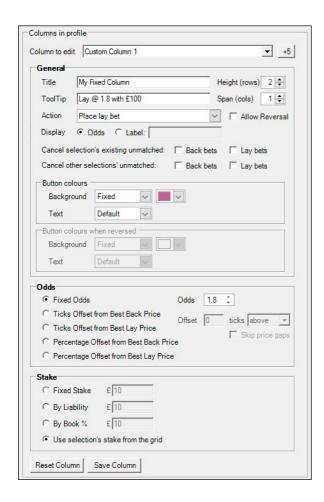


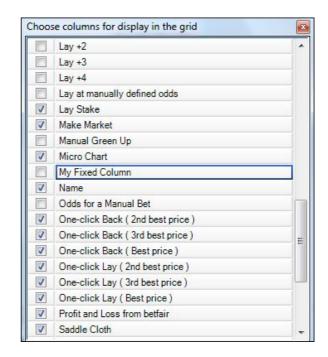
In the image below four addition columns have been created to so the 4th & 5th best back and lay prices, you can see on the right hand side there is no money waiting to be matched at odds of 7.0 and 7.6 so these prices have been skipped to show the 4th and 5th best price with money waiting to be matched.



Below I have created a custom column and called it 'My Fixed Column'. It will place lay bets at fixed odds of 1.8 and I have specified a strong colour to make it standout on the grid. Once saved it can now be added to the one-click or manual bet screen by clicking on the column chooser button







1 - Define the column

2 - Add to the grid

Now you will be able to place an order at the specified odds and cancel any existing unmatched bets in the market at the same time with a single click.



Columns can be <u>arranged</u> by dragging and dropping where you want them, or resized from the <u>Display</u> tab of the main setting area

Examples

To see a few more examples of ways custom columns / buttons can be used please see this blog

There are also several more step-by-step guides to setting up custom columns in the 'Tip & Tricks' section of our forum, these include examples on creating reverse and custom greening columns, displaying historic back/lay prices in custom columns, displaying other information like VWAP, Tennis Scores, Stored Values and much more.



Drag 'n' drop columns

The layout of the one click interface is very flexible. If you do not wish to have the last traded price or the total volume matched displayed then these can be removed using the column chooser.



In addition the columns can be moved and placed in any order. For example, if you want the trade profit moved to the right of the prices grid then you can drag and drop it by holding your left mouse button down on the column you want to move and when you see the two arrows appear between the columns you want to place it between as above simply release your mouse button.

Saving Custom Layout

If you have created a custom column layout, you may wish to save this to call up the next time you wish to use it. You can do this by clicking on the save grid layout button.

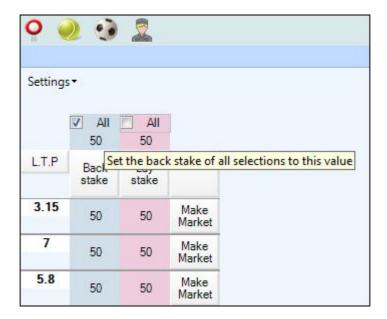
Click on this button will allow you to give a unique name to your customised grid layout.

For example, I have a custom layout here I have called 'My Grid Layout'.

				Selections: (6)	[5]	Z Green			101.0%		99.1%					✓ All 10	✓ A
			Jockey Name	Name P & L	Micro Chart /	Trade profit			Back	WoM	Lay			Matched Bets	Un Matched Bets	Lay stake	Baci stak
11 11	2	(1)	Clifford Lee	Lord Oberon £0.00		£0.00	2.18 £ 421	2.2 £ 447	2.22 £46	39%	2.24 £ 282	2.26 £ 902	2.28 £ 253	0	0	10	10
ĮI L	1	(5)	Finley Marsh	Jack Taylor £0.00		£0.00	3.5 £ 357	3.55 £ 156	3.6 £ 125	75%	3.7 £ 72	3.75 £ 55	3.8 £80	0	0	10	10
11	6	(3)	Edward Greatrex	Royal £0.00		£0.00	4.5 £ 250	4.6 £ 106	4.7 £ 86	77%	4.8 £9	4.9 £ 73	5 £51	0	0	10	10
1	5	(6)	Lewis Edmunds	Whinmoor £0.00		£0.00	25 £ 50	26 £ 34	27 £5	50%	28 £6	29 £ 19	30 £ 62	0	0	10	10
	4	(4)	Shane Gray	Sentimental Gent £0.00		£0.00	32 £ 16	34 £ 19	36 £ 11	48%	38 £ 24	40 £ 23	42 £2	0	0	10	10
Įl L	3	(2)	Darragh Keenan	Admissible £0.00		£0.00	230 £5	250 £ 4	260 £3	63%	280 £4	290 £3	310 £1	0	0	10	10

Changing the stake amount - One Click Screen

You can change the stake amounts used when placing Back and Lay bets by over-typing the 'Back stake' and 'Lay stake' values for an individual selection

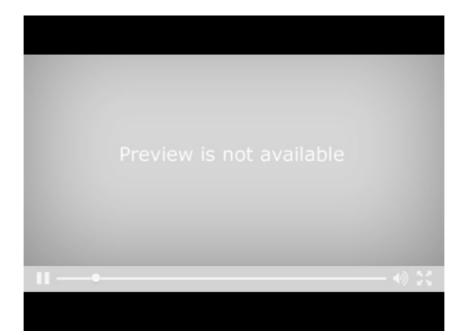


You can set the stakes for **all selections** by over-typing the values at the very top of the columns and then ticking the 'All' checkboxes.

To set the default stake amount you can use the settings editor. Will take you to the Settings Editor



Then save the settings in a profile. Note the default stake will take effect the next time you log in to Bet Angel.

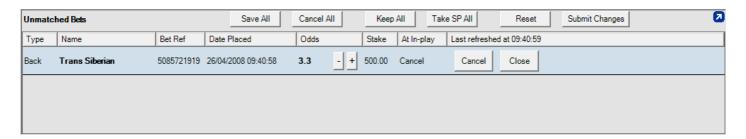


Bet Persistence / SP & Keep Bets

Concept



The unmatched bets area allows you to modify and manage unmatched bets but it also includes the ability to convert your them to get matched at Betfair SP (Starting Price), or to keep the bet through a market suspension and into the inplay phase of a market.



Usage

If you have unmatched bets there are three possible things that can happen when the market turns in-play:

- The bet is cancelled (Default)
- The bet is kept in the market Keep All feature
- The bet is matched at the Betfair Starting Price (BSP) Take SP feature

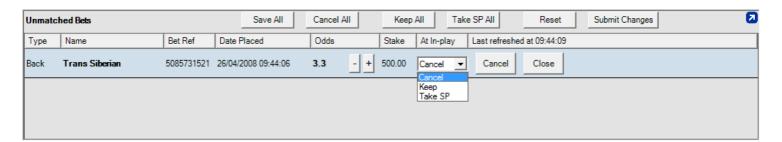
If you have any unmatched bets they will appear on the unmatched bets area at the bottom of the screen.

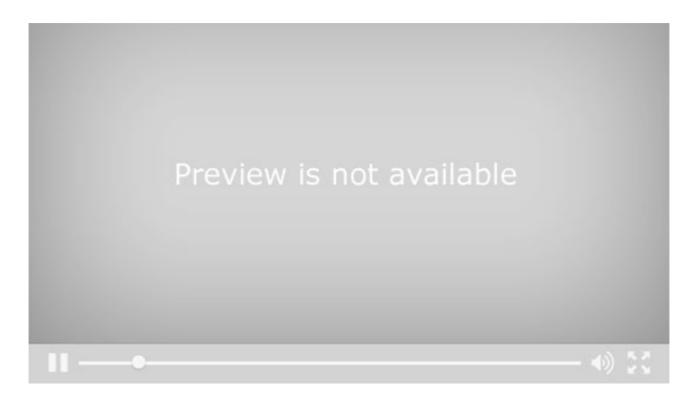
There is a column here called "At in-play". As already mentioned, the default is for all bets to be cancelled when the market turns in play unless you modify them with a Keep or Take SP feature. If you wish your bet to be carried over to the in play market, simply select "keep". Alternatively you can take the Betfair SP price by clicking "Take SP".

Tip: If you modify an individual bet **you need to instruct Betfair of these changes by clicking the 'Submit Changes' button**. Bet Angel reminds you that you have modified but not submitted by changing the status to the colour red.

By using "Take SP" your bet is guaranteed a match, but you are not guaranteed at what price it will match. By using "keep" you will retain the same price and stakes but you will rely upon the in play market volatility to get your bet matched.

If you have a series of bets in the unmatched bets area you can globally apply these characteristics by clicking on "Keep all" or "Take SP all". All unmatched bets in the unmatched bet area will modify and adopt the new characteristics; there is no need to submit changes.





Notes

If you select 'Keep All' or 'Take SP All' then submit a further bet that remains unmatched you will need to change the Take SP or Keep status of the new bet by clicking on these buttons again.

What If P&L

The 'What If' allows you to see what your profit and loss would be prior to placing a bet on the one-click and manual bet screens. Once enabled when you hover your mouse cursor over any of the back/lay prices (as if you were going to place a bet) the software will display the predicted profit/loss a matched bet at this price using your current stake and staking method would be.

This can be very handy if your opening up multiple positions and want to see how an additional bet will influence and change the profit/loss on your existing bet(s) - you may then want to adjust your stake or staking method prior to placing the bet.

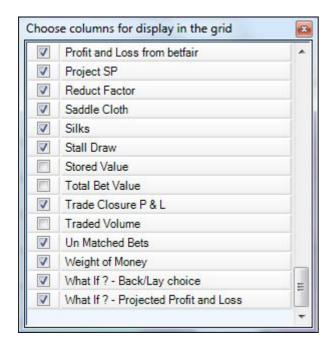
In the image below I have a £100 back bet stake selected for the 3rd fav and have my cursor pointing to place a back bet at the price 6.8, you can see in the 'What If column for this selection its showing I would win £580 and if any of the other selections wins I will lose £100.

	Selections: (9)		30	☑ Green			102.0%	97.3%		✓ All 25	✓ AII 100			
			Name	Micro Chart	Trade			Back /	Law			Lay	Back	What If?
			P&L	Micro Chart	profit			Баск	Lay			stake	stake	P&L?
physical section in the section in t	5	(5)	Thorpe Doro £0.00		£0.00	4.4 £ 59	4.5 £ 106	4.6 £ 85	4.7 £ 17	4.8 £ 35	4.9 £2	25	100	-£100.00
physical section in the section in t	6	(6)	Added Attraction £0.00		£0.00	6 £ 21	6.2 £ 43	6.4 £6	6.8 £ 10	7 £ 28	7.2 £ 38	25	100	-£100.00
physical section in the section in t	4	(4)	NYM £0.00		£0.00	6 £ 14	6.2 £9	6.4 £ 32	6.6 £ 25	6.8 £7	7 £ 23	25	100	Back ✓ £580.00
physical section in the section in t	9	(9)	Blended Lute £0.00		£0.00	6.4 £ 13	6.6 £ 16	6.8 £ 11	7 £9	7.2 £ 9	7.4 £ 22	25	100	-£100.00
physical section in the section in t	8	(8)	Hickory Hill £0.00		£0.00	7 £ 18	7.2 £ 37	7.4 £ 16	7.8 £ 27	8 £5	8.4 £5	25	100	-£100.00
physical section in the section in t	1	(1)	Edge Of Ackworth £0.00	·	£0.00	10.5 £ 10	11 £ 15	11.5 £ 18	12.5 £ 2	13 £3	13.5 £ 27	25	100	-£100.00

Now I want to offer a lay bet on the 2nd fav at the best reverse price (6.2), for £25, as I point the cursor over this cell the 'What If' figures have updated to show the new predicted P/L on all selections if this bet were to be placed and matched.

			Selections: (9)		☑ Green			102.3%	98.8%			✓ All 25	100	
			Name	Micro Chart	Trade			Back /	Law			Lay	Back	What If?
			P&L	Micro Chart	profit			Баск	Lay			stake	stake	P&L?
lighting.	5	(5)	Thorpe Doro -£100.00	<u>.</u>	£3.03	4.4 £ 167	4.5 £ 168	4.6 £ 67	4.7 £ 184	4.8 £ 20	4.9 £ 161	25	100	-£75.00
l _h ibh	6	(6)	Added Attraction -£100.00		£3.03	5.9 £ 27	6 £ 91	6.2 £ 22	6.4 £ 20	6.6 £ 44	6.8 £ 42	25	100	Lay ~
l _h ibh	4	(4)	<u>NYM</u> £580.00		∧ £3.03	6 £ 61	6.2 £ 18	6.4 £5	6.6 £ 26	6.8 £ 15	7 £ 77	25	100	£605.00
l _{hi} lin	9	(9)	Blended Lute -£100.00		£3.03	6.4 £ 64	6.6 £ 27	6.8 £ 98	7 £9	7.2 £ 21	7.4 £ 31	25	100	-£75.00
lhilini maran	8	(8)	Hickory Hill -£100.00	_^	£3.03	7 £ 52	7.2 £ 45	7.4 £ 13	7.8 £ 24	8 £ 44	8.2 £ 10	25	100	-£75.00
light.	1	(1)	Edge Of Ackworth -£100.00		£3.03	10.5 £ 14	11 £ 10	11.5 £8	12 £ 4	12.5 £ 9	13 £ 21	25	100	-£75.00

To display this whilst on either the One-Click or 'Manual Bet' screens click the 'Column Chooser' Icon [11], the following window will then open and at the bottom of the list you will find the two 'What If' options.



What If - Back / Lay Choice (this will display if its a back or lay bet your about to place)
What If - Projected Profit / Loss (this will show how the P/L is effected on all selections if you place the bet)

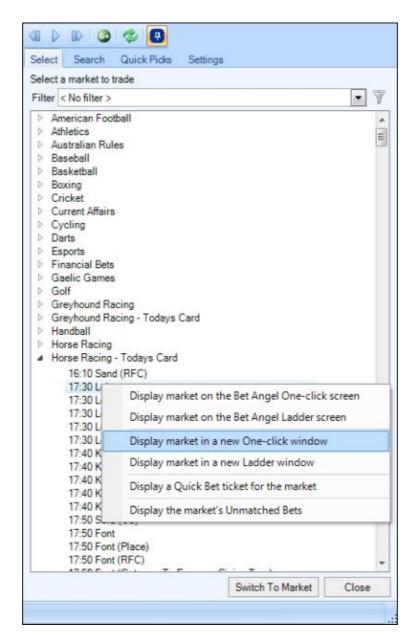
For details on enabling and seeing the 'What If' profit/loss on the ladder screen please see the following page

Trading Multiple Markets With Multiple One-Click Screens

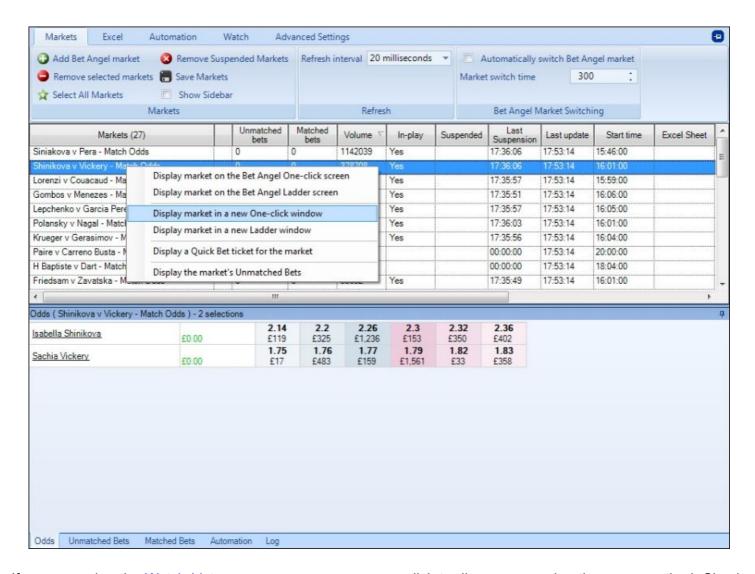
It is possible to display multiple One-Click screens with each One-Click screen attached to a different market. This is especially useful when trading more than one market at a time.

To open an additional market on a new One-Click screen (separate from the market being displayed in the main Bet Angel Trading screen) you start by right-clicking the market with the mouse in the Market Selection screen.

This brings up a context menu (as shown in the screenshot below) relating to the display of the market. Choose 'Display market in a new One-Click window' and a new one-click window will be created for the market.



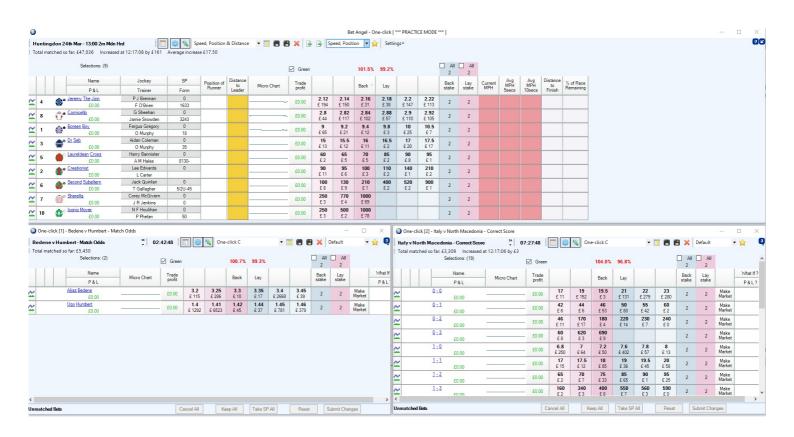
If you are using Guardian, then just right-click a market in Guardian's market list to view a similar context menu.



If you are using the <u>Watch Lists</u> you can spawn a new one-click trading screen using the same method. Simply right-click on one of the markets to see the same context menu.



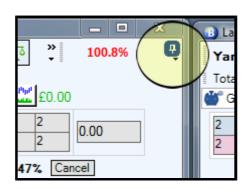
Here is an example layout showing three one-click screens each connected to a different market, each additional one-click screen opened is numbered in its title bar which makes it easier to keep track of which screen relates to which market, especially if you have them minimized to your windows task bar



Refresh rates

When the one-click screen window is brought into focus by moving your mouse over or clicking on it, it is refreshed at the main Bet Angel trading screen's chosen <u>refresh rate</u>. This gives the market you are about to trade the best possible refresh rate. Other windows will then revert to the background refresh cycle (which defaults to two markets per second, but is adjustable via the <u>Bet Angel Settings window</u>).

Tip: When squeezing many windows onto a smaller screen, use the drawing pin icon to **pin** each screen to the desktop. Any overlapping screens will be brought to the front when you move the mouse over the associated window.



Bet Angel – Global Settings

Automated order management

One of Bet Angel's most useful trading tools is the 'global settings' bar at the top of the interface. This controls how Bet Angel manages each bet and whether or not the trade is closed with or without profit. From here you can set Bet Angel to close a position even if the price is heading off in the wrong direction by applying a stop loss.

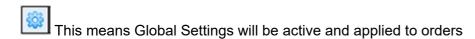


Usage

Choose from the picklist in the top left of the screen to select your desired automated trade. This may be simple offsetting to offsetting with greening and a stop.



Global settings can apply to all screens in the main Bet Angel trading window. e.g. one-click, ladder, manual betting etc. In some of these of these areas global settings will apply automatically, in other areas you will need to specify that you wish to use the global settings. Look for the 'cog' symbol on the one click and other screens.



This means Global Settings will not be active and not applied to orders

Pro Tip: It is advisable to check if Global Settings setting is active on each screen you use i.e. One click, Ladder etc.

IMPORTANT: If you use global settings (e.g. Offset bet and Stop) then you should add the market to Guardian if you intend to switch to another market. Guardian will manage the market in the background while you view another market. Failure to do so will result in the global settings being ignored.

Activating the global settings

The Global settings toggle button is on the One-click, Ladder, Manual betting, Dutching and Bookmaking screens allowing you to individually control which screens use the global settings. Note: The legacy charting and automation screens will always have global settings applied.



Enabled



Disabled

In order to use a global setting you simply need to enable them for that trading screen then decide what setting you require. As you chose a global setting from the picklist, the text boxes for the relevant parameters will be enabled. For example, choose 'Offset bet' and the 'Offset (ticks)' text box will be enabled so that you can specify the required number of ticks for the offset.

Fill or Kill

Fill or Kill is used if you want to instruct Bet Angel to automatically Kill (cancel) an order or remaining part of an order that has not been Filled (matched) within the time frame you have specified hence the name Fill or Kill.

If your using Offsetting you would also enable the 'Fill or Kill' option if you only wanted the offset part of your bet to be placed after your opening bet has been filled or begun to be filled.

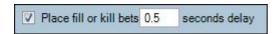
In the image below Fill or Kill has been enabled so each time a bet is now placed any part of it that is not Filled (matched) within 3 minutes is Killed (cancelled) by Bet Angel.



The time you would use is totally dependant on the type of market your trading and the type of trade your doing, there is no single time that is appropriate to all markets so feel free to experiment as you gain experience and find what work best for you and the market and style your trading.

For example; if your scalping an average pre-off UK horse racing market you might want to set this for a few seconds, whereas if it was a higher quality meeting like Ascot or Cheltenham you would probably want to increase this time up to a few minutes. Alternatively if you were trading on the in-running horse racing markets you might want to use a very fast fill or kill time like a second or even half a second if your throwing multiple speculative orders into the market hoping to catch a nice bounce.

NB; We would recommend always using a minimum of 0.5 seconds as a Fill or Kill time



When using Fill or Kill you will also be asked to specify a number of Batches, for further details on what Batches are please see the section of the user guide titled 'Offset Batches'

Fill or Kill with Advanced Automation

If your using Advanced Automation to trigger your bets into the market and wish to use the Fill or Kill as part of any of your rules it can be selected from the 'Parameters' tab of the rules editor within Guardian.



Reversing the book Using Odds Display



If you are looking to trade the market using the one-click or manual bet grid screens it makes sense to 'reverse' the book. The market is efficient so playing at normal prices means you have to ensure a very good strike rate together with a good reading of the market. If you reverse the book it allows to ask for a price or offer money to the market rather than take a price being offered by someone else which is how most Professional traders will approach things.

To reverse the book select the 'Odds Display' drop down menu. When you click on this menu you will see several options.

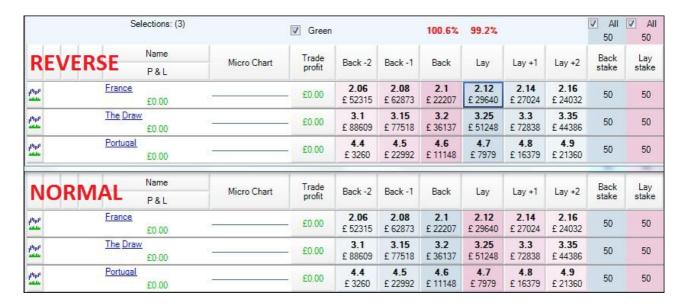


Normal Nothing will change, this is the same as the layout on Betfair's website **Back** The order boxes will turn Blue and only back orders will be placed. **Lay** The order boxes will turn Pink and only Lay orders will be place.

If you select the **reverse** option the book will 'flip' over and now the screen will offer you the chance to back at the current lay price and lay at the current back price. Any orders placed will most likely be unmatched when they reach the market. The reason you may want to reverse the book is to enable you to get your order filled at a better price.

Normal Odds = Take best price instantly.

Reverse Odds = Offer price to market and wait for it to be matched.



To back France at 2.12 click on the blue 2.12 box and your stake would be queued behind the £29460 already waiting to back France at those odds.

To offer a lay on Portugal at 4.4 clicking in this pink box would add your lay bet to the £3260 already waiting to lay Portugal at those odds.

Using the normal odds display lets you take the best current price of a selection, clicking on any of the pink boxes places a lay bet at these odds - but remember Betfair will always match you at the best available odds, so if laying France clicking on either 2.16, 2.14 or 2.12 will see your bet being matched at 2.12 - as these are the current best odds.

Pro Tip: Betfair's market is structured such that you will always get the best price on offer. If you ask to back at 2.60 and 2.62 becomes available then you will get the better price. If you ask for 2.62 and only 2.60 is on offer you will have to queue until your order is matched. The method for Lay bets is similar. If you offer to lay at 2.62 and 2.60 is available then you will get the better price. If you offer to lay at 2.60 but the price is at 2.62 (or any price above 2.60) you will once again have to queue.

When trading on the ladder screen you can ask for or take a price while using either the normal or reverse odds display, there is however still a couple of notable differences when using reverse or normal odds display. The most obvious difference is a change in column colours the second is where you actually click the mouse cursor to place a bet. Looking at the image below of the same selection (reversed and normal) money waiting to lay a selection is always shown on the left and money waiting to back on the right.

On both ladders below a £100 back bet has been asked for above the current price at odds of 2.28 A back bet is always placed in the blue column corresponding to the odds required (the image shows which box was clicked to place this bet) to back at the best current price for an instant match the blue box at odds of 2.10 would have been clicked as shown in the image - or any blue box below this.

0.00		2.44				•		0.00			2.44			•
0.00		2.42					П	0.00	. 2		2.42			
0.00		24					П	0.00			2.4			
0.00	RE	2.58	RSE				Ш	0.00		NO	241	AL		
0.00		2.36					П	0.00			2.36			
0.00		2.34					Ш	0.00			2.34			
0.00	9	2.32					П	0.00	1		2.32	î î		
0.00	3	2.3	27		6 8		Ш	0.00	* ×		2.3	27		
0.00		2.28	100	100.00			П	0.00	100.00		2.28	100		
0.00		2.26	89				П	0.00			2.26	89		
0.00		2.24	103				П	0.00			2.24	103		
0.00		2.22	1506				П	0.00			2.22	1506		
0.00		2.2	2983		0.0K		П	0.00			2.2	2983	0.0K	
0.00		2.18	4201				П	0.00			2.18	4201		
0.00		2.16	24032		î		Ш	0.00	5		2.16	24032		
0.00	2	2.14	26112				Ш	0.00	1		2.14	26112		
0.00		2.12	17738		2.6K		П	0.00			2.12	17738	2.6K	
0.00	17257	2.1			104.3K		П	0.00		17257	2.1		104.3K	
0.00	57020	2.08			148.7K		П	0.00		57020	2.08		148.7K	
0.00	52094	2.06			289.2K		П	0.00		52094	2.06		289.2K	
0.00	18968	2.04			110.1K		П	0.00		18968	2.04		110.1K	
0.00	15224	2.02	i î		19.8K		П	0.00		15224	2.02		19.8K	
0.00	3686	2			1.9K		Ш	0.00	5 6	3686	2	î î	1.9K	
0.00	26	1.99					П	0.00	9 89	26	1.99			
0.00	836	1.98					П	0.00	1	836	1.98			
0.00		1.97					П	0.00			1.97		e	
0.00	0	1.96					П	0.00	a [1.96			
0.00	522	1.95			0.5K			0.00		522	1.95		0.5K	
0.00	2792	1.94						0.00		2792	1.94			
0.00	40	1.93						0.00		40	1.93			
0.00	8	1.92						0.00	5	8	1.92			
0.00		1.91			8			0.00	1		1.91			
0.00	11	1.9						0.00		11	1.9	1		
0.00	1050	1.89				-		0.00	8 8	1050	1.89			

Pro Tip: Do not get confused when you reverse the book. The money available in the market at each price point is the same, you are just controlling whether Bet Angel places back or lay bets at a given price. i.e. You are controlling whether you wish to match against available money in the market or whether you wish to offer your bet to the market and wait for someone else to match it.



Offsetting by Ticks or Percentages

Offsetting is the process of having two orders placed in the market (a back and lay bet). The first order will be placed by you and is often called an 'opening bet', the second part is the 'offset' and this is automatically placed by Bet Angel using your predefined "offset" to create a potentially profitable trading position - If both orders are matched then you will make profit.

When offsetting you can specify either a number of ticks or a percentage you want to place your offset at.

There is three distinct ways of Offsetting, each will suit different strategies and scenario's so its a good idea to get familiar with all three so you can decide which will work best for what you are wanting to do.

- 1) Offset is placed at the same time as your opening bet This requires that the Fill or Kill option be Unticked
- 2) Offset is placed only when your opening bet is filled This requires the Fill or Kill option to be <u>Ticked</u>
- 3) Offset is placed only when your opening bet starts to get filled This requires the Fill or Kill option to be <u>Ticked</u> and a number of Offset Batches to be specified

For further details see the following two sections of the user guide on Fill or Kill and Offset Batches

To see a some detailed examples please see this thread from our forum

Offsetting

An offsetting order is defined as performing the opposite function of your opening trade. If you back first to open a trade/position then offsetting will place a lay order in the market automatically, if you lay first offsetting will place a back order in the market automatically.

The offset can be in the form of a number of ticks or percentage from your 'opening bet'. To use 'Offsetting' you must first make sure you have activated 'Global Settings' for that trading screen. Then using the dropdown list in the top left corner of your screen select 'Offset Bet' and enter a number and chose weather you want to use ticks or a percentage.



The offset by ticks or percentage allows you to define how far apart your offset orders are. If you use an offset of one tick as in the image Bet Angel will place your opposing order at the next available odds that would generate a profit for you - so if you backed at 4.9 a lay bet at 4.8 would be placed for you.

0.00			5.2	49		
0.00	i		5.1	146		
0.00	8 6		5	270		0.1K
0.00			4.9	69	10.00	0.1K
0.00	10.00	18	4.8			0.2K
0.00		30	4.7			0.1K
0.00		15	4.6			0.2K
0.00		54	4.5			0.0K

Obviously, a one tick offset has a greater chance of filling than a ten tick offset but a ten tick offset will generate a greater profit, only practice will help you determine the best amount to use as an offset for your strategy.

Offsetting with Greening

There are certain situations in a market where you need to achieve a hedged profit across the entire book instantaneously, normally the process of placing orders and hedging are separate.

For example, you place two successful orders (a back and a lay) for a profit and you then 'green' or 'hedge' that profit with a third bet. The Offset bet with greening feature reduces this process down to just a single mouse click. You place the opening bet and the software places the offset bet with the amount required to 'Green / Hedge' up already calculated to ensure when the closing order is matched you will have a equal 'greened up' profit across all selections.

This function can be used at any time but it is particularly useful in running when prices move so quickly you are often unable to square off your positions and hedge your profit quickly enough.



In the following example an offset bet with greening at 10% has been specified. A back bet has then been placed at 3.4 for £10, the offset bet with greening has been calculated and placed 10% lower at odds of 3.05, notice the stake for the offset lay bet is different this time - that's because greening has been included as part of the calculation so if both are matched a profit of £1.15 on all selections will of been made without the need to do anything else.

0.00	5		3.6	15		0.0K
0.00	D		3.55	100		9
0.00	20. 30		3.5	37		0.1K
0.00	D		3.45	59		0.0K
0.00	2. 32		3.4	191	10.00	0.0K
0.00	D	7	3.35			0.1K
0.00	2. 25	9	3.3			0.2K
0.00	5. 30	15	3.25			0.0K
0.00	5. 20	54	3.2			
0.00	5. 30	44	3.15			
0.00	D. 10	15	3.1			9
0.00	11.15	17	3.05			

In this final image this time using the one-click screen an Offset Bet with Greening at 25% has been set up with an opening back bet placed on 'Absolute Angel' at odds of 20.0, the offset bet with greening required has been placed 25% lower at odds of 15.0 and has been calculated to be £13.33 to green up the trade - if both orders are matched an equal profit of around £3.33 will be made no matter which selection wins.



Example

To see a detailed example of offsetting and offsetting with greening being used see this thread from our forum

Video Tutorial

Or click to see a video tutorial using 'Offsetting' on the One-Click screen or Ladder Screen

Stop Loss & Trailing Stop Orders

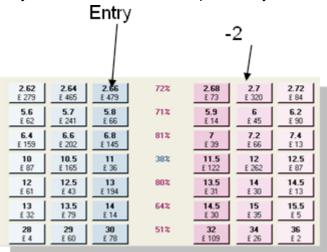
Stop trigger (ticks) 2 place at (ticks) 5 Stop trigger (%) 10 place at (%) 12

If you use offsetting it is possible for the market to move against your position. This means a loss is almost a certainty. If you let the loss run it could get much bigger and therefore stop orders can be applied to any offset orders you put in the market. The stop order works by closing your position at the best available price at the moment the stop fires. It is designed to allow you to exit the market immediately and without emotion. Stop orders will fire if you use them before the off and in-play. Due to the way exchanges work it is not possible to carry stop orders between the pre-off and in-play transition.

Stops can be in the form of ticks or percentages but will be the same as you have chosen to use for your offsets. Its not possible to use ticks for your offset and a percentage for a stop!

Pro Tip: When you start trading discipline is key as is controlled emotion. Stops can close a position and prevent you from taking a chance on a position.

If you enter the market by backing at 2.66 and you arm the stop at 2 ticks. The stop will trigger if your subsequent lay order breaches 2.70. Because you have backed first it will place a lay order to close your position.



Place stop at

The 'place at (ticks or %)' function has been designed to ensure that the stop orders fires at a reasonable price. If a stop fires it will try to close your position at the best available price. It is possible a large order may have pushed the price straight through your stop odds of 2.70 thus leaving your stop order as a unmatched bet requiring the price to come back down for it to be matched.

By triggering your stop at a number of ticks or percentage and using a higher number to place it at you increase the chance's of your stop being matched.

Following on from the previous example, if the stop is triggered at 2.70 the software now places a stop lay order at 2.76 (3 ticks higher). By placing the lay order at this kind of level it virtually assures the closing position is completed, even if a large order arrives in the market taking the price straight past the initial trigger odds of 2.70.

It works the same way when using percentages, by placing your stop slightly higher than its triggered you will increase your chances of the stop being successfully matched.

Note; There is never ANY guarantee a stop will be matched especially on volatile markets like in-running horse racing where the odds fly around all over the place.

Trailing stop



If you are looking to catch broader trend in a market but want to retain a stop loss you can use the trailing stop. This would not be suitable in a scalping market because as mentioned you are looking at a larger market move. The trailing stop is flexible as opposed to fixed. The basic idea is for the market to move in your favour and for the trailing stop to literally trail behind your position. For example, the market move two ticks in your favour so the stop moves up two ticks and trails your position or the market moves 5% in your favour the stop also moves up 5% trailing behind your position but ready to stop you out should the direction suddenly reverse. The following illustration demonstrates how a trailing stop order moves.



The **red** line represents a conventional stop order it is fixed according to your chosen offset. This stop never moves which means a quick drop back in the market caused by a large order spike could trigger your stop with a loss being the only outcome! Pro Tip: Using a stop is good as you learn discipline but in volatile markets it can often result in stop orders closing your position multiple times with a loss on each one. As you progress you will realise unless you are scalping a stationary market, it is vital to place your stop offset more than 1 tick away from the current market position or you will get unwanted stop orders firing and matching. Remember, the trailing stop is for markets where more movement is anticipated.

If you use a trailing stop as represented by the **blue** line, you will see it is pulled up behind your order to ensure there is a greater chance you will move into a profitable situation and a guaranteed one too! If the trend fails and starts to retrace, Bet Angel will close your order. In a strong trending market it is likely that your trailing stop will have moved some distance and therefore you catch the predicted long term trend in price movement. But if that trend reverses and ends your trailing stop will cut you out immediately locking in your profit.

Simple example: Lay order placed at 2.16 with an offset trailing stop of 5 ticks. As the market rises the stop pulls up and trails your position. If the market moves 5 ticks in your favour to 2.26 you cannot make a loss on the position as the stop is now sitting at 2.16 which was your opening position. If it moves further in your favour than a profit will be realised and only if the market then drops back 5 ticks will Bet Angel close your position with the stop order.

Example

To see some examples of using stop loss orders on both the ladder and one-click trading screens see this thread from our forum.



Stop on opening bet

A stop on opening bet **applies to the initial 'entry' bet** of a trade as opposed to a regular stop loss that applies to the offset 'exit' bet. As with other types of global settings, if you want to the switch to another market, you should add the current market to Guardian (which will manage the global settings in the background).



Using 'Stop on opening bet' adds a stop to the initial bet in an attempt to ensure the bet is matched even if the market moves away from your requested entry price. This can be useful if you wish to ask for a price that is better than is currently on offer by the market, but also want to make sure the bet is filled. e.g. If the current market is available to back at 1.68, place a Back bet at 1.7 with an opening stop 5 ticks lower. The bet will initially be unmatched in the market and the price may drift to fill your requested price of 1.7, but if it goes the other way and touches 1.65 then your opening stop will trigger and your Back bet will be repriced to 1.65 to try to fill at the current price.

'Stop on opening bet' could be used to add stops to dutching, bookmaking or make market positions. In the case of dutching, you may like to back at the lay price to gain that extra tick out of the market, but need to book to complete regardless (otherwise you haven't fully dutched the market and have an incomplete book). For example, if you set a five tick opening stop using global settings on the dutching screen and your unmatched bet eventually fills at the lay price then you are in a good position. If it doesn't work out and the price comes in five ticks, the opening stop will open the position on the runner for you. Without the stop, the price could collapse in and your only way to ensure the fill would be to wait until the market turns in play and then Take SP.

If you're just placing a single bet you may wish to use the opening stop. For instance, during an in-play soccer match, you offer to back the Home team two ticks above the current price as you want to place a back bet, but want more value for money. You think the price will spike in the next few minutes due to generally volatility in the game. If it fills you get want you wanted, but if the price contracts by your specified amount then the stop triggers and your bet is still placed. You didn't get the price you initially wanted, but at least you've still got your bet filled on the Home team automatically.

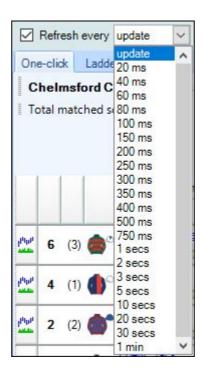
Refreshing the market odds

Here by ticking the 'Refresh Every' you can select how often you want to Bet Angel to refresh and update the market odds and information.

If you are 'using exchange streaming', prices and bet changes are pushed to Bet Angel from Betfair as soon as they occur on the exchange; by choosing Refresh Every 'update' the trading screen will be updated as soon as those changes arrive. If you wish to set the screen update frequency to a fixed interval then there are many settings to choose from, ranging from every 20ms to once a minute.

If you are not using exchange streaming in the Communications settings, then you will be 'polling' the information from betfair and this Refresh Every setting determines how often Bet Angel calls Betfair's servers for the most up to date market data and updates the screen. The fastest polling refresh rate is 200ms.

There is no perfect or recommended refresh period. If you refresh too quickly then the market can seem a little more erratic and you may find yourself being too reactive. Just modify the setting and find a refresh rate that feels comfortable for the type of market and your style of trading.



TIP; Guardian uses its own independent 'Refresh' rate separate to the one used here so can be set to a different 'Refresh Rate'. If you are running advanced automation we recommend always setting the fastest possible rate of 20ms within <u>Guardian</u>.

Offset Batches

Offset Batches is only used when the Fill or Kill option is enabled to 'Offset' your bet as it begins to get filled.

Rather than waiting for your whole stake to be filled before the offset is placed you can instruct Bet Angel to start offsetting your order as it begins to be filled by using and offsetting in batches. This is useful when using larger stakes and don't want to wait for your whole order to be filled before its offset and risk the price moving away from you.

So for example if you were using a £500 stake and specified '10' as the number of offset Batches this would mean as every £50 of your opening bet is matched £50 is then offset for you, if you used the same £500 stake but with '4' as the number offset Batches then as each £125 is matched this amount is then offset for you.



Global Settings Editor

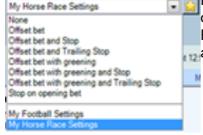
When trading different sporting events you may wish to approach each event differently. For example, you may wish to have no offsets when trading football but a large offset when trading a horse racing market.



Instead of resetting all your offset values, stop triggers and batch settings you can save these in the 'Global Settings Editor'

To save your own custom settings, click on the 'Star' next to the global settings drop down box. This will start the global settings editor.





Here, you can see we have selected an offset of 20 ticks with a trailing stop, fill kill of 5 seconds with 10 offset batches. This was then saved with the name 'My Horse Race Settings'. You can call your settings what you like and these will then appear at the bottom of the drop down box ready to call up and use in the future.

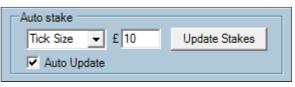


Auto staking - Using tick sizes

This feature has now been superseded by the newer 'Staking Methods'. For long time users or those who still wish to use the 'Auto Stake' feature we have still kept it available as a legacy. You have the option to switch between the newer Staking Methods' and old 'Auto Stake' by going into staking in the main settings menu.

Concept

Money management is an important part of any trading strategy and Bet Angel has built in automatic money management capabilities via the 'Auto Stake' feature. This will allow you to manage your trading bank in such a way that you can define how much money you wish to make per successful trade but also manage your trade size so that



you do not face a significant drawdown on your trading capital if you have a losing run.

Pro Tip: When starting out we advise using ticks sizes at low levels, £1 is okay! This means you make £1 if you get it correct and lose £1 if you are wrong thus keeping risk and reward even. It is easy to fall into the trap of small fixed stakes e.g. £20 but you will see from "How digital odds move" you could expose yourself to larger risks if you use £20 on a price of 1.88 and the same £20 stake on price of 4.30 in fact it raises your risk by a factor of 10!

Usage

Ticks are useful for managing your risk in the market. This is because they can be used to adjust your stake according to how much the market is going to move and how you want to make per successful trade.

How Digital Odds move

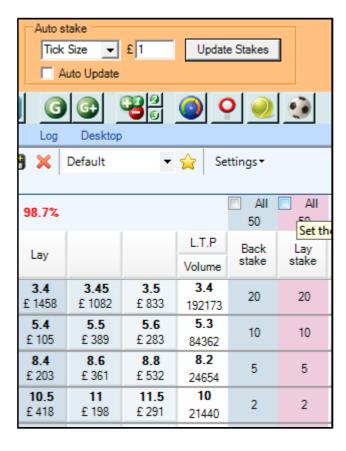
From	То	Increment	% Move
1.01	2.00	0.01	1%
2.02	3.00	0.02	2%
3.05	4.00	0.05	5%
4.10	6.00	0.10	10%
6.20	10	0.20	20%
10.50	20	0.50	50%

An increment of 0.01 means the odds move from 1.78 to 1.79, or a percentage move of 1%. The odds are moving at increments of 0.01 and we refer to this move as one 'tick'. (see the Pro Tip above)

At an increment of 0.10 it would move from 4.40 to 4.50. If you were looking to trade a position in the market and had a stake / trade value of £1000, placing this stake in a market that moves at 10% increments means you will only be 10 ticks away from losing your entire stake. Something moving ten ticks against you is a possibility so you are potentially taking too much risk! At increments of 1% you are 100 ticks away from losing your entire stake. Of course this works the other way around as gross profitability is directly related to movement but the essence of staking with tick sizes is to manage your risk carefully. At lower odds your relative stake is not under as much risk and there is generally more liquidity available at much lower odds. This is why traders tend to trade at short (smaller) odds.

Because our focus is on capital preservation and risk management it is best to set a tick value and use that to determine your stake. As mentioned in the above Pro Tip you could start with a tick size of £1. The lowest odds available move 1% at time and therefore your bank requirement will be £1/.01 = £100. With a bank of £100 you could trade at £1 tick sizes.

In the first example you can see that we have set the tick size to £1. Because of this tick size Bet Angel has automatically adjusted the stakes of each selection to reflect the fact that if any of these selections moves one tick in our favour we would win £1.



In the next example we have upped our tick size to £5. Again you can see that Bet Angel has change the stakes to reflect a £5 win if we are correct on the price movement.





Auto staking - Using liability stakes

This feature has now been superseded by the newer 'Staking Methods'. For long time users or those who still wish to use the 'Auto Stake' feature we have still kept it available as a legacy. You have the option to switch between the newer Staking Methods' and old 'Auto Stake' by going into staking in the main settings menu.

Usage



Sometimes it can make sense to stake with a pre-set liability. This is particularly useful if you are laying and don't want to accept too large a potential liability. People looking to lay losers in running in a horse race often use liability based stakes. Staking based on maximum liabilities has the effect of limiting your downside and transfer your upside to your skill at picking the correct entry point.

When you activate liability staking, Bet Angel will set the back side of the market to a uniform stake. This is due to the fact that a back bet will always be at 100% liability. The stake on the lay side of the market will vary though. It will vary according to the current available lay price. Therefore your potential profit will vary but your largest potential loss will be fixed at your pre-defined setting.

Awareness about auto staking

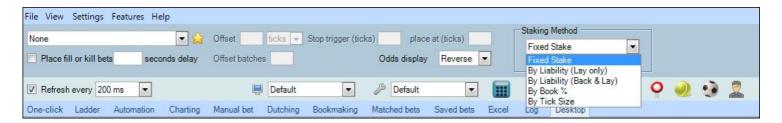
When you change the tick or liability size the 'Auto update' option is automatically switched off. This is to prevent any errors occurring when you change tick sizes. To reapply automatic updates to the market you must tick this box. If you elect to use 'Auto update', Bet Angel will re-calculate your stakes on every market refresh. While this is useful it also means that your stakes will vary constantly, you need to be aware of this. To apply the changes just once, click on the 'Update Stakes' button and leave the 'Auto update' un-ticked.

It is important to be aware that when 'Auto stake' is part of the global settings, the tick size setting and the recalculation of your stake will apply to a variety of functions in Bet Angel. Auto-staking can apply to several functions including 'One-click', 'Ladder', 'Automation' and 'Charting'. Double check your individual stakes and setting on every screen before you start.

Staking Methods

There are options to use a regular fixed stake as your bet or to calculate the size of the bet on the fly based on liability, book%, and tick size. The stake value selected on the ladder and one-click screens provide Bet Angel with your 'seed stake'. This seed stake in conjunction with the staking method chosen and the price of the bet will determine the actual bet amount to be used.

e.g. Enter a lay stake of £10 and select a 'Liability' Staking Method to ensure that any bet you offer to the market will have a liability of £10. So even if the current best price is 3.0, you can lay at 2.6 and a stake of £6.25 will be used. Lay at 1.8 and a stake of £12.50 will be used. In each case your liability will be the same as the £10 seed stake you've selected. This is particularly useful for in-play betting with its volatile price movement..



Fixed Stake

This is the regular way of staking – the stake you enter on-screen will be used when placing the bet regardless of the price.

By Liability (Lay Only)

The 'Seed Stake' you have entered (or in the case of the Ladder, selected from the Standard or Preset area) now becomes the liability you are willing to accept on lay bets. So, if you have selected a £20 stake and place a lay bet at odds of 3.5, Bet Angel will calculate the amount needed to realise a £20 liability; at odds of 3.5 it would mean a lay bet of £8.00 is submitted to the market. This means if that selection loses you make a profit of £8.00 and if it wins you lose £20. Note: When using this 'Lay Only' method, back bets behave the same as when using a 'fixed stake' so your risk in the market will be the same £20 regardless of whether backing or laying.

By Liability (Back & Lay Bets)

This option is most useful when you wish to trade by liability. Your back bets are staked in a similar way to the lay bets so that positions in the market can be easily opened and closed. In the case of a back bet, the 'Seed Stake' will now be your potential profit (the liability the person who takes your bet is accepting) so if you have selected a £20 stake and place a back bet at odds of 8.0 Bet Angel will calculate the amount required to realise a £20 profit; at odds of 8.0 it would mean a back bet of £2.86 is submitted to the market. This means if that selection wins you make a profit of £20 or a loss of -£2.86 if it loses.

By Book%

The 'Seed Stake' is divided by the placement price of the bet (the amount placed would be the same regardless of backing or laying). So, if you have selected a £20 stake and place a bet at odds of 5.0 the amount submitted would be £4 (£20 / 5.0 = £4) and if the same £20 stake was used to place a bet at odds of 2.2 the amount submitted would be £9.09 (£20 / 2.2 = £9.09).

By Tick Size

Your 'Seed Stake' defines the profit or loss that you wish to make for each price tick the selection moves (before greening), this would be the same regardless of backing or laying. e.g. If the seed stake is £10 and a bet is placed at 4.2, then a £100 bet would be submitted (due to tick increments of 0.1 at this price; 0.1 multiplied by £100 being the £10 seed stake you've requested).

Ladder / Depth of Market Interface

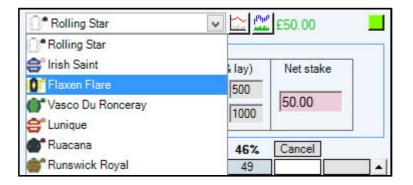
Concept

The 'ladder' or 'depth of market' interface allows you to view all available odds on a specific selection. By viewing a small number of selections in a vertical manner this interface allows you to see and trade the entire market depth in a convenient point and click interface. You have the ability to drag and drop orders in and out of the market with ease, speed and efficiency. Seeing the full market depth allows you to fill gaps in the market and also view the current range and volatility at a glance.



Setting up

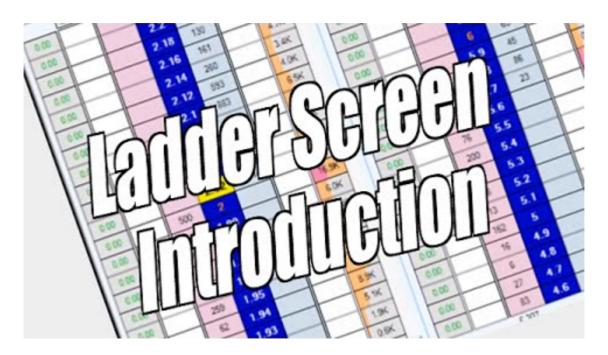
On the first visit to this page you will be presented with a display of vertical odds across the screen. Each of these represents the first three selections in the current market you are viewing. In order to change any of the selections, simply click on drop down menu with your selection. To the right of the selection name there is a small chart icon, clicking on this will bring up the current Betfair charts for this selection.



Using the ladder style option in the settings editor you can change the way the interface is represented on your computer. You are able to adapt the ladder display to either normal or large rows. Not only does this make the screen more useable it will allow you to adjust the screen to your monitor size. The 'normal' row size fits the odds and match bets total and allows more cells per screen. The 'large' row size puts empty space around the current data. This means it is easier to view each cell and the chance of clicking on the wrong one is minimised. There are a range of display options and all are available from this drop down menu. If you have a larger screen with a high screen resolution you will be able to fit more rows on. Experiment with this menu until you find a setting you are satisfied with.

Reverse None
Back
Lay
Reverse

You can also define how the ladder behaves when you click on it. Using the 'Odds Display' option you can force orders on the ladder to enter on back side only, on the lay side only or you can have back orders on the left and lay orders on the right or the opposite of this. Each method has plus and minus points depending on how you wish to trade the market and what Bet Angel features you aim to trade with. For more information on 'Odds Display' read the dedicated section.



Ladder Trading Interface Overview

Before you start using the ladder interface you need to be aware of additional settings available in its toolbar.



Show Ladder Settings Editor



Clicking this button will display the Ladder page of the Bet Angel Settings window

Use Global Settings

A red 'X' through the blue cog indicates that the global settings are not being applied, this is the default for the ladder screen. Global settings can be used from the ladder if required, to make features such as fill or kill, offsetting (with or without stops) available to your trades. Just click the button to remove the red 'X' and activate global settings.

Enhance Ladder

Selecting this will show the additional advanced features available with the ladder such as charting, bet history and a dedicated trade profit calculator.

Reorder Ladders

Clicking on this button will reorder the ladders in ascending price order with the favourite placed in 'Ladder 1' position.

Ladder Settings Editor



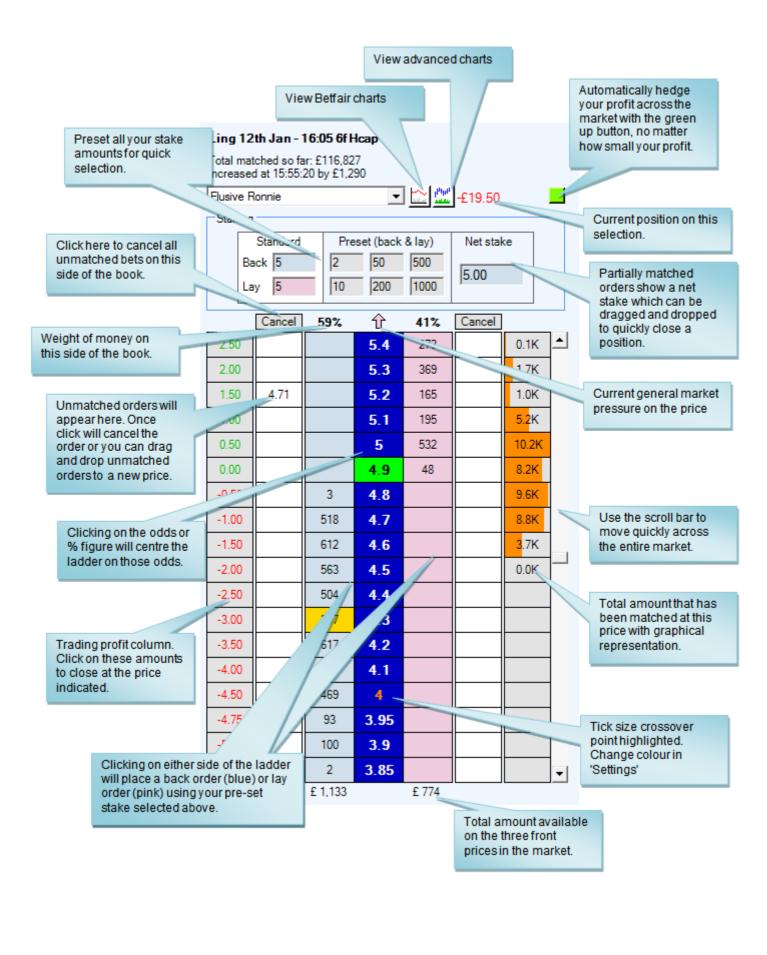
Clicking the spanner icon will launch the Ladder Settings Editor

Greening Options

The left hand column of the ladder is the 'trading profit column' which your potential position should you close your trade at a given price. You can configure this column to use greening (or not) when displaying values and closing positions. A red 'X' through the icon indicates that greening is off.

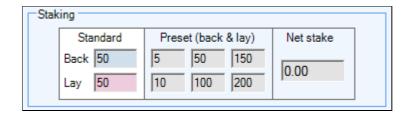
Close And Green Up All Trades

The P&L value to the right of the greening options button shows your potential profit for the market if you were to close all open positions at current market prices and green up to spread the profit (or loss) evenly across all selections. This is often referred to as 'Greening All Selections'. Just click the button to place the required bets and Green All Selections.



Ladder Staking Area & Pre-set Stakes

In this area we can set pre-set stake amounts to allow us to quickly change the stakes used when betting on the ladder.

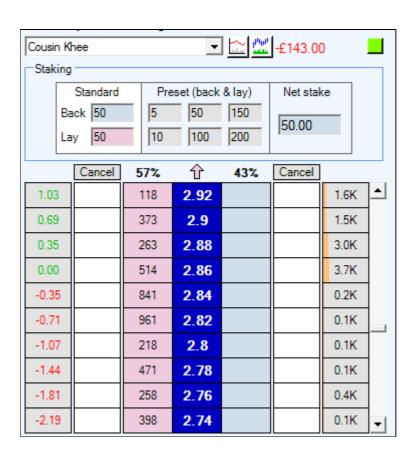


The standard stake area is set by the default stake amount defined in the settings editor.

The Pre-set stakes we can change by over-typing the values. For example, if I want to use £2, £5, £10 and so on I can enter these values.

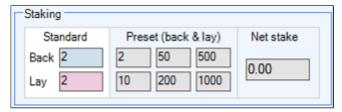
The Net Stake is showing us the current stake required to close a position on a particular market selection. As an additional help, the background colour of the Net stake shows us whether we need to place a BACK (blue background) or LAY (pink background) bet to close the position.

For example, here a £50 LAY bet has been matched in the market. This makes our NET STAKE £50. Bet Angel is showing that a BACK bet of £50 (blue background) is required to close our position. We can quickly select the Net Stake by clicking on it with the mouse then placing a BACK bet.

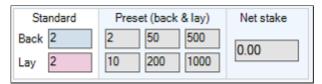


Note that the trade profit calculator cannot be used for greening once a position has been closed and has zero Net Stake.

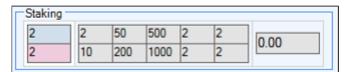
There are four ways to display the ladder staking area via the <u>settings editor</u>. Choose whichever suits you. Compressed settings are more suited to layouts with lots of ladders as display real-estate is at a premium.



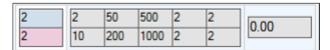
Legacy



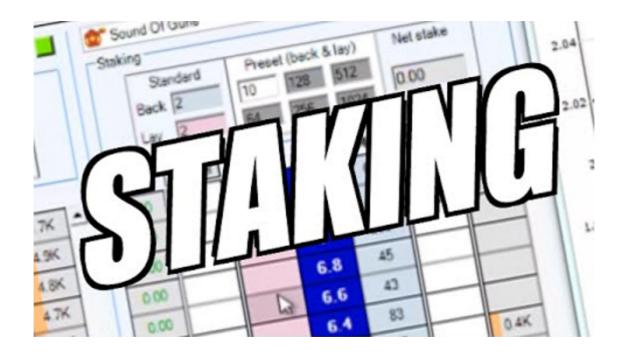
Standard



Compressed 1



Compressed 2



Show full market depth and volume

If you have this selected in the settings editor (it is by default so you probably will have) Bet Angel will automatically display full market depth and volume to the first ladder in the interface. The term 'market depth' refers to the amounts of money waiting to be matched at all the prices in the market.

0.00		2.36			
0.00		2.34	42		
0.00		2.32		123	
0.00		2.3	95		
0.00		2.28		6	
0.00		2.26			
0.00		2.24			
0.00		2.22			
0.00		2.2	100		
0.00		2.18		7	0.0K
0.00		2.16	10		0.0K
0.00		2.14	36		
0.00		2.12	98	6:	0.0K
0.00		2.1	272		0.3K
0.00		2.08	53		0.7K
0.00		2.06	18		1.8K
0.00	1(59 2.04			5.4K
0.00	4	17 2.02		7	4.8K
0.00	25	53 2		12:	5.5K
0.00	6	6 1.99			3.1K
0.00	1	52 1.98			2.9K
0.00	4	7 1.97			5.6K
0.00		9 1.96			10.5K
0.00		1.95			6.4K
0.00		1.94			1.9K
0.00	3	4 1.93		7	1.0K
0.00	8	7 1.92		100	0.2K
0.00	1!	50 1.91			0.4K
0.00	38	B7 1.9		(;	0.0K
0.00		1.89			
0.00	37	70 1.88			

Full market depth allows you to get an extended view of the entire market, not just the 'front' three prices. A normal Betfair screen will show you the three best prices to back or lay at. With full market depth view you get to see all the positions in the market wherever they are. Whether odds are at 1.01 or 1000 or any intervening level or amount, full market depth gives you unparalleled visibility of what is going on in the betting market. This in turn will give you a significant advantage over others who can't see full market depth.

	6.4	62	
	6.2	204	1.1K
	6	380	1.4K
	5.9	107	2.3K
	5.8	404	6.7K
	5.7	47	2.7K
320	5.6		0.7K
187	5.5		1.3K
8	5.4		1.5K
263	5.3		3.2K
9	5.2		4.2K
100	5.1		1.6K

	6.6		
	6.4		
	6.2		
	6		
	5.9	87	
	5.8	715	
	5.7	100	
131	5.6		
216	5.5		
308	5.4		
	5.3		
	5.2		

When you look at a market before it turns in-play, money held in open orders outside of the current price can be there for a number of reasons. Seeing the range and scale of this money will allow you to get better understand what is happening in the market. Money 'lurking' outside of the current price creates pressure or resistance to price movement by default, it also leaves a footprint of positions that people have left open perhaps because they have been only been partially filled or they are waiting for the market to return to its mean. People still leave large open positions out of the money; monitoring this is a definite advantage.

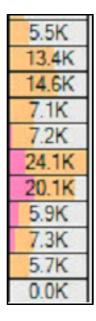
Full market depth is also useful for understanding volatility. If the range of matched prices is wide this suggests the market is more volatile. While you may get larger price swings you also need to be cautious of any moves that start to go against you. If you see even amounts of money matched across the market then the weight of money will likely move prices quickly in either direction. In contrast, large amounts of matched bet volume at narrower price ranges will create a less volatile market. Large amounts at certain prices are likely to mean that the price has hit resistance and may struggle to break through that price. It is likely that the market thinks that value is held above or below these points and people are acting on that by backing or laying when value is exceed in either direction. Full market depth is excellent tool to give you a much deeper understanding of the market.

NB; If you have full market depth enabled yet your ladder still looks like it is below then it is likely Betfair have restricted the data on your account. They can do this for several reasons the most common is if your account has no funds, often funding your account will automatically lift this restriction. If not you will have to contact Betfair directly for them to resolve.

	6.6		
	6.4		
	6.2		
	6		
	5.9	87	
	5.8	715	
	5.7	100	
131	5.6		
216	5.5		
308	5.4		
	5.3		
	5.2		

Traded volume & recently Traded Volume

The ladder interface will also show the recently traded volume if this option is selected in the general <u>ladder</u> <u>settings</u>.



The orange area above shows the total traded in a graphic format and will relate to the figures you see.

The pink part of the chart shows the total traded in the time frame set in the settings editor. This is set to 60 seconds as a default. This area of the display can be very useful as it highlights where the market is currently trading. If you come into a market afresh it is often tricky to know where the money is trading so this new feature gives an instant visual clue. In a slow market, or if you have come to a market early, you will often see no activity. This can also help you as it is often better to trade when the money is flowing into the market i.e. when the preceding race has finished.

Ladder Greening Up / Close Trade / Cash Out Column



Using this option (scales button) will toggle the left hand column of each ladder showing your position should you close at the prices indicated with or without greening.

Take a look at the following example.

	Cancel	54%	Û	46%	Cancel		
4.88			4.2	1			∸
4.13			4.1				
3.38			4	13			
3.00			3.95	9		0.0K	
2.63			3.9			0.0K	
2.25			3.85	25		0.1K	
1.88			3.8			0.0K	
1.50			3.75	223		0.2K	
1.13			3.7	233		0.3K	
0.75			3.65	238		0.6K	
0.38			3.6	334		2.5K	
0.00			3.55	302		4.5K	
-0.38		301	3.5			5.2K	
-0.75		505	3.45			1.4K	
-1.13		232	3.4			0.4K	
-1.50		257	3.35			0.6K	
-1.88		11	3.3			0.4K	
-2.25		104	3.25			0.4K	
-2.63		80	3.2			0.5K	
-3.00		217	3.15			0.7K	-

	Cancel	50%	Û	50%	Cancel		
4.88			4.2	1			_
4.13			4.1				
2.20			4	13			
	k here		3.95	9		0.0K	
requ	est pri	ce.	3.9			0.0K	
2			3.85	25		0.1K	
			3.8			0.0K	
1.50	7.50		3.75	280		0.2K	
1.13			3.7	225		0.3K	
0.75	Um	natche	ed	293		0.6K	
0.38	bet.			485		2.6K	
0.00						6.1K	
-0.38		556	3.5			5.9K	
-0.75		51	3.45			1.4K	
-1.13		232	3.4			0.4K	
-1.50		195	3.35			0.6K	
-1.88		37	3.3			0.4K	
-2.25		103	3.25			0.4K	
-2.63		80	3.2			0.5K	
-3.00		217	3.15			0.7K	•

In the first illustration we can see a lay bet has been placed at 3.55. The trading profit column (indicated) is telling me that I can close the trade at 3.55 for net ZERO. Closing at a lower price will result in a loss (red number). Closing at a higher price will result in a profit (green numbers).

I want to realise a profit of £1.50 from this market and I can see from this column that the price needs to move to 3.75 in order to do this.

If I click on the green '1.50' in the trading profit column, Bet Angel will place a bet in the exchange of the correct amount to realise this profit. You can see Bet Angel has done this in the second illustration.

If using greening, Bet Angel will automatically calculate the stake required.

Placing Greening Bets



Click on the button indicating the green position to the right of the scales to cause Bet Angel to place closing bets on each open position in such a way to realise the indicated profit (or loss).

Example

For a detailed example of Greening up and closing a trade see this thread from our forum

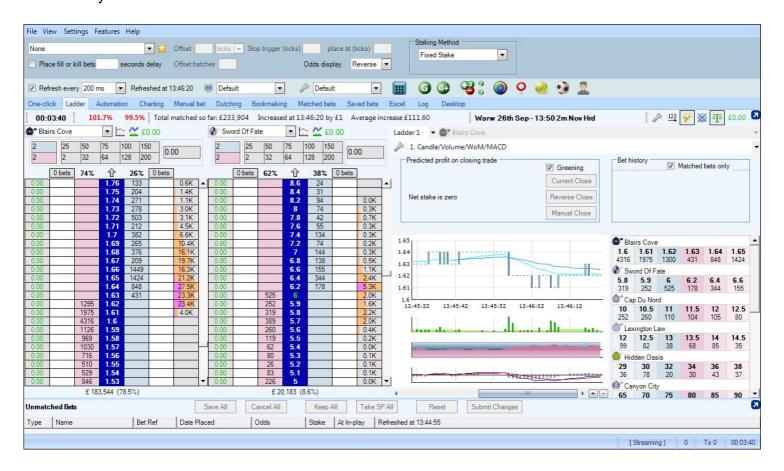


Enhance ladder



The ladder interface provides a quick and easy to use method of submitting bets into the exchange. Enhancing the ladder can provide more invaluable information at a glance:

- Advanced Charts
- · Easy Click Grid
- Cash-Out Trade Calculator
- · Bet History



Click the enhance ladder option and the ladder screen benefits from the addition of the enhanced charts. This is a personal choice so if it suits your style then select the Advanced Ladder view together with the advanced chart of your choice.

Using the Grid

The market grid on the right hand side will NOT place any bets into the market. It is there to provide a quick overview of the market and to allow you to select which horse is displayed in Ladder 1. If you click on any horse it will instantly place it in ladder 1. You can change your selection at any time.

Modifying the Charts

To make any adjustments to the advanced charts shown please visit the <u>Advanced Charting</u> section of the user guide

Or to edit any part of the Enhanced Area please see the Enhanced Area in the main ladder settings.

Tip: You can undock the ladder window and drag it to another monitor if you have a multiple monitor set-up

Center Ladder

The ladder can be centred at any time by clicking on the percentage figures at the top of the ladder. This will centre the ladder on the current back or lay price accordingly.

The ladder cannot be set to auto-centre keeping the current price in the centre as this would mean the price constantly changing with volatile markets. This would increase the risk of clicking on an unwanted price.

Tip: You can also centre all ladders by pressing the Enter key on your keyboard.

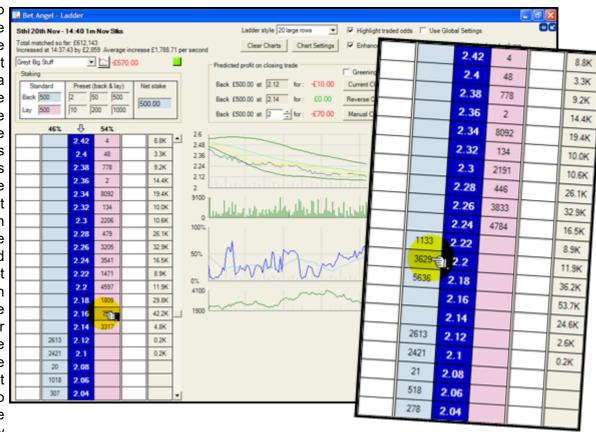
	Cance	53%	Û (47%	Cancel	
0.00			7.2	265		0.0K
0.00			7	273		0.2K
0.00			6.8	107		1.1K
0.00			6.6	129		2.1K
0.00			6.4	15		4.0K
0.00			6.2	225		2.4K
0.00			6	547		1.8K
0.00			5.9	387		1.5K
0.00			5.8	222		4.3K
0.00			5.7	561		7.9K
0.00		314	5.6			10.8K
0.00		513	5.5			3.4K
0.00		501	5.4			0.1K
0.00		427	5.3			
0.00		323	5.2			
0.00		181	5.1			
0.00		419	5			
0.00		57	4.9			
0.00		113	4.8			
0.00		206	4.7			
0.00		185	4.6			

Click on the book percent numbers to re-centre the ladder

Placing, cancelling and changing orders using the ladder

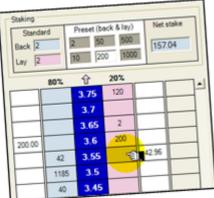
Placing an order on the ladder interface is simple and easy. With your stake values pre-set all you need to do is point and click your mouse to place, cancel or amend orders.

In this example, to open our position, we have clicked on the lay side and Bet Angel has placed a £500 lay order. We used a £500 stake because every price this movement in market will net us profit as the £10 market moves 2% at a time. This position is now shown in the trade calculator and the matched area. As the position moves into profit we have then moved our mouse over to the other side of the ladder see inset graphic] in order to get ready to exit the trade. We don't know



at this stage when the trend will end but we have our mouse ready to exit the trade immediately by clicking on the opposing side of the book. You can also use the trade calculator to exit if you wish as this also gives you the option to automatically hedge your profit at the same time.

If you place an order on the ladder and it is unmatched it will appear in the white area. In the next example we have clicked to back £200 at 3.60, but because that back price is not available in the market our unmatched bet appears on the left white area, the back side, as an unmatched order for £200. You can see from the market depth all £200 is ours. You can also see that we quickly put another order in the market to lay at 3.55. All but £42.96 has been matched and the remainder shows as an unmatched order. If an order is partially matched the unmatched amount appears in the white area and the net stake area is automatically adjusted.



Any orders in the white area of the ladder can be manipulated by clicking. Click once on an unmatched order to cancel that order. You can also click and hold any order in this area. This allows you to 'drag and drop' the order to another price. It often makes sense to move your mouse to click and hold unmatched orders. This means you can now move the order quickly if you need to. You will be able to drag it to new price to get matched quickly if needed. If the order matches while you are holding it, the order disappears. If you change your mind, simply drag the order off the side of the ladder to an empty area and the order will also be discarded.

You can also cancel all orders in a market on either the back or lay side of the ladder by clicking one of the 'Cancel' buttons at the top of the ladder.

You can also cancel using the hot keys.

To cancel all unmatched bets in the left column press the 'Z' key. To cancel all unmatched bets in the right column press the 'X' key.

	Cancel		cel all thes		Cancel	
0.00		a sin	atched bet gle click h			
0.00	2.50 4	(or press 'Z')				
0.00	2.50		8.4	3		
0.00			8.2	75		
0.00	2.50		8	63		0.0K



Quick hot keys

Using the ladder interface can be fast and furious and the ability to make quick calls, close trades and select stakes is an advantage.

With Bet Angel Professional we have introduced several hot keys for use in conjunction with the enhanced ladder.

These are:

- Z Cancel unmatched bets in left column
- X Cancel unmatched bets in right column
- C Close position at current available price

Space bar – Select 'Net stake' to make available for use with the next mouse click

Return/Enter - Centre ladders to last traded price

You also have the option of mapping over 200 unique actions to a shortcut key using the 'Keyboard Shortcuts Editor'

Ladder stop loss

As we have seen on previous pages, placing or changing an order on the ladder interface is quick and easy with the mouse. If you have opened a position and it looks like it is heading for a loss, you can use your mouse to quickly drag and drop the bet to close your position.

You can also click on a bet; holding the mouse button down in anticipation of dragging it to cut out of a position. Then either drop it to the new price or just drop it off the screen if you want to make no change to the bet (pressing 'Esc' on the keyboard will also discard the change).

If you'd like Bet Angel to manage the exit, you can use an automatic stop loss. Using an automated exit removes some of the emotion of exiting for a loss and it can execute quickly in a fast moving market.

To set a stop loss on the ladder, simply right mouse click on the back or lay side of the ladder.

If you have an open Back position (and so need to place a Lay bet to close the position), then you will be looking to right click on the lay side at a price at least one tick higher than the current lay price in the market. If you were allowed to click lower than that, the stop loss would be triggered immediately.

If you have an open Lay position (and so need to place a Back bet to close the position), then you will be looking to right click on the back side at a price at least one tick lower than the current back price in the market. If you were allowed to click higher than that, the stop loss would be triggered immediately.

Bet Angel will automatically work out your net trading position in the market when the price touches your stop loss and what closing trade is required to remove you from the market.

To cancel a stop loss, just right mouse click on it.

To move a stop loss, just set a new one, the old stop loss will be cleared automatically.

In the screenshot below, I have an open lay position on the second ladder, I am looking to exit at a much higher price, but have placed a stop order by right clicking on the back side of the ladder at 3.1. If the price drops to this level, Bet Angel will automatically exit the market by placing a closing trade at 3.1.

	Cancel	50%	Û	50%	Cancel				Cancel	52%	Û	48%	Cancel				Cancel	75%	Û	25%	Cancel		
0.00			7.8	15				3.00			3.95	9		0.0K		0.00			22				_
0.00			7.6					2.63			3.9	20		0.0K		0.00			21	107			
0.00			7.4	6				2.25			3.85	25		0.1K		0.00			20				
0.00			7.2	1				1.88			3.8			0.0K		0.00			19.5				
0.00			7	6		0.0K		1.50			3.75	257		0.2K		0.00			19				
0.00			6.8	18		0.0K		1.13			3.7	309		0.3K		0.00			18.5				
0.00			6.6	237		0.4K		0.75			3.65	686		1.7K		0.00			18	25			
0.00			6.4	247		0.1K		0.38			3.6	193		7.4K		0.00			17.5	2			
0.00			6.2	227		1.1K		0.00		445	3.55			6.7K		0.00			17	11		0.0K	
0.00			6	129		5.0K	\mathbb{H}	-0.38		794	3.5			5.9K		0.00			16.5	25		0.0K	
0.00		271	5.9			5.1K		-0.75		51	3.45			1.4K		0.00		35	16			0.2K	
0.00		95	5.8			3.0K		-1.13		190	3.4			0.4K		0.00		34	15.5			0.3K	
0.00		240	5.7			0.9K		-1.50		221	3.35			0.6K		0.00		41	15			0.2K	
0.00		56	5.6			0.2K		-1.88		11	3.3			0.4K		0.00		6	14.5			0.2K	
0.00		116	5.5			0.9K		-2.25		313	3.25			0.4K		0.00		2	14			0.1K	
0.00			5.4					-2.63		130	3.2			0.5K		0.00		35	13.5			0.1K	
0.00		50	5.3			0.0K		-3.00		715	3.15			0.7K		0.00			13			0.0K	
0.00		76	5.2			0.0K		-3.38		109	3.1			1.0K		0.00		12	12.5				
0.00		7	5.1			0.0K		-3.75		157	3.05			0.5K		0.00		22	12				
0.00		8	5				·	-4.13		770	3			0.4K	•	0.00		73	11.5			0.0K	•

On the enhanced ladder interface we can see more details of the stop loss order. Here we can see the price and the stake details in the profit calculator area of the enhanced ladder.



If you set a stop on the wrong side or have hedged your position or closed your trade, Bet Angel will have nothing to do and in the enhanced ladder display will show the stop loss with "0.00" as the stake.



When using the stop loss on the ladder, if you change to a different market, the stop loss setting will be cleared. This is so there is no risk of having a hidden stop loss active in the background.

Video Tutorial



Ladder Settings Editor

Using the Ladder Settings Editor you can configure and save multiple ladder layouts and designs, ie, you could could have one ladder screen configured for in-play tennis running alongside another that is setup for horse racing and another set up for football etc.

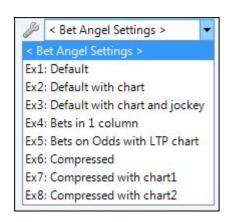
You can even display different ladder layouts at the same time by spawning markets in to a new ladder window

Ladder profiles can also be selected via <u>keyboard shortcuts</u> making it very quick and easy to switch back and forth between different displays.

Bet Angel is supplied with eight pre-saved example designs, these can be identified as the ones beginning with the prefix 'Ex', you can modify and resave any of these profiles, or use them as a starting point to create a new profile before saving it with a new name

We have also added a profile named **Settings** any changes to this profile will be saved when you next save the <u>Bet Angel Settings Profile</u>.

To begin editing select a profile from the list and click the to open the <u>Ladder Settings</u> area.



When you have finished editing or creating a new profile it can be 'Saved As' by clicking the icon and given a unique name which will then appear in your pick list of save profiles. In the image below you can see two new saved ladder profiles, one for trading in-play the other for trading on Tennis markets.



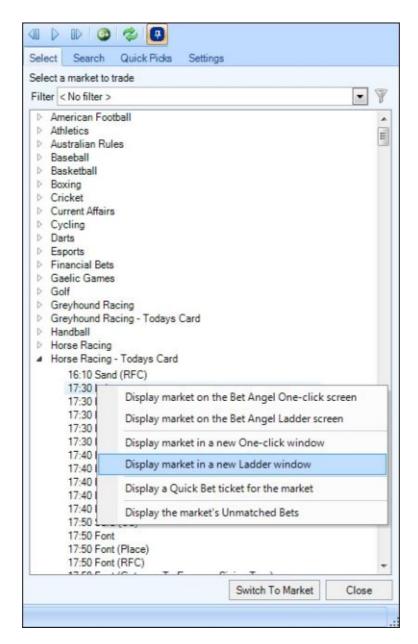
When editing any profile except the **Bet Angel Settings**> profile once you have finished making your changes click the to re-save it under its current name.

Trading Multiple Markets with Multiple Ladders

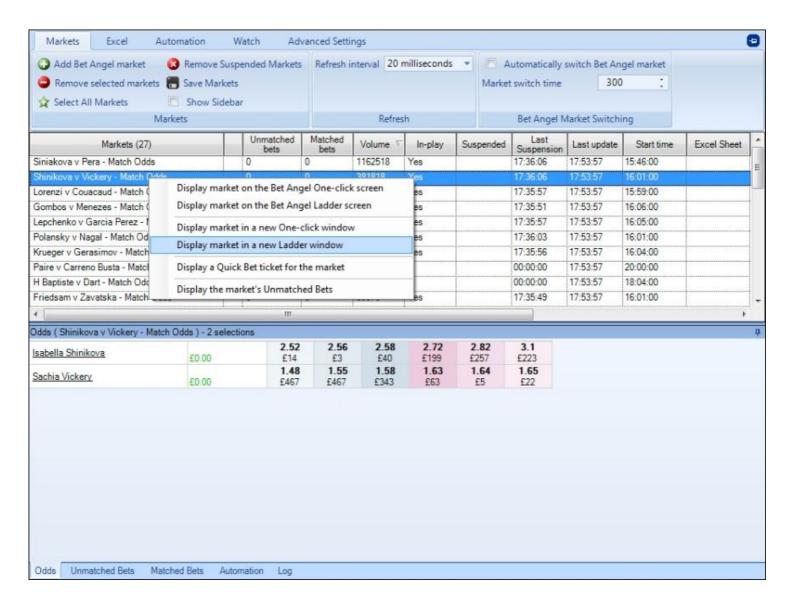
It is possible to display multiple ladders with each ladder attached to a different market. This is especially useful when trading more than one market at a time.

To open an additional market in a new ladder (separate from the market being displayed in the main Bet Angel Trading screen) you start by **right-clicking** the market with the mouse in the Market Selection screen.

This brings up a context menu (as shown in the screenshot below) relating to the display of the market. Choose 'Display market in a new ladder window' and a new ladder window will be created for the market.



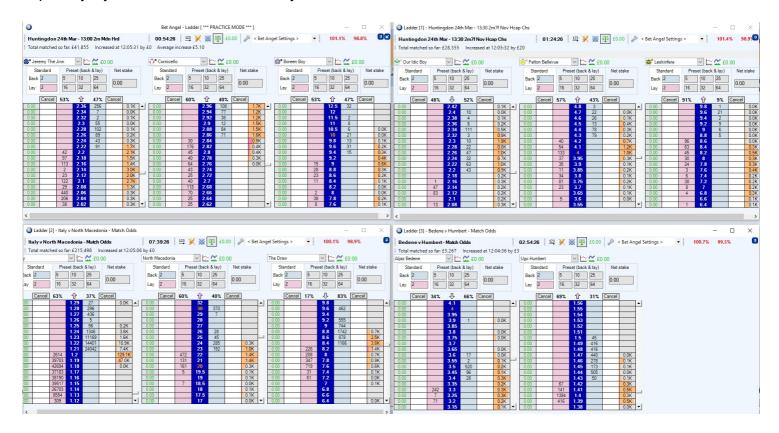
If you are using Guardian, then just right-click a market in Guardian's market list to view a similar context menu.



If you are using the <u>Watch Lists</u> you can spawn a new trading ladder using the same method, simply right-click on one of the markets to see the same context menu.



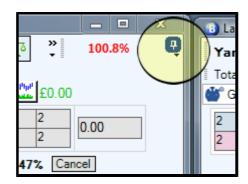
Here is an example layout showing four ladders each connected to a different market, each additional ladder screen opened is numbered in its title bar which makes it easier to keep track of which ladder relates to which market, especially if you have them minimized to your windows task bar



Refresh rates

When the ladder window is brought into focus by moving your mouse over or clicking on it, it is refreshed at the main Bet Angel trading screen's chosen <u>refresh rate</u>. This gives the market you are about to trade the best possible refresh rate. Other windows will then revert to the background refresh cycle (which defaults to two markets per second, but is adjustable via the <u>Bet Angel Settings window</u>).

Tip: When squeezing many windows onto a smaller screen, use the drawing pin icon to **pin** each screen to the desktop. Any overlapping screens will be brought to the front when you move the mouse over the associated window.

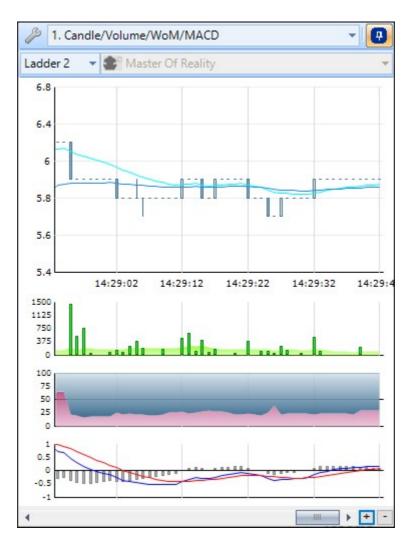


Bet Angel Advanced Charting

Concept

The Advanced Charting in Bet Angel allows you to graphically represent price movements, volume, Weight of Money etc in a resizable window or embedded on your ladder screen using a number of customizable user defined settings in the Advanced Chart Settings Editor.

It is also possible to plot your own bespoke Advanced Charts from data held in Stored Value <u>History Lists</u>. This allows you to accurately assess activity in the market and take advantage of any movements that occur using your own unique charts.



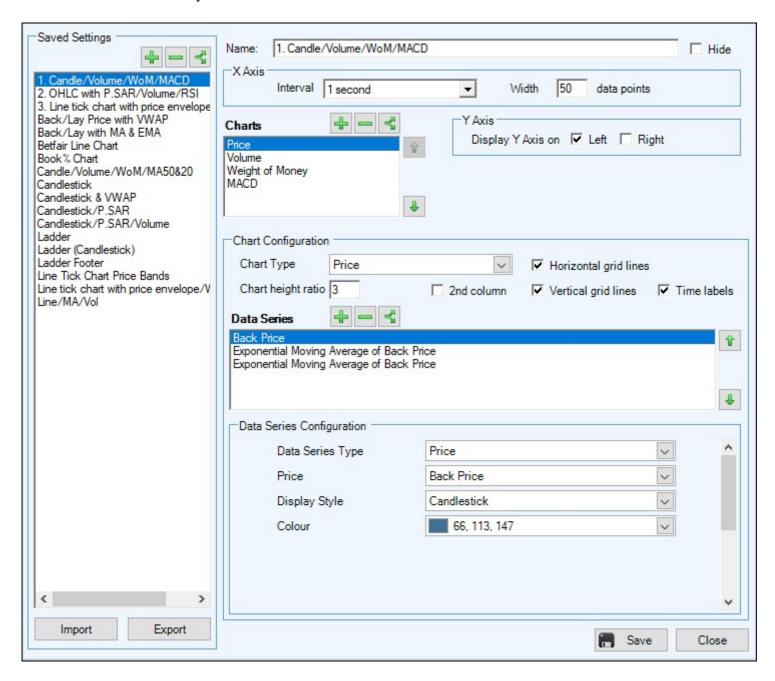
Using Guardian to store charting data

As soon as you add a market to <u>Guardian</u> and it begins to be refreshed/updated it will store market pricing data and plot advanced charts. This is very useful when you arrive at a later time as you could have up to several hours of Advanced Charts plotted, which you can scroll back through if you wish - the earlier you add the markets the more chart data you'll have when you open it.

If a market isn't in Guardian and not being refreshed, Bet Angel can only begin to plot the chart from the moment you switch to it on a main trading screen and it begins being refreshed/updated. ie, you'll have not advanced chart history

Advanced Chart Editor

The Advanced Chart Editor will able you to configure and build your own customized Advanced Charts, when you first open the chart editor the left Window will contain several ready-made advanced charts, you could choose to edit one of these or create your own from scratch.



Overview

Create a New Chart

To create a new chart from scratch click the plus icon distribution at the top of the 'Saved Settings' window.

Editing an Existing Chart

To edit an existing chart setting, click on the name of the chart displayed in the left window that you wish to modify. When you click on any one of these the main editing area fills with the settings you have assigned to that particular chart. To modify any of those settings simply click on the tick box next to the item you are interested in showing or wish to unselect.

For more details on creating and editing existing charts on please see the next page.

Import/Export

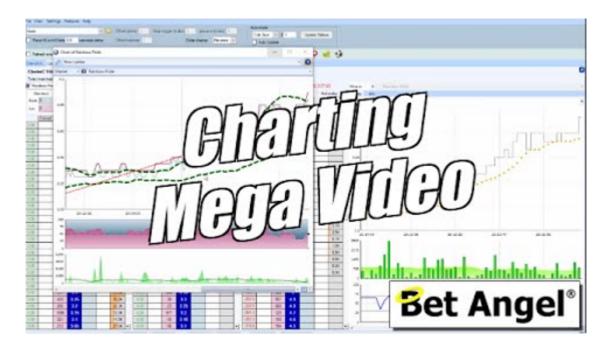
It is also possible to import/export advanced charts using the two buttons in the lower left corner, this is handy if you have Bet Angel installed on more than one computer and want to transfer advanced charts between them or share them with friends.

Advanced Chart Templates

There are also more ready-made Advanced Charts you can download and Import from the dedicated section on the Bet Angel Forum

There are hundreds of possible combinations you can chose from based on the data you wish to show and how you wish to see it displayed. If you want to create variations of each chart with slightly different data, simply create the variation you wish to see, rename it and save it to your list.

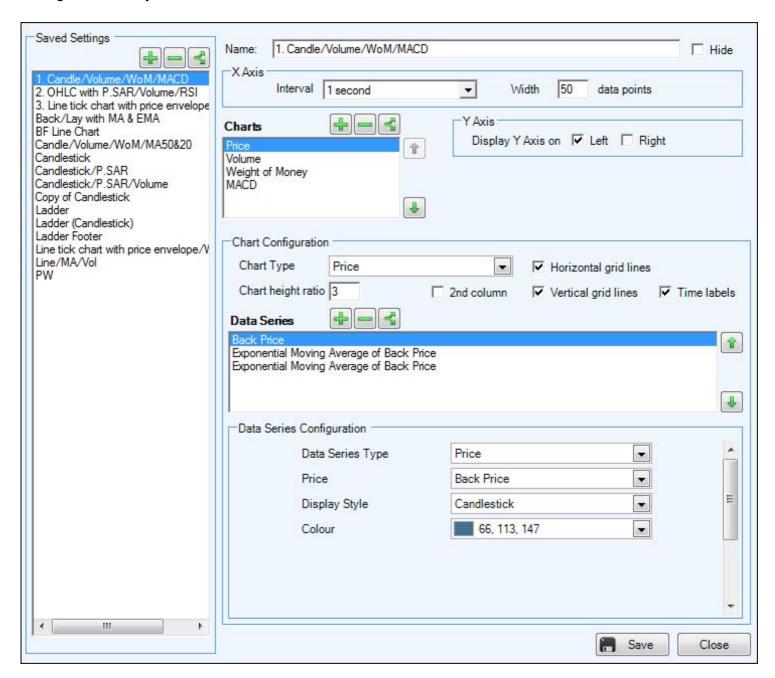
Video Tutorial



Creating Custom Advanced Charts

To create a new custom chart click on the button at the top. This will create a blank template populated with a basic 'Price' chart, as detailed below.

To gain ease of use and to familiarise yourself with various features, you can edit one of the existing charts. This is be done by clicking on the 'copy' icon, you can now edit an existing chart without accidentally overwriting settings that already exist.



The main charting editing windows consists of three different areas.

Intervals/Data Width

Here you can configure the interval/refresh rate the chart updates and the width of data points it displays, for example if you set the 'Interval' to 5 seconds and the 'Width' to 60 data points that would update the chart once every 5 seconds and display 60 updates on your chart - that would mean you have 5 minutes of activity (5 x 60 = 300secs) displayed in your chart window.

NB,The scroll bar below the chart can be used to view earlier activity, when using longer intervals and assuming you have the markets in <u>Guardian</u> you can plot as much as 2 days of data on your advanced chart

Charts

The top layer named 'charts' allows you to create a charting pane. Clicking the '+' icon in this area allows you to create a new charting window. You can create as many chart windows as you wish as they will all 'stack' on each other. Use the 'chart height ratio' to change the height of each of these 'stacked' charts.

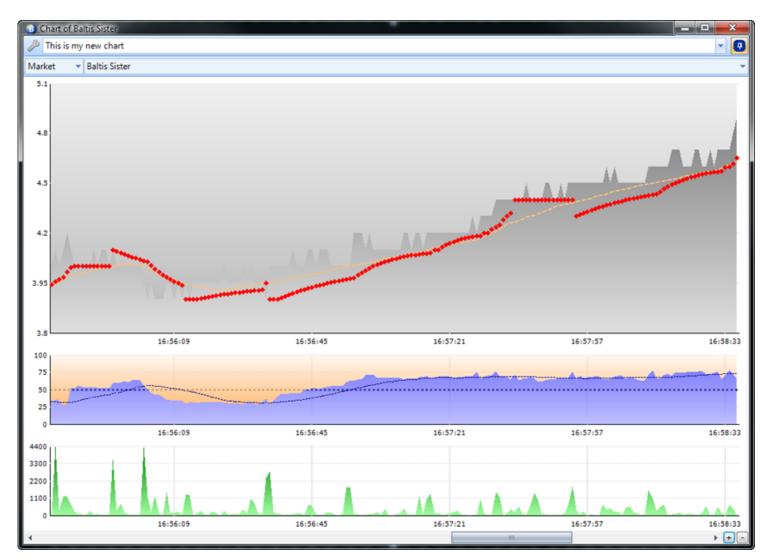
Data Series

When you create a new charting window it will be blank unless you add a data series. A data series is automatically added when you create a new chart window but you may want to modify this.

Each main chart panel can be created as a Price, Volume, weight of money, MACD or relative strength chart. From there you can 'layer' additional information on each chart.

To add a new layer of information to the chart simply click the '+' icon in the chart configuration area.

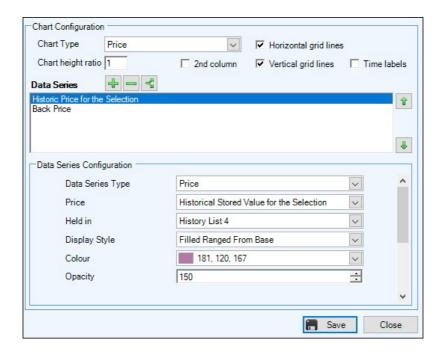
In this example chart we have created a price, weight of money and volume chart in the main charting panel.



History Lists

When configuring the 'Data Series' one of the options you have is to plot the 'Data Value' held in a <u>History List</u>. For example, you could have a rules file applied to markets running in Guardian which stores the VWAP for all selections every second to 'History List 2', those data values can then be plotted onto an Advanced Chart to give you a VWAP chart line.

In the image below I'm configuring a chart that will plot the historical Stored Values for each selection held in History List 4.



I've added this data series to an existing chart displaying the back price in a candlestick style, then using the 'Opacity' settings at the bottom I've created a layered effect to display the VWAP as 'Filled Range from the Base', and the original candlestick chart over the top.

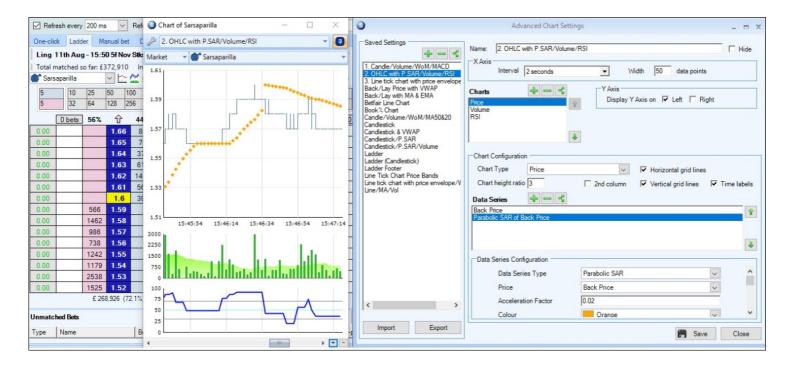


The Bet Angel forum contains several ready-made rules files with dedicated History Lists you can download from the following <u>page</u>

Once imported and applied to markets you can create advanced charts as detailed above to look up values held in those History Lists.

Editing Charts

A handy tip when editing charts is if you open a market on your main trading screen then the advanced chart your about to edit open for a selection while you have the Chart Editor window open and are making changes, as you make any changes if you click the 'save' button in the bottom right of the chart editor window you will see the effect in real time on the chart you have open.



Examples

There are also ready-made Advanced Charts you can download and import into your chart editor from the 'Customization' section on our <u>forum</u>

Chart Styles

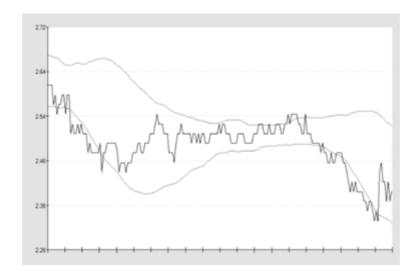
General - Name

If you custom create a chart then use this dialog box to name your chart. All charts are listed in alphabetical order so bear than in mind when you name a chart. You may also want to use a name that helps you remember what the settings were.

Chart Style

Line chart

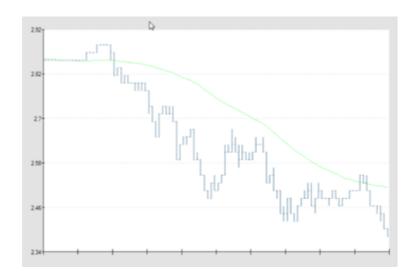
A line chart is simply a representation, in line form, of the data that you want to be plotted on the chart. A line chart simply plots the last available update of data to the chart.



Using the price envelope plot you can 'frame' the price volatility of the line chart so you can see how volatile the market looks and key pressure and turning points in the market.

OHLC Bar

An OHLC bar chart plots data over a time period and should therefore be used with a modified setting in the X Axis interval. By this we mean you should carefully decide over what time period you want this particular chart plotted. OHLC stands for "Open High Low Close".



This chart setting is constructed using the following data: -

1. Opening price: It is taken from the first price of the period.

- 2. Highest price: Highest price is high price of the period
- 3. Lowest price: Lowest price is low price of the period
- **4.** Closing price: It is taken from the last price of the period.

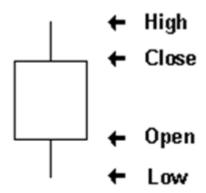
The top of the vertical line represents the high of the period while the bottom represents the low. A small horizontal line on the left side of the line shows the Opening price while the one to the right gives the Closing price.

Candlestick chart

A candlestick chart is a style of bar-chart used to describe price movements. It is a combination of a line-chart and a bar-chart, in that each bar represents the range of price movement over a given time interval. This method of charting prices is popular due to the ability to display five data points instead of one.



Candle sticks are composed of the body blue and white, an upper and a lower shadow or "wick". The wick illustrates the highest and lowest traded prices, and the body the opening and closing price. If the price goes up, the body is white, with the opening price at the bottom of the body and the closing price at the top. If the price goes down, the body is blue, with the opening price at the top and the closing price at the bottom.

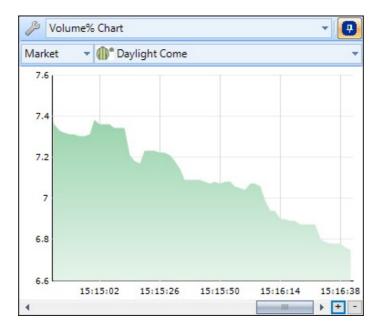


With all charting methods there are an immense amount of strategies you can put to use in the markets. As there are already substantial amounts of information available on this we suggest you Google each method to research your preferred strategy.

History List Chart

This is a bespoke chart created using data from a Stored Value held in a History List. it is displaying the **% share** of **Traded Volume** for each selection in the form of a 'Filled Range from the Base'.

What your seeing in the chart is how a selections share of the traded volume is changing over time. ie, in the image below this selections share of the traded volume has been decreasing.



The large list of data you can store in a <u>history list</u> gives you the ability to create some unique advanced charts and bespoke views of the market other traders don't have.

X Axis

Interval

The interval is the time between each refresh on the graph. You can set to the lowest value to one tick / one price movement. Generally this would make too volatile so people tend to use time intervals. The time intervals range from 500ms to 10 minutes. Time intervals are best used when plotting bar or candlestick charts.

Width / Data points

On the advanced charting you can plot up to 200 data points on the chart. By data points we mean the number of intervals plotted across the screen. Plotting more data points allows you to see much longer term price activity on your chosen market. Less data points means that the chart effectively expands to fill the same area but with less data giving you sharper focus on the time period you are looking at.

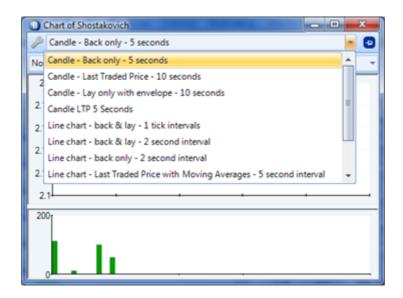
Both the interval and data point settings are down to your own personal preference.

Selecting Advanced Charts

To activate the charting function simply click on the chart graphic on the far left of a selection. On other screens, where this function is available, click on the appropriate icon on the screen.



Clicking on the icon will bring up a chart with default settings. You can click on additional icons and bring up multiple charts on different selections and display all these charts at the same time. Each chart windows can be pinned to the top of your current display and resized to suit your trading style.



When you first use the advanced charting you will be defaulted to the first chart in the list. By clicking the drop down menu you can select other pre-defined chart setting options. You can switch to different charts at any time by selecting the drop down menu option and selecting a new chart setting.

Bet Angel stores information on the market as soon as you switch to it. If you switch between selections in the market Bet Angel will have automatically started collecting information on those selections as well. If you want Bet Angel to collect data over much longer time periods you should populate Bet Angel's "Guardian" feature with the markets you are interested in. Make sure you pay attention to the refresh rate you have set in Guardian as this will ultimately determine the rate at which it is collecting data. For example, if you have ten markets available in Guardian and set it to refresh at 1 second, each market will be on a ten second cycle. This means it will collect data to populate the chart every ten seconds. If you want it to collect data faster, simply speed up Guardian.

Using Pan and Zoom

There may be times you wish to review charting data and look back to identify entry and exit points in a particular event that has just occurred. Remember, adding a market to Guardian early in the day will allow Guardian to store more historical pricing data to allow a more detailed look into the past.

Bet Angel advanced charting allows you to zoom in and pan around the historical pricing and chart information to do this.



Above you can see the chart of 'Water Wagtail'.

By clicking on the '+' and '-' buttons indicated you can zoom in or out of the chart. To pan back and forth in time use the scroll bar along the bottom of the charting window.

Here the chart has been zoomed in to show the desired detail:



Betfair Charts

Bet Angel can display Betfair charts that you may be familiar with from the Betfair website. The advantage of using them within Bet Angel is that these can be auto updated and displayed in different ways depending upon what type of data you would like to see.

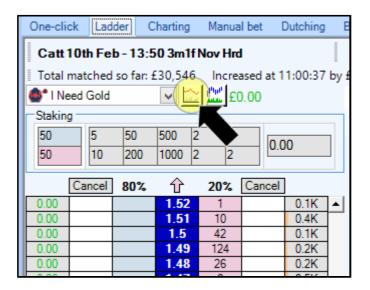


These charts can be resized as desired by clicking and grabbing the corner of the chart.

To view the Betfair charts click on the selection name in the one-click and most other screens:



In the ladder click on the chart button:



The charts can also be synchronised or not synchronised to the market or ladders as desired.



Here we have chosen just to display the price chart by deselecting the '%' button.

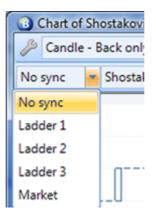
Chart Synchronisation

When switching from market to market you may wish to keep charts open on your screen rather than close them and reopen them.

Bet Angel allows the charts to synchronise with the current market loaded into Bet Angel so that when you switch markets the charts will switch also.

In addition, if you wish to keep an eye on a chart from a different market, you can open a chart in that market, select not to synchronise that particular chart and then switch to the new market. This way you can keep track of multiple charts from multiple markets.

In this image you can see several synchronisation options:



- 1 No sync
- 2 Ladder 1,2 or 3
- 3 Sync with market

If no sync is selected then the chart will remain looking at the runner or selection you originally clicked on even if you change market. **

If you choose to sync with the ladders then the chart will display the data associated with the runner or selection chosen in the ladder interface.

If you choose to sync with market then the chart will change and link to the relevant runner or selection in the new market. For example, if the chart was looking at the 3rd selection in the market then it will look at the 3rd selection in the list in the new market. Note that this is determined by the order provided by Betfair and will not include and sorting you may have chosen.

Synchronisation can be applied to the Betfair charts or the advanced charts.

NOTE: If you choose 'No sync' and wish the chart to continue to update even though Bet Angel is no longer looking at the market, you need to ensure the market is added to Guardian by clicking on the button. Also ensure that Guardian is set to a reasonable refresh cycle and remember that the chart will only update once per cycle. For example, if you have 10 markets in Guardian and the refresh cycle is set to 1 second then the chart will now update once every ten seconds.

Manual Bet and Green up.

Concept

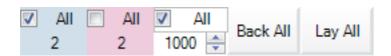
There will be occasions when manual betting in a market is preferable. Bet Angel Professional provides the ability to place multiple simultaneous manual bets and green up on selections within a market where stake calculation needs to be quick.

Note that the manual bet screen is simply an alternative layout of the one click grid. The 'one click' option can be turned off and the mouse pointer then becomes a price selection tool to populate the manual odds column.

Usage

If you wish to back or lay the entire field in a market you can check the boxes at the top of the manual bet section marked 'Set all odds to' and 'Stake all with' then enter values in the relevant boxes.

For example, if I would like to enter a back bet of £2 but at odds of 1000 across the field I would set it up as follows:



And click on the 'Back All' button.

This will place multiple simultaneous back bets across the field at my requested price of 1000. These will sit in the unmatched bet area from where I can further manage them if required.

A similar use might be if you want to place a lay bet of £2 at odds of 1.01 across the field:



And then click on the 'Lay' all buttons.



Be careful when using this method. Carelessly clicking on 'Back All' when you intended 'Lay All' could prove costly.

Using Manual Green Up stakes

The green up stakes area allows you to offset any profit or potential loss after you have completed a trade.

				Selections: (6)		☐ Green	101.5%	99.6%	All 2	All 2	□ AII	Back All	Lay All	Update with P & L
				Name	Micro Chart	Trade	Back	Lay	Back	Lay	Manual			Manual
				P&L	MICIO CHAIL	profit	Dack	Lay	stake	stake	odds			Green Up
phpp same	3			Red Somerset £10.00		£0.00	2.48 £ 57	2.5 £ 100	10	10	^ •	Back	Lay	
physic sector	6	(5)	(I)°	<u>Paphos</u> -£22.00		-£1.50	3.05 £ 458	3.1 £ 364	10	10	^	Back	Lay	-22
				Ertikaan £10.00		£0.00	6.4 £ 239	6.6 £ 77	10	10	^ •	Back	Lay	
				Tornado Force £10.00		£0.00	12.5 £ 44	13 £ 74	10	10	^ •	Back	Lay	
				The Mongoose £10.00		£0.00	25 £ 88	26 £ 29	10	10	^ •	Back	Lay	
Physical Control	5	(4)	1	Mcconnell £10.00		£0.00	130 £ 7	160 £ 4	10	10	^ *	Back	Lay	

Type in the green up value and Bet Angel will calculate stakes based upon the current lay (or back) price by using the following formula:

Actual stake = Green up stake/current price. With the current price being the current lay price if the green up stake is positive or the current back price if negative.

This enables us to fine tune a book and alter our potential position on individual market selections.

Bet Angel Advanced Dutching

Concept

If you are not familiar with the concept of dutching, it is a process of placing more than one bet in a market to create a position in that market that delivers a pre-defined profit. Bet Angel allows you to not only pre-define that profit by event and selection it allows you to manage your risk and reward by dutching to a pre-set target profit or loss by individual runner selection sometimes known a variable dutching.

For example, In horse racing you could face the complexity of a very competitive handicap. Twenty-eight runners, all roughly similarly weighted and at the front of the field all at roughly the same odds. An impossible puzzle to solve from a regular betting perspective - who on earth is going to win?

With dutching you can simplify the problem by saying 'I expect any one of these three, four, five or six selections to win'. So you move from the almost impossible task of trying to pick out a single runner or selection to picking a group of them that you think may win.

Using the dutching function in Bet Angel

When you view the dutching screen you will see the market you have chosen along with a list of selections in that market. You will also see a reminder that dutching only places back bets in a market. When you perform dutching you <u>only</u> back selections in the market you do not perform any other task. We put this reminder in because there are actually several options available for you to place back orders into the market. You do not just need to back at the current back price.

Your overall objective is to create a position below 100% in book value; there are many ways to do this. In order to create a position below 100% you have to exclude selections from the market or put some unfilled orders into the market. Using Bet Angel you can choose whether you back at the current back price, at the current lay price or whether you nominate your own price and wait for it to be filled.

Back with a stake of	£ 100 :			Clear				Place Bets		
 Back for a target profit of Back for a minimum stake of 	£ 20 :	Margin % Winners 1 ;	Select the runners to dutch and the odds to be used:				Book % 75.1%	Total stake £100.00		
	102.6%	99.0%	Back All:	Lay	Manual	Margin Maker	Odds	Stakes	Predicted profit	
Medici Banchiere £0.00	6.2 £ 26	6.4 £ 19	V				6.2	21.47	£33.14	
Murdanova £0.00	4 £ 32	4.1 £ 25	V				4 :	33.29	£33.14	
Spare Parts £0.00	5.9 £ 102	6 £ 32	V				5.9	22.57	£33.14	
Rouge Nuage £0.00	12 £ 4	12.5 £ 61	V				12 :	11.10	£33.14	
Fast Track £0.00	11.5 £4	12 £3					11.5	11.58	£33.14	
Zylan £0.00	16 £ 11	16.5 £3							-£100.00	
Sayesse £0.00	19 £ 24	19.5 £ 10							-£100.00	
Tuff Love	11.5 £ 14	12.5 £4							-£100.00	

^{*}The Dutching tool only lets you place 'Back Bets' into the market, if you wish to Lay multiple selections you will need to use the 'Bookmaking' tool

Awareness about dutching on a Betting Exchange

There are certain circumstances where if you dutch a market and have failed to account for the impact of withdrawn selections you could face a substantial loss. Please make sure you understand the market you are dutching and make sure you clearly read the rules of the market to asses any possible impact.

Using Global Settings With Dutching

There may be times when you feel a market will withstand the mixing of strategies. You can apply global settings and make use of offsetting if you wish by clicking on the cog [™] symbol within the dutching interface.

To see some example of how to use the Dutching tool see this forum thread

Advanced Dutching - Getting Started

Your first task when using advanced dutching is to select the staking method you require. Below is a brief outline of the three staking methods available. Each method is covered in more detail over the following few pages of this user guide.

If you "back with a stake of" your liability (potential loss) is fixed at this amount but your profit varies according to the margin in your book.

If you 'back for a target profit of' your profit is fixed by the dutch bet you create but your stake varies If you 'Back for a Minimum Stake of' the minimum stake will be used on the selection you choose with the highest odds, the stake amounts for any subsequent selections will then be calculated by the software to ensure the same profit amount is achieved.



After choosing your 'Staking Method' before making any selections another setting you should pay attention to is the 'winners' box. If you are a making a book or performing book arbitrage on an outright win market your target book % is under 100%. If you are in market with two possible winners your target book is actually any value under 200%. Therefore if you set the winners to two, Bet Angel will adjust the book % figures to go green if the book dips under 200%.

You need to be aware that the winners box does not influence predicted profit calculation at this moment in time.

Creating your Dutching position

Once you have decided your staking method and value you need to decide which selections you want to dutch and at what price.

Rather than pricing each selection manually we have included a series of tick boxes which allow you to create your position quickly and easily.

You can see in the image below the columns are headed 'back', 'lay', 'manual' and 'margin maker'...

	101.3%	99.2%	All:	Back	Lay	Manual	Margin Maker	Odds
Indian Hawk £0.00	2.62 £ 58	2.64 £ 72		7				2.62 📫
Lisdoonvarna Lad £0.00	3.4 £ 16	3.45 £ 138		V				3.4
Lygon Rock £0.00	4.4 £ 194	4.5 £ 11				V		10 💲
Weebill £0.00	18 £8	18.5 £ 6			V			18.5 🗘

For the time being we will ignore the 'Margin Maker' column, this is covered in more detail on this page

If you tick a box in the 'Back' column you will creating your position on this selection by taking the current back price. If you tick a box in the 'lay' column you will create your position by offering your back bet to the market at the current lay price.

If you don't want to use either the current back or lay price for a selection then you can tick the box in the 'Manual' column then you will be able to manually enter the price you want to place your bet using the 'Odds' Column

In the image above I have opted to take the current back price for the first two selections so these bets will be matched as soon as I hit the 'Place bets' button, for the 4th selection I will be offering my back bet at the current lay price of 18.5 so will need to wait for it to be taken once its been placed.

For the 3rd selection I want to back it at much higher odds than its currently trading at so have ticked the manual column and specified that I want to place this bet at 10.0 in the odds column

Placing your bets

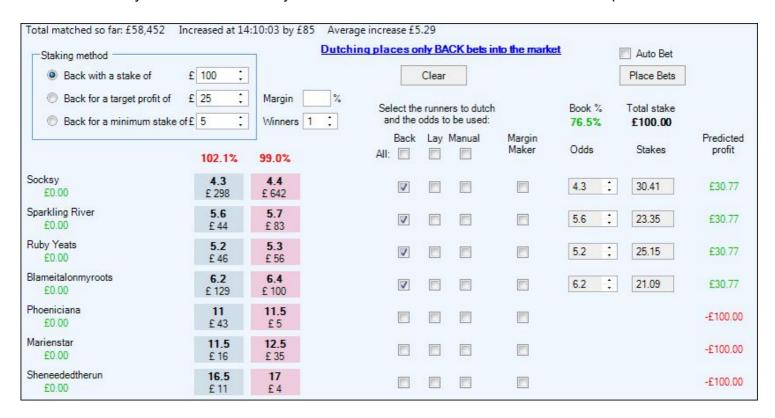
Your bets will still not be placed into the market until such time as you have pressed the 'Place bets' button, this is located just above the stake column. You can change and play about with the tick boxes, odds column etc as much as you like without fear of accidentally placing a bet. This allows you to fully experiment with selections and stakes etc until you are totally happy.

Advanced Dutching - Back with a Stake of

The first staking method is the most basic and traditional, you would set a 'fixed' stake to back with, and your winnings would be spread equally amongst the selections your have made with your stake being your potential loss if one of your selections does not win.

Therefore with this method your loss will <u>always</u> be fixed but your winnings/profit will be variable and dependant on the odds and selections you choose to back.

In the image below we have selected four runners in a eight-runner market and 'Backed with a stake of' £100 by taking the current back price for all four. We will lose £100 if none of these four selections win but win £30.77 if any of the four do win. If you look at the book % you can see that the four selections chosen make up 76.5% of the market.



Once you are happy with your selections and predicted P/L the last thing to do is click the 'Place Bets' button, the software will then submit the bets to the market.

Remember if your betting pre-off and asking for a price you will still need to click the 'Keep Bets' button if you want to take any unmatched bets in-play.

For years you this would be the normal way in which you could place simple "dutching" bets, but with Bet Angel you have much more flexibility than this. If you are still placing normal back bets, make sure you expand your repertoire and edge by using more advanced strategies.

Advanced Dutching - Back to a Target Profit of

Another staking method and way of using the advanced Dutching is to 'Back to a target profit', with this method Bet Angel also gives you the option to 'Override your Target Profit' this is sometimes called 'Variable Dutching'

A frustration with more traditional dutching could be that you choose your five selections in a market. Then none of the five win and instead the fifth in the list (which you didn't cover) romps in. For a long time this created a big problem for a lot of dutching strategies.

Also netting a profit is fine, but an equal profit on all selections may not work for you in terms of risk and reward and neither will the issue of having all your liability spread across the remainder of the field.

Using Bet Angel it is possible to 'dutch' your selections to a pre-defined profit or loss <u>per selection</u> by using the 'override target profit' column. This allows you considerable flexibility in terms of the profit you expect to gain from your winnings selections, or the loss you are willing to bear for your errors.

Variable Dutching

In the image below we have a correct score market from a match where the away team is the favourite to win, and it's our belief is that the away side will most likely win but it will be a tight low scoring match, however this is football where anything can happen so there may just be a lucky goal scored by the home side and if so we don't want to get stung if that happens.

So, here we have chosen to 'back for a target profit of' £25 but rather than accept a £25 profit on each score line chosen we have used the 'Override Target Profit' column to pre-define the P/L required for individual scores.

You can see we have created a position for ourselves where a low scoring away win will return our £25 target profit, but any low scoring home win or draw will only see a very minor loss of between £0 & -£5.

Only if there is a goal fest and the home team win 3-0 or more than a total of 4 goals are scored would we be able to lose -£25

Bournemouth v Tottenham - Co	orrect Score		*								
Total matched so far: £2,738 Inc	reased at 18:3	9:27 by £20		increase £0.0 a places or		CK bets in	ito the market		Auto Bet		
Staking method Back with a stake of	£ 10 :				Clear				Place Bets		
The state of the s	£ 25 ;	Margin Winners 1	%	Select the	runne	rs to dutch be used:		Book % 74.5%	Total stake £25.07		
	104.0%	97.7%		Back All:	Lay	Manual	Margin Maker	Odds	Stakes	Predicted profit	Override target profit
0 - 0 £0.00	14.5 £ 121	15 £ 164		V				14.5	1.73	£0.00	0
0 - 1 £0.00	10 £ 16	10.5 £ 300		V				10 :	5.01	£25.00	
0 - 2 £0.00	12 £ 103	13 £ 62		V				12 :	4.17	£25.00	
0 - 3 £0.00	21 £ 17	22 £ 88		V				21 :	0.96	-£5.00	▽ -5
1 - 0 £0.00	15 £ 43	16 £ 110		V				15 :	1.67	£0.00	0
1 - 1 £0.00	8.2 £ 30	8.4 £ 55		V				8.2	3.06	£0.00	V 0
1 - 2 £0.00	9.8 £ 130	10 £ 42		V				9.8	5.11	£25.00	
1 - 3 £0.00	18.5 £ 107	19 £8		V				18.5	1.35	£0.00	0
2 - 0 £0.00	28 £6	29 £ 24		V				28 :	0.72	-£5.00	▽ -5
2 - 1 £0.00	15.5 £ 10	16 £ 122		V				15.5	1.29	-£5.00	▽ -5
2 - 2 £0.00	16 £ 21	17 £ 61								-£25.07	
2 - 3 £0.00	32 £2	34 £ 30								-£25.07	
3 - 0 £0.00	55 £ 5	80 £ 6								-£25.07	
3 - 1 £0.00	40 £ 89	48 £ 2								-£25.07	

So now we have an excellent chance of at worst breaking even or losing a very small -£5 while have a great chance of netting a tidy profit if the favourite does indeed win with a low scoring total.

Once you are happy with your selections you can submit the bets to the market by clicking the 'Place Bets' button.

In the image I have just chosen to take the current back price for all score lines but there is nothing to stop you asking for either the current lay price or submitting a bet at any odds of your choice, just remember that if doing this pre-play and you need your bet matched you will still have to ckick the 'Keep Bets' button to instruct the software to take your unmatched bet in-play.

Video Tutorial

Bet Angel®

ADVANCED

VARIABLE DUTCHING TOOL

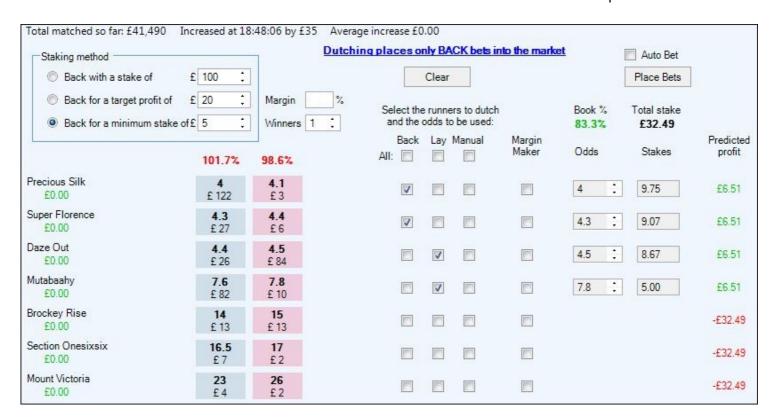


Advanced Dutching - Back with a Minimum Stake of

Bet Angel is able to place a book on Betfair for small values but in order to ensure you comply with the betting exchange's terms and conditions you can set up a book to 'back for a minimum stake of'. This ensures you do not place bets on below the specified minimum value. If you choose to perform a dutching position with bets below the minimum value we cannot guarantee these bets will enter the market without error or complications as the process to achieve this is complex. We do not condone any abuse of the terms with the exchange and suggest you always try and comply with them.

When using the staking method 'Back with a Minimum Stake of' the minimum stake will be used on the selection you choose with the highest odds, the stake amounts for any subsequent selections will then be calculated by the software to ensure the same profit amount is achieved.

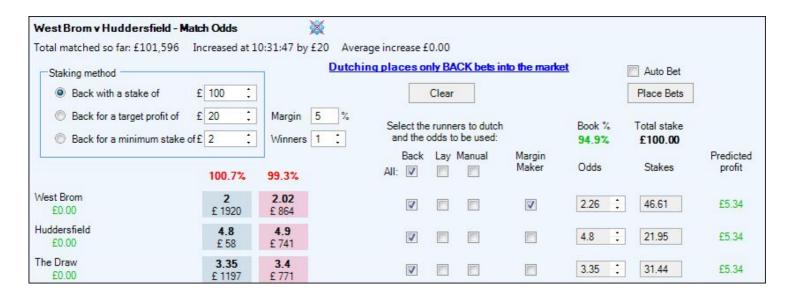
In the image below it is the 4th runner 'Mutabaahy' that has the highest odds of the selections chosen so the minimum stake of £5 I have set is used on this selection, the software has worked out all the stakes required for other selections based on there odds so that ALL selections chosen will achieve the same profit if it were to win.



Using the Bet Angel Dutching Margin Maker

The 'Margin Maker' is a quick and easy way for you to create a profit margin on your selection/s without the need to do the calculation yourself manually. To use the 'Margin Maker' once you have ticked the selections you wish to 'Dutch' tick the 'Margin Maker' box along side the selection you wish to use to create your margin on.

In this example we want to make a 5% profit on the West Brom V Huddersfield match, you can see that after setting the 'Margin Maker' to 5% and backing the book we have ticked the margin maker function next to 'West Brom' The software is showing to make 5% on this market by using 'West Brom' as the 'margin maker' their odds would need to drift out to 2.26. How do we know when/if the odds could reach 2.26? This will happen when the match goes in play and if there is not a goal within the first 30 minutes or so, therefore you will need to make a judgment on whether this will happen or not.

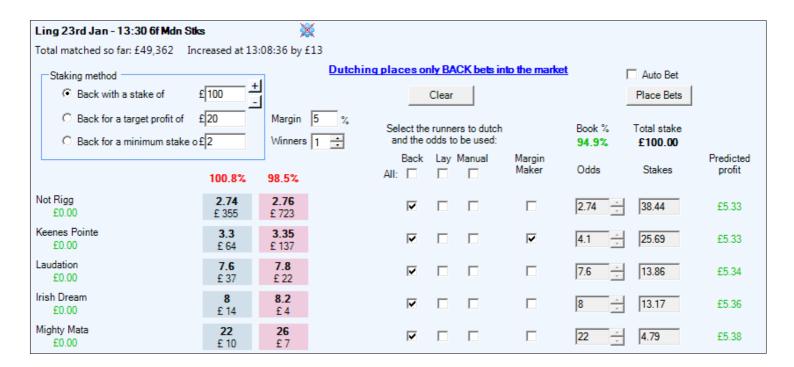


If you thought not and there was a chance of a early goal within the first 30minutes instead of using 'West Brom' as your 'Market Maker' you could instead use the draw. The odds of a draw will rise following a goal so by ticking the 'Margin Maker' box for the draw in the image below we can see exactly what odds the price would need to rise to for us to still make our 5% profit.



Once you are happy with your choice all thats left to do is click the 'Place Bets' bets button to submit your bets into the market, remembering to also 'Keep bets' afterwards if placing the bets pre-off and you need to take them in-play to be matched.

Of course you can see you can do this with any sports event not just soccer. Below we have picked a race at Lingfield and applied the same selection criteria. Here you can see that if 'Keenes Pointe', the 2nd favourite, drifts to 4.10 in running we will net a £5.33 profit. We don't need to worry about the favourite winning the race (in fact if it gets off to a flying start and makes all that's all the better for us) we just want to see that the 2nd fav is out of contention at some point during the race. If he does we will make money not just if the favourite wins, but if any horse wins the race!



Margin Maker on Small Fields

In small fields the margin maker function takes on another characteristic. If there are only two selections you can use the margin make to automatically price the entire market quickly, easily and effectively. This allows you to enter a double trade in the market with just one click and a good chance of filling. In the following screen shot you can see we are on an in-play tennis market. We have back the field, all two of them, at the current back price with 5% margin. 'Zidansek' is the likely winner of this event and we have chosen to take his current back price. As 'Alves' struggles to get back into the game we would expect his price to drift or stay at a similar level. As we have ticked 'Alves' as the margin maker Bet Angel has worked out that as we backed 'Zidansek' at 1.11 we need to back 'Alves' at 21.0. Currently he is priced between 9.4 and 990 so we sit right in the unmatched lay area and stand a good chance of getting filled. If both orders are filled we will make 5% profit.

TZidansek v C Alves - Match O	dds	**							
Total matched so far: £532,072	Increased at 1.	2:21:45 by £4 Ave	rage increase £0	.19					
Staking method		Dutc	hing places or	nly BA	ACK bets in	to the mark	<u>et</u>	Auto Bet	
Back with a stake of	£ 100 ;			Clear				Place Bets	
Back for a target profit of Back for a minimum stake of	Margin 5 % Winners 1 :	Select the runners to dutch			Book % 94.9%	Total stake £100.00			
	100.7%	88.6%	Back All: ☑	Lay	Manual	Margin Maker	Odds	Stakes	Predicted profit
T Zidansek £0.00	1.11 £75	1.13 £3	V				1.11	94.98	£5.43
C Alves £0.00	9.4 £2	990 £ 2	V			V	21 :	5.02	£5.43

When you dutch you are generally using the available or expected prices to make money. But why not wait for exactly the right opportunity and not only nominate what prices you will accept but what margin you think is acceptable? The best way to explain this is to look at book arbitrage.

Book arbitrage and automatic dutching

Book arbitrage using dutching is the process of backing the book at less than 100% on the back side. In theory this shouldn't be possible but, because the market wobbles, sometimes the book will trade below 100% and it is possible to back the entire field and make money. These aberrations in the market only occur infrequently and therefore it is only possible to take advantage of this incorrect pricing using the automated dutching feature in Bet Angel.

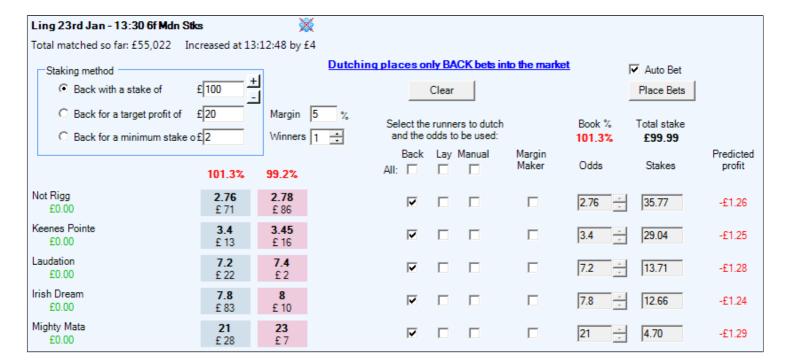
First you need to set the target margin in Bet Angel. To do this you need to visit the automation tab of the <u>settings</u> <u>editor</u> and set the required margin. If you are performing book arbitrage you need to set this to 100% as the instruction in the settings editor is telling Bet Angel to fire orders to the market if the book% is less than or equal to 100%. In reality you may want to set this to a value lower than 100% as you would like to get something from this strategy and that is only possible at a value lower than 100%. However it is likely that when this bet fires it will do so below 100%. When you have set this margin trigger you need to visit the dutching area to set up your book. In this case we are looking for the back side to go under 100%.



Once this is set (and saved) go to the dutching area on Bet Angel and click on the back all tick box. When you are ready to set Bet Angel in motion click the auto bet tick box. If Bet Angel sees a book% of under 100% on the back side it will automatically fire a back all order into the market at the correct odds and stake needed at that split second in time. Unless you are fortunate you are likely to get unmatched bets using this strategy so make sure you think about what you will do with unmatched bets or which events are more suitable for situations where the entire book will get matched easily.



You can also use the auto bet function in your normal dutching activities as well. It always makes sense in busy markets to ask for a certain margin or better prices rather than try to enter the order manually.



Bookmaking - 'Being the bookmaker'

Bet Angel's powerful bookmaking feature allows you to act like a bookmaker and lay bets to a market for other users to back. Traditionally bookmaking has been the preserve of established circles but with Bet Angel and betting exchanges bookmaking is now simple and within the reach of the ordinary person. Bookmaking is a simple strategy and one you can use on any market as it is does not rely on any particular knowledge of the underlying market.

The concept of bookmaking

Bookmakers make money by laying odds on an event at a price above true odds. This makes the people who are backing an event pay more than 100% for an outcome that can only possibly end with a 100% chance. This is why trying to beat the bookmaker has always been incredibly difficult. In a five horse field any one of five horses will definitely win the race, there is a 100% chance of that happening. If you can sell the book at 110% you know you only have to pay out a maximum of 100% and the remaining 10% will be your profit. If you look at this as a backer, you are buying 100% for more than it's worth and you will always lose. That is unless you know something significant enough to turn over the bookmakers built in margin.

The art of bookmaking has always been to create a balanced book. You need to take money from backers in equal proportion based on the odds you have offered. The odds you offer should have some profit margin for you. If you can't do this your risk is out of proportion to your potential pay-out and you could face a large loss. For traditional bookmakers their role was pretty clearly defined, they needed to split opinion as this would nearly always produce a balanced book and therefore make money. In modern betting markets splitting opinion is no longer an option. The market is free from your influence and people pick and choose their own prices. Therefore you need to price the book at a level that ensures that you can get all your bets matched as quickly as possible. Any unmatched bets will leave an 'unbalanced' book and a potential loss for you!

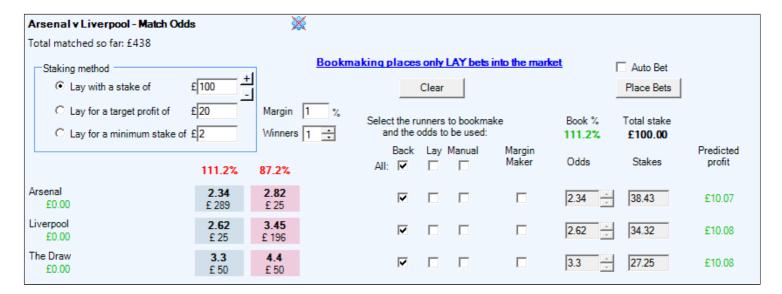
Awareness about bookmaking on a Betting Exchange

When you lay a book to the market and complete it your trading bank is immediately available for further activity. This is extremely beneficial as exchange margins are small so you can use a small trading bank to repeatedly make a book and improve your overall margin in the market.

You do need to be aware not to make a book in a false market. If you lay a book and have failed to account for withdrawn selections you could face a substantial loss. Please make sure you understand the market you are bookmaking in and ensure you clearly read the rules of the market to assess any possible impact.

Using the bookmaking function in Bet Angel

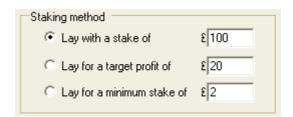
When you enter the bookmaking screen you will see the market that you have chosen and a list of selections in that market. You will also see a reminder that bookmaking only places lay bets in a market. When you make a book you only lay selections to the market you do not perform any other task. We put this reminder in because there are actually several options available for you to lay orders into the market. You don't need to lay at the current lay price.



Your overall objective is to create a book above 100%; there are many ways to do this. But in order to make a book above 100% you have to put some orders unfilled into the market. Using Bet Angel you can choose whether you lay at the current lay price, at the current back price or whether you nominate your own price.

Selecting a staking method

Your first task when making a book is to select a staking method. Click on either of the methods to decide what your objective is when creating a book. If you "**lay with a stake of**" your liability is fixed but your profit varies according to the margin in your book.



If you 'lay for a target profit of' your margin is fixed by the book you create but your stake varies. Lay for a target profit has to be used carefully as it can generate very large stake values. This is because you may be working on small margin and in order to generate your required profit Bet Angel needs to place large orders into the market.

Bet Angel is able to place books on Betfair for small values but in order to ensure you comply with your betting exchanges terms and conditions you can set up a book to 'lay for a minimum stake of'. This ensures you do not place bets on the exchange below the minimum value specified in your terms and conditions. If you choose to create a book with bets below the minimum value stated by your terms and conditions we cannot guarantee that these bets will enter the market without error or complications as the process to achieve this is complex. We do not condone any abuse of your terms with the exchange and suggest you always try and comply with these terms.

Another setting you should pay attention to is the 'winners' box. If you are a making a book on an outright market your target book % is over 100%. If you are in market with two possible winners your target book is actually any value over 200%. Therefore if you set the winners to two, Bet Angel will adjust the book % figures to go green if the book exceeds 200%. You need to be aware that the winner's box does not influence predicted profit calculation at this moment in time.

Creating your book

Select the runners to bookmake and the odds to be used:					
Ba All:	ck Lay	Manual	Margin Maker		
Ī.					
Ī.					
Ī.	· 🗆				

Once you have decided what your stake value will be set at you need to create your book. To create your book you need to decide what prices to give each individual selection within the book. Rather than pricing each selection manually we have included a series of tick boxes which allow you to create your book quickly and easily. If you click anywhere within the row of this tick box you will automatically price the market and Bet Angel will work out the stake for you. You can see the columns are headed 'back', 'lay', 'manual' and 'margin maker'. If you click on the 'Back' box you will make a book by laying at the current back price. If you tick 'lay' you will make a book by laying at the current lay price and so on.

At the top Select the runners to bookmake Book % Total stake of these and the odds to be used: 101.0% £100.00 columns Back Lay Manual Margin Predicted you will see an 'ALL' option. To create your Maker Odds Stakes profit All: 🔽 П Г 굣 П 34.38 £0.99 31.94 £0.99

14.15

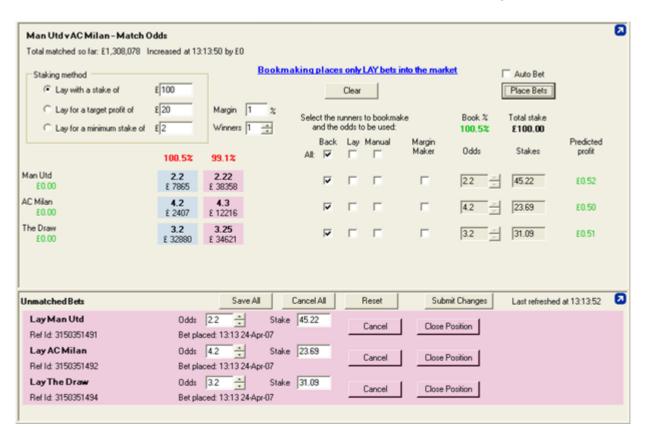
£0.95

first potential bookmaking position click the 'Back ALL' tick box and you will notice all the tick boxes under the back side are active. This means you will be creating a book by laying everything at the current back price. At this point you have not actually placed any positions in the market you are just looking at what positions you

could take. You can see from the book% figure in this screen shot that the book is at 101.0%, this value is also green. It is green because if all your orders in this market are filled you will be laying 100% liability into this market for 101.0%, you will make money. If the book% figure goes below 100% then you will not have made a profitable book and you will need to change the odds selections to create a profitable book.

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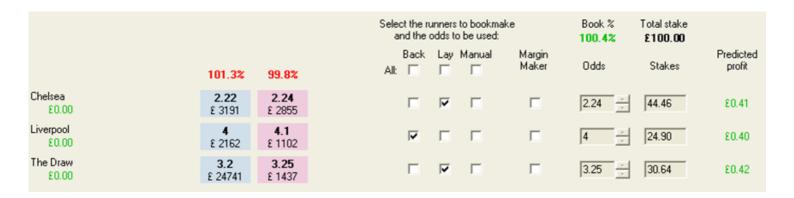
In the example we have given, because you are laying at the current back price you can press the place bets button and this will place the orders into the market. You can do this safely as all your current bets will be unmatched. Your screen should show all the unmatched bets in the 'unmatched bets' window. For your book to complete profitably you need all these orders to match. To get familiar with the software you can place these bets into the market and use the **cancel all button** in the unmatched bets area to cancel all these outstanding orders.





In this particular example we have let the bets run and there were matched a little later. As previously discussed as soon as the book is complete our balance is available to use again. Now this order has completed we can make another book and increase our profit on this event while at the same time lowering our overall risk.

It is possible to create a book in any market but obviously the more selections there are the more potential you have that your book will not be completed fully, i.e. your bets will not be completely matched. In the example we have detailed you can see we have laid two of three prices at the current lay price and only asked for one order to be matched at the current back price. Despite this there is still margin available for us on the book. While this has allowed us to create a book that is likely to fill profit maximisation is usually the best route to follow for book creation.



Bookmaking concepts

In the following example I have selected an evening soccer match from the Portuguese league and made a book on that match. I have no idea who Maritimo are or what there form is, but then I don't need to as my anticipated position isn't relying on this knowledge. All I am looking to do is 'sell' 100% probability for more than 100%. In this case you can see I have 'sold' my book to the other punters on the exchange for 101.2%. For a £500 stake we would net £6 for our efforts if all our bets get matched. Doesn't sound a great return from a traditional betting perspective but obviously this isn't traditional betting.



If you want to nominate a profit target then you can also do that in Bet Angel. In the next image you can see we have 'asked' for a £10 profit. Bet Angel tells us that we would need to stake £828 to get this profit! That doesn't so that appealing so what can we do about this? There are some useful tricks on exchanges you can use to achieve the same profit without the same risk.



The first method is deceptively simple. One of the unique characteristics of the exchanges is the ability to recycle your money through the market. Say we placed our first position in the market we would net a £6 profit after all our bets were filled. As soon as our bets are filled we get the chance to re-use our money, the exchange makes the money immediately available to us again. This is quite a radical change from traditional betting markets where your money is tied until the betting event is over. So we simply repeat our bookmaking again. If we completed three books in this market before the start of the match we would have only used £500 but turned a profit of £18, a bit better than the £6 we thought we would get. If you still don't like the idea of using such large stakes to generate such a small profit why not go for a variation on a theme? In the next example we have used the clever margin maker function on Bet Angel to create a book for us to generate margin subject to what happens in the match.

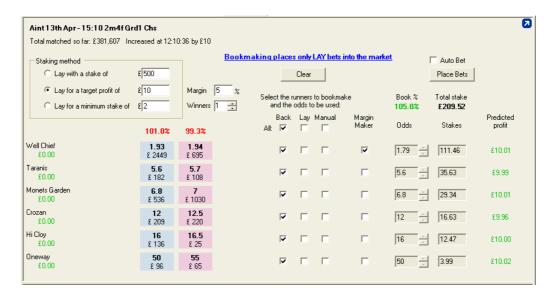
Using the Bet Angel margin maker

In this example you can see that we have laid a book but ticked the margin maker function. This is telling is that if we want to make 5% margin on this match the draw would need to be priced at digital odds of 3.35. How do we know that the odds could reach 3.35? This will happen when the match goes in play and there is not a goal before around 30 minutes. Of course you will need to make a judgment on whether this will happen or not, so there is more risk with this strategy but your stake value is massively reduced.



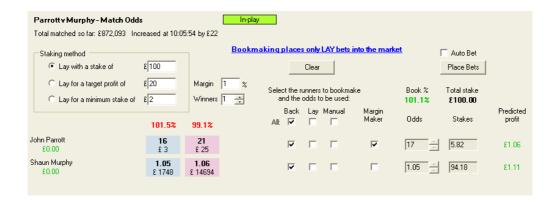
Of course you can see you can do this with any sports event not just soccer. We have picked the John smiths Melling steeplechase at Aintree and applied the same selection criteria. Here you can see that if Well Chief, the odds on favourite, comes in to 1.80 in running we will net a £10 profit. We don't need to worry about Well Chief winning the race we just want to see that he comes into contention at some point during the race. If he does we will make money not just if Well Chief wins but any horse in the race!

The ability to carry over bets in in-running markets is something never previously available before betting exchanges came into being. This ability gives us a very useful way of increasing the type and range of books you make and the possibility of getting your book completed in your favour. Use the 'Saved bets' tab to carry bets over to an in-running market.



In small fields the margin maker function takes on another characteristic. If there are only two selections you can use the margin maker to automatically price the entire market quickly, easily and effectively. This allows you to enter a double trade in the market with just one click and a good chance of filling. In the following screen shot you can see we are on an in-play snooker market. We have laid the field, all two of them, at the current back price with 1% margin. 'Shaun Murphy' is the likely winner of this event and as his win gets more certain our order at 1.05 will complete. As John Parrott struggles to get back into the game we would expect his price to drift or stay at a similar level. As we have ticked 'John Parrott' as the margin maker Bet Angel has worked out that if we lay Shaun Murphy

at 1.05 we need to lay John Parrott at 17. If both orders are filled we will make 1% profit. You can see that we would lay John Parrott at a price that is currently not available and therefore we are highly likely to get this order filled.



Book arbitrage and automatic bookmaking

Book arbitrage is the process laying the book at more than 100% on the lay side. In theory this shouldn't be possible but, because the market wobbles, sometimes the book will trade above 100% and it is possible to lay the field and make money. These aberrations in the market only occurring infrequently and therefore it is only possible to take advantage of this incorrect pricing using the automated bookmaking feature in Bet Angel.

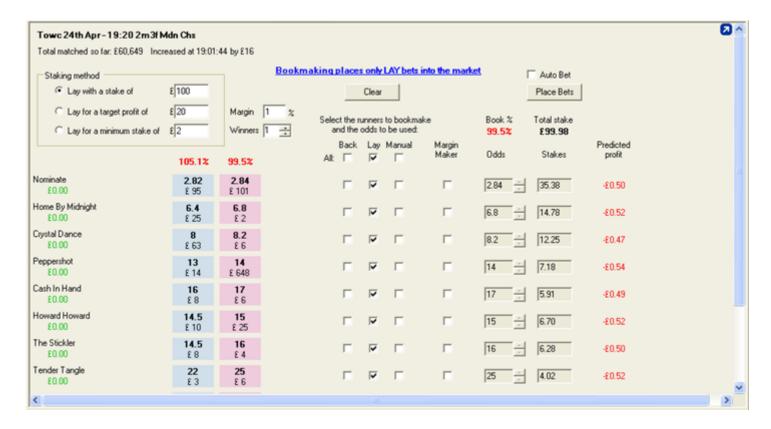
First you need to set the target margin in Bet Angel. To do this you need to visit the **Settings Editor** and set the required margin. If you are performing book arbitrage you need to set this to 100% as the instruction in the settings editor is telling Bet Angel to fire orders to the market if the book% is higher or equal to 100%. In reality you may want to set this to a value higher than 100% as you would like to get something from this strategy. When you have set this margin trigger you need to visit the bookmaking area to set up your book. In this case we are looking for the lay side to go over 100%.



Go to the bookmaking area on Bet Angel and click on the lay all tick box. When you are ready to set Bet Angel in motion click the auto bet tick box. When Bet Angel sees a book% of over 100% on the lay side it will automatically fire a lay all order into the market at the correct odds and stake needed at that split second in time. However, unless you are fortunate you are likely to get unmatched bets using this strategy so make sure you think about what you will do with unmatched bets.



You can also use the auto bet function in your normal bookmaking activities as well. It always makes sense in busy markets to ask for a certain margin rather than try to enter the order manually.



Summary of bookmaking function

To create a book make sure you go through the follow steps

- 1. Decide what stake and staking method you will use
- 2. Create the book using the tick boxes available on the screen.
- 3. Make sure you create a book over 100%
- 4. Use autobet to fire your orders in when the book reaches your margin target

Unmatched Bets Area

Concept

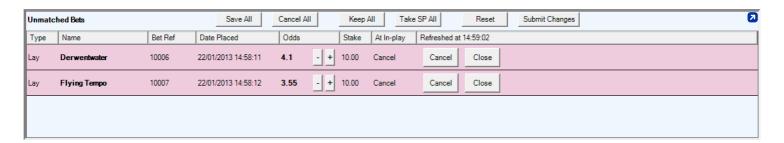
The unmatched bets area displays all the bets that you have placed, into the market currently displayed on the Bet Angel Trading screen, that remain unmatched.

It is a convenient way for you to view, manage or modify your unmatched bets. By sorting the unmatched bets you can quickly see what open positions you have and then decide what action to take.

Usage

The unmatched bets area is presented under the trading areas of the Bet Angel Trading screen. By default it is large enough to see a few unmatched bets, but you just adjust the visible height by dragging the horizontal splitter bar up or down (the bar is displayed just above the 'Unmatched Bets' title). You can also <u>undock</u> the unmatched bets area and, if required, pin it to be always visible on screen.

Whenever you place an order into the current market using Bet Angel, regardless of how you place it, it will appear in the unmatched bet area and remain there until it is matched or cancelled. Tip: If you start using <u>Global Settings</u> the unmatched bet area will also feedback information about fill or kill timers or stop losses being used with an unmatched bet.



Main buttons

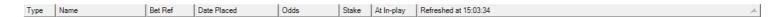
At the top of the unmatched bet area there are six main buttons:

- 'Save all' manually saves the unmatched bets to the 'Saved bets' area.
- 'Cancel all' will cancel all unmatched bets in the market.
- 'Keep All' tells the exchange to Keep each of the unmatched bets in the market when it is turned in-play. *
- **'Take SP All**' tells the exchange to fill each of the unmatched bets by Taking the Starting Price when the market is turned in-play. *
- *Note: Unless the Keep or Take SP option is chosen, the unmatched bets will be cancelled when the market turns in-play. This function is the same as on the Betfair website and only available when offered by Betfair.
- 'Reset' clears any pending changes that you have made to the unmatched bets.
- 'Submit Changes' sends any pending changes, that you have made to the unmatched bets, to the exchange.

It is important to note that if you edit the bet's 'Odds', 'Stake' or 'At In-play' values in the unmatched bets area, except for the nudging feature (see below), you will need to use the 'Submit Changes' button to send these changes to Betfair. This allows you to modify the prices of a number of bets in advance and commit the changes with a single press of 'Submit Changes'. Until that time these 'pending changes' to unmatched bets will be displayed in red and can be abandoned by pressing 'Reset'.

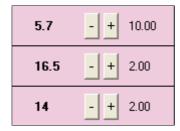
Tip: If you want to carry a bet from before the start of the event to 'in-play' then we recommend that you use 'Keep All' rather than 'Save All'. 'Save All' is beneficial is you wish to save a bet for submission into the market multiple times.

By clicking one of the column titles the **column header bar** in the unmatched area you can **sort your unmatched bets** by Name, Bet reference, date placed, odds or your outstanding stake. You can sort in either ascending or descending order.



Modifying and 'nudging' orders

If you wish to modify the stake amount or the odds on an unmatched bet you simply click on those odds or stake and a white box will appear around the value. This is a now a numerical field where you can enter your new stake or odds. If you have clicked on this field by mistake, either press 'esc' or click elsewhere on the screen. Changes to the bet currently in the market will be marked in red and will be committed when you press the 'Submit Changes' button.



You will also notice that there are plus and minus buttons to the right of the unmatched bet odds. These buttons allow you to quickly amend an order by nudging the price up or down by one 'tick'. A 'tick' is the next price point available in that odds series. e.g. If you had a bet priced at 5.7, nudging the odds up one tick will push the price to 5.8 or nudging it down would push it to 5.6.

Cancel / Close position

Rather than cancelling all open positions in a market you may wish to cancel individual positions. This can be achieved by clicking the cancel option on the unmatched bet which you wish to remove from the market.



Sometimes, rather than modifying or nudging a position, you may wish to just exit you position immediately. If you click the **Close Position** button Bet Angel will attempt to close your position at the best available price at the current stake value; however it may need to use the third best price in the market for the selection to ensure the best chance of the bet being filled. Care should be taken when using this feature on very volatile and illiquid markets as the speed of being filled will be at the risk of getting a worse price than if you'd adjusted the price manually. You may wish to use the <u>Trade Calculator</u> as another way to control the exit of your positions.

Awareness with regard to global settings

If you modify the price of a bet or increase the stake, both of which will result in a new bet reference, you are taking manual control of the bet and any global settings that were applied to this bet will be lost. Settings such as stop losses, fill or kill orders will no longer function if you modify a bet.

Video Tutorial

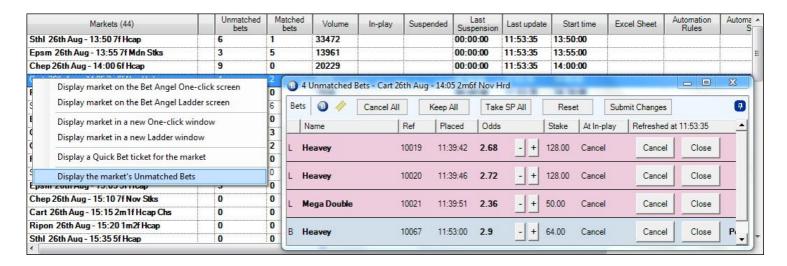
Spawned Unmatched Bets Window

An unmatched bets window can also be spawned for any market without having to open the market on a main trading screen.

You can launch this tool from the list of markets that have been loaded into <u>Guardian</u>, the <u>Watch List</u>, the <u>Market selection</u> tree, the <u>Guardian selection</u> tree, the <u>Quick Bet ticket</u> or via a <u>keyboard shortcut</u>.

To show the unmatched bets window for a market right click on a market from any of the areas of Bet Angel listed above and a pop up menu will appear, and the 'Display the Unmatched Bets for this Market' is located at the bottom of this list.

In the image below, the 4th market in Guardian has been right clicked on and the 'Display the Markets Unmatched bets' option has been selected from the pop-up window and that's then spawned the unmatched bets window for that market.



From there you can manage everything to do with your unmatched bets as detailed on the previous <u>page</u> of this user guide, just as if you had the full market open and where using the regular unmatched bets area at the bottom of the window.

If you wish to display the full market from the unmatched bets window you can do so by clicking on one of the following icons located in the upper left corner of the window and that will open the market to your main One-Click or Ladder trading screens.

Alternatively by clicking the 'Bets' icon in the top left corner a pop up list will appear were you can still choose to display the market onto your main one-click or ladder screen or spawn it in a new one-click or ladder window.

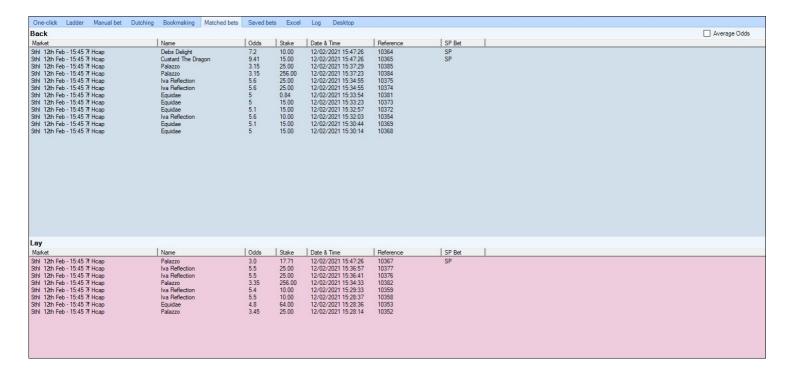


Below those is the option to 'Sync to the market under the mouse cursor', this is a useful option to enable if you trade or have multiple <u>ladder</u> or <u>one-click</u> markets open as you could have just one floating 'Unmatched Bets' window pinned somewhere on your screen and it will show any unmatched bets associated with the market currently under your mouse cursor.

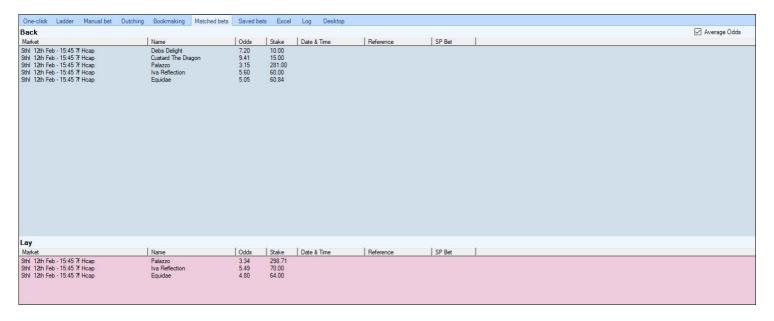
As with most other tools of Bet Angel, the size and position of these windows can be saved in a <u>Screen Layout</u> profile.

Matched Bets Area

This page will show a list of all your matched bet in a market including the odds matched at, the stake, time the bet was matched, the bet reference supplied by Betfair and any bets matched at SP



If you have a lot of matched bets you might find it easier to tick the 'Average Odds' box, you'll then see the average matched odds and stake for each selection



NB; Columns can be resized by positioning your mouse cursor at the side until you see two small arrows appear, then with your mouse button depressed you can drag the column to the desired width. You can then save this as part of your <u>Layout</u> profile.

Saved bets area

Important Note: This option is a legacy feature kept at the request of clients. It is more of a convenience option for users so please ensure you are fully aware of the issues associated with it (also Limitations at the end of this section).

In most cases we recommend the new "Keep" or "Keep All" function.

Concept

The saved bets function in Bet Angel allows you to quickly and easily save any unmatched bets you have in a market and reintroduce them quickly and easily to the same market when it becomes unsuspended in play. You could do this as part of a deliberate in running strategy or as another way to minimise risk. If you are in a football match it will carry bets over after a goal. For most markets the Betfair 'Keep Bets' feature can be used instead.

If you use offsetting with greening try laying a price to the market and carrying over the back bet in-play to green up to experiment with this function.

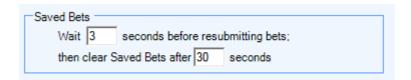
Usage

The two key options on the saved bets tabs are listed as tick boxes near the top of the screen. The unmatched bets are held at the bottom of the saved bets screen for your reference. This section can be undocked or re-sized to hide it.

If you tick the 'save unmatched bets on suspension' tick box, then any bets that are in the unmatched bet area will automatically be saved by Bet Angel. When the market is marked as suspended Bet Angel will transfer the unmatched bets to the top of the saved bets screen. At this point you can choose to delete all, some or none of the unmatched bets. If you click the place all button it will automatically place all the saved bets back into the market. If you want Bet Angel to automatically re-submit bets into the market you should tick the 'Resubmit saved bets when in-play' tick box.



To set this up correctly you need to go to the **Settings Editor**. In this area you can set the time Bet Angel waits before attempting to re-submit bets to an in-play market. It is important to set a reasonably long period before resubmission. This is the only way to ensure your bet is automatically re-entered into the market. If you set this time period too short your bet re-submission may fail due to caching on Betfair's servers. This is because the market may undergo multiple suspensions and un-suspensions before it reaches its final 'in-play' status.



Make sure you also set a reasonable 'clear saved bets after' time period. This clears down saved bets to stop them being re-introduced, for example, during a dead heat in a horse race.

Please be aware that, because of caching on Betfair's servers, it is possible, though rare, to have false saved bets. To be 100% safe it is often a good idea to save bets, but to manually re-introduce them. This is more likely to occur if you are placing bets very near to the start of an event or placing large numbers of multiple bets.

Limitations

You should be aware that the saved bets function only works on the market that is currently active. If you switch away from the market your saved bets will be lost. This is because neither Betfair nor Bet Angel has the ability to submit saved bets that are not currently held in the active market, your saved bets are only stored in temporary memory. If you want Bet Angel to resubmit or store saved bets **do not** switch away from your current market. There is no reason however, subject to system resources, why you cannot open multiple copies of Bet Angel to achieve multiple saved bets in different markets.

Trade Profit Calculator (Cash Out)

Concept

The trade calculator can be used in any market to quickly and easily exit your positions. You can close your position for an immediate exit, offer a closing bet on the reverse side of the book to scratch or improve the price of your trade, or you can close for a nominated target price (and see the profit that will provide). You can also automatically hedge and 'go green' on your open market positions on a selection, all with one click of your mouse.



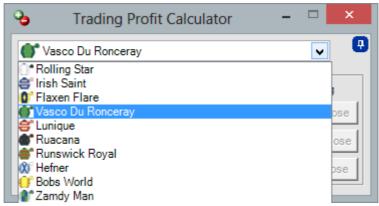
General usage

To use the trade calculator you need to click on the trade calculator icon or look in the enhanced ladder where it is present. You can open and use three trade calculators simultaneously on different selections within the same market.

It is important to note that in order for the trade calculator to function correctly it needs to work out your net position on a selection within the market. It can only do this if you have backed or laid that selection in isolation. If you have used bookmaking, dutching or a similar tool on a market Bet Angel will not be able to work out your net stake and you will not be able to use the trade calculator reliably. The trade calculator can be 'pinned' to the top of the screen to ensure that all the relevant trade information and the ability to exit your trade is available all the time in an area convenient to you. You can 'pin', 'unpin' and move the calculator where you wish on the screen. Use the pin option on the top right of the trade calculator to do this.

Using the trade calculator

When you first start up the calculator or you have no positions in the market the trade calculator will be blank. Clicking on the pick list will show you a list of all available selections in that market. Use the pick list to choose which selection you would like to use the trade calculator on.



When you have an open position in the market, the calculator will immediately show you your net position in the market if you chose to close your position at that moment. Bet Angel will also display the required stake and price

required to close your position. At this point you would chose how you wish to close the position and press one of the available buttons.



In this example you can see there are three buttons which you can use to close your position.

- Current Close allows you to close the position immediately at the best market price. If you have previously backed the selection, it will lay it at the current lay price; if you have laid the selection, it will back it at the current back price to close your net position.
- Reverse Close allows you to take the best available price on the opposing side of the book. If you have backed to open your trade it will try to lay at the current **back price** to close. You gain the advantage of a better price (at least one tick), but as you are offering the bet to the market you will have to wait for another market participant to match against your bet. Therefore you gain additional profit for the risk of the bet possibly not filling. Used appropriately, this is a great way to reduce a potential loss or scratch your trade if your position is going against you.
- Manual Close allows you to nominate a price which you wish to close out at. You can use this to assess future profitability, a potential loss or to put a price in the market that will be met at some point in the future. Use the saved bets option (or Keep All) to automatically re-introduce this bet into the market if you wish to be matched at some other time.

If you tick the 'greening' option on the trade calculator, the calculator will automatically hedge your position on this selection in the market when it places your closing position, regardless of which button you chose to close it. This means you can place a trade with only one click that will automatically place the correct stake and at the correct price to spread the profit you have made across the entire book. It will perform this task whether you have made a profit or a loss and it does not need to place multiple bets to achieve this.

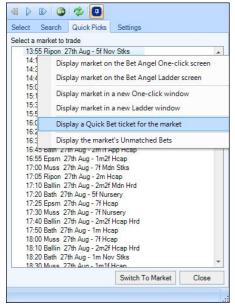


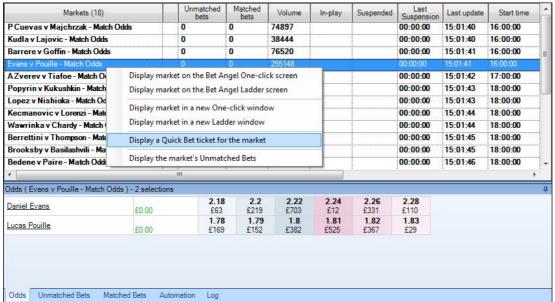
A good way to experiment with the trade calculator is to use it on an 'in-play' event. This is because the odds move quickly and you will see the immediate impact of this on the trade calculator. Try laying a small stake in a horse race before the off and use the trade calculator to close this position in running.

Quick Bets Ticket

The Quick Bet ticket is a small window that is quick and easy to launch and contains the essentials buttons and tools for placing and managing a single bet or green up on any market/selection without the need to open the full market. Once a bet has been placed, the bet will be tracked and if it is unmatched can be managed and adjusted from the same window.

Quick Bet tickets can be launched by right-clicking on a market in the main <u>Market</u> or <u>Guardian</u> Selection windows, or on any of the markets loaded into Guardian or a <u>Watch List</u> / <u>Coupon</u> and selecting 'Display a Quick Bet ticket for the market' as shown in the images below.





The Quick Bet ticket will then appear in its own mini window ready to start placing bets from.



Using Quick Bet Tickets

Once the Quick Bet ticket is open to place a bet first choose if it will be a back or lay bet Type of Bet Back Lay you wish to place, next click on a price to select the odds you wish to place the bet at, or type directly into the 'Odds' box the price you wish to place the bet at, the 'what if' profit and loss figures that you will win or lose based on the stake and odds chosen will then be displayed to you and if your happy with everything click the 'Place Bet' button in the bottom right corner to submit the bet.

When the Quick Bet ticket is opened for a market by default it will display the selection Betfair has in it's first row, you can change the selection you wish to bet on using the selection pick list.



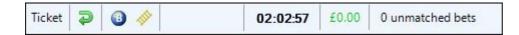
The default stake shown when opening a Quick Bet ticket is set in the main <u>Staking Settings</u> area, if you wish to use another stake for this bet you can type it directly into the stake box, alternatively you can right mouse click in the stake box and your existing Ladder preset stakes will become available for quick selection.

If you do choose to edit/change the stake on the Quick Bet ticket you can specify how it then behaves when reusing or opening new Quick Bet tickets afterwards in the main Behaviour Settings area.

Once a bet is placed if it is unmatched it will appear at the bottom of the window were you can manage it by adjusting the odds it was placed at using the '+' and '-' buttons, cancel bet or close bet. (For more unmatched bet options please see the 'Toolbar' section below).



Toolbar



Across the top of the quick bet ticket is the toolbar, clicking on the 'Ticket' text will open a menu window where you will have the options to display the full market in a new floating One-click or ladder window.



You can also quickly switch to and display the full market on your one-click or ladder screen by clicking either the icons, the behaviour of these icons can be changed in your main settings area on the <u>Behaviour</u> tab, were you configure them to open on to your main trading screen or spawn a in new window

Once a bet has been placed from a quick bet ticket clicking the 'Reuse' icon will reset the ticket and allow you to place another bet. When reusing a ticket you can also configure the staking on the Behaviour tab in your main settings area.

Next in the tool bar is the In-Play status and a countdown timer for the market, in the image below its showing the market has been in-play for 00:00:33 second



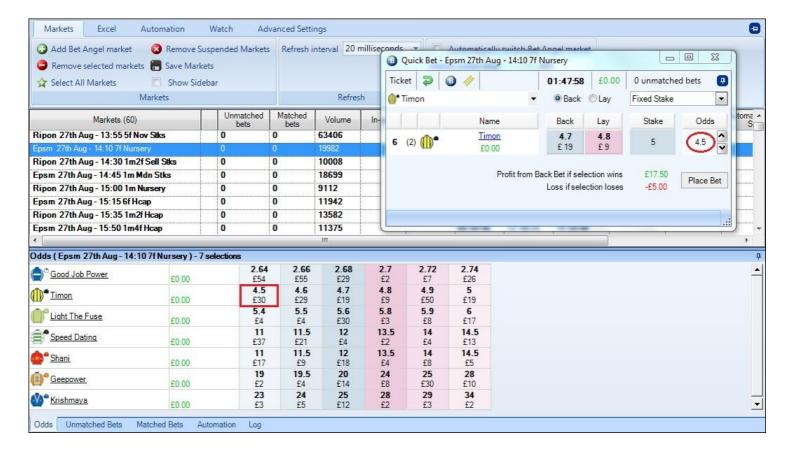
After that your profit/loss figures for the market is displayed, clicking on this P/L figure will green up any open positions you may have. When a greening bet is placed you will hear the usual bet placement 'beep', if you don't hear anything it means you have already closed and greened up all positions on that market for the predicted profit now showing.

Finally is the total number of unmatched bets for the whole market, clicking on that will spawn a floating <u>unmatched</u> <u>bets</u> window, were you can fully manage ALL your unmatched bets for that market including Keep Unmatched bets and Take SP actions.

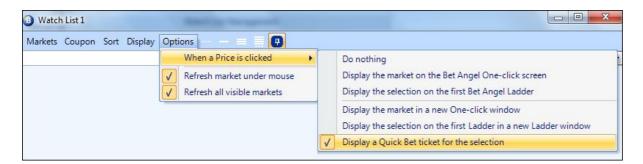
Auto Fill Quick Bet Ticket

When opening a Quick Bet ticket from a screen containing a price, ie, the Guardian odds pane or the Watch List/ Coupon by <u>left</u> clicking on a price those odds, the selection and the back/lay bet type will automatically be prefilled when the ticket window opens.

In the image below I've just clicked on the 4.5 back price of 'Timon' in the Guardian Odds pane window, when the Quick Bet ticket opens those odds, selection and bet type have all been pre-filled into the quick bet ticket, ready to just press the 'Place Bet' button to submit the bet.



NB, Before opening a Quick Bet ticket from a Watch List or Coupon price make sure you have this enabled in your Watch List options as shown in the image below.



Warning: Global settings & Servants do not apply to Quick Bet tickets, but you can spawn the market in full via the toolbar if required were Global settings and Servants will be available.

Servants

Servants are a unique feature of Bet Angel, they put the speed and power of automation into the hands of manual traders to enhance their trading experience. Using servants will allow Bet Angel users to get in and out of the market with a couple of key presses, opening and closing trades in less time than it takes a conventional trader to move around the screen to place bets.

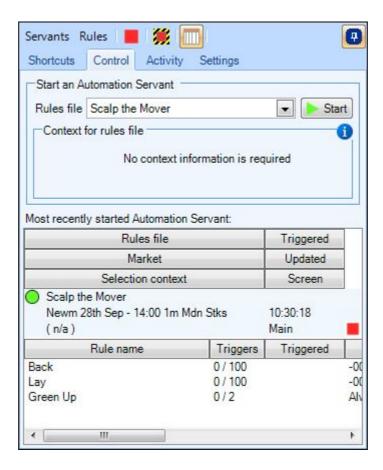
Whereas Bet Angel Guardian's Automation is designed to follow a single set of Rules on each market, usually set up hours in advance to run in the background on multiple markets throughout the day, Servants are designed to be flexible and are there to help you on the on the main trading screen (or on a spawned ladder window). You may start as many Servants as you want or need on a market, they are also designed to stop automatically when you switch to a new market meaning there's no risk of them doing anything without your knowledge.

Servants are deeply integrated into Bet Angel, they are able to make use of all the rules and conditions in the Automation Editor as well as being really easy to start and stop using keystrokes, mouse clicks, popup menus or custom columns. They can also be context sensitive and can make use of which selection or price is under the mouse cursor on the ladder or one-click screen when they are started. It's also really easy to change the stakes that the servant will use so they will be ready to help whatever type of market you are trading. Unlike Guardian's Automation, there is no limit to how many servants can be started on a market or individual selection. Overtime you'll build an army of servants so you can go into a market fully armed with predefined tasks and strategies ready for deployment in a split second.

Servants free your mind when trading; you spot the opportunities while letting a servant handle the tedious side of bet entry & exit. Use them as simple helpers or fully automated traders deployed as you see fit.

Servants can be created to do everything the regular guardian automation can do, they even have a few additional options of their own. The best way to take advantage of them is to create each servant to perform a specific task so that when a situation arises you have a Servant at your fingertips that you can immediately start to carry out its task.

By adding 'Context' to a servant's rules, important factors like which selection, stake and even entry odds can be defined by you as you start the servant with just one click of your mouse or push of a key. This allows you to start a servant on both a favourite and outsider with different stakes and/or entry odds, with no need to edit the rules that the servant will follow.



Example uses of a servant:

- Placing multiple bets at different prices with a single click or key press.
- Offset a percentage of your stake at different ticks
- Have it watch the market for sudden price movement on any selection alerting you when you need to act or take care.
- Exit when you hit a target profit or exceed a loss threshold
- Laying the field at multiple prices with a single click

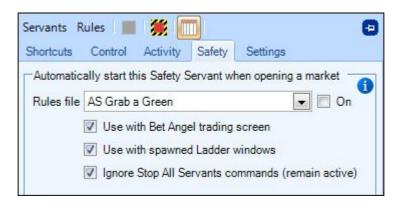
Download ready-made servants from our <u>forum</u> and edit them to your own requirements or create your own from scratch and you build up your personal army of servants ready for any situation.

You can also use a servant to time entry of a bet based on your defined conditions. For instance when trading preoff you may have a servant looking for the favourite to be shortening in price, and only trigger if the book%, and weight of money meets your criteria. It could then place a lay bet with a few ticks offset with greening if matched. So while trading as normal when you next see either the 2nd or 3rd fav reach the bottom of its range you could start this servant on that runner, the servant will then follow your instructions and monitor the favourite, the book % and the weight of money and execute the bet when appropriate to do so, meanwhile you can now be looking for the next opportunity.

Once started a servant will watch tirelessly for your conditions before acting, they will do this for as long as necessary or until stopped (if the situation changes). They won't get bored or impatient and jump the gun, and when it does trigger it will be much faster than you could of reacted and placed the bet manually.

Safety

Another unique feature is the 'Safety Servant', this special type of servant can be instructed to start automatically each time you open a new market (and stop when you move to the next). Their job could be to ensure you have greened up at the off, or to take SP automatically, they can also be used to add discipline to your trading by alerting you if your over staking or have too many unmatched bets in the market.



Servant Manager

The Servant Manager tool can be used to start & stop automation servants, show their current status, display full details of the most recently started servant and display the activity or all other servants used. It can also be used to create, edit, import and export Servant automation files.

To start the Servant Manager click the (Bellboy icon) which is located on the right of the main toolbar.



The colour of the 'Servant Manager' icon on your main tool bar will change colour depending on the status of Servants on the current market.



No servants have been started on this market



Servant/s started and are now pending on this market (awaiting rule start time)



Servant/s started and are active on this market

By hovering your mouse cursor over the Servant Manager icon a tool tip will appear showing the number of Active, Pending and Stopped Servant (including Safety Servants).



Right clicking on the Servant Manager icon will display a number of stop options as well as an option to quickly start, stop and change any <u>Safety Servants</u>



Video Tutorial



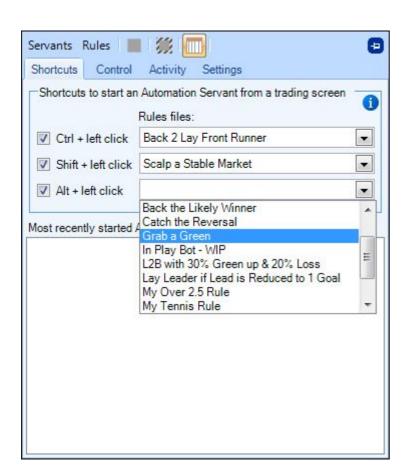
Starting Servants

To give maximum flexibility to the user servants can be started in several different ways as detailed below. Whenever a new servant is started you will hear a sound alert of a 'Desk bell' being rung, (if you wish to change this alert it can be done via the sound alerts area of your <u>main settings</u>.

1) Servant Shortcut

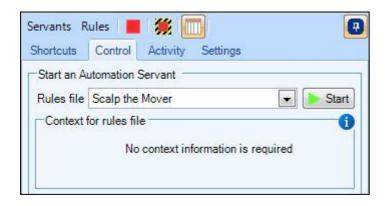
When you open the 'Servant Manager' by clicking on the Bellboy icon the first tab you will see is the 'Shortcuts' tab, here you can assign up to three servants to the preset shortcut keys, CTRL+Left Click, SHIFT+Left Click & ALT+Left Click.

Once a servant has been assigned to one of those presets simply pressing that combination of keys will then start that servant providing your mouse cursor is hovering somewhere within the betting area of any of the selection. If the servant has any rules using 'Context' then the position of your cursor at the time of starting a servant will determine which selection, stake and/or price it will use. See this page of the user guide for further details on using 'Context' as part of a servants rules.



2) The 'Start' button within the Servant Manager

After opening the 'Servant Manager' if you go onto on the 'control' tab you will be able to select any of your saved servants from the drop list. If the servant you have selected requires any context information instead of using your mouse cursor the applicable context options will become available in the 'Context for rules file' area below. Once a rule is selected and any context details entered then you then just need to click the 'Start' button whenever your ready.



3) Custom Columns on the one click screen

If your trading on the one click screen you may prefer to add a custom button to start a servant, for further details on adding and using custom columns see the 'Custom Column Editor' page of this user guide. In the image below I have created a servant that will look for gaps between the back & lay prices and fill them with orders, once a custom column has been created with a servant assigned it can then be started no differently than if you were placing a regular back or lay bet.

There is nothing to stop you adding several custom columns or as many as you can fit on your screen so this is a good way of having a number of servants just a click away.



4) Keyboard shortcut

Servants can also be started with the press of a single key by assigning a them to a Keyboard Shortcut, for further details on setting up keyboard shortcuts see the 'Keyboard Shortcut Editor' page of this user guide. A servant can be started with a keyboard shortcut regardless of your cursor position on the screen unless the servant contains a rule that uses any 'context'

If the servant has any rules using 'Context' then the position of your cursor at the time of starting a servant will determine which selection, stake and/or price it will use. See this page of the user guide for further details on using 'Context' as part of a servants rules.

Starting Additional Servants

Their is no limit to the number of servants you can start on either a market or selection (providing your PC can handle them). So you might want to start a scalping servant on 2-3 selections watching for ideal scalping opportunities, while having another servant monitor the whole market looking out for a steamer or drifter, with yet another servant monitoring your overall profit/loss ready to step in and trigger as soon as your preset amount is reached.

When on the 'Shortcuts' or 'Control' tabs of the 'Servant Manager' details of the most recently started automation servant will appear in the bottom window, all others servants that have been started will be visible on the 'Activity' tab.

NB; If you are running multiple Automation Servants on a market we recommend taking extra care to ensure they don't conflict with each other.

For some detailed examples of starting Servants see this thread from our forum

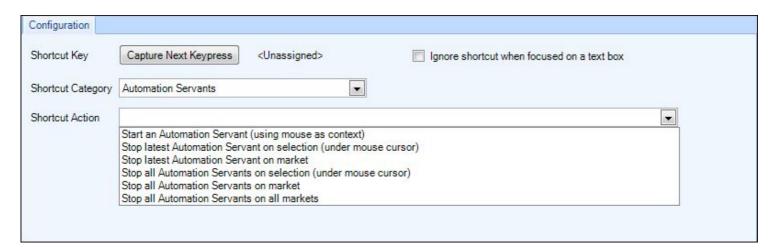
Video Tutorial



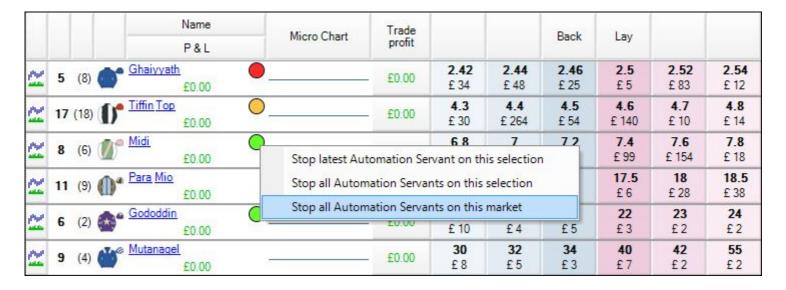
Stopping Servants

Just like starting a servant there is also multiple ways of stopping them. Once all servants on a selection are stopped the status light/s next to their names will turn Red Warsaan. When all servants have been stopped on the market the 'Bellboy' icon will also turn Red

The quickest and easiest way of stopping a servant is probably via a <u>keyboard shortcut</u>. Here you can create shortcuts to stop a single servant, all servants running on a selection or all servants running on the market from a single key press.



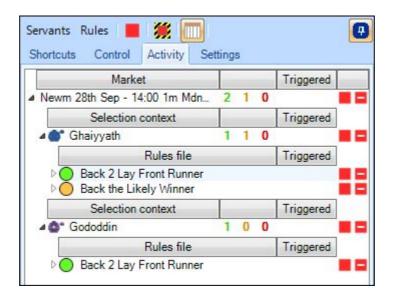
Another way to stop servants that have been applied to a selection is to right mouse click on the status light shown next to that selections name, this can be done on either the ladder or one-click screen, a popup window will then appear with a number of options shown in the image below. Once all servants on a selection have been stopped the status light will turn red.



Finally if you have the 'Servant Manager' window open at the top there is the nuke button which as the name suggests will stop ALL servants on ALL markets. At the top left corner of the 'Servant Manager' window you can click the 'Servants' link and choose from any of the 'Stop' options from their.



Or you can go on the 'Activity' tab you can click any of the 'red' squares down the right hand side of the window were you can again stop an individual servant running, all servants running on a selection or all servants running on the market.



Stopping Safety Servants

The purpose of a Safety Servant is usually to run all the time, they are therefore excluded from being stopped bymost of the ways above. There are only two ways a Safety Servant can be stopped.

- 1) If it was the most recently started Servant then the large red square at the top of the 'Servant Manager' window will stop it when clicked
- 2) It can be stopped via the 'Activity' tab by clicking the red square adjacent to it just the same as stopping any other servant this same way

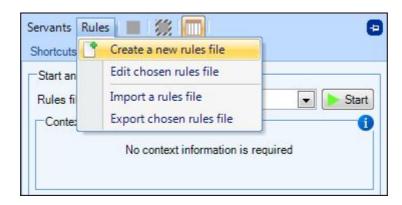
For some detailed examples of stopping Servants see this thread from our forum

Creating & Editing Servants

To create your own Automation Servant rule start by opening the 'Servant Manager' by clicking on the 'Bellboy' icon



then across the top click 'Rules' link and select 'Create a new rules file'.



This will open the 'Rule's editor' window were you can begin to create your rule, see the following pages of the user guide for full details on using the Rules Editor to create a new file.

Editing Automation Servants

Editing an existing servant is done in a similar way to creating a new one, except this time you would use the next option down in the list 'Edit Chosen rules file' to open the rules editor, by default the last servant that you started will appear when the rules editor window opens however if you wish to edit a different Servant simply select it from the drop list in the rules editor and begin editing,

Importing/Exporting Automation Servants

Once you have created a servant, you can share this with others by exporting the file. To do this select the servant you want from your rules files and click 'Export chosen rules file' then specify a folder on your PC to export it to.

If you have been given an Automation Servant, you can import it clicking on 'Import a rules file'. This will display a file selection window from your PC, just navigate to the folder you have saved the file to and click Open. The new automation servant will be added to your list and you can then edit or apply it to markets as required.

Downloading Example Servants

To help users get started a section has been added to our forum were you can download some ready made 'Servants', these are ready to use straight away and will perform a number of basic tasks, these can then be edited/ modified to your own requirements.

New Servants will be added to the <u>forum</u> regularly, between these and your own your collection of servants will quickly grow.

To download a servant just click the thread title of the one your interested in and directly below the description of what the rule does you will see the file name which will end in .Baf. Click this link and a popup window will then appear and you will be asked to 'Open' or 'Save' the file - chose 'Save' and it will then be downloaded to your PC.

After downloading a servant it can be imported straight into your Bet Angel by following the import steps above.

NB, files on the forum are intended as generic examples and are not guaranteed to make a profit, we recommend they are only to be used as a starting point which you can then build on by editing and modify them to their requirements.

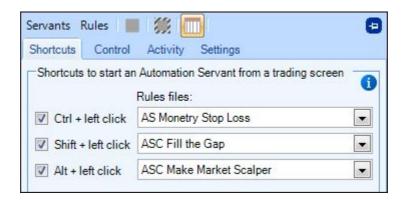
For a detailed step by step guide of creating Servants see this thread from our forum

Shortcuts

This area of the 'Servant Manager' lets you assign up to three pre-saved rules files to the following preset combination keys

Ctrl+Left Click, Shift+Left Click & Alt+Left Click.

Once you have selected the rule/s files you want just tick the box to the left to enable it and its now ready to be used whenever required, see this page on <u>starting Automation Servants</u>.



Below this in the bottom half of the window are the details of the 'Servant' that you most recently started including the servant name, the market its running on, the time the servant was started and if applicable the selection context the servant was applied to.

In the image below we can see the following information displayed

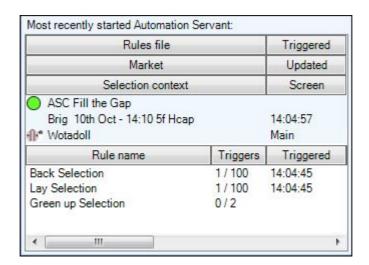
The Servant named 'ASC Fill the Gap'

It was started on the Brighton 14:10 5f H'cap market and the time is currently 14:04:57

It was started on the context selection 'Wotadoll'

Further below that are the details of the individual rules of that 'Servant' including individual rules names, number of times a rule has triggered out of the maximum number of times its able to trigger and the time that rule last triggered

The Servant consists of 3 rules, the rules named 'back selection' and 'lay selection' have both triggered once so far out of a possible 100 times, the last trigger was at 14:04:45. The third rule of this servant is the 'Green up selection' has not yet triggered but can do so up to 2 times.



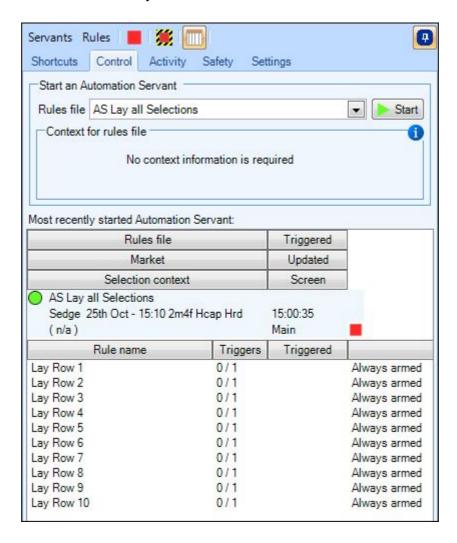
If you expand this window or use the bottom scroll bar you will see addition information relating to your automation servant like the times that individual rules are set to be armed between and a brief description of what each rule of the Servant is doing.

Rules file		Triggered		
Market		Updated		
Selection context		Screen		
ASC Fill the Gap Brig 10th Oct - 14:10 5f Hcap **Motadoll**		14:05:59 Main		
Rule name	Triggers	Triggered	Times	Description
Back Selection	1/100	14:04:45	-00:07:00 to -00:00:20 (event start)	Place Servant context stake BACK bet on Servant
Lay Selection	1 / 100	14:04:45	-00:07:00 to -00:00:20 (event start)	Place Servant context stake LAY bet on Servant context
Green up Selection	0/2		-00:00:10 to -00:00:00 (event start)	Close trade on Servant context selection with greening

Control

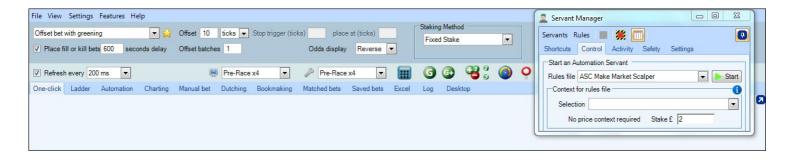
Sometimes you may not use a Servant enough times to warrant mapping it to a keyboard shortcut or a shortcut combination or speed may not be of the essence in some cases, this is where the 'Control' feature of the Servant Manager comes in handy.

You can quickly see and then select the Servant you want from the drop list, if it requires any context info you will be prompted to enter this in the 'context for rules file' area. In the image below a Servant named 'AS Lay All Selections' has been chosen but it does not require any context information. As soon as the Start button is pressed the servant details are shown below in the 'Most recently started Automation Servant' window.



In the image you can see a Automation Servant named 'AS Lay all Selections' has just been selected and started this was done on the 15:10 race at Sedgefield, the servant is active as shown by the 'green' status light next to its name and has 10 rules within it of which none have triggered yet.

TIP; You can minimize this window so only the top half is showing then pin it in the top right corner of your screen or where ever is convenient, that will allow you to quickly select then start and stop servants whenever they are required.



Activity

The Activity window shows all the activity of the servants you have started during this session, at first glance it may appear a little daunting but when its broken down its actually really simple to use and will tell you everything you need to know about your servants activity.

You can chose to display various levels of detail by selecting from the 'Activity Tree Expansion' presets on the <u>Settings</u> tab, whichever level is selected the basic navigation etc always remains the same with the most recent market and recently started servant at the top and the older Archived markets and servants at the bottom.

The most simplistic view is 'No Expansion' as you can see in the image below this just gives the bare basics. Under the 'market' header it is showing we are currently looking at the Newbury 13:40 market, to the right of that its showing on this market there is 1 active servant, 2 Pending Servants and 1 servant which has stopped (shown by the colour of the figures 1 2 1).

Below that its showing a total of 8 more servants have been stopped on archived markets.

On the far right you will see two red squares, when clicked the solid red square will stop any servants that have been started on this market, the next square with a white line through it will stop and archive all Servants on this market. For more ways to stop Servants see this <u>page</u> of the user guide.

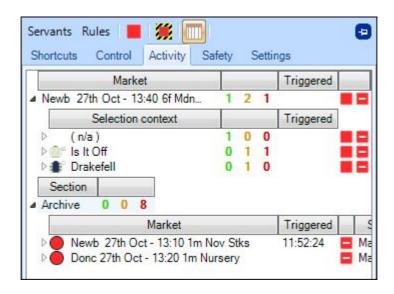


If we now use the 'Expand to Level 1' view in the image below you will see another level of information is now visible, the current market is still the same and at the top but now there is a 'selection context' header and below that you can see the names of the selections a servant has been started on. Where you see (n/a) means a servant is not running on any particular selection but is instead running on the whole market.

In the archived section it is also now showing the names of the markets those 8 servants were started on and the time it last triggered if applicable.

On the far right you will see in addition to being able to stop and archive all servants on the market you are now able to stop and archive all servants on individual selections.

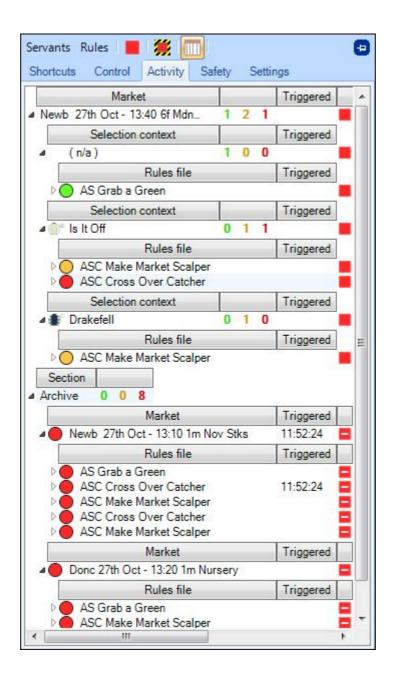
For the archived markets you will now see a red square with a white line through, this will completely remove a Market from the archive list, once this is done a market is removed for good so only remove from the archived area once your certain you no longer need to refer to it.



Moving on to 'Expand to Level 2' a 'rules file' header will now appear and below that are the names of the individual servants that have been started on each selection, in the image below its showing that its a servant named 'AS Grab a Green' that is active on the market, this is shown by its green status light . Hovering your cursor over a status light will display a pop-up tool tip showing the time that the servant was started.

Below that you can see the selection named 'Is It Off' has 1 pending servant named 'ASC Make Market Scalper' and 1 stopped servant named ASC Cross Over Catcher' also indicated by the colours of their status lights. Under that the selection named 'Drakefell' has a servant named ASC Make Market Scalper' pending In the archive section its now showing the individual names of each servant started so we can see that 5 of the 8 archived servants where started on the Newbury 13:10 market and the remaining 3 on the Doncaster 13:20 market.

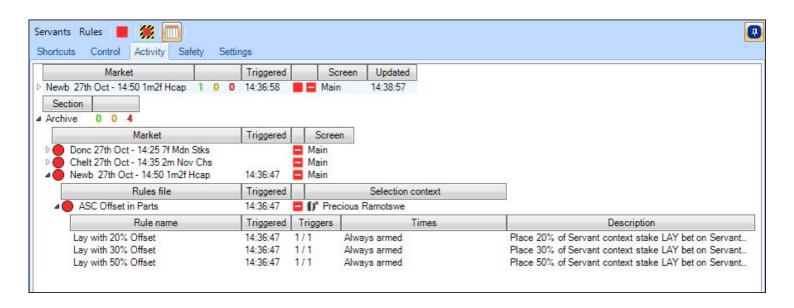
On the far right the option to stop and archive servants individually is now available.



There is a total of seven preset levels you can select from on the 'Settings' tab each one showing another level of detail. At this point its probably best to experiment with each level yourself to see which best suits your needs.

In addition to the preset levels we understand every user will have difference preferences so it is also possible to manually drill to any level of information they require while hiding details they don't need to see. This can be done by clicking the small triangle icons down the left side, combined with the preset levels each user will be able to fully customize their activity tree to there own requirements.

NB; If you 'expand to 3rd level' or 'expand to Automation rule level' a lot of the details will be out of view so you will need to make the Servant Manager window wider or use the bottom scroll bar.



Safety Servants

A 'Safety Servant' is a unique way to use a servant in that rather than having to keep starting it manually each time you open a new market once selected and enabled it can start up automatically for you every time you switch to a new market, and if saved as part of your <u>settings profile</u> and you login with that profile it will be started for you as soon as you open your first market.

The type of tasks you would typically give a safety servant are those that you intend to run on each market or that can act as a form of back up, for example greening up at the start time and/or taking SP on unmatched bets etc. It can also be used to help with discipline for example it could play a sound alert or display a pop-up message if your total loss exceeds your defined threshold.

Safety Servants are created exactly the same way as if your creating a regular automation servant, you can even use an existing Servants as a safety servant providing it does not contain any rules that require 'Context' information. Safety Servants are independent so can also be used even if your not using a regular servant.

To Select a Safety Servant just open the 'Servant Manager' window and click the 'Safety' tab, then chose from your list of saved rules files and tick the 'On' box.



After a 'Safety Servant' has been started each time you switch to a new market you will hear the familiar bell ring as an audio alert, also at the bottom right of the 'Bellboy' icon you will now see a 'Plus' sign appear, the colour of this plus sign shows the Safety Servants status.



Safety Servant has been started but is pending on this market (awaiting rule start time)



Safety Servant has been started and is active on this market

The main Bellboy icon colour will continue to change depending on the status of your regular servants. Here you can see all regular servants have been stopped except for the safety servant which is still active.

A Safety Servant also has the following three unique options which can be enabled by ticking the relevant boxes

Use with Bet Angel Trading Screen - Once enabled the safety servant will be started on a market as soon as you open it on either your one-click or ladder trading screens.

Use with spawned Ladder windows - This will enable the safety servant on any market you now spawn by right clicking and choosing to 'Display market in new ladder window'.

Ignore Stop All Servants commands (remain active) - This will exclude it from being cancelled when using any of the 'Stop ALL servant commands'.

If you tick 'Ignore Stop All Servant Commands' you can still stop a Safety Servant by either clicking the red square adjacent to it on the 'Activity' tab or if it was the most recently started servant by clicking the red square next to it in the 'Most recently started Servant' windows or the large red square at the top of the 'Servant Manager'.

It is also possible to start and stop Safety Servants by right clicking on the main Bellboy Icon and ticking the bottom option 'Use Safety Servant', here you can also click 'Change the Safety Servant' and this will open the 'Servant Manager' window for you to select another.



Warning; If you make any edits to a safety servant whilst it is running it will be stopped and require starting again after any edits have been saved by un-ticking and re-ticking the 'On' box

Also If you select another Safety Servant while one already running the new one will be turned 'Off'

Also If you select another Safety Servant while one already running the new one will be turned 'Off' automatically when selected so you will need to re-tick the 'On' box again to start it. This is to prevent the risk of any immediate automatic activation if you accidentally chose the wrong one from your drop list.

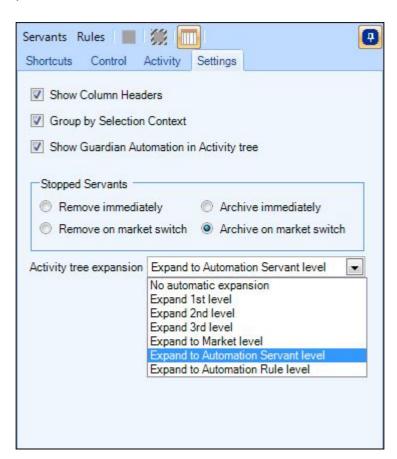
Settings (Servant Manager)

This area gives you a number of options to customise how you want the information in your 'Servant Manager' to appear and be handled. Starting at the top

Show Column Headers - Shows or hides the column headers on the Activity tab and in the bottom window for the most recently started servant, this can also be done by clicking the icon which looks like a calendar at the top of the Servant Manager window.

Group by Selection Context - When ticked servants will be grouped by market then selection headers on the activity tab. When un-ticked all the Servants for each selection will appear together on the activity tab with the selection they have been applied to now shown to the right of their names.

Show Guardian Automation in Activity Tree- If your running both servants and regular automation via Guardian when ticked this will also display the details of your Guardian rules on the Activity tab - this is useful when wanting to see details of both in one place.



Below those are four options for you to choose from which will instruct the software how you want it to handle 'Stopped Servants'

Remove Immediately - Removes servants details from most recently started servant window and the activity tab as soon as it is stopped

Remove on market switch - As above but it removes upon switching to another market

Archive Immediately - By 'Archiving' the servants you are putting them to the bottom of the 'Activity' window but they will still be visible should you want to check anything at a later time like how many times a rule triggered or what time it was stopped etc.

Archive on Market Switch - As above but Archiving will take place automatically each time you switch to a new market.

Activity Tree Expansion - Here you can choose the level of detail you want to be displayed on your activity tab and in the most recently started servant windows.

Servant Context

As with Guardian's Automation, when <u>creating rules</u> for a servant you have the option to specify which selection to use, and the stake & price when placing a bet.

You might always require a servant to trigger on the same selection (i.e. the favourite) or to have the stake and price fixed into the rule, but to make servants as flexible as possible, we have introduced the concept of 'Servant Context'.

By choosing a 'Servant Context' during rule creation you are deferring the decision as to which selection / stake / price to use until the moment you actually start the servant. This is done by using location of your mouse cursor at the time you start your servant - your mouse is providing the context to the servant. In the case of the stake, that will be taken from the appropriate row of the one-click screen or staking area on the ladder screen. The staking method will also be taken from the Bet Angel screen at the time of starting the servant.

Contexts allow you to create generic servants which can then be started on multiple selections, using different stakes and each placing bets at different prices - without requiring you to keep editing the servant's rules file each time.

if a rule contains 'Servant Context Selection' your cursor can be over any of the back or lay prices for the selection you want to start it on.

If a rule contains 'Servant Context Stake' it will use the stake amount and method you have set for that selection. If a rule contains 'Servant Context Price' the actual price your cursor is hovering over at the time you start it is the price it will use

For example, using the image below assume you had a servant that used 'Servant Context Selection' and 'Servant Context Stake' within a rule. To start the servant on the runner on the first ladder you would hover your cursor over any of its blue back or pink lay cells and press your shortcut key to start it, the servant would then use the stake value of £256 that is selected from the preset area above the ladder and whatever staking method was selected on the main banner.

If you wanted to use the same servant on the runner in the forth ladder you would hover your cursor over its blue or pink cells and press your start key again, only this time because the preset stake value above the ladder for this selection is £50 when the servant triggers a bet on this runner it will now use that £50 stake.

If you were to change the stake value at the top of the first ladder and then start the same servant on it again it would now place bets using the new stake value when it triggers.



They work the same way on the one click screen, just hover your mouse cursor over the pink or blue cells of the selection required when starting the servant and that's the one it will run on.

If the servant was using 'Servant Context Price' as part of its rule then the actual price your cursor is hovering over will be the price the servant uses.

For example if a Servant had a rule that uses places bets 4 ticks above the 'Servant Context Price' and it was started as shown in the image below on the 2nd runner, when it triggers it would do so by placing the bet at 6.0, because this is 4 ticks above 5.6 (the price at which the cursor is hovering over when started). If the rule also used 'Servant Context Stake' then the amount placed would be £100 as this is the stake amount that is currently set for this selection.

2.	. (3)	Selections: (14)	-	✓ Green			102.7%	99.5%			✓ All 50	All 10
		Name	Micro Chart	Trade profit			Back	Lay			Lay stake	Back stake
proper man	8 (8) a B	P&L urcan £0.00		£0.00	2.1 £ 203	2.12 £ 497	2.14 £ 321	2.16 £ 40	2.18 £ 470	2.2 £ 1516	50	225
انوال _ا شند	1 (12) 💮 E		<u> </u>	£0.00	5.1 £ 157	5.2 £ 221	5.3 £ 88	5.4 £ 289	5.5 £ 226	5.6	50	100
1441	4 (9) (9)	very Chance £0.00		£0.00	12.5 £ 78	13 £ 32	13.5 £ 15	14.5 £ 139	15 £ 33	15.5 £ 37	50	50
الوال _ا طلقت	9 (2) 1 G	erry The Glover		€0.00	10 £ 196	10.5 £ 213	11 £ 56	11.5 £ 87	12 £ 78	12.5 £ 43	50	50
piga Maria	2 (7) 👸 La	t Hawill £0.00		£0.00	36 £ 12	38 £ 14	40 £3	42 £ 2	44 £8	46 £5	50	25
الوالم طفقة	14	ugarred £0.00	8	£0.00	26 £ 60	27 £ 31	28 £ 9	29 £ 31	30 £ 23	32 £2	50	25

For a detailed example of using Servant Context see this thread from our forum

Microsoft Excel integration

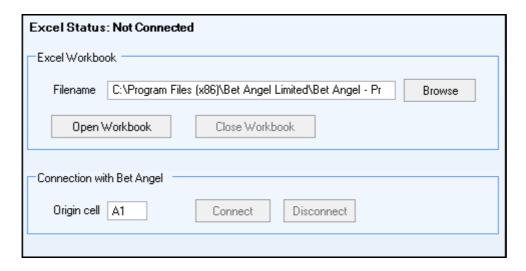
Concept

By linking to Microsoft Excel with Bet Angel you are able to create your own custom trading tools, trading algorithms or your own trading robot. This will give you massive flexibility in interacting with Betfair. At its simplest level, you can create simple templates to view the market or create custom buttons to aid your trading style or at its most complex you can custom write complete trading algorithms.

Important note: We do not provide a copy of Excel with any of our products. This is provided by Microsoft and is your responsibility.

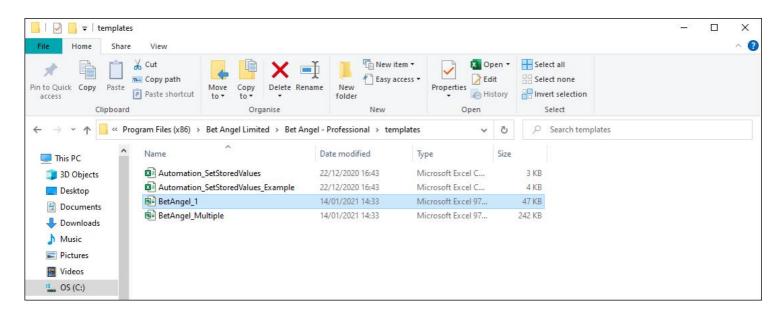
Starting up the Excel interface

Before you can link Bet Angel to a spreadsheet you need to select a market. Once you have selected a market you will be ready to send that market data to a connected spreadsheet.



Go to the Excel tab on Bet Angel. When you click on this tab you will see the current Excel status. In order to use Excel with Bet Angel you need to connect Bet Angel to Microsoft Excel.

To connect to Microsoft Excel, click on the browse button. Locate your custom spreadsheet or locate the templates area and Bet Angel will display a list of spreadsheets available for use in Excel. Double click on the spreadsheet you have selected to bring the location into Bet Angel.



It is important to note that there is no need to store all your spreadsheets in the default folder; you can store them where you wish. The first spread that you will see when you first use this function is the default spreadsheet called "BetAngel_1.xls"

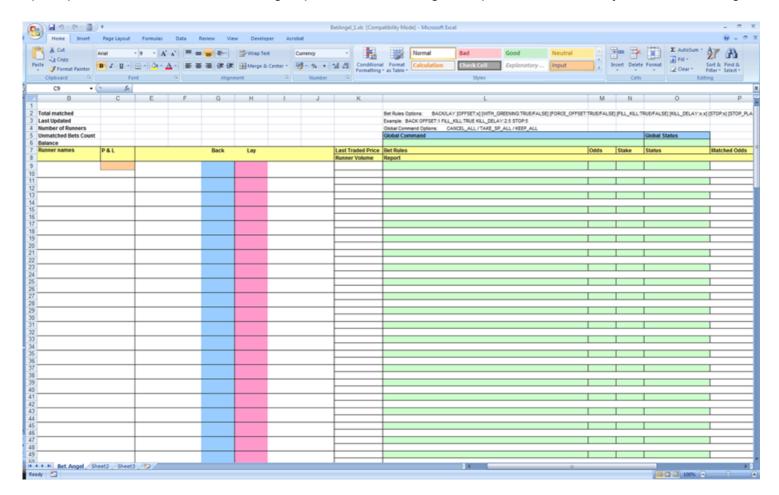
The provided templates can be found in the same directory as Bet Angel is installed. Usually this is C:\Program Files(x86)\Bet Angel Limited\Bet Angel – Professional\templates\

The video tutorial below will show how to connect an Excel spreadsheet to Bet Angel



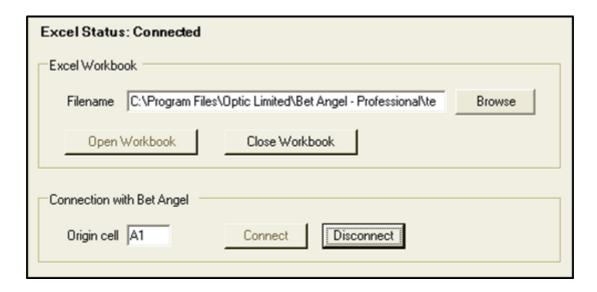
Connecting Bet Angel to your spreadsheet

When you have located the spreadsheet you wish to use click the 'Open workbook' button on the Excel. This will open up Microsoft Excel and the Bet Angel spreadsheet. 'Bet Angel' templates are denoted by the name 'Bet Angel'.



Once the spreadsheet is open it will display a blank template. In order to use this spreadsheet you need to connect Bet Angel to the spreadsheet. By default the origin cell is set at A1. This means that Bet Angel will start populating data to the spreadsheet from spreadsheet cell A1. You can change this going forward but the basic template we supply has been constructed so that data will populate from cell A1. To connect data to the spreadsheet simply click the 'connect' button on the Bet Angel Excel tab. You should see the 'Connect' button grey out and the 'Disconnect' button become active. If you wish to work on the spreadsheet at any time without it update, simply use the 'Disconnect' option.

Once connected Bet Angel will start populating your spreadsheet with data from the market you have selected from within the main Bet Angel software. You are now ready to start experimenting and using the Excel interface to Bet Angel. This interface is powerful not just because it lets you read and place bets through Excel but more because it can also trigger Bet Angel automated order functions as well.



Unable to open workbook or connect to workbook

If you have been unable to connect to the spreadsheet try the following:

- Check that Excel is installed correctly on your PC (Bet Angel supports Microsoft Office 2003 onwards)
- Check that you are able to open the template with Excel from outside of Bet Angel. Remember the default location of the file is: C:\Program Files (x86)\Bet Angel Limited\Bet Angel Professional\templates\BetAngel 1.xls
- If you are using a regionalised version of Windows or Excel, then check your locale is set correctly. See this link

Using the 'Bet Angel' spreadsheet

When you have connected your chosen market via Bet Angel to the spreadsheet you will see all the market data appear on that spreadsheet. You will see a display that is familiar to the display you would expect to see on Betfair accept that this display has been framed into cells on the spreadsheet.

It is important to note that the spreadsheet is effectively split into three areas: -

Data Fields

The multi coloured area are the 'data fields'. These represent the area on the spreadsheet where data is transferred from Betfair via Bet Angel to your spreadsheet. The data fields contain information such as the selections in your chosen market the current odds, money available at those odds, your P&L, market name and amount matched.

York 14th May - 14:10 1m	n2f Grp3							
Total matched	45,293							
Last Updated	10:39:55							
Number of Runners	5							
Unmatched Bets Count	0							
Balance	€23.95							
Runner names	P&L			Back	Lay			Last Traded Price
								Runner Volume
Dar Re Mi	-£4.50	1.81	1.84	1.85	1.89	1.9	1.91	1.85
		€81.62	£58.34	£41.03	€8.66	€70.00	€323.94	€31,302.92
Crystal Capella	€0.20	2.92	2.94	2.96	2.98	3	3.05	2.96
		€365.17	£202.40	£22.91	£440.28	£340.03	£150.00	£10,043.52
Changing Skies	£15.00	8	8.2	8.4	9.6	10	11	8.6
		£8.48	629.43	£28.37	£12.07	€5.00	£12.00	
Princess Taylor	€15.00	40	42	44	48	65	80	42
		£11.56	£20.60	£5.76	£5.85	£6.78	£5.00	£497.98
Rio Guru	£15.00	100	150	200	450	700	750	210
		€8.00	€9.00	€2.00	€2.00	€4.00	€2.00	£110.46

Reporting fields

Reporting fields represent the area where Bet Angel reports what is actually happening in the market with bets that where triggered from your spreadsheet. Items such as the price your trade was matched at, the amount matched and the resultant reference number and time of execution.

	0	Р	Q	R	S
1	UE/FALSE] [KILL_DELAY:x:x] [STOP:x] [STOP_PLACE:x] [T	RAILING_STOP:TRUE/FALS	E]	
3					
	/				
4					
5	Global Status				
6					
7	Status	Matched Odds	Amount Matched	Bet Reference	Time
8					
9					
10					
11					
12					
13					
14					
16					
17					
18		ı	I.	I.	
19					
20					
21					

Unmatched and matched bet data

Columns T through AE on the Bet Angel worksheet contain unmatched bet data. By monitoring the data in these cells extra bet management possibilities exist when using automation. Average odds, stake and the number of unmatched bets per market selection data are fed through to this section. Note due to the complexity of unmatched bet data, it is not possible to list each unmatched bet individually.

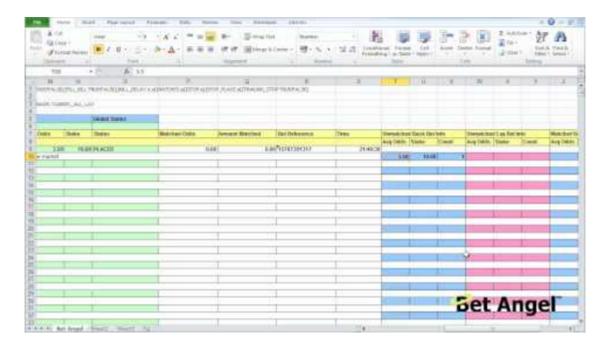
T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE
Unmatche	I Back Bet I	nto	Unmatcho	d Lay Bet Int	lo.	Matched B	ack Dat Info		Matched I	ay Bet Info	
Avg Odds		Count	Avg Odds			Avg Odds		Count	Avg Odds		Count
Avg Caas	Stake	Count	Avg Ouus	Stawe	Count	avy cous	Stake	Count	Avg Coos	Stake	Count
1.58	4.00	2							1.56	4.00	
1.30	4.00								1.30	4.00	
			1.04	2.00	- 1						
			1,04	2.00							

Additional data

Columns AF through AL on the Bet Angel worksheet can be configured via the <u>settings</u> editor to display additional data relating to horse racing markets.

Column A is hidden and contains Betfair system data such as the market ID and other information.

See video tutorial below for understanding and using the Bet Angel spreadsheet template



Instruction fields

The green cells in the Excel template are the instruction fields. Use these cells to tell Bet Angel what you want it to do.

On each refresh Bet Angel will scan these green cells and process any new instructions on the row (placing bets, greening up, controlling automation etc), once an instruction is processed the Status cell in column O will be updated.

Note: Bet Angel uses the Status cell (column O) to control the instruction scan for that row. For an instruction to be processed the 'Status' cell must be blank.

If the Status cell for a row is empty then Bet Angel will process the instruction as soon as the other cells are populated (e.g. column L and, in the case of bet placement, columns M & N also). If you want to send a second instruction on that row, then just clear the Status cell once the first instruction has been processed. For more information about the Status cells see: selections, global

L	M	N	0
Bet Rules Options: BACK/LAY [OFFSET:x] [WITH_GREENING:TRUE/FALSE] [FORCE_OFFSE	T:TRUE/FALSE	[FILL_KILL:T	RUE/FALSE] [KILL_DELAY:x.x] [
Example: BACK OFFSET:1 FILL_KILL:TRUE KILL_DELAY:2.5 STOP:5			
Individual Command Options: CLOSE_TRADE / GREEN / CANCEL / CANCEL_ALL / CANCEL_AL	L_BACK / CAN	CEL_ALL_LA	Υ
Global Command Options: CANCEL_ALL / TAKE_SP_ALL / KEEP_ALL / GREEN_ALL			
Global Command			Global Status
Bet Rules / Individual Commands	Odds	Stake	Status
Report			

Syntax of Bet Rules & Individual commands

The syntax of the betting commands in Excel correlates with the global settings parameters used at the top of Bet Angel when placing a bet on the one-click screen. e.g. The are options to specify offsetting, fill or kill, batches etc. There are also individual commands for bet cancellation, greening, and trade closure. There are also some advanced commands for controlling Automation via Excel.

All commands are entered against the relevant selection in column L. e.g. L9, L11, L13 etc

Betting commands

BACK	Place a Back bet (price and stake provided by columns M & N)
LAY	Place a Lay bet (price and stake provided by columns M & N)
BACK_SP	Place a Back SP bet with no minimum price limit (stake provided by column N)
BACK_SP_LIMIT	Place a Back SP bet (minimum price and stake provided by columns M & N)
LAY_SP	Place a Lay SP bet with no maximum price limit (stake provided by column N)
LAY_SP_LIMIT	Place a Lay SP bet (maximum price and stake provided by columns M & N)

Optional parameters that can be appended to the betting commands

OFFSET:x	Apply an offset bet x ticks away
OFFSET_PERC:x.x	Apply an offset bet x.x percent away (rather than using ticks)
FILL_KILL:TRUE/FALSE	When TRUE a fill or kill delay will be applied, the number of seconds being parameter
KILL_DELAY:x	x represents the number of seconds to apply to the fill or kill routine
BATCHES:x	When offsetting, use up to x batches
STOP:x	Apply a stop trigger x ticks away (normally applies to an offset bet unless OP
STOP_PERC:x.x	Apply a stop trigger x.x percent away (rather than using ticks)
STOP_PLACE:x	When a stop has triggered, place the stop bet x ticks away
STOP_PLACE_PERC:x.x	When a stop has triggered, place the stop bet x.x percent away (rather than
TRAILING_STOP:TRUE/FALSE	Specifies whether the stop should be trailing or not
WITH_GREENING:TRUE/FALSE	Specifies whether to offset with greening or not
OPENING_STOP:TRUE/FALSE	When TRUE the stop will be applied to the opening bet rather than the offse

Example betting command

The following rule will place a lay order in the market; hold it in the market for 60 seconds to wait for it to be filled. If it is not filled it will be cancelled, if it is filled it will apply 'with greening' to the offset order one tick above and apply a trailing stop against the order which will exit the position moves three ticks against us.

=LAY OFFSET:1 FILL KILL:TRUE KILL DELAY:60 STOP:3 TRAILING STOP:TRUE WITH GREENING:TRUE

Individual commands (columns M & N are not used)

CLOSE_TRADE	Close a position using net stake on this selection at the currently available price
GREEN	Close and green a position on this selection by invoking the built-in greening routine with on the selection will be evenly spread across all selections.
CANCEL	Cancels an individual unmatched bet whose Betfair bet reference is held in column R fo
CANCEL_ALL	Cancels all bets for the selection
CANCEL_ALL_BACK	Cancels all unmatched back bets for this selection
CANCEL_ALL_LAY	Cancels all unmatched lay bets for this selection

TAKE_SP	Marks an individual unmatched bet to be matched at SP when the market turns inplay. be marked needs to be specified in column R for the selection.
TAKE_SP_ALL	Marks all unmatched bets of the selection to be matched at SP when the market turns i
KEEP	Marks an individual unmatched bet to be Kept by Betfair at times when it would normal market suspends and goes inplay). The bet reference of the bet to be kept needs to be selection.
KEEP_ALL	Marks all unmatched bets of the selection to be Kept by Betfair at times when it would not the market suspends and goes inplay).

Advanced commands to link Excel with Advanced Automation

SET_NOMINATED1	Sets this selection as the first No
CLEAR_NOMINATED1	Clears it
SET_NOMINATED2	Sets this selection as the second Guardian
CLEAR_NOMINATED2	Clears it
Note: Similar commands exist for nominated column	ns 3 to 5

SET_SV FOR: <selection market event> NAME:<name> VALUE:<value></value></name></selection market event>	Assigns a shared stored value
CLEAR_SV FOR: <selection market event> NAME:<name></name></selection market event>	Clears a shared stored value

Notes:

SET_SV will normally store a numeric value, but if you want it to store Text then the value specified in the Excel command should be placed in quotes.

e.g. SET_SV FOR:SELECTION NAME:Test1 VALUE:42 NAME:Test2 VALUE:"This is text"

The FOR command is optional and defaults to SELECTION when used in a individual command

The commands can be chained together to set multiple values in one go, e.g.

SET SV FOR:SELECTION NAME:Test1 VALUE:42 NAME:Test2 Value:99 NAME:Test3 Value:200

or

CLEAR SV FOR:SELECTION NAME:Test1 NAME:Test2 NAME:Test3

As with all commands, they will be **processed when the <u>Status</u> cell in column O is empty** and will show OK / ERROR / FAILED when processing is complete.

Status cell (for selections)

To signify when the betting instruction is being processed, the 'Status' cell will change.

Possible values for the status cell:

	The status cell is clear and Bet Angel will process the instruction on this row on the refresh
PLACING	A betting instruction has been scanned and is being sent to betfair
PLACED	The bet has been placed and the bet reference has been returned
PLACED_KILL_PENDING	The bet has been placed with a fill or kill timer running, once the timer expires (or if matched before the timer expires) the status will change to PLACED
MARKET_SUSPENDED	The market was suspended when the instruction was processed
FAILED	The bet placement failed when sent to betfair. Check that the price & stake used we and check the Log page for other error messages
OK	An Individual command (CANCEL_ALL, GREEN etc) was processed
	An error occurred during the processing of an individual command. e.g. A syntax er command

Syntax of Global Commands

Cell L6 allows us to issue commands that apply to the whole market rather than a specific selection.

For instance all current unmatched bets in the market can be marked to Take SP:

	_	 	
Global Command			Global Status
TAKE_SP_ALL			OK

Global commands

CANCEL_ALL	Cancels all unmatched bets in the market
_	This will execute the greening routine within Bet Angel to close any open positions on all the selections in the market and evenly spread any profit or loss. It's the equivalent of using the greening column on the one click screen with the 'Green' checkbox ticked.
TAKE_SP_ALL	Marks all unmatched bets in the market to be matched at SP when the market turns inplay.
_	Marks all unmatched bets in the market to be Kept by Betfair at times when they would normabe cancelled (e.g. when the market suspends and goes inplay).

Advanced commands to link Excel with Advanced Automation

	Assign an Automation rules file to the mark in Guardian
	(using the Automation Rules 1 column)
_	Clears the rules file from the market in Guardian (using the Automation Rules 1 column)
Note: Similar commands exist for Automation Rules columns 2 to 5	

SET_SV FOR: <market event> NAME:<name> VALUE:<value></value></name></market event>	Assigns a stored value
CLEAR_SV FOR: <market event> NAME:<name></name></market event>	Clears a stored value

Notes:

SET_SV will normally store a numeric value, but if you want it to store Text then the value specified in the Excel command should be placed in quotes.

e.g. SET_SV FOR:SELECTION NAME:Test1 VALUE:42 NAME:Test2 VALUE:"This is text"

The FOR command is optional and defaults to MARKET when used in a global command

The commands can be chained together to set multiple values in one go, e.g.

SET_SV FOR:MARKET NAME:Test1 VALUE:42 NAME:Test2 Value:99 NAME:Test3 Value:200

or

CLEAR SV FOR:MARKET NAME:Test1 NAME:Test2 NAME:Test3

As with all commands, they will be **processed when the <u>Status</u> cell in column O is empty** and will show OK / ERROR when processing is complete.

Status cell (for global commands)

To signify when the global command is being processed, the 'Status' cell O6 will change.

Possible values for the status cell:

	The status cell is clear and Bet Angel will process the global command on the next refresh
MARKET_SUSPENDED	The market was suspended when the command was processed
OK	The command was processed
ERROR	An error occurred during the processing of a command. e.g. A syntax error in the command or an invalid parameter

Important cell references in the Bet Angel spreadsheet

Some important cells are not immediately obvious at first glance and should be highlighted as they contain important market information. These cells are: -

G1 = Displays 'In-play' text when market is 'in-play'

H1 = Display 'Suspended' text when the market is suspended.

C3 = Last updated time

C2 = Total money matched

C4 = Number of runners

C5 = Number of unmatched bets in market

C6 = Betfair account balance

F2 = Number of transactions made in past hour

F3 = Published event start time

F4= Countdown to event start

Placing basic bets or trades using the Bet Angel Spreadsheet

In order to clarify how to issue commands from Excel we will isolate a selection on the spread sheet and give you a step by step guide to how to initiate commands from the spreadsheet. It may be helpful for you it disconnect Bet Angel from the spreadsheet while you are editing or experimenting. This will stop you firing in positions automatically without realising it!

Here you can see we are looking at a horse called "Tiradito". It is currently trading at 3.65 to back and 3.75 to lay.

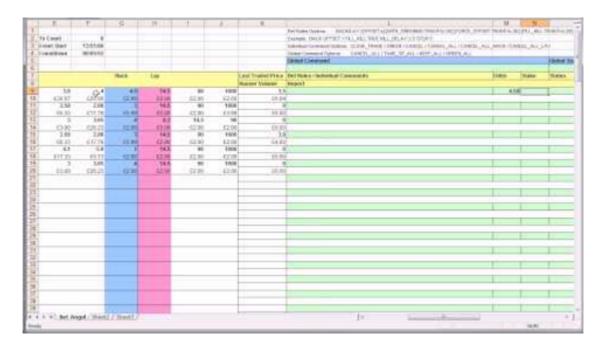


At its most basic level you can fill in the rules manually to initiate a position. You simply enter the odds, the stake you require and what you would like to do: -



This isn't a particularly effective use of Excel though. Ideally you want to automate some or all of the commands and functions. Fortunately you are able to enter traditional spreadsheet commands via the Bet Angel spreadsheet that will replicate functions you would perform manually or use similar commands to make decisions on your behalf and trade away automatically.

In the following example, rather than type the odds we have used an Excel command to pull in the odds data automatically. In this example we have typed '=G9' in the 'Odds' column and this achieves the same result at if we had typed in odds of 3.65 into the same cell. The advantage now is that if the price changes from '3.65' the Odds value in cell M9 changes automatically.



Placing triggered bets or trades using the Bet Angel Spreadsheet

Let us take our use of the spreadsheet forward a step and get Bet Angel to automatically seek a price target and fire a bet into the market when that price target is breached.

Excel contains many 'logical' commands that can be used to decide the contents of a cell. One of the simplest commands to use and understand is the 'IF' command. You can see in the next example we have created an 'IF' command.



If you enter this command into the spreadsheet in exactly the same manner you see here, then press enter something curious happens, nothing. Let me explain why.

If we break this command down to plain English it is saying the following. "If cell reference G9 is higher than 4 then display the word BACK. If it is not higher than 9 then display nothing. At the moment cell reference G9 equals the value 3.65 so it is displaying nothing; your cell will be empty. Click on the cell however and press F2 and your formula will re-appear for you to edit.

If you now connect Bet Angel to the spreadsheet, your spreadsheet will now sit their patiently waiting for the odds on "Tiradito" to go higher than 4, as soon as that happens the word "BACK" appears magically in the bet rules area and Bet Angel will fire an order into the market by placing a back order at 4 with a stake of 10.00 in your local currency.

If you wish you could replace the word "BACK" with "LAY" it would lay instead of backing automatically. But you could also make the stake, the odds in fact you could make anything conditional on anything else. While there is no need, in the following example we have asked Bet Angel to vary the amount we will stake based upon the price it sees in the market.

В	С	E	F	G	Н	1	J	K	L	M	N
Runner names	P&L			Back	Lay			Last Traded Price	Bet Rules	Odds	Stake
						Runner Volume	Report				
Tiradito £0.00		3.55	3.6	3.65	3.75	3.8	3.85	3.65	=IF(G9>4,"BACK","")	3.65	=IF(G9>=5,5,10)
		£4.48	£305.90	£35.57	£431.00	£24.40	£77.00	£4,342.42			

In this example what we are saying is "If the back odds (in cell G9) are higher or equal to 5.0 then change the stake value to 5, else the value should be 10"

Hopefully by now you will be getting an understanding of just how powerful this tool is. But the fact is that all these functions are at the very simple end of what is fully possible with this Bet Angel function.

Fully automatic trading using the Bet Angel Excel Spreadsheet

If you want to elevate your spreadsheet to the next level then you should try putting multiple IF statements in your spreadsheet. But you should also consider better use of the data part of the spreadsheet.

In the next example we are asking Bet Angel to automatically trade the market it is pointed at.



Let us describe what each cell is doing: -

Cell L9

"If all the money on the back side (cells E10 to G10) is higher than all the money on the lay side (cells H10 to J10) then put a LAY order in the market, else do nothing"

Cell M9

The current lay price

Cell N9

Initial IF statement - =IF(G9<=3,-----,"")

If the current back price is less than or equal to 3 then perform the following calculation, else do nothing.

Nested IF statement - =-----, IF(G9<2,100,IF(G9<3,50,"")),--)

If the current back price is less than 2 then use a stake value of 100 else if the current back price is less than 3 then use a stake of 50.

3	Example: BACK OFFSET/IFILLKILLTRUE KILL_DELAY/2/5 STOP/5			
4	and the second control of the second control			
5	Bet Rules	Odds	Stake	Status
e				
7				1721
8				
9			12	
10				
11				1810
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20				118
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22		1	:0	532-
24				
25		57.		
26				

ExAMPL: BACK OFFSET: FILL KILLTRUE KILLDELAY	12.5 STOP:5			NAME OF THE OWNER, WAS
Bet Rules	Odds	Stake	Status	Match
	13			
BACE	1.5	6 100.00	PLACED	
£ 100.0 Black bet placed on Azzenal at 156. Entirely	unmatched			C)
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Bet status cell

If this spreadsheet is active, when our criteria are met, a bet will be fired into the market. This will happen without our intervention and fully automatically.

To signify when the betting instruction is being processed, the 'Status' cell will change.

For the betting instruction to be scanned and processed in the first place, the 'Status' cell must be blank, then as the bet is being sent to betfair it'll show 'PLACING' and then change to 'PLACED' once a bet reference has been returned.

For more information about the possible values of the status cell see here.



Linking multiple spreadsheets

There is no obligation to only operate functions only from the Bet Angel section of the standard spreadsheet template. In fact you can operate and link multiple spreadsheets back to the Bet Angel data source in Excel. This gives you the benefit of viewing information in a way that you would like to see and that is unique.

_	В	С	Е	F	G	ш	1	-	V
_4			E	Г	G	Н	-	J	K
1	Salis 14th May - 14:20 5f	Mdn Stks							
2	Total matched	6,954							
3	Last Updated	10:45:14							
4	Number of Runners	8							
5	Unmatched Bets Count	0							
6	Balance	£23.95							
7	Runner names	P&L			Back	Lay			Last Traded Price
8									Runner Volume
9	Romany Princess	£0.00	3.4	3.45	3.5	3.6	3.65	3.7	3.65
10		I	£67.00	0254.00			0.450.00	225.22	04 040 40
		•	207.00	£354.00	£45.00	£255.00	£453.00	£65.00	£4,342.42
11	Kalam Daleel	£0.00	4.3	4.5	£45.00 4.6	£255.00	10.5	£65.00	£4,342.42 4.6
11	Kalam Daleel	£0.00				£255.00 9 £9.00	10.5		
11 12 13	Kalam Daleel Palisades Park	£0.00	4.3	4.5	4.6	9	10.5 £7.20	11	4.6
			4.3 £50.00	4.5 £8.20	4.6 £15.29	£9.00	10.5 £7.20 6.2	£25.00	4.6 £1,012.62
13			4.3 £50.00 4.8	4.5 £8.20 5.6	4.6 £15.29 5.7	£9.00 5.9	10.5 £7.20 6.2 £47.90	£25.00 6.6	4.6 £1,012.62 5.7
13 14	Palisades Park	£0.00	4.3 £50.00 4.8 £13.75	4.5 £8.20 5.6 £25.99	4.6 £15.29 5.7 £62.22	£9.00 5.9 £2.00	10.5 £7.20 6.2 £47.90 3.8	£25.00 6.6 £30.00	£1,012.62 5.7 £388.06
13 14 15	Palisades Park	£0.00	£50.00 4.8 £13.75 3.55	4.5 £8.20 5.6 £25.99 3.6	4.6 £15.29 5.7 £62.22 3.65	£9.00 5.9 £2.00 3.75	10.5 £7.20 6.2 £47.90 3.8 £24.40	£25.00 6.6 £30.00 3.85	4.6 £1,012.62 5.7 £388.06 6.6

In this example we have linked the spreadsheet to a race and can see the selection 'Romany Princess' is in cell B9 of the Bet Angel spreadsheet. Bet Angel has populated the spreadsheet with this data so what we are seeing is the output of data to the spreadsheet by Bet Angel. It is possible to dynamically link to this data from within the same workbook. Doing this allows us to change how the data is represented and how we instruct Bet Angel to act on that data. In the next screen shot we have set up a new spreadsheet in the same workbook by clicking on the 'Sheet2' tab at the bottom. By clicking somewhere on this new spreadsheet we can import data across to the new spreadsheet. In this case I have entered the formula ='Bet Angel'!B9 into the cell. By doing this Excel reads data from cell B9 on the 'Bet Angel' spreadsheet. As we have already seen this is the name of the selection from that sheet, therefore the new spreadsheet displays the name. By copying and pasting this reference you can pull in the other data as well, whether it is the odds, the names, your P&L or any other detail on the main Bet Angel spreadsheet.

	B9	-	. (6	f _x ='Bet Angel'!B9		
	Α	В	С	D	Е	F
1						
2						
3						
4						
5						
6						
7						
8						
9		Romany P	rincess			
10						
11						
11						

Creating your own market interface

Once you have the data in the new spreadsheet you can move and manipulate the data at will by dragging and dropping cells. You can see here that we have copied across cell references that are reading information on the current available odds and also the current totals available at those odds. This has had the effect of turning the 'normal' Betfair screen into a vertical display. This has been achieved by, not copying the content of the cells, but by making a relative reference to those cells. You can see in this example that the odds of '3.65' come from 'Bet Angel!G15'. If the odds or the money available change on Bet Angel they will now automatically change on your new spreadsheet.

	E14	→ (e)	<i>f</i> _x =	Bet Angel'!	G9		
	Α	В	С	D	Е	F	G
6							
7							
8							
9		Romany Princess					
10							
11		Volume matched			2.94	£560.90	
12		£60,559			2.92	£44.00	
13					2.9	£53.58	
14				£2.00	2.88		
15				£165.49	2.86		
16				£249.37	2.84		
17							
40							

Formatting the display

Once you have the general look and feel you like you can apply formatting functions of Excel to make the display more pleasing. Right clicking on a blank area on the Excel main toolbar menu brings up the toolbar options list. From this list you can select and use the many formatting options in Excel. They allow you to change the appearance of text and also the colour, add pictures and other items. If you are unsure of where the formatting options are in Excel or how to use them, press F1 in Excel for help.

	3.80	
	3.75	
	3.70	
£ 191.51	3.65	
£ 127.03	3.60	
€ 259.39	3.55	
	€ 127.03	3.75 3.70 1 191.51 3.65 2 127.03 3.60

Now we have formatted and changed the look of our data we can start adding some more complicated functions and interpretation of this core data. To do this we will use predominately Excel based commands and formulas.

Creating your own market indicators

I have decided I want to create a weight of money measure, to do this I need to add up all the money on the back and lay side of the book. In Excel you can use the command '=SUM' to add up these values. On the spreadsheet you add up all the values in those cells to produce the total of money on one side of the book or another.

Amount on back side	=SUM(D4:D9)			
Amount on lay side	£ 878.13			

When we have completed that we can subtotal these values into another cell and calculate the weight of money percentage. Here you can see I enter a formula that divides the amount of the back side by the total of both back and lay side. Excel now represents these calculations as percentage figures for you to quickly asses the weight of money on either side of the book.

Amount on back side	£ 577.93 =F12/F14
Amount on lay side	£ 878.13 60%
Total	£ 1,456.06
	T T

We have enhanced this further by using the **conditional formatting** option in Excel. This allows you to highlight, colour and emphasise text in Excel according to its underlying value. Here you can see that we have set it to turn red if it is greater than 50% or turn blue if the cell value is lower than or equal to 50%. There are many 'tricks' in Excel that allow you to change the way text and information is displayed, ensuring you are familiar will all of them if you want to get the best experience from the Excel integration.

You can also use Excel to 'flag' market characteristics to you to help you interpret what is happening in a market. Using the hypothesis that weight of money will help push prices in one direction or another we have created an 'IF' based formula to display text when it spots one characteristic or another. Rather than just relying on the colour blue or red on the weight of money percentage figures it will now display text telling us what it thinks. We have set the 'IF' command so that if the back percentage is less than 50% it will display text alerting us that it thinks the price will get smaller. If not, it will display text alerting us to the opposing situation.



Standard Excel tools are also able to be applied to your spreadsheet as well. You can see that we have used the graphing tool to plot a pie chart of the weight of money. This will update automatically as the market progresses. Pretty much anything is possible in Excel with some ingenuity and a grasp of Excel functionality.

Romany Princess						Weight of Money
/olume matched		3.80	£ 122.39			
£ 54,385.00		3.75	€ 633.21			
		3.70	€ 122.53			
Current P&L	£ 191.51	3.65				
£0.00	£ 127.03	3.60				
	£ 259.39	3.55				
	Amount on ba	ack side	£ 577.93	40%		
	Amount on la	y side	£ 878.13	60%		
	Total		£ 1,456.06			
	Superduper	enroadeho	et think's the	market is comir	a in	

We now have a spreadsheet that has pulled information from the main Bet Angel spreadsheet. It has displayed this information in a manner that we would like and it is also displaying supplementary information based upon our automatically translated interpretation of that data. The one problem with this spreadsheet though is that all it is doing is displaying information; you are not interacting with it or placing orders through it.

The next step in learning to use Excel fully is to create functions that will allow you to activate a bet or process, to place a bet from your spreadsheet.

Getting the most out of Excel automation

It is possible to write completely automatic trading tools for Bet Angel using Microsoft Visual Basic for applications. This tool is included in Excel and can be used to elevate automation to another level with Bet Angel. However, VBA, is beyond the scope of this document and of our support team as it is a complex and detailed language. It is something that you will need to learn and write independently and seek specialist advice if you are interested in pursuing this level of sophistication.

It is possible to write very complex spreadsheets even without the help of tools such as VBA though and a lot of Bet Angel was first created by implementing the concept on a spreadsheet before putting it into the actual product. Creating automatic trading functions can be achieved in a non-complex manner

Creating automatic trading functions

Because Bet Angel uses a scripting language, before you can create a button or auto trading tool you need to 'parse' the instruction to place in the instructions fields of Bet Angel. By 'parse' we mean that you need to construct a 'sentence' that Bet Angel will understand. Parsing is usually hidden but for demonstration purposes we will list all the details on the same area of the spreadsheet we are designing.

=IF(G12<0.5,1,0)								
=IF(D7<100,1,0)								

The tool we are going to create is a really simple automatic trading function. We have two rules that we want to set for this tool to be ready to fire a bet into the market. The first rule is that we want is for the weight of money to be favourable on the back side. The second rule we want is that there should be less than £100 remaining on the price we will back at. We have set up two 'if' statements which will display a '1' or a '0' depending on whether these rules have been met; in effect we have created a truth table. If the sum of these two values equals two then our conditions have been met and the order can be placed. If only one of these conditions is met, nothing will happen.

Truth table	1	
	0	
Order instruction	=IF(D19+D2	0=2,"BACK","";

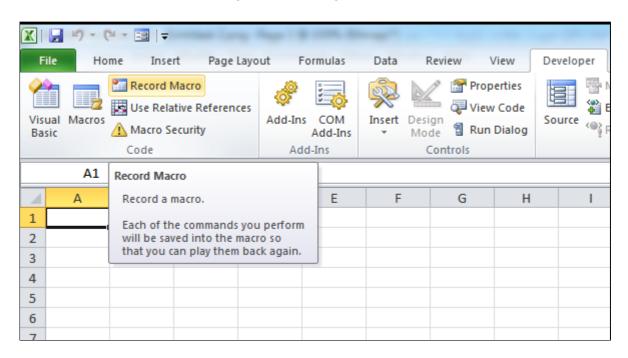
We create a final IF command to check the status of the two conditions and if that is met it populates the order instruction cell with the word "BACK". If the criteria are not met then nothing is displayed in this cell and Bet Angel will do nothing. With these conditions and this text in place Bet Angel is now in a position to execute an order automatically. Orders, as previously discussed, are executed from the 'Bet Angel' spreadsheet and therefore we need to link from our spreadsheet to the instruction area to issue our order.

That process is very simple, you go to the selection you want on the 'bet rules' area of the 'Bet Angel' spreadsheet, press "=" and then locate the order instruction cell on yourself designed spreadsheet. When you have pressed the enter key, both spreadsheets will be linked and sharing information with each other. An order instruction issued on the main spreadsheet will now trigger an order from the 'Bet Angel' spreadsheet.

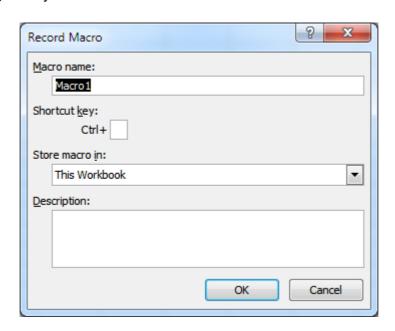


Creating buttons

If you wish to create a button to trigger a bet or action in Excel you can do so quite easily. To create automation in Excel you need to create a macro, sounds scary, but it isn't. A macro can be programmed using some sort of coding skill but for those people who have even thought about writing code on a computer there is a much simpler solution.



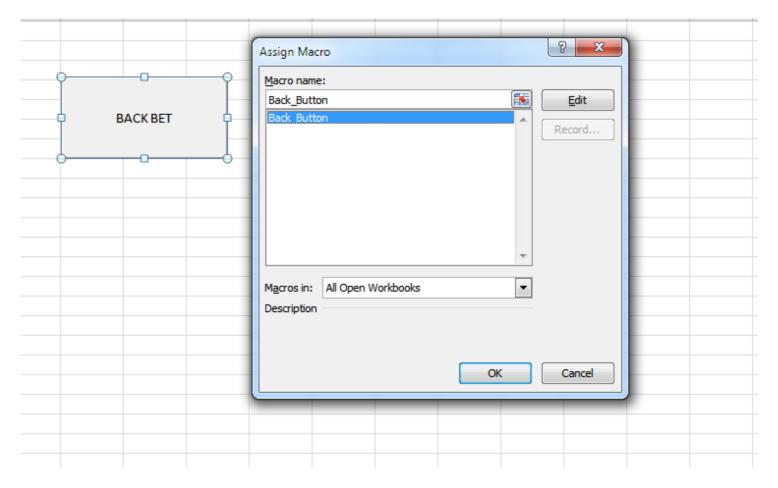
Let us assume that we want to produce a very simple piece of automation. We want a button that will place a back order when we click it. We will use the same spreadsheet we created before but instead of using a formula in the order instruction cell we will use just plain text. If your spreadsheet was active and you wrote in the order instruction cell 'BACK' it would place a back order into the market. What we are going to do is use a simple piece of automation to simulate the same thing. First you need to record a macro.



Go to the Developer menu on Excel and select 'Record New Macro'. You may need to add the 'Developer' tab. See here for instructions how to do this - http://msdn.microsoft.com/en-us/library/vstudio/bb608625.aspx. You will be presented with a box which asks you to name the macro and assign a shortcut key. At this stage you do not need to assign a shortcut key but you should name the macro. Once you click the 'OK' button on the record macro dialog box it will immediately hand control to you. At this point the macro is recording your every move! Click on the 'order instruction' cell and type the word 'BACK'. When you have done this locate the 'stop recording macro' box and click the stop button. You have now recorded your first piece of automation.

Now locate the 'Insert' button on the ribbon and click on the button icon. Drag your mouse over the area where you would like to see the button. When you have done this a button will appear and you can name the button and assign the macro you recorded to this button. If you want to modify the button simply right click the button. You have now created an automatic trading button tool. Whenever you left click this button your macro will be run instantaneously.





Other Excel Resources

The Bet Angel forum has a dedicated section where users can upload and share there excel spreadsheets with other users, these can be anything including automation strategies, data-capture, trading analysis and macro commands etc.

To browse, download or share one of your own excel spreadsheets please see this section of our forum

There is also a number of video tutorial on using spreadsheets with Bet Angel, these can be viewed at our <u>Bet Angel TV Channel</u>

Bet Angel - Guardian

To start Guardian from the Bet Angel trading screen just click the 😉 button.

Concept

Bet Angel Guardian is a multi-market interface for Bet Angel which allows you to trade multiple markets at the same time. It cycles through each of the markets that you add to it, refreshing prices and bet information. It manages any global settings that you have applied to bets in those markets. It also runs Advanced Automation, integrates the markets with Excel, populates Watch Lists, Coupons and gathers charting data in the background.

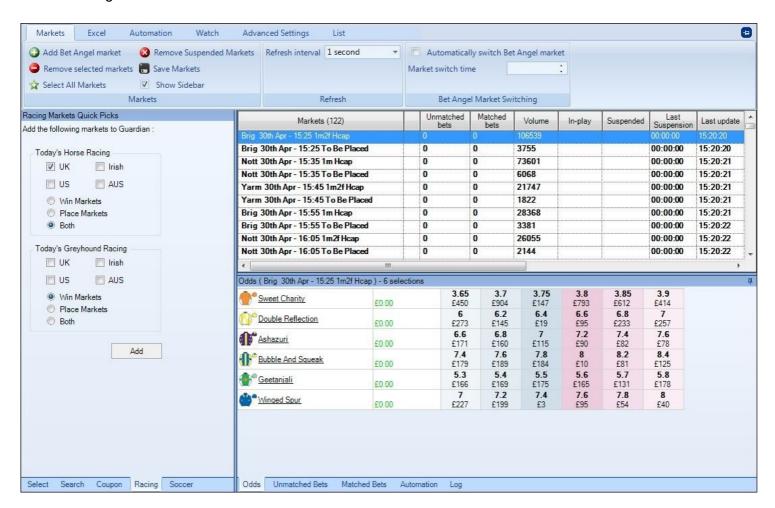
It's a great way to work with multiple markets; any market that you add to Guardian will be managed in the background, allowing you to quickly switch the Bet Angel trading screen to any market of interest.

There are a number of sports events that start at multiple times such as soccer, cricket or tennis matches. Guardian gives you an effective way to monitor and trade multiple positions in those markets simultaneously.

The market <u>list</u> of Guardian is also fully customizable allowing you to add/remove columns you need, this includes columns to apply up to five <u>automation</u> files to each market, up to five <u>nominated</u> selections for rules to run on and up to five columns to display <u>alerts</u>. You can also create your own custom columns to display a range of preset information for markets and selections or to display <u>Stored Values</u> and values held in <u>History lists</u>.

Guardian Screen

The image below shows Guardian's <u>Market Selection</u> sidebar on the left, the <u>Ribbon Bar</u> at the top. The main display area has the Market List in the top half with the total number of markets currently in Guardian displayed on the 'Markets' header tab. When you select a market from the Market List, it's details will be shown in the bottom half of the display area, for more specific information for that market (Odds, Bets, Automation, Log) you can use the tabs along the bottom of the window.

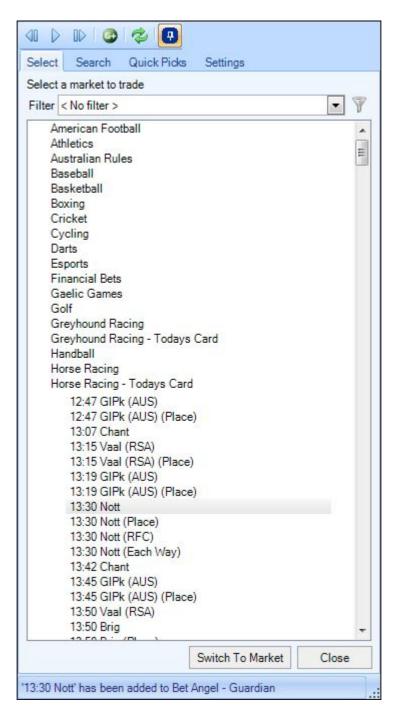


Usage

In order to get Guardian to manage a market you need to add a market to Guardian. There are several ways to do this: -

If you are using the main Market Selection tool, find and select the market you are interested in and click on the

icon on the top of the market selection window. This will automatically add the selected market to Guardian and confirm this action with a text indicator at the bottom of this menu. When the confirmation text appears you should also hear a sound. This means your selected market has been added to Guardian. Do not double click on the market or click the "Switch to market" or it will load directly into Bet Angel without adding it to Guardian.



If you currently have a market on your Bet Angel trading screen you can add it to Guardian by using the Guardian buttons located on the main ribbon.

Click on the icon to add the current market that you have on your screen into Guardian.

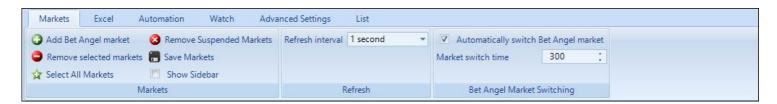
Click on the icon to open Guardian from the main Bet Angel screen.

Adding Markets in Guardian

Markets can also be added into Guardian in bulk from the Guardian Market Selection window

Ribbon Bar

This is the top area of the screen and contains five tabs.



Markets – This tab displays buttons to add/<u>remove</u> markets to/from the market list, remove suspended markets and save markets. You can also set the refresh interval and specify if Guardian should cause Bet Angel to automatically switch markets a specified number of seconds before the due start time of an event.

Excel – This tab enables you to link Guardian to Microsoft Excel in order to submit bets into multiple markets using an Excel workbook or spreadsheet. See the <u>Guardian & Excel</u> description.

Automation – Apply advanced automation to markets within Guardian

Watch - Create a 'Watch list' based upon a custom set of markets

Advanced Settings – This tab allows you to restrict the refresh of the list of markets within Guardian to a set window before and after the advertised start time of the events. It also allows Guardian to automatically export profit reports

List - This tab allows you to set up and configure how the market 'List' is displayed, including the adding/ removing of columns for you to apply Rules files and Alerts to markets and the option of creating your own custom columns to display preset information or Stored values and values held in History Lists.

Guardian Market Selection

From the Guardian Market Selection there are several ways of selecting and adding markets into Guardian, to display the market selection window tick the 'Show sidebar' box on the main Guardian ribbon.



The first thing you'll probably notice is it looks very similar to the main <u>market selection</u> window - which it is but with a few distinctions that allow you to find and add markets in bulk to Guardian quickly and easily.

Across the bottom of the window you will notice there are several tabs: 'Select', 'Search', 'Coupon', 'Racing', and 'Soccer', depending on the types markets your looking for at least one of these will help you do so quickly and easily.

Select Tab

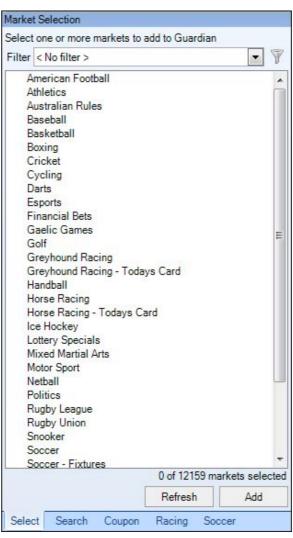
From the Select tab you will see a market list familiar to the one found within Betfair and the main <u>market selection</u> window launched via the Bet Angel trading screen (see image below left).

From here, click on the sport type you are interesting in and navigate through the tree until you see the market you would like Guardian to monitor, once you have found it click on it to highlight it then click on the 'Add' button or you can hold your left mouse button on it then drag & drop it into the top window of Guardian.

To add multiple markets from here after clicking on the first hold down your 'shift' key and press/hold your 'Down Arrow' key.

You can continue to add markets using this method and Guardian will begin to monitor from the moment the market is loaded.

You can also find and select a market here using a saved <u>Filter</u> or you can click the filter icon <u>W</u> to open the <u>Filter</u> <u>Editor</u> and create a new market filter.

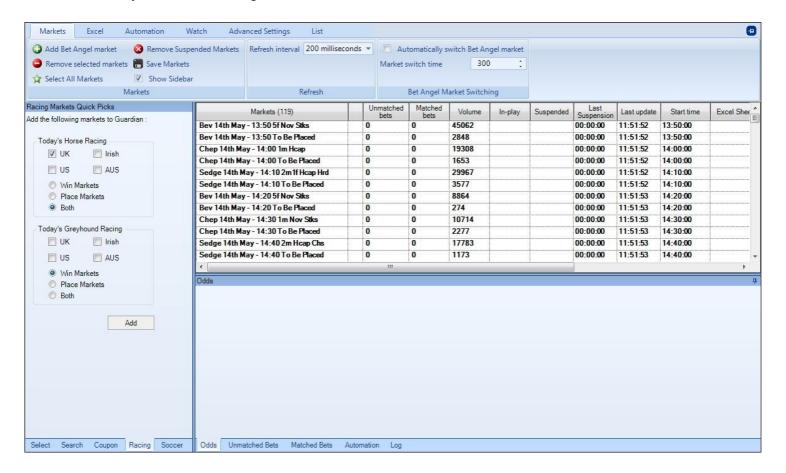




Racing Tab

Using this tab (displayed above right) enables you to load the entire day's Horse and/or Greyhound racing markets into Guardian for UK, Irish, Australian and US racing. You can also choose whether to load the win markets, place markets or both types.

In the image below 'UK Horse Racing' and 'Both' have been selected, so once 'Add' is clicked all the Win & Place markets for today's UK horse racing markets will be added to the Guardian market list in one click.



Search Tab

The search tab works exactly the same way as it does in the main <u>Market Selection</u> Window only here you can quickly select multiple markets to be added to Guardian. To do this after searching for your markets using either a search text or saved filter select the first one then with your 'Shift' key held down use your 'Arrow Up', 'Arrow Down', 'Page Up', 'Page Down', 'Home' or 'End' key to select other markets you want to add to Guardian.

If you want to select multiple markets that are not all together you can select the first market as normal then with your 'CTRL' key held down select which ever other ones you require.

In the image below I've used a saved filter to search for NH horse races, then after selecting the top market with my 'Shift' key held down I've pressed the 'Down Arrow' key to select further markets, once they have been selected click the 'Add' button at the bottom to add them into Guardian.



Soccer Tab

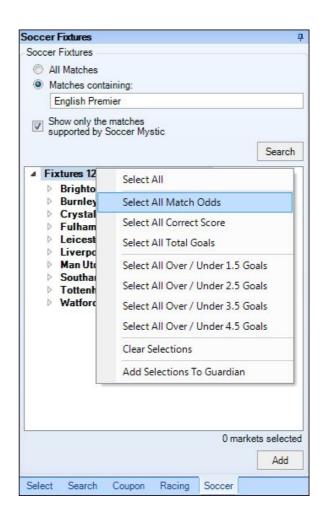
If you trade or bet on Soccer markets the dedicated soccer tab will allow you to search for football (soccer) matches quickly. When doing this you can also elect to search for games supported by the <u>Soccer Mystic</u> predictor tool.

In the example below left the search is for 'English Premier' matches that are also supported by the Soccer Mystic predictor.

To then add the required market types to Guardian right click your mouse button whilst hovering your cursor over a fixture or date.

In the image below right I've right-clicked the date and about to select 'All Match Odds' markets, to add all Premier league match odds markets for 12th May to Guardian in one click

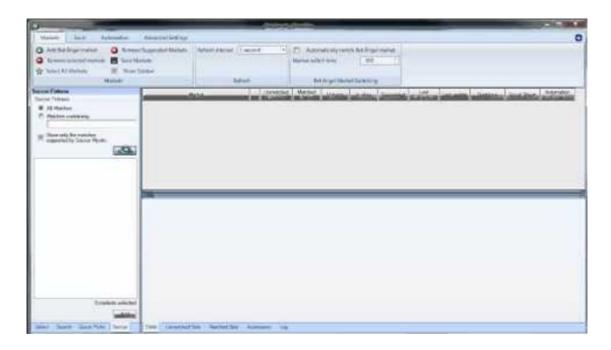




Coupon Tab

Please see the following section of this user guide for details on Coupons

Video Tutorial



Updating Markets - Guardian Market Cycling

Refresh Interval

Bet Angel Guardian cycles through **all** markets loaded in Guardian using the 'Refresh interval' defined by the user on the main ribbon.



Each time a market is refreshed it's price & bet information is updated, you can see the time a market was last updated by looking at its 'Last update' cell in the market list window.

When a market is updated, Guardian executes any management tasks it has for that market (*knowing that it now has the most up to date price and bet information available*). These management tasks may include: binding the market with Excel, executing Advanced Automation rules, acting upon global settings such as stop losses, and capturing new chart data points.

Market Cycling

To explain market cycling in more detail: If, for example, your Guardian refresh interval is set to the default 1 second, then Guardian will update each market in turn once per second.

If you have 20 markets loaded in to Guardian it will then take 20 seconds to cycle through all of the markets. So you'll only be refreshing prices (triggering automation rules, creating a chart data point etc) for each market once every 20 seconds.

If you were to increase the refresh rate to 200 milliseconds then each of those 20 markets would now be updated every 4 seconds.

At full speed refreshing at 20 milliseconds each market would be updated at least twice EVERY second!

Care should still be taken not to add an unnecessarily large quantity of markets to the market list. Even with streaming the time taken to cycle from one end of the list to the other may mean you miss market suspensions, automation trigger opportunities etc.

Unless a market is updated, Guardian cannot perform its management tasks, so it is vital that you configure Guardian refresh settings appropriately for the task you have given it.

Since Betfair introduced the option of 'Streaming' market data in 2016 we would recommend using this where possible.

With streaming enabled you can now get market updates as fast as every 20ms meaning any automation rules can be run against 50 markets every second.

Tip: In the case of soccer matches, rather than keep every one of today's matches in the list, why not click the 'Traded Volume) column header to sort markets by their traded volume and discard the ones with little or no volume. They will be so illiquid that they will be untradable and their presence in Guardian market list makes the refresh of other markets less effective.

Note: If the market is opened on the main Bet Angel trading screen, then the market data will be updated at that screen's refresh rate. This is a great way to give a single market a high refresh rate (see Auto-Switch Market below for further details).

Advanced Settings - Restricted Refresh



This is a handy option if you wish to only monitor markets that are close to the event's start time. Ticking 'Restrict refresh' means Guardian will only monitor the markets whose start times are within the time window specified. The default setting is for Guardian to only refresh the markets that are within 20 minutes of starting until 15 minutes after. These times are taken from the advertised start time on Betfair. If a meeting is delayed then you will need to adjust the start times accordingly within Guardian. You should also ensure your PC's local time is set accurately as this is used when comparing against the event's start time.

In the case of horse or greyhound racing automation, where each race is one after another, using restricted refresh is a great way to speed up the frequency of updates for the races about to start whilst ignoring those which are not yet of any interest.

Excel Tip: When used in conjunction with the 'Auto-bind' facility mentioned <u>here</u>, Guardian will only bind a market to your Excel spreadsheet when it has a start time within 'Restricted refresh' time window.

Auto-switch market



If Guardian is set to 'Automatically switch Bet Angel market' then the current market is automatically loaded into the main Bet Angel trading screen and is available for use by the features linked to that (one-click, ladder, in-play trader, Tennis Trader, Market Overview etc). The market on the Bet Angel trading screen is updated based on its own refresh rate and is independent of the Guardian refresh cycle.

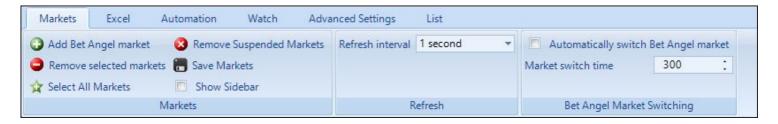
When automating in-play horse races, where time is of the essence, it is recommended that you use this feature to ensure a rapid refresh of market data.

Removing Markets

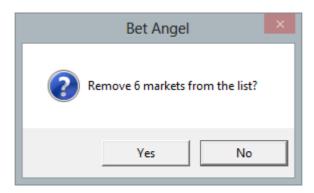
When removing multiple markets from Guardian you can choose to 'Select all markets' and then click on 'Remove selected markets' or click on 'Remove suspended markets'.

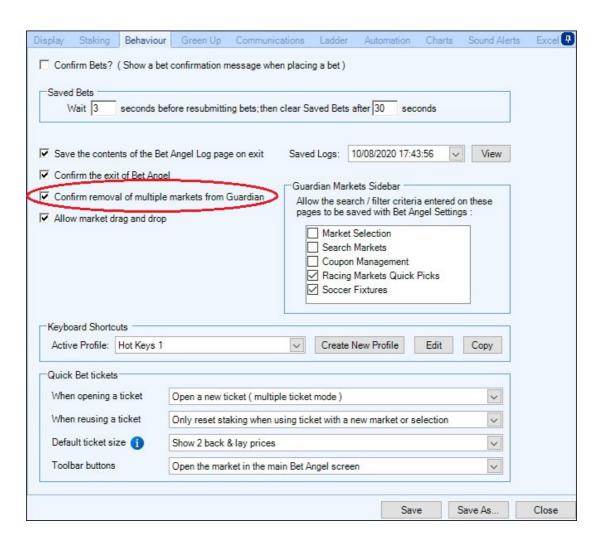
To choose a group of markets manually select the first in the main Guardian screen and with your 'Shift' key held down press any of the following keys 'Arrow Down', Page Down/Up', 'Home' or 'End'.

To choose individual markets after selecting the first hold down your 'CTRL' key then click on the individual markets you wish to remove.



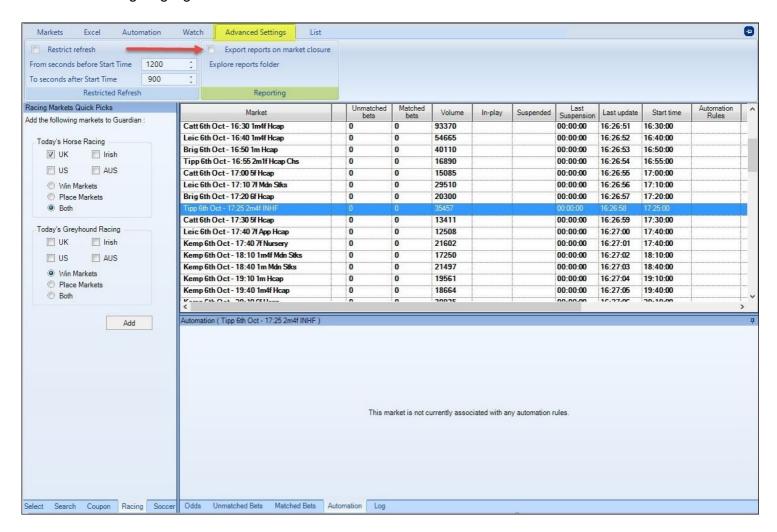
Bet Angel will present a pop-up message asking you to confirm this action. If you wish to disable this you can do so via a setting in the settings editor.





Profit & Loss Reports

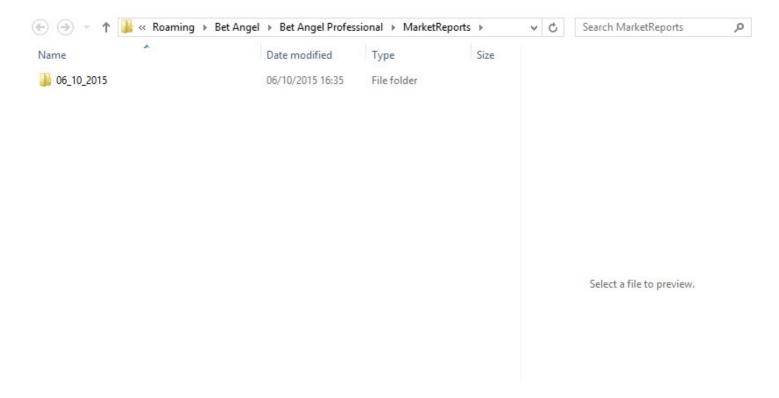
The Profit Report feature allows you to gather data for later analysis. In the screenshot below you can see the the Advanced Settings highlighted



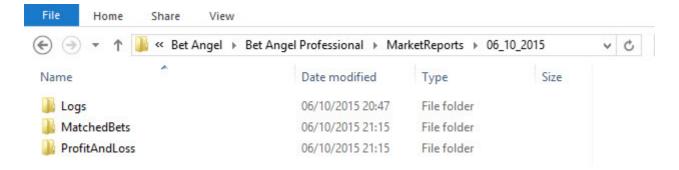
If you wish to have reports, simply put a check mark in the box "export reports on market closure" and Bet Angel Professional will handle the rest.

NOTE: The report will not generate immediately after the finish of the event. Betfair must close the market and then the report will be generated.

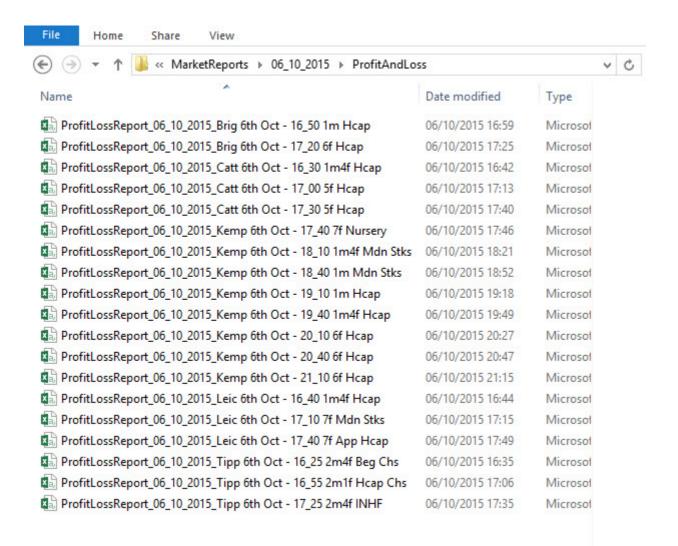
If you wish to view the data, simply click on "Explore reports folder" and a File explorer window will open as below. This shows reports from 6th October 2015 (06_10_2015)



Now you are exploring any folder or file as is normal with Windows. If you double click on the folder it will open and show more folders as below



You can now open the folder relevant to you and it will display a list of Excel* files to allow data analysis. In the screenshot below I have chosen Profit and Loss reports



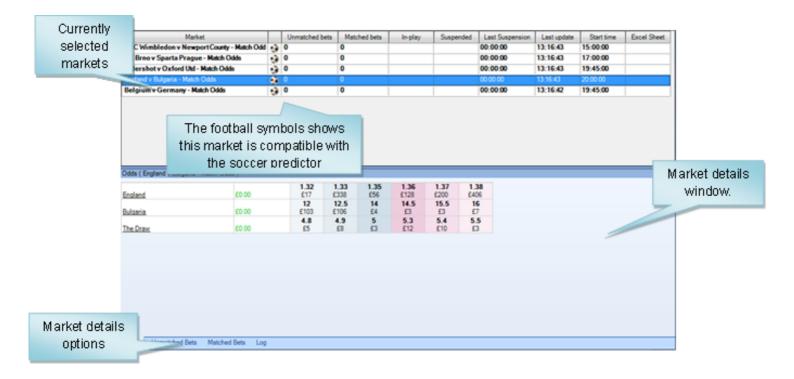
^{*} NOTE: We do not supply a copy of Excel, that is a Microsoft product and you are responsible for its provision.

System & Connection

Please note that because Guardian is a client based process, you should ensure your PC maintains an internet connection at all times. Be careful that your PC/laptop does not go into sleep mode, hibernate or power-down Wi-Fi while you want Guardian to be managing the markets.

Note that in order to link the multiple markets held in Guardian to Excel you should use the Excel feature within Guardian and not the Excel page in the Bet Angel trading screen.

Main Guardian Window



Market List Window

In the main market list window you will see the market name, the total number of markets currently in Guardian, how many open positions are matched or unmatched. You will also see the current market status such as 'in-play' or 'suspended' along with the time of last suspension, the last time a market was last updated, the event start time, and any excel sheets and automation files attached to a market and any nominated selections you have made.

This market list can also be fully customized to your own requirements and tastes, this includes the ability to arrange and resize the columns in the way you want as well being able to add you own custom columns then save these as layout profiles. For more information on please the following page.

Markets (68)	Unmatched bets	Matched bets	Volume	In-play	Suspended	Last Suspension	Last update	Start time	Excel Sheet	Automation Rules 1	Automation Nominated Selection 1	Automation Nominated Selection 2
Carl 22nd Feb - 13:35 2m4f Hcap Chs	0	0	258396		Yes	13:47:05	13:47:05	13:35:00				
Sthl 22nd Feb - 13:45 2m4f Nov Hcap Chs	0	0	424040	Yes		13:47:05	13:47:20	13:45:00				
Fairy 22nd Feb - 13:55 2m Mdn Hrd	0	0	71424			00:00:00	13:47:20	13:55:00				
Carl 22nd Feb - 14:10 2m3f Hcap Hrd	0	0	45221	···	····	00:00:00	13:47:20	14:10:00				i
Sthl 22nd Feb - 14:20 2m4f Nov Hrd	0	0	23536			00:00:00	13:47:20	14:20:00				
Fairy 22nd Feb - 14:30 2m Mares Mdn Hrd	0	0	7459			00:00:00	13:47:20	14:30:00				
Carl 22nd Feb - 14:40 3m Hcap Chs	0	0	26414			00:00:00	13:47:21	14:40:00				
Sthl 22nd Feb - 14:50 2m Nov Hrd	0	0	23610			00:00:00	13:47:21	14:50:00				
Fairy 22nd Feb - 15:00 2m Mares Mdn Hrd	0	0	8121			00:00:00	13:47:21	15:00:00				
Carl 22nd Feb - 15:10 2m1f Hcap Hrd	0	0	14739			00:00:00	13:47:21	15:10:00				
Sthl 22nd Feb - 15:20 3m Hcap Hrd	0	0	13101	İ		00:00:00	13:47:07	15:20:00				

Market Details Window

When you click on a market in the main list above, the lower part of screen allows you to view and switch between the following;

Odds - Shows each selection of the market with their profit/loss and the current best three back/lay prices

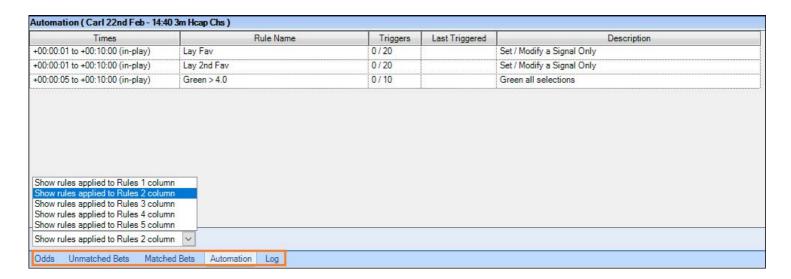
Unmatched Bets - Current unmatched bets you have on that market

Matched Bets - Current matched bets you have on that market

Automation - Details of which rules have triggered and when on that market, there is also a pick list is available to switch between the different rules files you may have applied to that market.

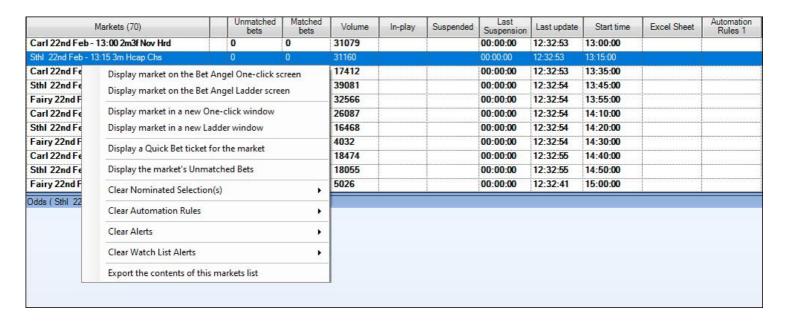
Log - Market specific log will tell you when Guardian detected market specific activity such as a suspension or when bets were placed in this market.

NB; The time between suspension and detection may vary slightly because of the way that Guardian cycles the markets.



Market List Menu

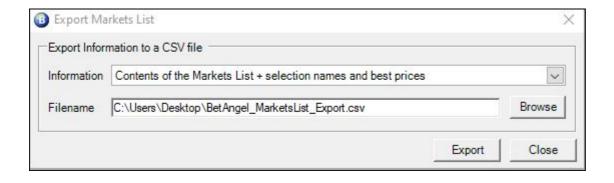
By right-clicking on any of the markets in the Guardian market list a menu window will appear, from here you can perform a range of tasks such as opening a market on a ladder screen, a one-click screen or in a <u>quick bet's</u> ticket, or display the unmatched bets for that market. You can also clear automation <u>rules</u>, <u>nominated</u> selections, and <u>alerts</u>.



Export the Contents off this Market List

This final option from the right-click menu allows you to export information from the selected market into a CSV file, you can choose to export only the contents of the market list, contents of the market list + selections names, or contents of the market list + selections names and best prices.

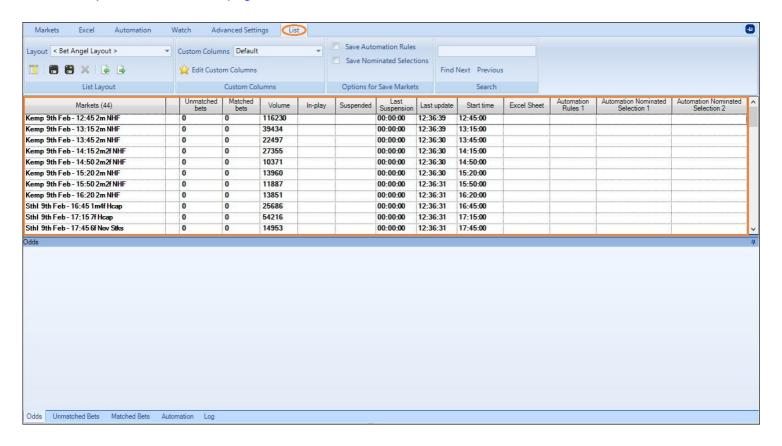
Once you've selected the information you want from the pick list click the 'Browse' button to select a destination folder on your PC and finally the 'Export' button



Market List

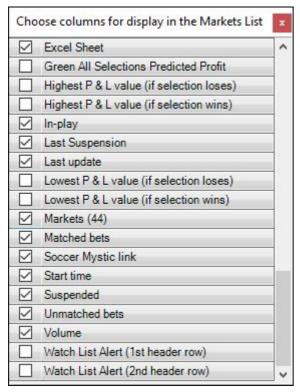
From the 'List' page you can fully configure how your main Guardian market list is displayed by adding or removing the columns of interest to you, this includes up to five columns to display alerts, up to five columns to apply automation files, and nominated selections for rules to trigger on. It is you can also possible to create your own custom columns to display either preset information for selections and markets and your own stored values and values held in a History List from your automation rules.

Once you've created your custom columns and a layout that suits your needs it can then be saved as a custom layout profile, this allows you to quickly switch between different saved profiles depending on the markets you are trading and what you need displaying in your Guardian market list. For some examples of the types of layouts you can create please see the next page.



Adding/Removing Columns

To add or remove the columns open the column chooser , a menu window will then appear where you will be able to tick/untick the columns you want to display in your guardian market list window, There are over 30 default columns already in the column chooser which you can select.



NB; Once you begin creating and saving your own custom columns they will also appear in this menu list to be selected when required.

Reorder and Resize Columns

Columns can be reordered by hovering your mouse cursor over a column header, then with your left mouse button depressed simply drag the header to its new location and release your mouse button to drop it there.

By pointing your mouse cursor between the column headers you'll see a small icon with two arrows, by holding down your left mouse button at this time you can drag your column/s to your required width.

After you have selected the columns and placed them in the order you want you can then save them as a new 'Layout Profile' by clicking the disc+ icon or if you've edited an existing layout profile it can be resaved by clicking the disc icon.

This is handy if you trade different types of sports, for example you could create a layout with custom columns for racing and then another for tennis, or perhaps you want a layout specifically for a Saturdays when there is a variety of sports on and another for guieter midweek days.

Saving Rules and Nominated Selections

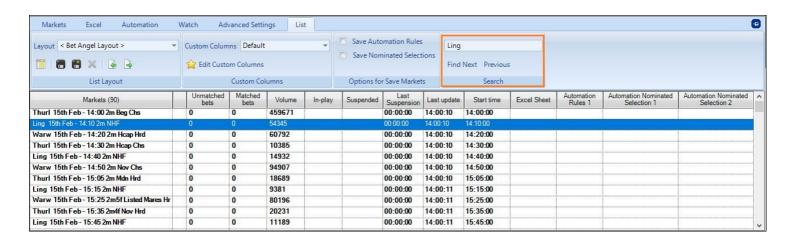
By ticking either of the boxes, when you 'Save Markets' (either from Guardian's Markets page or during the closure of the Guardian screen) your automation rules or nominated selections will be saved and automatically loaded again the next time you log on



*Before saving automation rules be aware that as soon you next log in and the markets begin refreshing your rules will be active and able to trigger

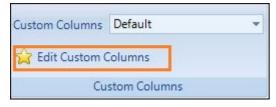
Search Market List

The search area can be used to find a piece of entered text in the market list, for example you could enter part of the market name or a start time, clicking 'Find Next' will take you to the next row matching that criteria, clicking 'Previous' will take you back to the previous row which had text matching your criteria.



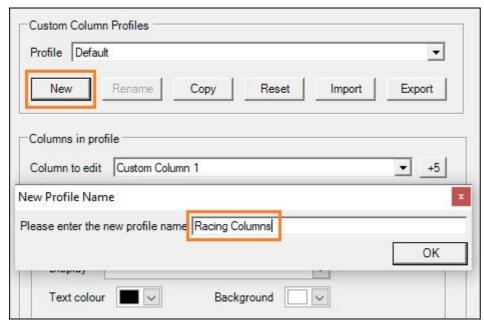
Guardian Custom Columns

From here you can create your own custom columns to display in your market lists in Guardian. To open the custom column editor and begin creating custom columns click the 'Edit Custom Columns link next to the gold star



When the custom column editor window opens you will see one 'Default' profile, you can start adding custom columns to this profile or you may prefer to create a new profile.

In the image below I've clicked the 'New' button to begin creating a new custom column profile named 'Racing Columns'.



Each new Custom Column Profile has 10 custom columns available for you to edit, but if you find that you need more for that profile you can add additional custom columns to edit in groups of 5 at a time by clicking the '+5' button.

Creating Custom Columns

The next step is to begin creating some custom columns, you'll probably want to start with editing Custom Column 1. The 'Title' area allows you to rename this custom column (this will be the name displayed for this column header in the market list window).

Next you can select what the custom column will 'Display' for you, here you have the following four choices;

Market Information

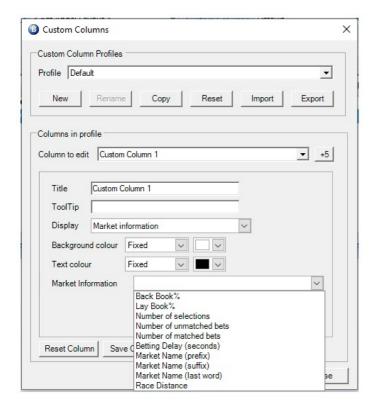
A Selections Information

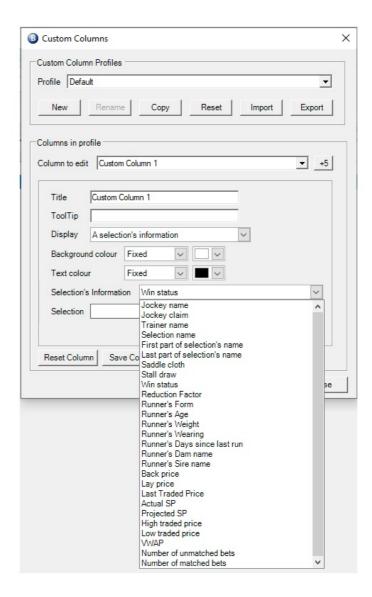
A Shared Stored Value

A Historic Stored Value

Market & Selection Information

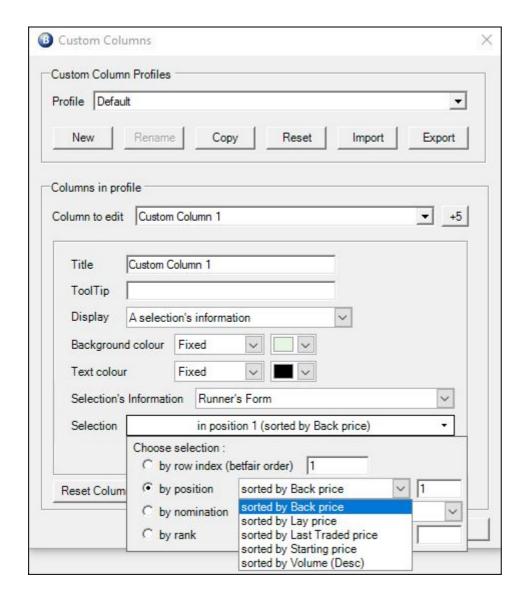
When selecting either 'Market Information' or 'A Selections Information' you will get one of the two pick lists shown below where you can select the preset information you want to be displayed in this custom column.





When choosing to display 'A Selections Information' you will also be given extra options to specify which selection's information you wish to display, then if you choose a selection 'by position' you'll be given the option of choosing which sort order will be used by this column, this allows for different columns to use different criteria for sorting which are also decoupled from the main sort used by rules for Servants and Automation.

In the image below I've created a custom column and named it 'Fav Form' and chosen to display the 'Runners form' of the selection in position 1, sorted by their back price, for this custom column I've also changed the background colour to a pale green to make it stand out in the market window.



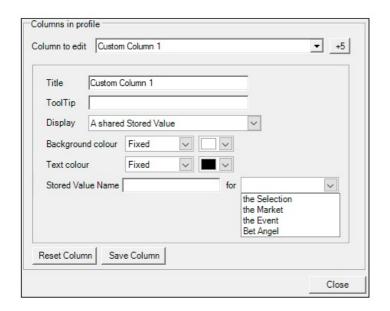
Once you've saved the column you can then create a further custom column by selecting another custom column to edit for example 'Custom Column 2', here I'm going to change the Title to '2nd Fav Form' and change it to the selection to 'In position 2 (sorted in order of favouritism) by back price. This can then be repeated until you have created all the columns you need for this profile.

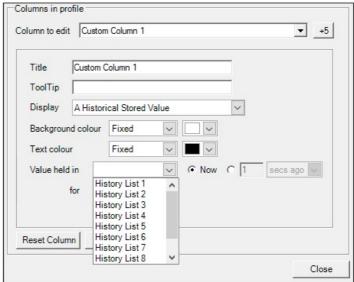
In the image below you can see how those two custom columns (when selected in the custom column chooser) would then appear in the Guardian market list.



Shared Stored Value and Historic Stored Value

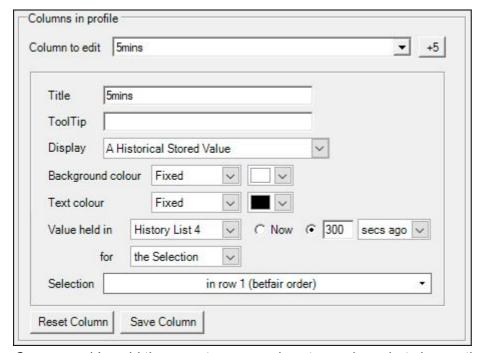
When selecting either a Shared Stored Value or a Historic Stored Value you will get one of the two picks lists shown below, from these you can input the Shared <u>Stored Value</u> information you want to display or select which <u>History List</u> and time you want to display a value from.





Example; I have a rules file applied to this market storing the last traded price every second to History List 4, I now want a custom column to continually look up and display the historic value held in that history list (i.e. the last traded price) at my chosen intervals.

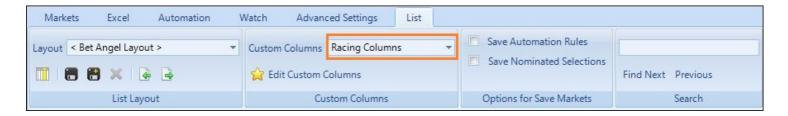
In the image below I've created the first custom column and called it '5mins' and chosen to display the Value Held in 'History List 4' from 300 seconds ago of the runner in Betfair's row 1



Once saved I could then create a second custom column but change the Title to 3mins and display the value held in 'History List 4' from 180 seconds ago of the runner in Betfair's row 1, then another with the Title changed to 1min to display the value held in 'History List 4' from 60 seconds ago of the runner in Betfair's row 1

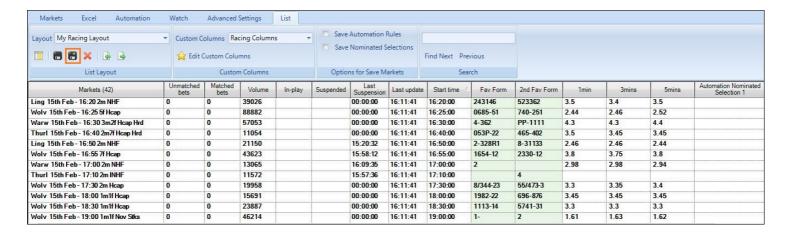
Using Custom Columns

Once you have created and saved all the custom columns needed you can return to the main Guardian screen, and select the custom column profile you've just created.



Next you'll need to open the column chooser as described on the previous page and tick the newly created custom columns you want to display as part of this profile and arrange and resize them any way you require. Once that's done you can now save this as a new layout by clicking the 'Disc+' icon

I've called this layout 'My Racing Layout' and in the image below you can see the four custom columns that I've just created, displaying the form for the 1st and 2nd fav and the historic prices from 1min, 3min, and 5mins ago for the runner in row 1 in each race.



Guardian Layout and Import/Export

There are unlimited ways you might want to configure and layout your Guardian market list depending on the type of markets you are trading and what information you want to see. For example if you are using automation you might want several columns to apply your rules from and to display alerts. If you are a racing trader you may want to populate your Guardian columns with additional racing information

Example Layouts

Here is a market list layout created specifically for horse racing markets to display information like form, Last Traded Price, High and Low Traded prices and the profit/loss for each market.



This next market list layout has been created for football markets and has custom columns to display the back book %, the length of the in-play bet delay, it also has a couple of alert columns to display alerts triggered by automation rules.



Here the market list layout has been created especially for tennis markets with custom columns to display the scores and server information, the number of matched, unmatched bets, profit & loss, there are also columns to apply rules and nominate players for rules to run on and display alerts from a rules file.

Start time /	In-play	Matched bets	Volume	Player 1	P1 Points	P1 Games	P1 Sets	P1 Serving	Automation Rules 1	Automation Nominated Selection 1	Alert 1
Last update	Suspended	Unmatched bets	Green All P & L	Player 2	P2 Points	P2 Games	P2 Sets	P2 Serving	Excel Sheet	Automation Nominated Selection 2	Alert 2
12:08:00	Yes	14	39298	Durasovic	40	3	1	1	Tennis Scores		
14:06:21		1	£32.64	Dubrivnyy	40	3	1,	0			
12:54:30	Yes	11	356023	Ostapenko	0	5	0	0	Tennis Scores		
14:06:22		2	£15.27	Pegula	0	6	1	2			
13:01:00	Yes	0	12803	Ramanathan	15	1	0	1	Tennis Scores		
14:06:23		0	£0.00	Silv	0	2	1	0			
13:29:00	Yes	4	305448	Minaur	15	2	0	0	Tennis Scores		
14:06:23		8	£18.71	Nishikori	30	3	0	2			
13:35:00	Yes	0	166776	Pavlyuchenkova	40	1	0	1	Tennis Scores		
14:06:23		0	£0.00	Kvitova	30	2	0	0			
13:45:00	Yes	0	13516	Golubev/Tiurnev	0	4	0	0	Tennis Scores		
14:06:22		0	£0.00	Hassan/Vatutin	15	1	0	2			
14:00:00		0	21325	Tauson					Tennis Scores		
14:06:21		0	£0.00	Babos							
14:30:00		0	27070	Sakkari					Tennis Scores		
14:06:20		0	£0.00	Keys							
14:30:00		0	12388	Svitolina					Tennis Scores		
14:06:21		0	£0.00	Doi							

Download Examples

There are also ready-made Guardian Custom Column & Layout files which you can download and import straight into your Bet Angel including all the examples seen above from the Shared Guardian settings area on the Bet Angel forum.

Guardian - Excel - Multi market functionality

By clicking on the 'Excel' tab within Guardian, we can link to an Excel workbook to manipulate and monitor data as described in the Excel section earlier.

However, Guardian allows us to monitor *multiple markets* within Excel and execute bets or trades based upon triggers set within the Excel spreadsheet within one or more markets.

For example, if we wish to monitor both the win and place market of a particular horse race we can now do this within Excel. Or maybe you wish to look at and compare a soccer match odds market with the correct score market from the same game.

The ability to monitor multiple markets in this way enables Excel to be used to write exotic triggers based upon multiple markets' data or to submit bets to multiple markets in sequence.

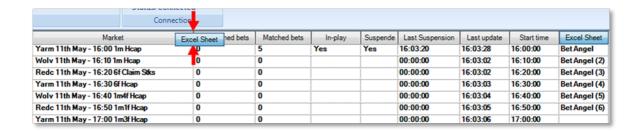
Follow these steps to load several markets into Excel by using the supplied Excel template 'BetAngel Multiple.xls'.

- 1. Load markets into Guardian.
- Click on the 'Excel' tab within Guardian and click on 'Browse for file'
- 3. Select the 'BetAngel_Multiple.xls' spreadsheet. (As a default this is stored under "C:\Program Files (x86)\Bet Angel Limited\Bet Angel Professional\templates\" when you install Bet Angel Professional. Replace 'C:' with the name of the drive where you installed Bet Angel.
- 4. Click on 'Open Workbook'. This will cause Excel to open and load the specified workbook.
- 5. In the main Guardian window we now need to tell Guardian which spreadsheet within the recently opened workbook we would like each market to link to. In the 'Excel' column click on the cell related to the market and you will see a list of possible sheets within the open workbook that can be linked to Guardian. You can click on 'Auto-bind' to quickly add markets to available spreadsheets.

Market	Unmatched bets	Matched bets	In-play	Suspende	Last Suspension	Last update	Start time	Excel Shee	et
Yarm 11th May - 16:00 1m Hcap	0	5		Yes	16:03:20	16:20:14	16:00:00	Bet Angel	
Wolv 11th May - 16:10 1m Hcap	0	2		Yes	16:12:33	16:20:15	16:10:00	Bet Angel (2)
Redc 11th May - 16:20 6f Claim Siks	0	0			00:00:00	16:20:22	16:20:00	Bet Angel (₹
Yarm 11th May - 16:30 6/ Hcap	0	0			00:00:00	16:20:16	16:30:00	Bet Angel (3)	^
Wolv 11th May - 16:40 1m4f Hcap	0	0			00:00:00	16:20:17	16:40:00	Bet Angel (4)	
Redc 11th May - 16:50 1m1f Hcap	0	0			00:00:00	16:20:18	16:50:00	Bet Angel (6)	
Yarm 11th May - 17:00 1m3f Hcap	0	0			00:00:00	16:20:20	17:00:00	Bet Angel (7)	Ε
Redc 11th May - 17:20 1m Hcap	0	0			00:00:00	16:20:21		Bet Angel (8)	
Yarm 11th May - 17:30 1m2l Hcap	0	0			15:28:29	16:20:21		Bet Angel (9) Bet Angel (10)	
Wind 11th May - 17:50 5f Nov Siks	0	0			00:00:00	16:19:56	17:50:00		
Towc 11th May - 18:00 2m5f Mdn Hrd	0	0			00:00:00	16:19:56	18:00:00		



Hint – You can move the 'Excel' column header to be closer to the market name to make this easier to follow by dragging and dropping. In fact you can do this with any of the column headers.



6. Now click on 'Connect' in the top area and Guardian will begin to populate the worksheets.



Note that the worksheets will populate at the same rate as Guardian so wait for Guardian to complete a full cycle of markets before all your worksheets are populated with data. For more information, see <u>Guardian Market Cycling</u>.

Using the supplied multiple markets spreadsheet we can see the different sheets within the workbook at the bottom of the Excel screen. And we can switch to the markets selected within the same workbook. Using the Excel functions mentioned earlier in this user guide we can now submit orders to multiple markets.

Tip: You can add your own worksheets to Excel. If you want them to be visible to Bet Angel then their name must begin with the text 'Bet Angel' (as per the numbered sheets in the image below). If you want to have worksheets invisible to Bet Angel (for local storage and calculation) then just give them a name that doesn't contain the text 'Bet Angel'.

29	Northern Fling	£0.00	18	18.5	19	19.5	20	21	19
30	,		£115.88	£70.53	£84.49	£31.26	£179.44	£90.80	£6,213.54
31	Internationaldebut	£0.00	28	29	30	32	34	36	30
32			£23.87	£18.96	£49.18	£4.46	£21.50	£18.00	£1,139.48
33	Stolt	£0.00	23	25	26	34	36	38	26
34			£34.51	£11.64	£15.04	£3.00	£9.84	£7.90	£1,921.14
35	Group Therapy	£0.00	46	48	50	55	60	65	50
36			£9.51	£308.92	£39.13	£70.70	£14.06	£9.56	£1,139.84
37	Stoneacre Lad	£0.00	60	65	70	80	85	90	75
38			£11.69	£3.08	£17.56	£4.00	£2.00	£8.12	£1,257.72
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50		1/22	1 (0)	/=	(1)	1(=)			2 (2) ()
Bet Angel Bet Angel (2) Bet Angel (3) Bet Angel (4) Bet Angel (5) Bet Angel (6) Bet Angel (7) Bet Angel (8)									

Spreadsheet handling

Guardian offers advanced spreadsheet handling features if you load multiple markets.

If you load an entire days racing for example, you can choose to link all the markets to individual spreadsheets. You can 'bind' or link each spreadsheet within your workbook to each individual market as described <u>here</u>.

Clear Bindings

You may wish to reset the sheet. You can do this in one go by clicking on 'Clear bindings'.

Auto Bind Spreadsheets

If you want to quickly add all the markets to your workbook's worksheets, then just click on 'Auto-bind Bet Angel sheets' and this will automatically bind each unallocated sheet (whose name starts with 'Bet Angel')



Auto Clear Bindings

The 'Excel sheet' column in Guardian will remain linked to the market chosen even after a market is settled and no longer available. If you wish to clear this binding once a market is settled than you can choose to do this by ticking this setting. This will then free up your spreadsheet for use with another market.

Guardian - Watch Lists

Concept

The Guardian Watch List allows you to add markets stored in Guardian or a subset / custom list of those selected markets to a dedicated list. This list can be viewed in a smaller window and pinned on top of other windows. This enables you to quickly view multiple markets across multiple sports and quickly change between them without switching to the main Guardian screen.

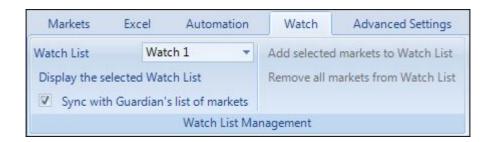


Usage

Guardian allows you to have up to 5 of these watch lists at any one time, you may wish to populate each with a different sport or have one to keep a eye on the markets you have automation running on - the choice is yours!

There are two ways to add markets to a watch list:

- Sync the watch list with the list of markets currently in Guardian
- Add selected markets individually to a watch list



The easiest way is to keep the sync box ticked as in the image above. Click on 'Display the selected Watch List' to open a window with the selected markets displayed.

Once a watch list is displayed you can then quickly change the market displayed in Bet Angel to your choice market simply by clicking on a price. Note that this will not place a bet. You can also change to the one click screen or ladder interface for each market by clicking on the Bet Angel 'B' or the ladder symbol above each market.



Menu Tabs



The menu items allow you to configure some of the options within each Watch List such as removing suspended markets, how the markets are sorted what details are displayed from each market and even how the mouse interacts with the Watch List.

The selection of horizontal lines allows you to hide all selections, show only the first selection, show the first three selections or show the entire market. You can also choose these options with each individual market.

The pick list below the menu tabs which is currently displaying '<Show all Events>' is used to select the market you wish to show, sometimes you might have a lot of markets in your watch list but may just want to see them one at a time - this pick list allows you to guickly switch between them or select all events.

The drawing pin will ensure the watch list remains on top of your screen at all times. You can then move it to a convenient place on the screen.

Refreshing Markets

On the right of each market name you will see the time indicated when the market was last updated by Guardian. Here you can see the bottom market showing a Football match between Tottenham Vs Ajax has not updated since 17:14:46 – much later than the other markets.



This is because the refresh rate has been set in Guardian and its been restricted to refresh only markets due to start in the next 3600seconds (1hr), and this match is not due to KO for several more hours therefore is not being refreshed as part of the main Guardian cycle.

However, to begin refreshing this market in your Watch List (even though it falls outside your Guardian refresh parameters) you just need to click on the 'Options' tab and tick one or both of the Watch List refresh options and that will begin refreshing markets in your Watch List using the background refresh rate you have set in your main Communication Settings





At the bottom of each watch list you can see the market count. In the example above we can see 5 markets. The figure over to the right of this is the overall profit and loss of the markets contained within that particular watch list.

Video Tutorial



Using Multiple Watch Lists

One of the useful ways to use the Watch List is to configure a watch list for different types of markets. For example, you could create a watch list to contain all soccer match odds markets and another watch list to contain all the over/under markets.

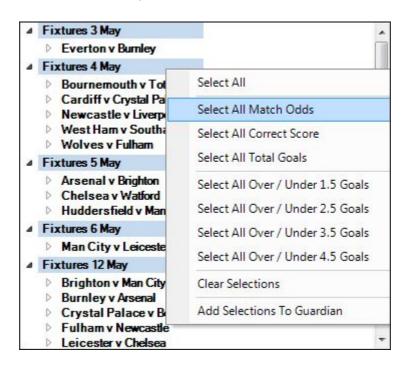
Using Guardian to quickly load up and sync a watch list is a quick way of creating your own set of lists.

And once you have multiple Watch Lists it is very easy to switch between different sports and markets at the click of your mouse button.

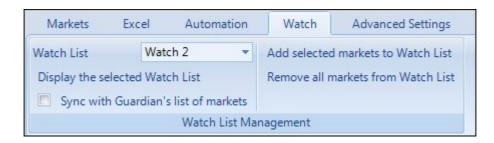
An example set up is as below. Here I have one watch list with the horse racing for today and another one showing the match odds for some upcoming Premier League soccer games.

Firstly, load up the day's horse racing and tick the sync with Guardian's list of markets, once that's done un-tick this option as I am about to load some more markets.

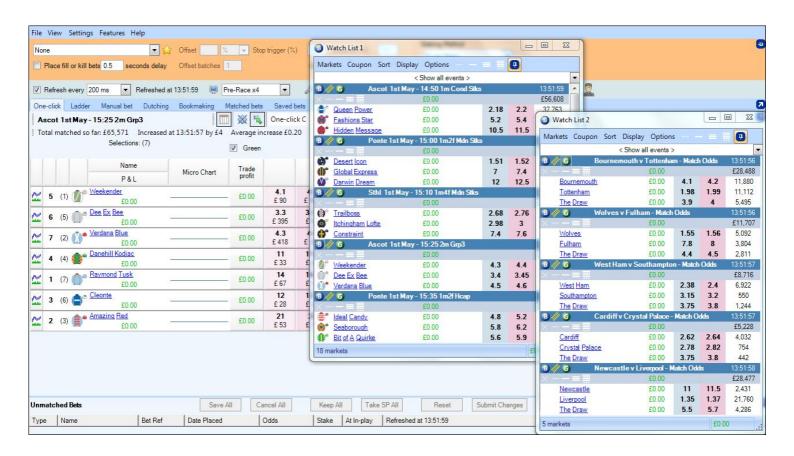
This time I want to load up all the English Premier League match odds markets. Click on the soccer tab within the Guardian market selection tool. Search for matches containing 'English Premier'. This will show games sorted by date. By right clicking on the dates I can quickly select all match odds markets.



Once they have been added to Guardian on the 'Watch' tab select 'Watch 2' then select each of the match odds markets and click 'Add Selected Markets to Watch List



Now I can display both these watch lists at once and use them to quickly switch between the markets displayed in addition to seeing the latest data from Betfair at a glance.



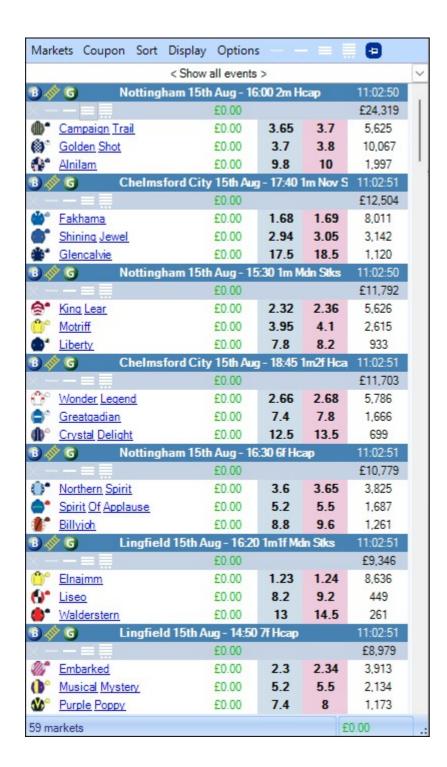
Sorting Watch List Markets

Once your markets have been added to a Watch List there are many ways to sort them and you can perform this to suit your own preferences.

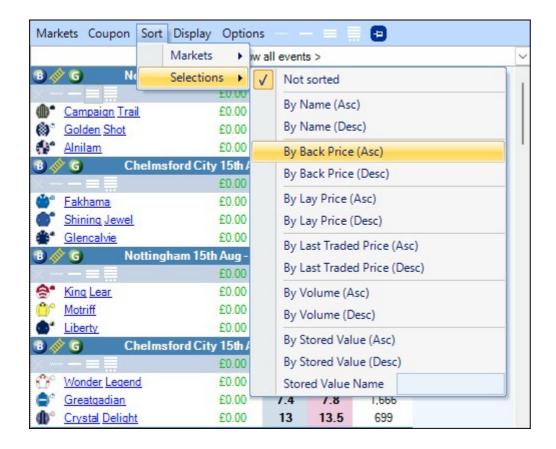
By clicking the 'Sort' tab you can chose to sort either the markets and/or selections.



In the following image I've chosen to sort 'by volume (desc) so the market with the largest traded volume will now be at the top followed by the 2nd highest, 3rd highest and so on.



Moving on to sort the selections order you can choose from any of the following options.



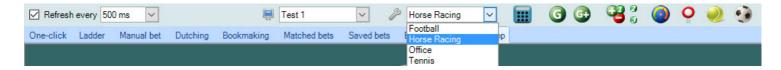
Here I've chosen to sort 'by back price (Asc)', so the selections in each market will now appear in order of the shortest back price, this allows me to keep an eye on the front 3 in the betting no matter how the prices move around.



Pro Tip Load all the markets into a watch list and display the front 3 runners. You now have all markets at your disposal and should an opportunity present itself you can instantly load it into Bet Angel. For example, a horse gets worked up or loose, or connections come on TV and say they are not hopeful; queue the drift!! I cannot stress enough how this can help you to not only spot an opportunity but how quickly you can load that market and start trading. There is no more searching for the market and loading it, simply glance at your watch list and click the icon of your choice. To quote a well known phrase "The early bird gets the worm!"

Saving you preferred watch list layout

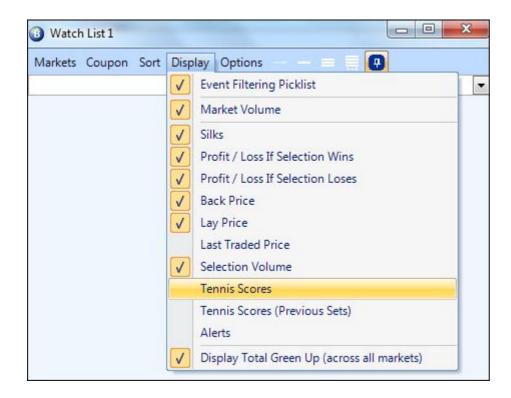
As with normal profiles, Home, Office, etc. You can include watch lists when saving them. This allows you to have a different profile for tennis, Horse racing, football etc. Simply use the drop down list of profiles and select the appropriate sport.



I am sure you will agree this is a great aid to your trading, all the markets you choose in visible form and just one click away from loading into Bet Angel Professional ready to trade.

Watch List Tennis Scores

In conjunction with Tennis Trader you can use watch lists as your own live scoreboard with server information. To display the Tennis scores on your watch list click 'Display' and select Tennis Scores and Tennis Scores (Previous Sets) from the list



Then load the markets of interest as usual and you will have the live scores and server information literally at your fingertips and when you want to get involved just click the Bet Angel logo to launch that match on the one-click screen or the ladder icon to open the market on your ladder screen.

You can even see the Betfair charts without the need to open the market simply by clicking on the players name



If you also have 'Alerts' selected from the display options you can be notified at critical moments in the match which you have instructed Bet Angel to notify you about, i.e. the underdog has a service game to win a set, or the prematch fav has lost the 1st set.

You can then simply click on the Bet Angel or ladder icon to open that market on your trading screen and your ready to take action.

You can see in the image below that an alert has gone off notifying you that something of interest has just happened, and you should known instantly by the name given to the alert just what that is.



NOTE We are reliant on Betfair supplying the live scores from a tennis tournament and have no control over which they decide to include. Just remember this when looking to use a watch list for live tennis scores.

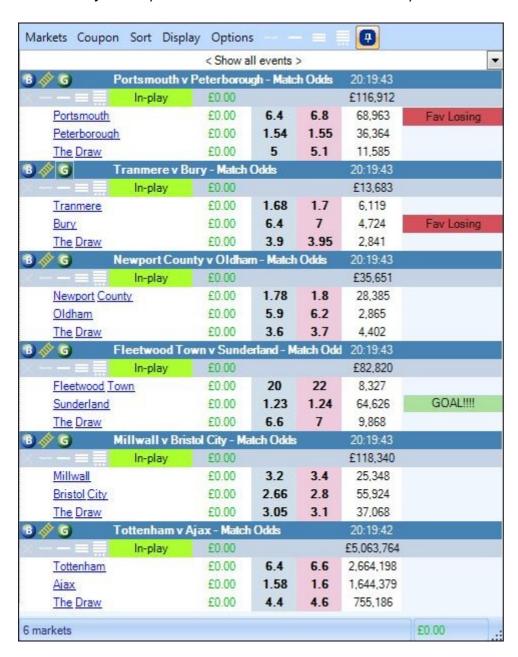
Watch List Alerts

Even when using a Watch List you may still miss opportunities especially if you are watching dozens of markets or even using multiple Watch Lists and/or are concentrating on the market you have in focus on your main trading screen/s.

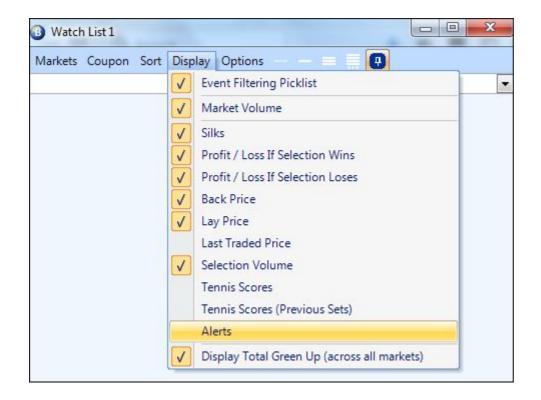
Having the ability to display alerts when a preset criteria you have specified is met within that market or by a individual selection will mean you never miss an opportunity.

For example you may want to see an 'Alert' when a team scores a goal in a football market, of if the Under dog is leading in the final 10 minutes of a match. Or perhaps if your trading Tennis markets you want to know when a particular score is reached or if the fav is facing 2 or more break points, in horse racing markets you might want to be alerted if there is a sudden increase in a selections matched volume or something steam/drifts a number of ticks or percentage in a given duration - the possibilities of what you can create alerts for are truly endless.

In the image below I have some football markets in a watch list where three alerts have just gone off, *remember you can put a mixture of markets from different sports and add unique alerts for each of them



To enable 'Alerts' in your Watch List, first open a Watch List then click 'Display' and tick ' Alerts' from the list



Alerts are then created using <u>Advanced Automation</u> or a <u>Servant</u> and you can see all the options you have available too you when creating an alert by clicking on those links.

Once you have created and saved your alert/s it's then just a case of adding the markets to guardian then to a watch list as explained on the previous pages before finally applying the relevant automation file or servant to the market/s your interested in.

Now as soon as the criteria and conditions you have set are met you the alert will goes off next to that market or selection and you'll never miss a key moment again.

Even if you have dozens of markets in a Watch List when you configure an alert you can instruct it to auto-scroll to the market it triggered on, or even maximize the Watch List if you have it minimized to your Windows task bar through lack of screen space.

Tip; Ensure your are <u>refreshing</u> Guardian and the markets in your watch list optimally and fast enough so that you dont miss or get a delayed alert

Greening From the Watch List

The watch lists also feature a quick way of greening any market on the list.



You can see above the green P&L list for the 14:00 at Southwell. Right at the top there is the greening button – in this case £0.47. Click on this and Bet Angel will green up on this market even if you are viewing a different market in the main application.

Event Filtering Watch List

Once you have added your markets to a Watch List either manually or by syncing all the markets in guardian you can filter the markets that are shown by either an event or single market.

This will allow you to create flexible and dynamic Watch Lists alongside your normal trading (or alongside other Watch Lists). For instance it could be used to show a small display of the prices of all runners in the horse race you are currently trading on a main screen.



Alternatively you maybe trading on football and used a <u>Coupon</u> to load hundreds of markets into a Watch List, you could use 'Event Filtering' to zone in on just the markets relating to the specific match that you have clicked on in Guardian.

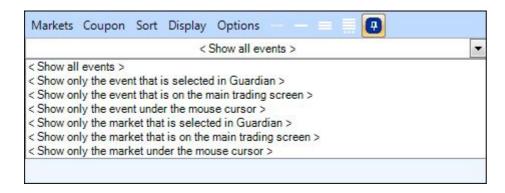
Or if you have spawned multiple markets it can become context sensitive, allowing the list to dynamically filter as the mouse moves, ie, showing related markets to the selected soccer match.

To do this you first need to enable the 'Event Filtering Picklist' option under the 'Display' tab of your watch list



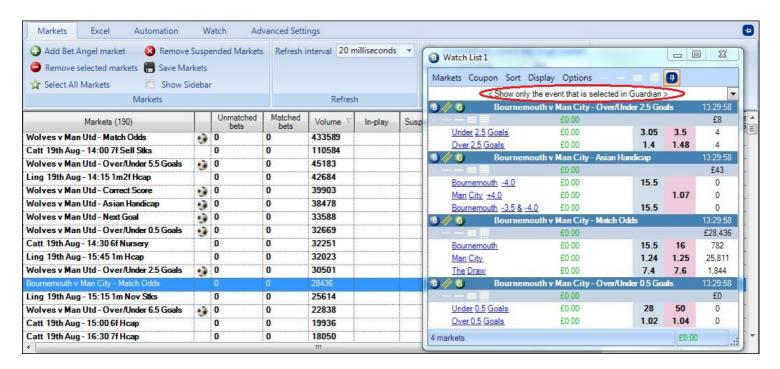
You'll then be able to set your 'Event Filtering Picklist Options' and choose whether you want to show filtering by Markets, filtering by Events or both.

If both are selected you'll see the following options appear in your 'Events Picklist'



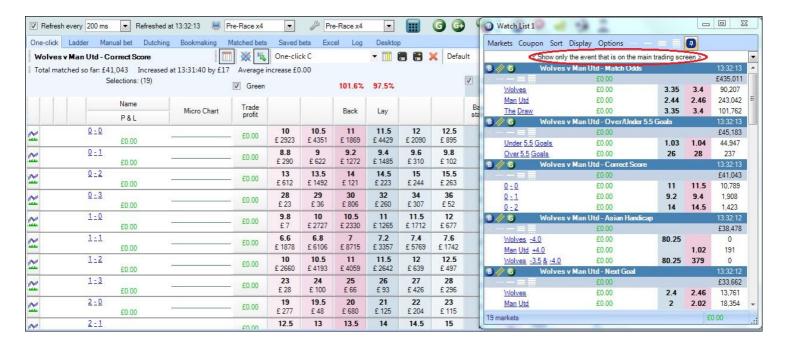
When this filter is used if you have multiple markets from the same event ie, in a football match you may have all the Match Odds, Correct Score, O/U 1.5, 2.5, 3.5, BTTS etc for several fixtures by clicking on any market from a fixture in Guardian the watch list will then display that and all other markets for that fixture.

In the image below the Bournemouth Vs Man City match odds market has been selected in Guardian so the watch list has now filtered and displayed only those markets relating to the Bournemouth Vs Man City from those currently in Guardian.



Show Only the Event that is on the Main Trading Screen

Similar to above but displays the markets from the event you have on your main trading screen ie, your One-Click, Ladder or Dutching screen etc. Each time you open a new market to one of those screens it and all it's related markets you have in guardian will be displayed in the watch list.

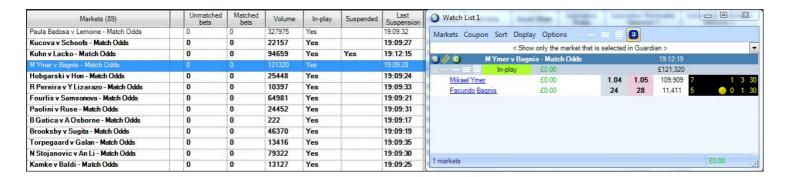


Show Only the Event that is Under the Mouse Cursor

This is handy if you have spawned multiple markets onto new Ladder or One-Click screens, as you hover your cursor over each window the watch list will dynamically change and display other markets you have in Guardian for that event.

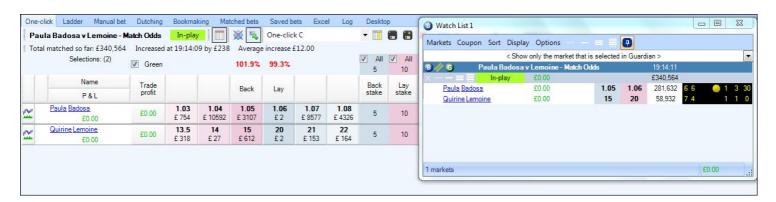
Show Only the Market that is Selected in Guardian

Similar to the event options above but this only displays the market that you currently have selected in Guardian on the watch list, this can be especially handy on Tennis markets if you quickly want to flick through the markets in Guardian and see the live scores for a match.



Show Only the Market that is Selected on the Main Screen

As above but shows only the market currently on your main trading screen, this again is useful if trading tennis markets and to see the live scores as soon as you open a market.



Show Only the Market that is Under the Mouse Cursor

If you have multiple markets spawned in new ladder or one-click screens as you hover your mouse cursor over each one that market will be displayed in your watch list.

Summary

Using watch lists you can:

- Easily view all or a subset of the markets in Guardian
- · Customise the display to show the prices you need, sorted in the order you require
- · Spawn up to five different watch lists to group markets together
- Quickly update prices by hovering the mouse over the market
- Switch the Bet Angel trading screen to a chosen market with a single click
- Go directly to the One-click screen or the Ladder or even spawn a seperate Ladder window.
- Instantly switch the Ladder display to a chosen selection
- · Quickly scan important markets
- · Easily green up any market in the watch list with a single click
- View Live Tennis scores (when available for a market)
- View alerts next to a market or selection at critical moments within a match or race.

Guardian - Coupons

Coupons combine the <u>Market Filtering</u> with the <u>Watch Lists</u> to enable you to easily find a whole group of markets that you wish to trade, add them to Guardian, and display them in a Watch List style Coupon in your preferred format - and all this can be done with just ONE push of a key!

Once defined your coupon can be used again and again to quickly setup a whole days trading with no effort whatsoever. They are perfect for multi-market trading and are especially useful for Soccer traders that need to monitor multiple matches (and their various markets) concurrently.

Coupons are fully customizable and you can create and save as many as you require, then in just a few clicks or push of a key its possible to find and load a whole group of markets displayed in the way you want.

Below are just a few examples of how coupons can be configured to look. Imagine each day you fire up Bet Angel, open Guardian, then want to see all today's English Premier league fixtures with your specified markets for each like Match Odds, Next Goal, Over/Under, Correct Score etc - **one** push of a key and they are instantly found, loaded and displayed as you see below (or however else you want to configure your coupon).

This first Coupon has four panels (vertical panes) each displaying a Premier league fixture with their related markets listed below (in an order you chose). The event pick list at the top of each panel is used to select which match is displayed below it, depending on screen space and what you want to see you can add or remove panels to suit your requirements.



In this next example the markets for each fixture now appear horizontally across the coupon with 2-3 related markets displayed in each panel. There are options within the <u>Coupon Editor</u> so that you can apply 'Padding' so each new event lines up across the panels, if you look at the Huesca Vs Barcelona fixture you'll see they all line up perfectly when they start, as does the Man Utd Vs West Ham fixture.

Although there are only three fixtures in view you can see from the scroll bars there are plenty more loaded in this coupon. Another option within the Coupon Editor is the ability to link scroll bars so that when any one of them is moved all panels will scroll up or down in sync.



The third example is a sort of hybrid of the above two layouts, its showing just one fixture with related markets spread out over three panels (in whatever order you want them), using the pick list above the primary panel you can quickly switch between all other fixtures.



Never Miss an Opportunity

Just as when using a Watch List it is also possible to display Alerts on a Coupon, so if you have a rules file running in the background monitoring for things like goals, prices to be reached, a sudden change in volume etc once your

criteria is met an alert will go off next to that market or selection (even if its not in view it can auto scroll to that market/selection or maximize the coupon from your taskbar), so you never miss an opportunity when or if they arise no matter how many markets you are monitoring.

Updating Markets

When using Coupons we recommend that you use 'Exchange Streaming' when retrieving market information and price updates from Betfair, this will enable you to fetch the latest prices, volumes traded and scores etc as fast as 50 times every second. Although a watch list will update each visible market in turn, at that rapid refresh rate you'll be able to keep all displayed markets up to date.

Streaming can be enabled from the **Communications** area of your main settings.

NB; When streaming markets there is a restriction to 1000 imposed by Betfair so please ensure you keep an eye on your total market by either looking at the number on the 'Markets' column header in Guardian or in the bottom left corner of your coupon/s.

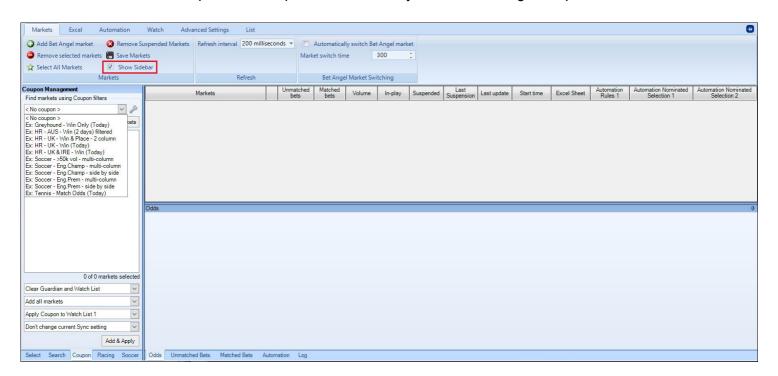
Coupons

To access the Coupon page and select a coupon, first open Guardian and tick the 'Show Sidebar' window, then select the 'Coupon' tab from the bottom of the sidebar.

When you first install Bet Angel it will already contain several example coupons in the coupon pick list ready for you to start using straight away, these are all denoted with the prefix 'Ex:'

In addition to the pre-installed coupons you can also create and save as many of your own coupons as required (or edit any of the pre-installed ones) using the <u>Coupon Editor</u>.

The editor is launched by clicking on the \mathbb{Y} icon next to the pick list, the following couple of pages of this guide will show how to do this and explain all the options available to you when creating a coupon.



Before looking at the coupon editor and creating your own customized coupons let's first look at how to use.

Applying and Using a Coupon

Once you select the coupon that you want to use from the coupon pick list, Bet Angel will find and display the markets fitting the coupon's filter criteria in the lower window.

You can see in the image below the coupon selected has found 33 markets which fit its criteria.



Below that window are four pick lists which you can use to configure how the markets are then added and applied to Guardian and the Coupon. Which you choose will depend a lot on whether you intend to give Guardian a secondary task (such as running Automation on different markets) or whether you wish to display multiple coupons at once.

Loading Pick Lists

The first option is whether to 'Clear any existing markets you have in Guardian and Watch List', 'Clear markets in Guardian only', or 'Don't Clear'.

If you only intend adding and using one coupon at a time the best option would likely be to 'Clear any existing markets you have in Guardian and Watch List' this way you won't have unwanted markets in Guardian or Watch List from a previous session.

However if you intend loading more than one coupon and perhaps want to run automation on the markets loaded from the two coupons you'd then need to use 'Don't Clear' so the markets from the first coupon still remain in Guardian.

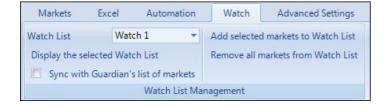
The second pick list option is to specify if all the markets you see in the window above are to be added to a coupon or if you'd like to manually select from those markets which will be added to a coupon.

Or you can choose to 'Add Selected Markets Only (select in Guardian)' or 'Add all Markets (select in Guardian)' these options will pre-select the markets as they are added to Guardian which makes it easier to add Automation Rules to only those markets (whether by keyboard short cut or via the Guardian header menu)



The third pick list allows you to specify which Watch List (1 to 5) you want to apply your coupon to. It's therefore possible to display up to 5 different coupons each having found and loaded their own markets each in there own Watch List.

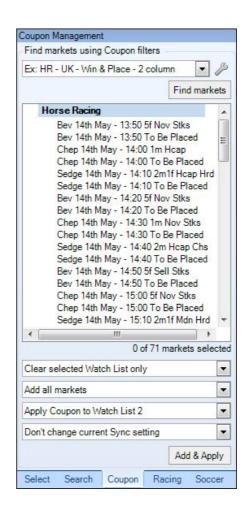
The last pick list option lets you specify a sync option, this allows you to either override, use or ignore the current 'Sync with Guardians List of Markets' option on the 'Watch' tab on the main Guardian banner.



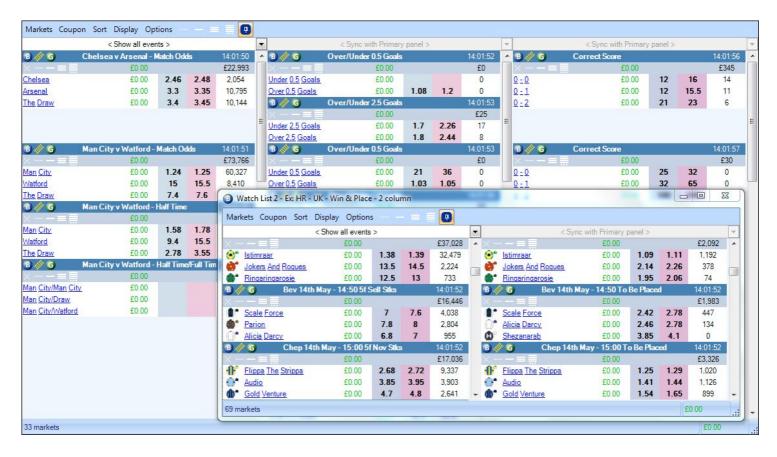
In the image below left the coupon 'Ex Soccer >50k Vol Multi Column' has been selected, notice in the bottom pick lists I've used 'Clear Guardian and Watch List' added all 33 markets and 'Applied the Coupon to Watch List 1'

In the image below right the coupon 'Ex HR-UK Win & Place - 2 Column' has been selected, this time in the bottom pick lists I've used 'Clear Selected Watch List Only' (So the markets for the first coupon will remain in Guardian's list and these will be added to but it will clear Watch List 2 to ensure there are no left over forgotten from a earlier session still lingering), all 71 markets are then added and 'Applied to a Coupon in Watch List 2'





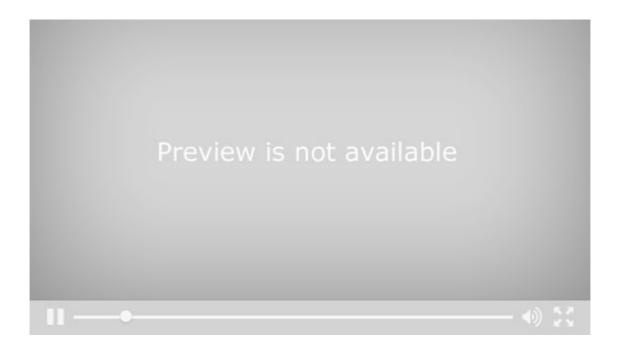
We now have 2 sets of markets loaded in to Guardian (one for football and one for racing) each in there own coupon in 2 different Watch Lists, these can then be positioned anywhere on your screen or minimized to your taskbar until required.



Once markets have been applied to a Coupon and Watch List even if they are removed from Guardian they can still be refreshed using your 'Background' refresh rate which can be set in the <u>communications</u> area of your main settings.

To see a detailed example of using coupons to monitor multiple markets please see this Blog

Video Tutorial



Coupon Editor

The coupon editor is used to setup and configure your own customized coupons, when creating a coupon you have full control of the markets it finds and loads as well as how they are displayed and what information is displayed with them.

There are three area's to the Coupon Editor 'Filters', 'Panels', and 'Settings' which are covered in detail on the next three pages.

Coupon Filter

The first step when creating a coupon is to configure a filter to find the markets you wish to have displayed in your coupon. The 'Filter' page here is exactly the same as the one used for the main market filter, even allowing you to specify multiple Filter Sets to find the exact markets that you wish to add to your Coupon.

If you're not already familiar with using the market filter please see the <u>Market Filter Editor</u> page of this user guide for full details



Once you have selected your filter criteria the next tab of the editor will allow you to configure the panels of your coupon, this is where you can specify how your markets are displayed, in what order and what information is shown etc.

Coupon Panels

The 'Panel' page is where you can configure how your coupon's panels will be displayed. A panel is a vertical pane within the coupon which will be displayed side by side. You can add as many as you wish. Each individual panel can be fully customised to control which markets are displayed in it and the sort order used etc.

When required each vertical panel has its own scroll bar so each can be scrolled independently. If needed the scroll bar usage can be linked together so that having moved one scroll bar, the others will move to keep the panel displays in sync (keeping all events aligned).

Market Title Style

Beginning with a 'Primary Panel' (the first panel on the left) your first option is to choose the market title style you wish to use for markets in this panel.



In the next two images you can see how the first two options would look, the third of course shows only the market name.

Event Name - Market Name



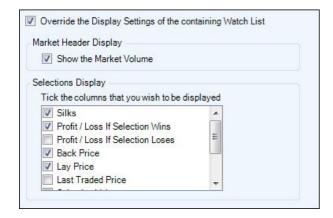
Market Name - Event Name



Override Display Settings of Watch List

This setting is handy if you trade various different sports and/or already use Watch Lists and have your display options already set up, here you can configure the coupon panel to ignore the watch list's own settings and use ones you specify in this coupon design.

For example; if creating a Football coupon you're unlikely to want the 'Silks' or 'Tennis Scores' columns displayed so it would make sense to use 'Override Display Settings of Watch List' and deselect those columns, so that they are hidden any time this coupon is used.



Override the Markets Sort in Watch List

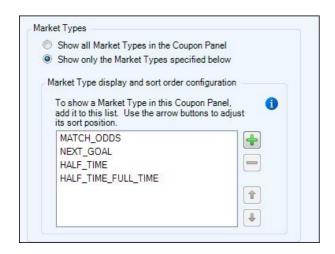
Similar to the option above, if you already use Watch Lists and have the markets sorted and saved in a particular way, this option will let you override those settings for this coupon panel only and allow you to specify a Primary, Secondary, and Tertiary sort.



Market Types

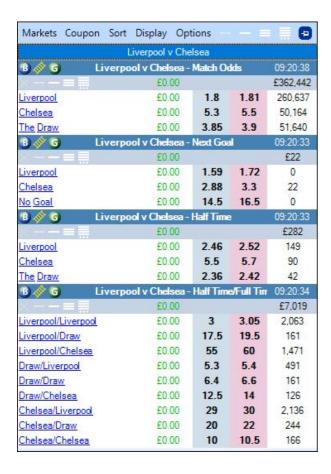
Here you can choose to show all market types in a panel (which would be very similar to an existing regular Watch

List), or you can specify exactly which markets you do want to display in the panel by clicking the icon, a window will then open (shown below right) listing the market types which fitted your filter criteria, from here you can tick the ones you would like to display in this panel of your coupon.





If you want to change the order those market types appear, just select one to highlight it then use the 'up' & 'down' arrow icons to change its position relative to others. In the image below you can see how these four markets will then appear in the primary panel on your coupon.



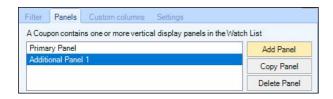
Override Sort Order of Watch List

The final option lets you override any existing selection sort order you may have saved on your Watch List, in the image below I've chosen to do this and to sort the selections in the markets in this panel in order of favouritism



Additional Panels

Once you have finished configuring your Primary panel the next step is to return to the top and click 'Add Panel' and repeat those steps until you have set up all the panels (vertical panes) you need for this coupon.

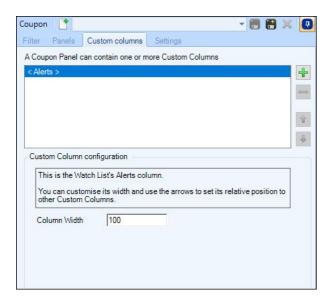


Or if most of the settings used on your Primary panel will getting used on your Additional Panel use the 'Copy Panel' button and then make whatever small edits are required, this may just be a case of changing what market types appear in the new panel.

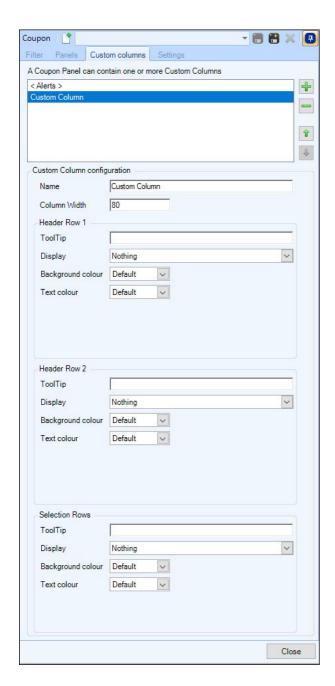
Coupon Custom Columns

The 'Custom Column' page allows you to add your own custom columns to your coupon to display bespoke information, this includes displaying preset information for the market and selections, <u>Stored Values</u> and <u>History Lists</u> or your own Entered Text.

When you open the Custom Column tab the first option you'll see allows you to set the width used for your Alert column, the Alerts themselves are configured using the <u>Parameters</u> tab of the rules editor when an 'Alert' rule type is used.

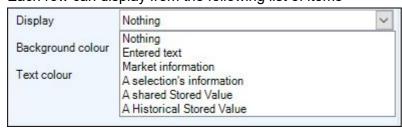


To begin adding your own custom columns to display in your coupon click the icon to the right of the upper window, the lower half of the window will then display the options available for configuring the custom column, you can add as many columns to a coupon as you need. As you add them you can change the order that they appear in the coupon using the up/down green 'arrow' icons at the side of the window.



A custom column has three sections, each of which can be individually configured: the top header row of the watch list for the market, the second header row, and the block of rows representing the selections in the market.

Each row can display from the following list of items



Entered Text - Input your own static text

Market Information - Choose from a preset list of available market information. For example, book%, number of selections, number of matched/unmatched bets, number of selections etc

Selection Information - Choose from a preset list of information about a specific selection. For example, Jockey name, Trainer name, Selections name, form, age, weight, headgear, SP, VWAP, etc

If you chose a selection 'by position' you'll be given the option of choosing which sort order will be used by this column, this allows for different columns to use different criteria for sorting which are also decoupled from the main sort used by rules for Servants and Automation.

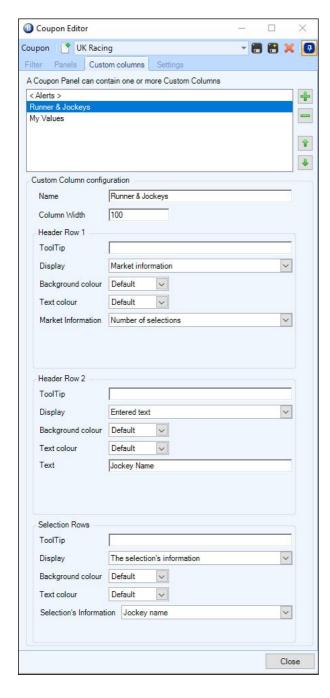
Also when using this option on a header row, you will also need to specific as to which selection's information you want to see.

A Shared Stored Value - Display a Shared Stored Value set by an automation rule or servant rule A Historical Stored Value - Display a value held in a History List set by an automation rule.

The final option you have for each row is to choose a background and/or text colour, here you can use the default colours, a fixed colour or use a <u>Value Based Colour Settings</u> file you have saved

Example

In the images below I've created two custom columns, the first (on the left) will display some market and selection information in the Header row 1 and Selection Rows, the second column (shown on the right) will display some Shared Stored Values from a rules file in Header row 2 and the selection rows.





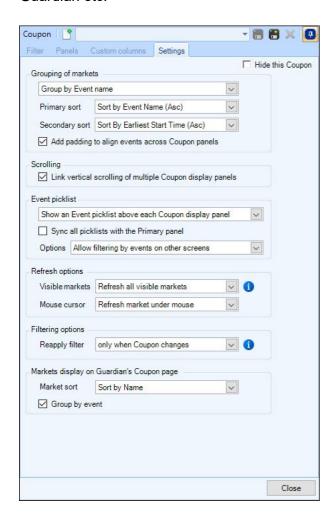
In the final image below you can then see how these custom columns would appear when this coupon is used



NB, When using multiple panels in the coupon, the choice of which of the defined custom columns to display can be made on a panel by panel basis

Coupon Settings

The 'Settings' page lets you configure: how your markets will be grouped together in your coupon, if the scrolling should be linked, whether to show the Event pick list, the refresh options to be used, how frequently the coupon filter should be reapplied to the Watch List's markets, and how the results of the filters should be displayed in Guardian etc.



Grouping of Markets

Here you can specify if and how you want to Group your Markets, you will then be given the choice of using a Primary and Secondary sort so that your markets appear exactly how you want them. (Primary sort taking priority over Secondary)

Padding

If you choose to 'Group' markets in some way you will also be able to add 'Padding', this ensures that each new Event always starts aligned across the full width of the coupon.

In the image below, 'Padding' has been added; you can see the gap it has created in the Primary panel after the last Stuttgart V Hoffenheim market so that the Swansea V Man City markets all begin in line.



Scrolling

When ticked this will link (lock) all scroll bars so that on a multi-panel coupon, no matter which scroll bar is used all panels will scroll up and down to stay in-sync.

Event Pick List

The event pick list is the area above each panel where '<Show all Events>' is displayed, you can chose to inherit your current watch list settings or 'show' or 'hide' this above each panel.

If you chose to show you will then be given the option to sync all pick lists with the primary panel - this means that when you select an event in the primary panel, that event will be shown in all the others - without the need to individually select it in each. This makes switching between different events possible with just one click no matter how many panels are being used.



Refresh Options

There are three options for how the Watch List should refresh the markets currently visible in the Coupon and the market currently under mouse cursor.

When 'Refresh all Visible Markets' or 'Markets Under Mouse' is used, the rate at which they are updated (in a cycle) will depend on the background refresh rate that you have chosen in the <u>communications</u> area of the Bet Angel Settings.

Filtering Options

By opting to use reapply the filter at set intervals, you can have the coupon automatically remove markets which no longer fit your filter criteria.

For example, if you used 'Reapply Filter every 10 seconds' then every 10 seconds all markets in a coupon would be checked to see if they still met your original filter criteria and if not they would be removed. So if your coupon filter was configured to display football markets that had not kicked off, then once they kick-off (and therefore turn inplay) they would be filtered out as soon as the filter is next reapplied - in this case, automatically within ten seconds of them going in-play.

However if you wanted the coupon filter to find and add football markets that have not yet kicked off with the intention of continuing to trade them in-play, then you would use the filter option 'Reapply only when coupon changes' and the markets would remain in your coupon until you specifically removed them or until you manually ran the filter again.

Once you have finished configuring your settings the last task is to save the coupon by clicking the 🛅 icon in the top right corner of the editor and give it a name.

It will now be available in your coupon pick list ready for to use.

To see a detailed step-by-step example of configuring a filter please see this Blog

Advanced automation (Triggered betting)

Advanced automation is a great way to **automate some or all** of your betting or trading activity in a sports market.

You can get the automation triggers in Bet Angel to enter a trade, exit a trade or execute complete trades fully automatically all day long! Perhaps you have a job and do not have time during the day to bet or trade or perhaps you have a strategy that requires fast reactions to a price move, either way automation is a good way to approach it.

Automation is simple, you simply create a rule to suit your needs. The rule is controlled by the use of simple commands based on logical instructions. You can decide when you want it to trigger and how often.

When you use automation, you create a named file for your rules. The file can include specific rules to open a position, close a position or hedge (to name just a few). You can put many rules into one file for use with any market that you choose in Guardian.

The simplest way to explain advanced automation is to <u>create a rule</u>.

Getting started

The best way to create your first rule is to write it down in a series of logical steps.

Imagine we want the software to back a horse only if it trades at 1.3 in-play. We normally cannot place a bet until it reaches 1.3 because the exchange will always match the back bet at the highest odds on offer at the time of placement. The theory that we want to test is 'does a horse backed at 1.3 win a race often enough to cover the stakes used when it loses?'. To test the theory we need to run the experiment on dozens of races in a consistent manner. Automation is perfect for this, so let's use this as an example of how to create an Automation rule.

Requirements: Back a horse in-play if the horse is priced at 1.3 but only back ONE horse at this price.

Note: We want to back only one horse at this price as the payout from the winner would not be enough to cover the cost of two back bets on different horses.

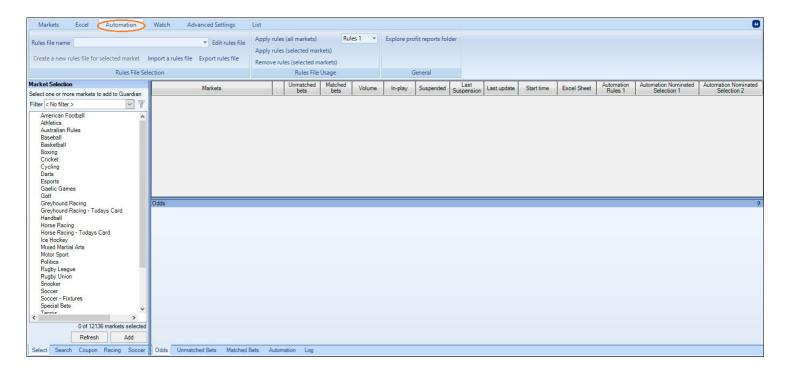
You can see this requirement is about as simple as we can make it. The theory that we want to test is that we believe a horse at 1.3 has a good chance of winning the race, so back it. Let's setup our first rule and then we can test it.

TIP: When you start with a new automation rule it is advisable to use practice mode. The rule will require testing and mistakes could cost money in a live market. However please be careful about excessive use of practice mode as this can lead to Betfair placing restrictions on your account. Try to place some live bets with your account every day to avoid restriction.

Our first automation rule

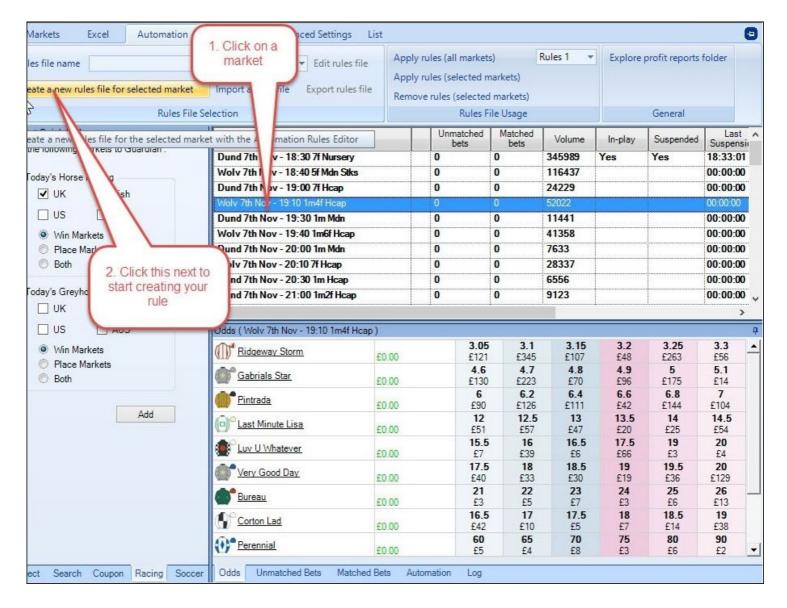
Creating a simple rules file

The Advanced Automation is a feature of Guardian in Bet Angel Professional. When you first open Guardian you will notice all options apart from "Import a rules files" are unavailable, see screenshot below. This is normal; we need to choose some markets for Guardian's markets list.



Market selection

With Guardian open, select and load the markets that you wish to use into the market list (perhaps using Quick Picks). You can see in the screenshot below that today's UK races have been loaded and an evening race at Wolverhampton has been selected.

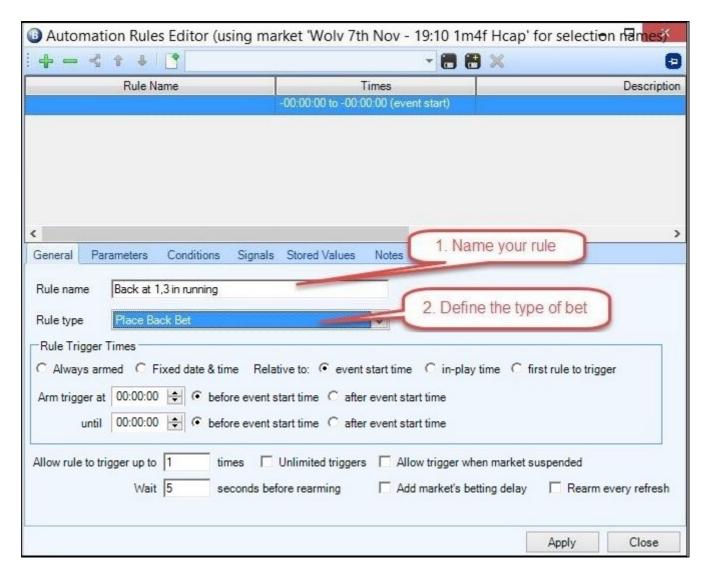


You can see the option to create a rule is now available, so click that to create the automation rule.

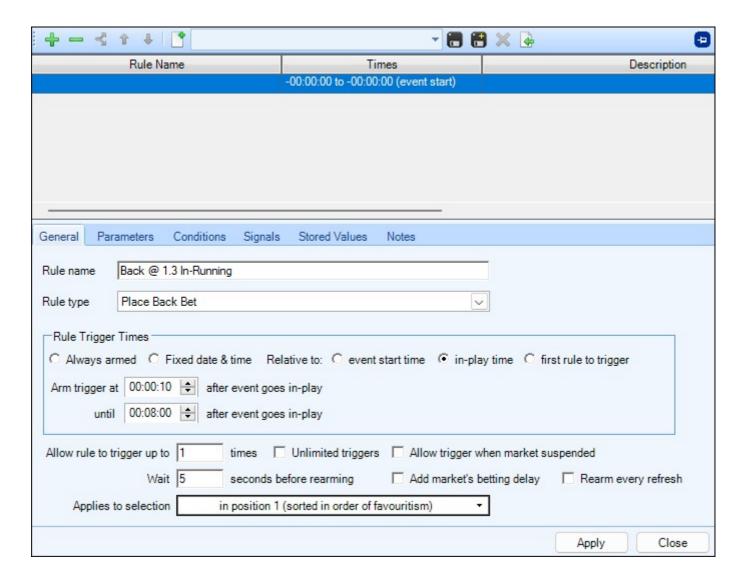
Creating an automation rule

For our scenario, our rules file just need a single rule.

The rule must be given a name so I have chosen 'Back at 1.3 in running.' Because we are backing I have defined the 'Rule type' as 'Place Back Bet'



We must now tell Bet Angel when to arm and disarm the trigger. This is an in-play bet so we select 'relative to in-play time'. You will see from the screenshot below that the trigger is set to arm at 00:00:10 and the disarm at 00:08:00. We wait for the ten seconds in-play before arming to allow the prices to settle after the off and the 8 minute duration should cover all but the longest of races. You can amend these times as you see fit. You will also see the rule is set to trigger once only as backing two horses at these low prices guarantees a loss. The option 'Applies to selection' has been set to 'in Position 1 (sorted in order of favouritism)' - Bet Angel will constantly sort the selections based on their price so the lowest priced horse will be in position 1 and that is the horse we want to place the back bet on.



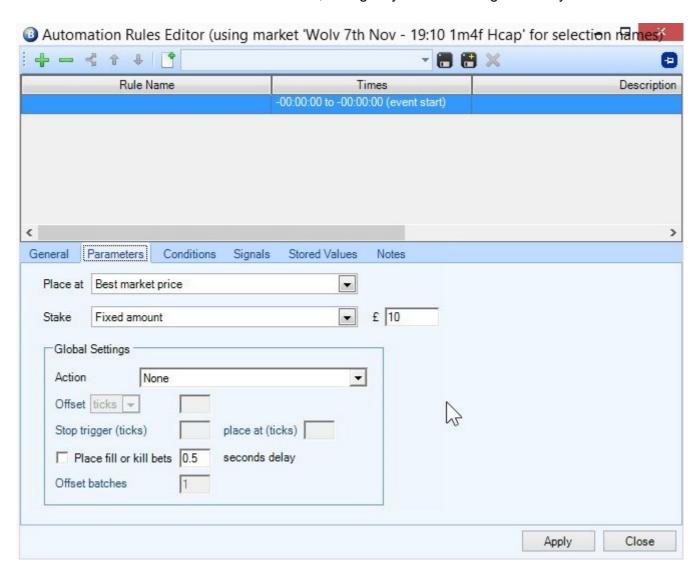
NB, The width of the columns in the top window of the editor can be resized by pointing your mouse cursor between the columns until your cursor icon changes, then with your left mouse button held in you can drag the columns to your desired width.

Parameters

The next step is to set the parameters of our rule, this is where we set our price and stake.

The screenshot shows that the bet will be placed at 'Best market price'. This is because the in-play market moves very quickly and Betfair impose a 1 second delay when placing an in-play bet, the price you request can often be gone. By selecting best market price Bet Angel will take just that, the best price on offer at that moment. There are other placing options available, so you can decide to ask for different price depending on how you wish to adjust to trigger.

The stake has been set to the 'Fixed amount' of £10, but again you could change that as you see fit.



Conditions

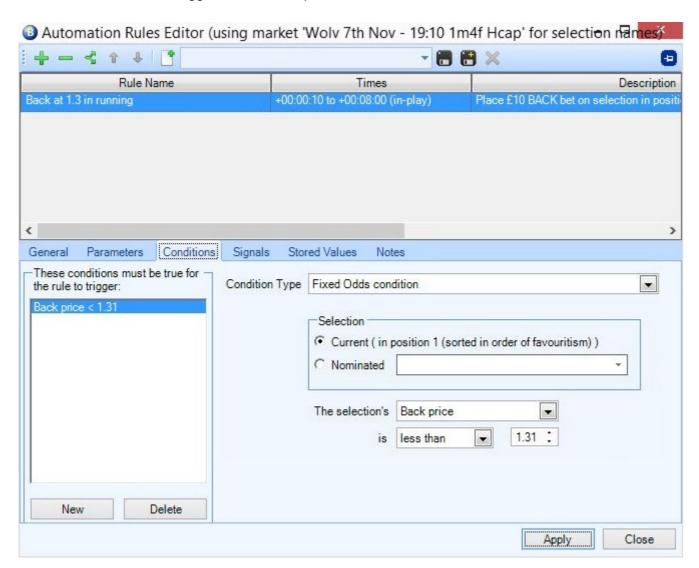
Next a condition needs to be added to the rule, so that Bet Angel knows when to trigger the bet. You can add many conditions to a rule, each one MUST be satisfied (i.e. test as TRUE) for the rule to trigger. A full reference can be found here.

For our scenario, we want the rule to look at the price of the favourite and only trigger if the price is 1.3 or less.

So the 'Condition Type' is set to 'Fixed Odds Condition' and it is set to apply it to the Current Selection as defined on General page. Remember that was set to be the favourite of the race at the moment of trigger. See here.

The rest of the parameters define that we wish to look at the selection's 'Back Price' and to check that it is 'less than' the price of '1.31'.

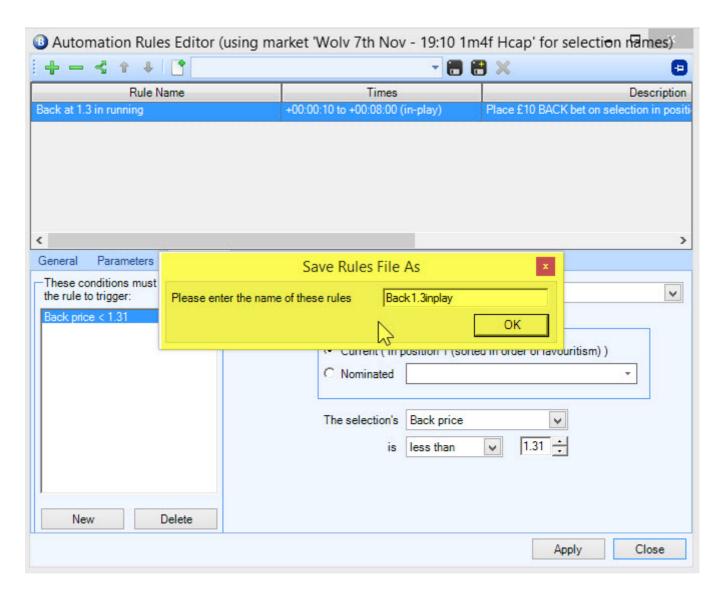
Basically we are saying to Bet Angel, "please monitor the in running prices and if the back price of the runner in Position 1 trades below 1.31, trigger our rule and place the back bet".



The rule is complete, so now it's time to save it.

Saving a rules file

Click on the disk icon and then give your rules file a name.

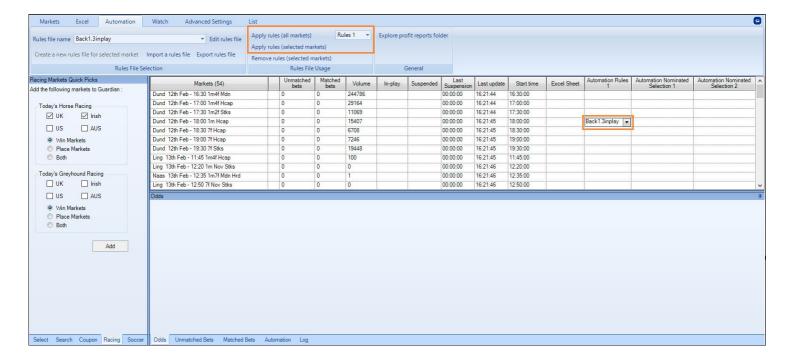


TIP: If you attempt to leave a rule without saving it or without saving any modifications, Bet Angel will prompt you to save it.

Using & Removing your rules

The automation rules file is finished, so now you can apply it to all markets in Guardian's markets list using the 'Apply rules (all markets)' link or to only apply it to selected markets with your 'CTRL' key depressed select the markets in the market list window, these will then be highlighted in blue. Once you've finished selecting them you can click on the 'Apply rules (selected markets)' link to apply the rules file to those market.

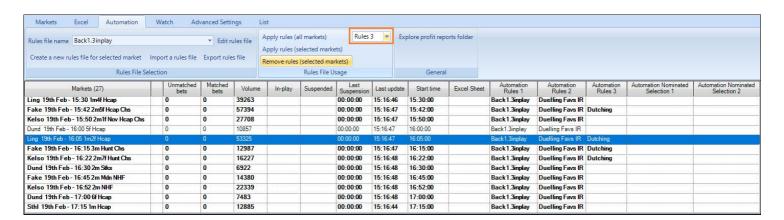
Another way you can apply rules files to individual markets is to select it in the 'Automation Rules' column, in the image below only the Automation Rules 1' column is visible, but you can add additional columns to your market list display from the '<u>Lists</u>' tab and apply up to 5 rules files to each market.



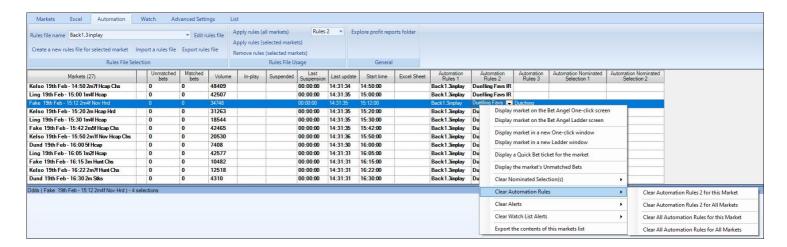
Use this simple rule as the basic building block for future rules. The complexity is only really limited by your imagination, but please ensure you fully test your rules in Practice mode to ensure they function as you intended, before using them in a Live market.

Removing Rules

To remove a rules file is just the reverse of applying them, you can select the market/s in the main list then choose the rules column you want to remove it from on the main ribbon, then click the 'Remove rules (Selected Markets)' link to remove the rules in that column from the selected markets.



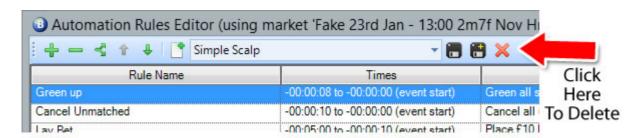
Or if you have multiple automation rules columns and are using several rules files you can select a market and right-click in the rules file column you want to remove a rule/s from, a menu will then appear where you can choose to clear the rule file in that column for a single market, all the markets or clear all rules for that market or clear all rules for all markets



Deleting A Rules File

To delete a rules file follow these steps:

- 1. In Guardian, select the 'Rules file name' that you wish to delete from the pick list on the Automation header page.
- 2. Click on 'Edit rules file' to open the Automation Rules Editor
- 3. Click on the red 'X' to delete the file.



Import and Export Rules File

Once you have created a rules file, you can share this with others by exporting the file.

In Guardian switch to the Automation tab and select the Rules file that you wish to export and then click 'Export Rules File'. A save window will appear allowing you to choose the destination for the file.

If you have downloaded a rules file, you can import it clicking on 'Import a rules file'. This will display a file selection window, just navigate to your downloaded file and click Open. The new rules file will be added to the pick list in Guardian and you can then edit it or apply it to markets as required.



From the Servant Manager go to the Control tab and select the Rules file you wish to export, then click Rules 'Export Rules File', the save window will appear allowing you to choose the destination for the file.

If you have downloaded a rules file, you can import it clicking on rules then 'Import a rules file'. This will display a file selection window, just navigate to your downloaded file and click Open. The new rules file will be added to the rules file list and you can then edit it or apply it to markets as required.



Examples

The Shared Files section on our <u>forum</u> contains around 200 ready-made automation template files for all major sports which you can download and import into your Bet Angel.

Using Signals

In its simplest form, a signal allows one Automation rule to control the behavior of another. E.g. Only green up if the Place Bet rule has triggered three times, or only place a bet on the Away team if a bet hasn't already been placed on the Home team.

Working together, a group of signals can produce a complex set of betting logic that was previously only possible using Excel macros.

A signal is a named value that can be applied to a selection or the market as a whole. Each rule can, optionally, set/clear/modify one signal for a selection and one for the market.

You can create as many named signals as you wish in the rules file and use any number of them in the Automation Conditions section to control the activation of other rules.

Signals are initialised with the integer value of your choosing and if required can be increased & decreased on each trigger. In this way it is very easy to create trigger counters for a rule (or for multiple rules working together).

You can attach a signal to an existing Rule Type (so that they are set when Place back bet, Place lay bet, Cancel unmatched bets, or Green all selections etc are triggered).

Alternatively you can create a rule specifically to manipulate a signal (using the Set / Modify a Signal Only rule type) when your specific automation conditions are met.

Automation conditions exist to specifically test for the presence or absence of a named Signal and to test if a signal value is equal, greater or less than your specified amount. You can even test when a signal value changed.

Example

If you have a back bet rule that triggers once its conditions are met, you can now also choose to set a named signal when it triggers (for this example we'll call it "BACKED")

You also have a lay bet rule that triggers when its own conditions are met, but now one of these conditions can be a 'Signal Set Condition' defined to look for the presence of the "BACKED" signal - this will mean that in addition to its other conditions the lay bet can only trigger after the back bet has been triggered and the "BACKED" signal has been set.

In other words, signalling has allowed you to control that the lay bet can only trigger AFTER the back bet has been placed.

More examples of what Signal's can be used for

- Control the order that rules are triggered into the market.
- Delay the placements of bets once conditions are met (including tennis scorelines).
- Ensure a selection has traded above or below X odds for a period of time before triggering a rule.
- Check that the number of ticks between one selection and another remains over or under X amount of ticks and/or for a period of time.
- Close a position based on the time the position was opened rather than at a fixed point in time.
- Only close a position if a profit or loss amount has been exceeded for more than X seconds.
- Cancel unmatched offset bets after X seconds.

- Trigger bets based on the value of matched or unmatched bets in the markets.
- Check that one or more selection has traded above or below X odds and/or within a period of time.
- Create two mutually exclusive sets of rules in the same rule file (the first rule to trigger sets a signal that prevents the other set of rules from ever triggering).
- Prevent bets being triggered in certain situations that other automation conditions cannot manage.

Using Stored Values

Stored Values work in a similar way to the 'Signals' explained on the previous page and are very much an expansion to this existing feature, although they can also be used on their own and totally independent should you wish. However, when combined the possibilities and flexibility they bring when creating automation rules and servants are endless.

Just like when using 'Signals' you would first give each 'Stored Value' a unique name of your choice, but then rather than you specifying your own value or automatically having its value incremented or decremented etc upon each trigger 'Stored Values' lets you record things like the back, lay, last traded prices or volume etc of a selection, which can then be used as a condition/s for other rules to test.

For example you may want to continually store the current back price of the favourite every second, then if it suddenly trades more than 10 ticks above or below the previous Stored Value have another rule trigger a bet or trade into the market.

Also just like signals you can set a 'Stored Value' when an existing rule triggers (ie, when you Place a back or lay bet, cancel unmatched bets, or Green all selections etc).

Or you can create a rule specifically to store a value at a specific time by using the 'Set / Modify Stored Value Only' rule type which you can then add conditions too if you wish (ie, store value of the fav's back price 30secs after going in-play if its traded volume is greater then £X)

Sharing Stored Values

Stored Values are unique in that they can also be 'Shared' with other automation files and servants, le, a servant could store a value of something pre-race then later a rule within a guardian automation file could check for that stored value as part of an in-running strategy and trigger bets accordingly. From a programming point of view, this is a 'Global' variable, but as such needs to be used with a bit of care, consider what is responsible for initialising the Shared value – you might want a dedicated Servant to initialise/reset a value that will be used by multiple Servants thereafter.

Shared stored values can also be displayed on your one-click screen as information in a <u>custom column</u>, so you could create a rule to continually store the current back price of each selection every minute in the run up to the off and have each displayed on your one-click screen in a custom column, giving you a brief historical overview of how the price of a selection is moving as the off approaches.

Another unique and key advantage of using 'Stored Values' is for the first time you can now trigger rules in one market of an event based on something that has happened in another market of that <u>event</u>. Ie, you could trigger a bet/trade on the Correct score market of a football match using a stored value from the match odds market, or you might want to trigger a bet/trade on the place market of a horse race from something that has happened in the win market. This will allow you to produce not just interconnected rules but also complex strategies interconnected across markets but in a user friendly way that was previously only possible to those with VBA programming skills able to using Excel.

Our forum contains many worked examples of ways you can use Stored Values as well as some ready-made automation files and servants which can can be downloaded from the following links.

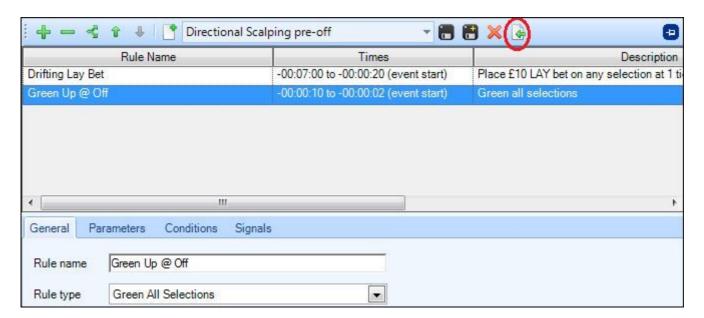
Servants
Automation Files

Copying Rules Between Files

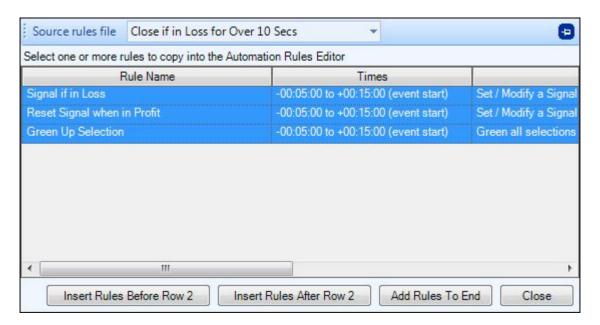
As you begin to build up your collection of Automation files you may find you have some rules which you favour which have become tried and tested and served you well. Or you may have downloaded one or more of the example automation files from the <u>shared files</u> section on our forum and want to take some of the rules (and it's parameters and conditions) from one file and add them to another.

Rather than manually retyping them you can save a lot of time and possible mistakes by using the rule copy feature within the rules editor.

Start by clicking on 'Edit Rules File' on the main Guardian banner then select the automation file you wish to add the copied rules to and click the top right icon shown in the image below.



A second window will then open for you to select the source file containing the rule/s you want to copy, once you have highlighted the rule types you want use one of the bottom buttons to copy into to your destination file.



Automation Reference

The intention of this reference is to give a brief explanation of each of the settings in the Automation Rules Editor:

Rule Types
Trigger Times
Applying Rules to a Selection
Parameters
Conditions
Signals

For examples of how to use Automation see the following pages:

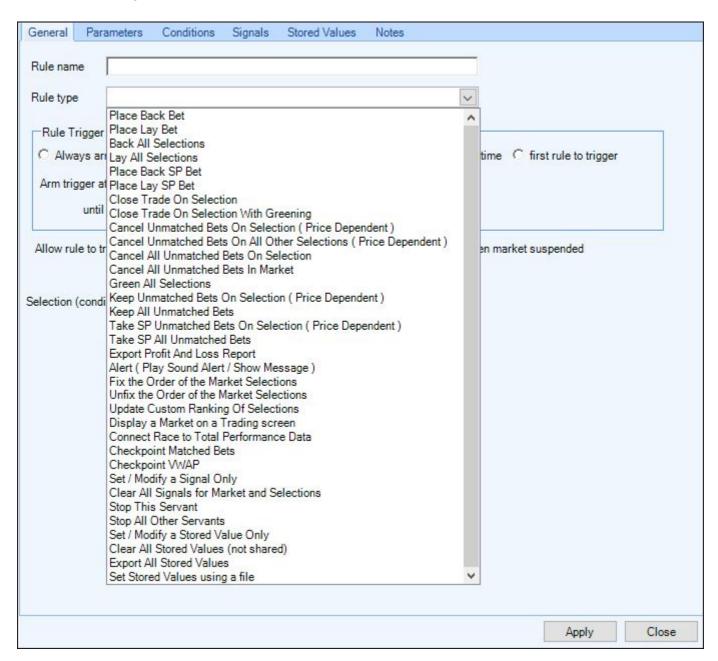
Getting Started

Example Rules

Generic Rules with selections chosen in Guardian

Rule Types

Set the Rule Type to tell the automation rule what to do when the trigger time limits and rule conditions are satisfied. As you can see from the screenshot below, you can use automation rules to place bets, close trades, green up the market, manage unmatched bets etc.



Explanation of each Rule type:

Place Back Bet - Place a back bet on the chosen selection (price & staking as specified on the <u>Parameters</u> page). For an example see <u>Creating an automation rule</u>

Place Lay Bet - Place a lay bet on the chosen selection (price & staking as specified on the Parameters page).

Back All Selections - Place a back bet on every selection in the market (price & staking as specified on the <u>Parameters</u> page).

Lay All Selections - Place a lay bet on every selection in the market (price & staking as specified on the <u>Parameters</u> page).

Place Back SP Bet - Place a back bet into the market to be matched at SP (limits for your SP bet can be specified on the <u>Parameters</u> page)**

Place Lay SP Bet - Place a lay bet into the market to be matched at SP (limits for your SP bet can be specified on the <u>Parameters</u> page)**

Close Trade On Selection - Uses the net position on the chosen selection to calculate the stake required to close the trade. When using this rule the <u>Parameters</u> tab will allow you specify where the close trade bet is to be placed at.

Close Trade On Selection With Greening - Uses the net position on the chosen selection to calculate the stake required to close the trade (and spread the profit/loss across all other selections). When using this rule the Parameters tab will allow you specify where the close trade bet is to be placed at.

Cancel All Unmatched Bets On Selection (Price Dependant) - This lets you cancel specific unmatched bets on a selection, for example cancel only on unmatched bets equal to, greater than or less than the odds specified, this option can also be used to can cancel just a selections unmatched back or lay bets. When this rule is used additional fields will become available on the 'Parameters' tab.

Cancel All Unmatched Bets On All Other Selections (Price Dependant) - Cancel bets on all the other selections in the market other than the one that the rule is applying to.

NB, on the <u>parameters</u> page, best price, best reverse price etc relates to the chosen selection of the rule and not the 'other' selection being cancelled. It is assumed the rule will mostly be used with a fixed price. e.g. 'cancel all other unmatched Back bets >= 1.01

Cancel All Unmatched Bets On Selection - Cancels all the unmatched bets in the market on the chosen selection.

Cancel All Unmatched Bets In Market - Cancels all the unmatched bets in the market (ALL selections).

Green All Selections - Uses the net positions on all of the selections in the market to calculate the stakes required to close the trades (and spread the profits/losses across all other selections) and places those bets at the current best market price. If all bets are matched, this will create a green book with the same payout on every selection. This is the equivalent of pressing the Trade Profit button for any selection on the one-click screen (with Green ticked), or pressing the Green All selections button in the toolbar of the Ladder.

*When using this rule you will have the option on the 'Parameters' tab to use the 'Current Market Price' OR the 'Current Reverse Market Price' For more details see this section of the user guide on 'Reverse Greening'.

Keep All Unmatched Bets On Selection (Price Dependant) - This lets you keep specific unmatched bets on a selection, for example keep only on unmatched bets equal to, greater than or less than the odds specified, or keep just a selections unmatched back or lay bets. When this rule is used additional fields will become available on the 'Parameters' tab.

Keep All Unmatched Bets - Marks all unmatched bets in the market as KEEP. i.e. All unmatched bets to be kept in the market during the transition from pre-off to in-play. See <u>Unmatched bets area</u> for more details about Keep All.

Take SP All Unmatched Bets On Selection (Price Dependant) - This lets you Take SP specific unmatched bets on a selection, for example take SP only on unmatched bets equal to, greater than or less than the odds specified, or take SP on just a selections unmatched back or lay bets. When this rule is used additional fields will become available on the 'Parameters' tab

Take SP All Unmatched Bets- Marks all unmatched bets in the market as TAKE SP. i.e. All unmatched bets to be matched at the Betfair Starting Price (when available) when the market turns in-play. See <u>Unmatched bets area</u> for more details about Take SP.

Export Profit And Loss Report - Saves a snapshot of the market profit and loss values at the time of the trigger. The values are appended to a date-stamped CSV format file (that can be read by Excel), so that one file per day

is produced. The folder containing the data files can be found by clicking the 'Explore profit reports folder' button at the top of Bet Angel Guardian in the 'Automation' tab.

Alert (Play Sound Alert / Show Message) - Plays a chosen sound file or display a pop up message, to alert you to a particular event occurring. Used in conjunction with the <u>Conditions</u> page, these alerts can be very useful and flexible

Once selected you can choose your sound file or add the message you want to appear on the 'Parameters' tab

Fix the Order of the Market Selections - Normally every time the market prices are updated, Bet Angel sorts them in order of favouritism ready for use with the 'by position' option of choosing a selection. This rule type stops the sort, so that the order of position by favouritism and Betfair row index is fixed from the point the rule is triggered onwards. This is very useful if you want to guarantee multiple rules (triggered seconds or minutes apart) are applied to the same runner or row index even if a horse is withdrawn or the order of favouritism changes thereafter. e.g. Lay whichever horse is the favourite ten minutes before a race starts and then keep laying the same horse every thirty seconds up to post time (even if its prices drifts and it becomes 2nd, 3rd or even 4th fav).

Unfix the Order of the Market Selections - This allows you to cancel a 'Fix the Order of the Market Selections' rule so Bet Angel can once again sort selections in order of favouritism. Following on from the example above you might want to 'unfix the order' at post time to be able to run a different strategy in-running which involves triggering bets on the current favourite (shortest priced runner) at the time the rule triggers.

Update Custom Rankings of Selections - This allows you to put selections in up to five custom rankings lists using a selection's price/value to determine its rank in the list. You can use the back price, lay price, last traded price, starting price, volume, a stored value or an historical stored value as the ranking criteria. When this rule is used additional fields will be available on the 'Parameters' tab to enter your criteria.

Display a Market on a Trading Screen - This allows you to display a market on your main trading screen or open a new or specific numbered ladder / one-click screen, the rule can switch the market its applied to or look up another market type from the same event in Guardian.

When this rule is used additional fields will be available on the 'Parameters' tab to enter your criteria

Connect Race to Total Performance Data - This will connect you to the live Total Performance Data (TPD) race data feed (*You will need an active TPD subscription to use this rule*)

Checkpoint Matched Bets - This is an advanced feature. It effectively resets the matched bets count and amounts used by the automation conditions. This is particularly useful for tennis markets where the same scenario can repeat many times.

e.g If a rule has been triggered and has left the market with 2 matched bets and £100 matched on both the back & lay side, applying this 'Checkpoint' will make the rule conditions think that there are 0 matched bets and £0 matched. Effectively allowing the same rule to run again with the same trigger criteria.

Checkpointing will not damage the Green All Selections calculations, so a clean exit of all positions is possible when required.

Checkpoint VWAP - This will reset the VWAP at the time the rule triggers, removing any traded volume from each selection in the market. Only new traded volume from that point onwards will be used to calculate the VWAP. NB, After resetting the VWAP it will be 0.0 immediately afterwards until the first bit of volume arrives, so it's worth waiting a few seconds before using VWAP in an Automation condition.

Set / Modify Signal Only - This would be used when you want to set or modify a signal based on its own rule trigger times and Automation conditions; when you don't want the signal change to occur due to the triggering of another rule (such as bet placement). The action of the Signal is set from the <u>Signal Tab</u> ie, you may want to set a signal when the odds of a selection are reached but without yet placing any bets into

ie, you may want to set a signal when the odds of a selection are reached but without yet placing any bets into the market or performing any other action.

Clear All Signals for Market & Selections - This allows you to quickly clear all signals currently set regardless of their name and value for the whole market.

*if you have set multiple signals with different names and values and wish to clear only signals with a certain name or value from either a selection or the market then you can use "Set / Modify a Signal Only" to perform this type of task.

Stop this Servant - This is for use on Servants only and when used will allow the Servant to stop itself. i.e. You could use Automation conditions to decide when the Servant should stop running rather than just have it based on time & trigger counts.

Stop All Other Servants - This will allow you stop all Servants you currently have running on a market, once this rule type is selected the parameters tab will let you specify if its to stop all Servants on a selection or market. Any guardian automation rules running on the market will be <u>unaffected</u> if this rule is triggered as will the Servant that triggers it, this makes it a useful rule particularly when part of a closing or greening up Servant to ensure other servants are not able to continue afterwards.

Set / Modify a Stop Stored Value Only - This can be used when you want to set or modify a Stored Value based on its own rule trigger times and Automation conditions; when you don't want the Stored Value change to occur due to the triggering of another rule (such as bet placement). The action of Storing a Value is set from the <u>Stored Value</u> Tab ie, you may want to set a signal when the odds of a selection are reached but without yet placing any bets into the market or performing any other action.

Clear all Stored Values (Shared) - This allows you to quickly clear all stored values (except those that are shared) regardless of their name and value.

If you have set multiple stored values with different names and wish to clear only ones with a certain name or a 'shared' stored value from either a selection or the market then you can use "Set / Modify a Stored Value Only" rule to perform this type of task.

Export All Stored Values - This aids the debugging of rules using stored values. It will export the current state of your Stored Values to a csv file and will allow you to see if values changed at the expected point in time. Depending on the options selected the most recent value held in each History List can also be exported, but it should be noted that it is not possible to export the entire contents of a History List. See this 'Parameters' page for export options.

Set Stored Value using a File - This allows the market to process a CSV file* and set one or more stored values (or shared stored values) on a selection, the Market or the Event. The stored value's name & value will be specified in the file itself along with four filter criteria that determine whether that row of the CSV is applicable to the market processing the file. The filter criteria can be one or more of the following: market name, time, selection name, selection row.

When using this rule the <u>Parameters</u> tab will allow you to browse for the CSV file and also check the file for errors before it is applied to a live market.

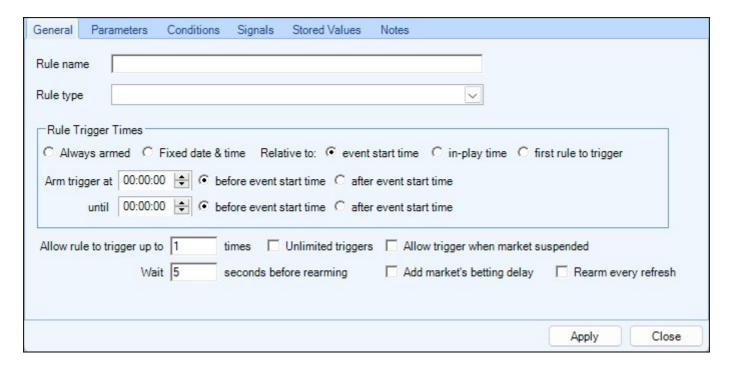
*an example CSV file can be found in the templates folder which highlights how to use the filter criteria

^{**} SP bets are considered by betfair to be matched as soon as they are placed and cannot be cancelled, so you should be familiar with their behaviour on the web site before using them.

Rule Trigger Times

All rules in Bet Angel have a start and end time that you must define; we refer to this as the 'time window' for the rule.

This 'time window' can be specified in terms of a fixed date & time (based on your PC's clock), or be relative to the advertised start time of an event, or be based on the time since Bet Angel was aware that the market was in-play.



Please be aware Bet Angel uses the time on your PC's clock for comparison so always ensure it is updated and correct.

A rule can only trigger if the time now falls inside your defined time window and then only if your rule's <u>conditions</u> are met.

It is important that you consider how frequently each market's prices will be refreshed and set the time window accordingly. There is no point in having a two second time window if the market is only being refreshed once every ten seconds as that risks the rule from never triggering at all. For more information, read about <u>market updates</u> and Guardian's refresh optimisations.

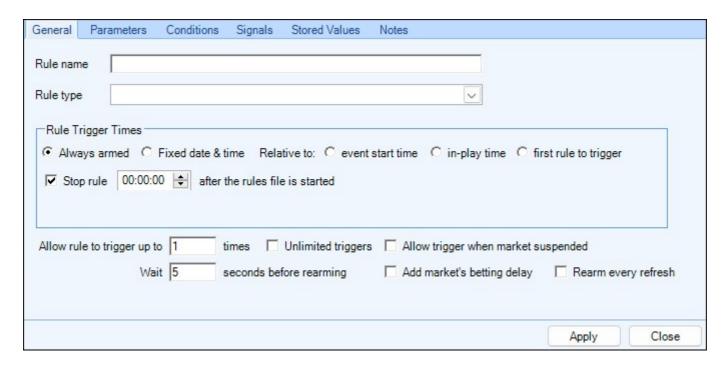
Care should also be taken when overlapping time windows. If you plan to automate betting for ten minutes before the start of an event and then Green All Selections, then ensure that the betting time window has finished before the Green All Selections starts

e.g. Place back and lay bets from '00:10:00 before event start time' to '00:00:15 before event start time' and then Green All Selections from '00:00:10 before event start time' to '00:00:00 before event start time'

Always Armed

This option allows you to always have a rule armed once applied to a market, for example if you have a green up rule which greens to a target profit or loss so you might want to use this option to ensure its always armed and always ready to trigger no matter when you choose to open a position.

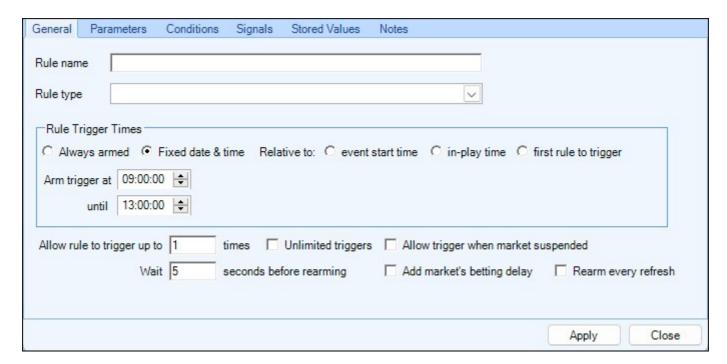
Here you also have the option to stop a rule being able to trigger after a specified number of seconds from it being started, this acts as a sort of fill/kill feature for a rule and is mainly used when starting rules manually with 'Automation Servants'.



Fixed date & time

This option allows you to arm a rule based on the current time of day. If the time of your PC's clock is between the start and end times specified then rule will be armed and will be triggered as soon as **ALL** of its <u>Conditions</u> are satisfied.

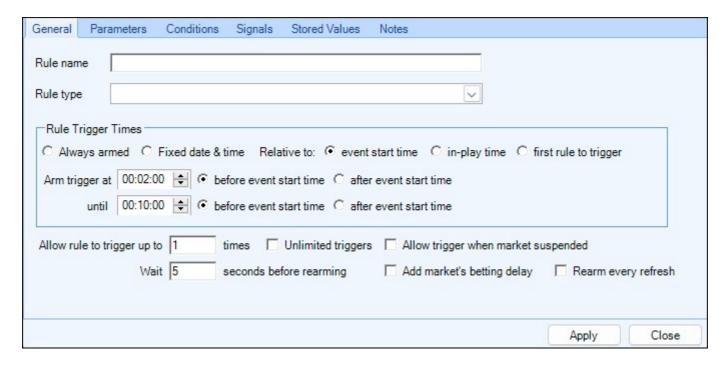
In the image below you can see the start time is set to 09:00:00 and the end time is 13:00:00. The rule will only be allowed to trigger if the current time on the PC is between 9am and 1pm.



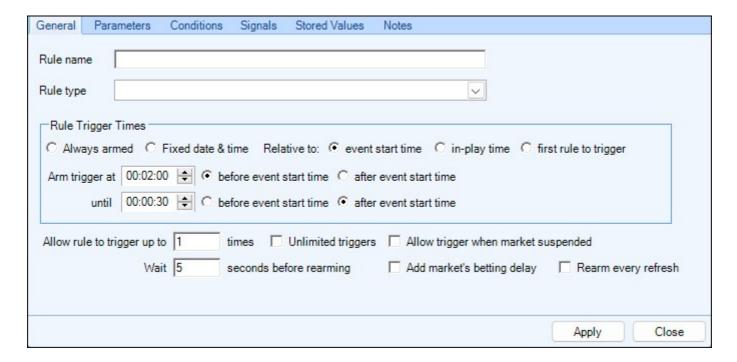
Relative to event start time

This time setting allows us to instruct Bet Angel to trigger a rule based on a time relative to the advertised start time of an event. This is beneficial as it makes the rule more generic and allows it to be applied to any market regardless of the time of day the event is due to start.

In the screen shot below I have set Bet Angel to allow rules to trigger starting from 2 minutes before the event start time and ending 10 seconds before the event start time.



If you expect a market to be starting late, you could even adjust the end time to be after the advertised start time of the event. In the screenshot below, the rule is allowed to trigger 30 seconds beyond the start time.

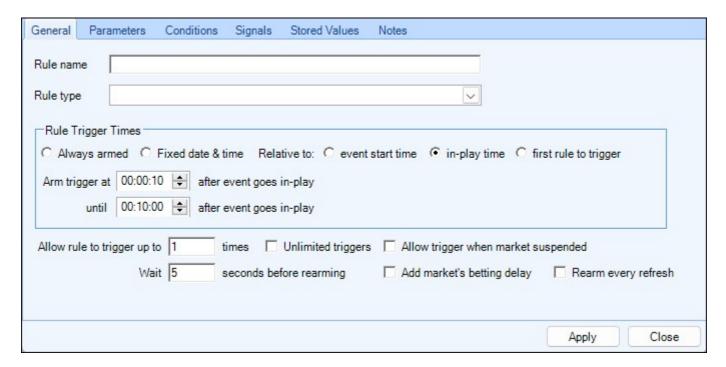


Relative to in play time

This sets the rule's trigger time window to be based on the time since Bet Angel was first aware that the market had been marked in-play by the exchange. It could be used to trade the first minute of a horse race in running or to automate the first half of a football match.

The example below is based on a horse race and it has been configured to allow triggers from the first ten seconds of the in-play race until the end. Note: The end time has been set to 15 minutes to cover even the longest of races, but automation will not attempt to trigger once the race is suspended.

<u>Tip</u> The in-play horse racing markets are extremely volatile especially at the start of a race so we recommend waiting a period of 10 seconds to allow the market to settle before a trigger is armed.



First Rule To Trigger

This option allows you to set a rule to arm at a time AFTER the first rule within the automation file has triggered, this is handy if you first want to trigger a series of bets then allow a bit of time for the market to move in your favour before triggering a green up rule.

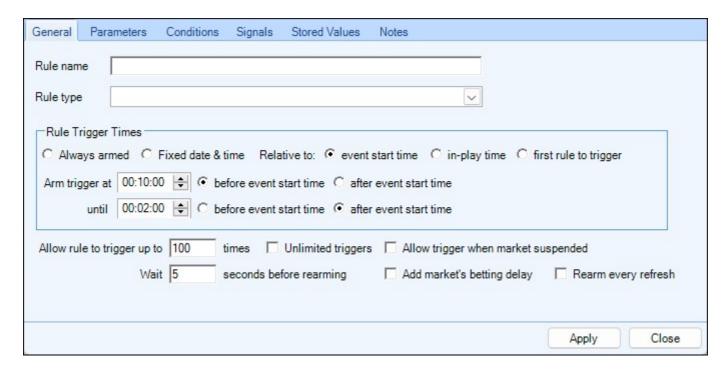
In the image below you can see it is armed for 00:00:59 after the first rule of the file triggers until 00:02:00 after the first rule has triggered.

ule name		-		
ule type			<u> </u>	
	00:00:59 🖨 a	e & time Relative to: C event s fter the first trigger from this rules f fter the first trigger from this rules f	îile	st rule to trigger
Allow rule to trig	gger up to 1		Allow trigger when market su	_
				Apply Close

Rule Triggers & Arm Times

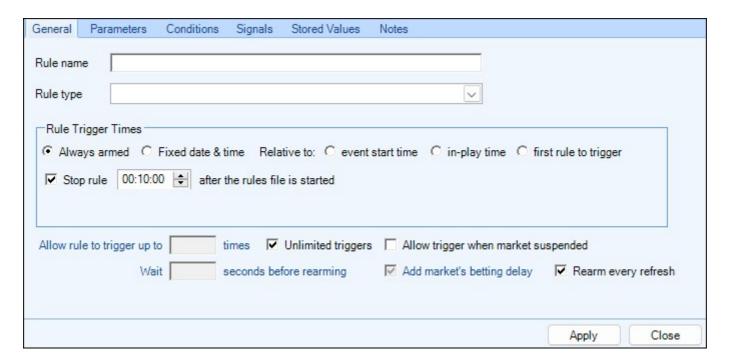
These options allow you to configure the number of times a rule can trigger and at what rate it will rearm after each trigger (subject to any <u>Conditions</u> you have set being satisfied).

In the first image the rule can trigger up to 100 times, once it has triggered the rule will rearm after 5 seconds and be ready to trigger again subject to the conditions being satisfied.

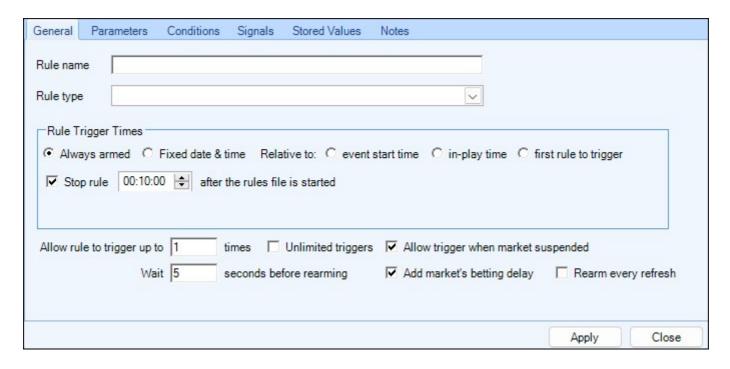


In the following image the rule is 'Always Armed' and can trigger an unlimited amount of time and will rearm upon every refresh, so this rule would begin triggering as soon as it was applied to a market in Guardian and it was refreshed.

These settings are ideal if you are setting <u>Signals</u> and <u>Stored Values</u> or populating <u>Historical Stored Values</u> with data for <u>advanced charts</u>, or to display values on the Ladder or One-Click trading screens.

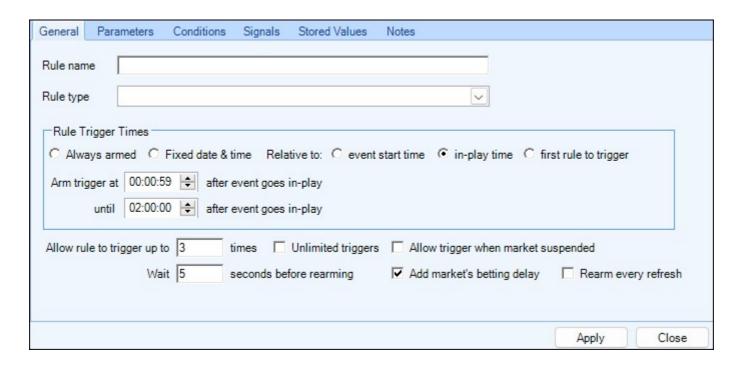


Next the rule is again 'Always Armed' but is also able to trigger even when the market is suspended. Used in combination with the <u>Market Status condition</u> you could trigger a rule when the market is closed to retrieve your settled P/L or the Win Status of a selection to then pass to another market using <u>Stored Values</u>



In this final image the rule is armed to trigger when the market is in-play, it can trigger up to three times and rearms after five seconds. The 'Add markets betting delay' option is also ticked, this prevents the rule from placing another bet until the first has reaches the market.

For Example, with Betfair applying a 8 second bet delay to an in-play football market, and with the rule armed for 5 seconds, a second bet could trigger before the first has even reached the market. By ticking this option the second bet will trigger 5 seconds after the first has reached the market.

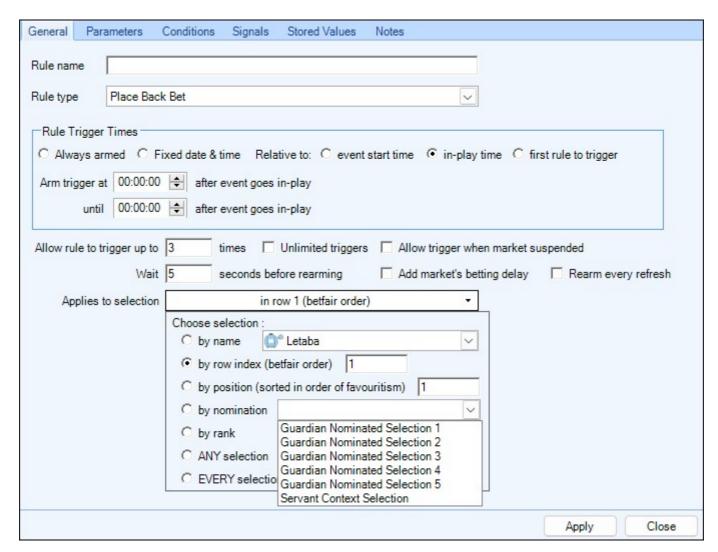


Whenever creating new or editing existing rules always ensure you test your rules when in <u>Practice Mode</u> first to ensure they are triggering exactly as you want them to.

Apply Rule to Selections

After selecting a rule type and setting the trigger times next you need to set how many times you would like it to trigger and also the time before rearming it once it has triggered (this is the minimum amount of time you want to elapse before the rule is able to trigger again). Once this time has passed and the rule rearms any conditions you have in place also need to be satisfied again before the rule can trigger again.

The final part on the 'General' tab is where you 'Apply' the rule type being used to a selection, there is several of options to chose from here to give you the most flexibility possible.



By Name

This would be the least used option having been superseded by the 'Nomination' option below, when selecting this option your choosing a specific selection by name to apply the rule to, this means that you can not apply the same rule to another market as that selection will not be available so by using this you would be required to duplicate and save the whole automation file for each individual market.

By Row Index (Betfair Order)

This is the order Betfair put the selections in when the market first opens and the order you would see the selections in if you looked on their website.

By Position (sorted in order of favouritism)

This allows you to apply your rule to a selection based on its order of favouritism at the time the rule triggers, by default the order of favouritism is determined by the selection with the lowest best back price (this can be changed to lowest lay or last traded price on the <u>automation</u> tab in the main settings tool if you wish).

By Nomination*

This will allow you to apply your rule to an individually nominated selection, this enables you to create and save a generic rule for example you may have a rule for front running horses then after adding the days markets to guardian and applying the rule you can use the 'Automation Nominated Selection' columns on guardian's main screen to quickly pick which selections you would like the rule to run on.

ANY Selection

This will allow a rule to trigger on any selection that satisfies your criteria. When it does trigger it will do so on the first selection that has met your criteria - it can not trigger on any further selections until after it has been rearmed (providing you also have enough triggers remaining). Once its rearmed it will again trigger on the first selection that meets your criteria which could include the same one again unless you have conditions like 'Number of matched bets' or 'Number of place bets' to control the amount of time it can trigger on any given selection.

If your require a rule to trigger on more than one selection at the same time then you would need to use 'By Row Index' then create and apply a separate rule for each row.

Every Selection

This will allow a rule to trigger on every selection that satisfies your criteria. You <u>only</u> need to set the number of triggers for the amount of times time you want the rule to trigger per selection, the number of selections there is in a market is irrelevant.

ie, if it was armed to trigger 2 times and you applied the rule to a market with 16 selections subject to any conditions being met it would trigger on all 16 selections twice.

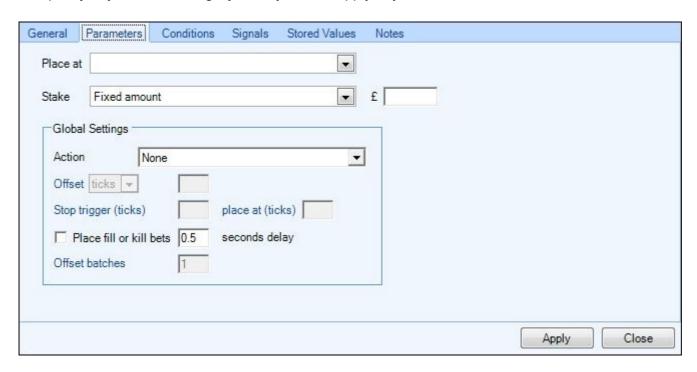
Servant Context**

This will apply the rule to the selection under your mouse cursor (on the ladder or one-click screen) at the time the servant is started, or if your starting the servant via the 'Control' tab of the 'Servant Manager' you will be able to manually chose the selection you want from a drop list before pressing 'Start'

NB* This is only for use on Rules you intend to use in Guardian. NB** This is only for use on Rules you intend to use as Servants

Parameters

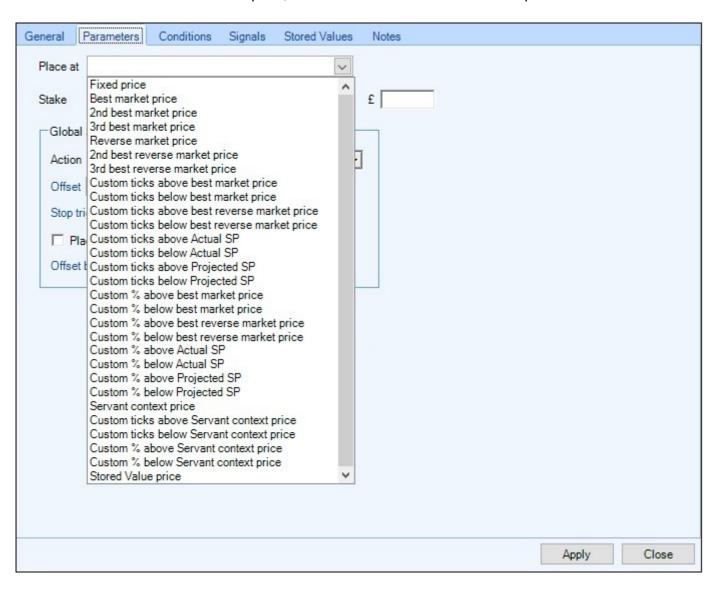
The parameters area lets you specify were a bet is to placed, the staking method and stake size to be used, you can also specify any 'Global Settings' you may wish to apply to your rule.



Parameters are not always required, for example when using certain rules types like 'Green all Selections' or 'Take SP', therefore when ones of these rules are used it will just display 'No Parameters Required' and the rest will be blank.

Place at (Parameters)

The 'Place at' option let you specify were you want to have your bet submitted in the market, using either fixed odds or odds in relation to the current market price, see below for details of what each option does.



Fixed price - the price that you want assigned to the bet

Best market price - is for taking the current highest price for the selection (for a back bet) or the current lowest price for the selection (for a lay bet). This is often known as the 'touch' price.

2nd best market price - the 2nd best price for the selection in the market (based on the description of Best market price), this will be seen on the one-click screen as one price away from the touch price. Pricing a bet here will give it a better chance of filling in a fast moving or low volume market, but you'll be given a slightly worse price that the best market price.

3rd best market price - the 3rd best price for the selection in the market. Seen on the one-click screen as two prices away from the touch price. Like the 2nd best market price, this improves the chances of the bet being matched but with the compromise of a slightly worse price.

Reverse market price - is for offering bets to the market, so if placing a back bet it will be placed (offered) at the best lay price, and if placing a lay bet it will be placed (offered) at the best back price.

Custom ticks above best market price - take the Best market price for the selection and increase it by the specified number of price ticks.

Custom ticks below best market price - take the Best market price for the selection and decrease it by the specified number of price ticks.

Custom ticks above best reverse market price - in the case of a Back bet, take the Best Lay price in the market for the selection and increase it by the specified number of price ticks. In the case of a Lay bet, take the Best Back price in the market for the selection and increase it by the specified number of price ticks.

Custom ticks below best reverse market price - in the case of a Back bet, take the Best Lay price in the market for the selection and decrease it by the specified number of price ticks. In the case of a Lay bet, take the Best Back price in the market for the selection and decrease it by the specified number of price ticks.

Custom ticks above Actual SP - for in-play markets that have had an SP specified by betfair, take that price and increase it by the specified number of price ticks.

Custom ticks below Actual SP - for in-play markets that have had an SP specified by betfair, take that price and decrease it by the specified number of price ticks.

Custom ticks above Projected SP - for use on pre-off markets that have a Projected SP provided by betfair, take that price and increase it by the specified number of price ticks (*note, Betfair update there Projected SP every 60 seconds*).

Custom ticks below Projected SP - for use on pre-off markets that have a Projected SP provided by betfair, take that price and decrease it by the specified number of price ticks (*note, Betfair update there Projected SP every 60 seconds*).

Custom % above best market price - take the Best market price for the selection and increase it by the specified percentage in price.

Custom % below best market price - take the Best market price for the selection and decrease it by the specified percentage in price.

Custom % above best reverse market price - in the case of a Back bet, take the Best Lay price in the market for the selection and increase it by the specified percentage in price. In the case of a Lay bet, take the Best Back price in the market for the selection and increase it by the specified percentage of price.

Custom % below best reverse market price - in the case of a Back bet, take the Best Lay price in the market for the selection and decrease it by the specified percentage in price. In the case of a Lay bet, take the Best Back price in the market for the selection and decrease it by the specified percentage in price.

Custom % above actual SP - for in-play markets that have had an SP specified by betfair, take that price and increase it by the specified percentage of price.

Custom % **below actual SP** - for in-play markets that have had an SP specified by betfair, take that price and decrease it by the specified percentage of price.

Custom % above Projected SP - for use on pre-off markets that have a Projected SP specified by betfair, take that price and increase it by the specified percentage of price. (*note, Betfair update there Projected SP every 60 seconds*).

Custom % **below Projected SP** - for use on pre-off markets that have a Projected SP specified by betfair, take that price and decrease it by the specified percentage of price. (*note, Betfair update there Projected SP every 60 seconds*).

Servant Context Price - This will use the price under your mouse cursor (on the ladder or one-click screen) at the time the servant is started, or if your starting the servant via the 'Control' tab of the 'Servant Manager' you will be able to manually enter the price you want before pressing 'Start'

Custom ticks above Servant context price - As above but take the price under your cursor or that you enter on the 'Control' tab of the 'Servant Manager' and increase it by the specified number of price ticks.

Custom ticks below Servant context price - Take the price under your cursor or that you enter on the 'Control' tab of the 'Servant Manager' and decrease it by the specified number of price ticks.

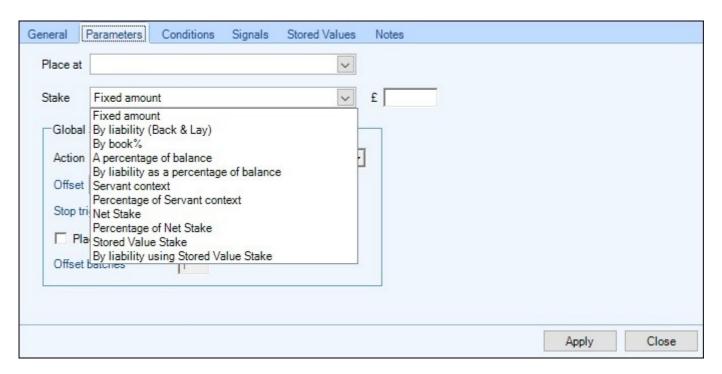
Custom percentage above Servant context price - Take the price under your cursor or that you enter on the 'Control' tab of the 'Servant Manager' and increase it by the specified percentage

Custom percentage below Servant context price - Take the price under your cursor or that you enter on the 'Control' tab of the 'Servant Manager' and decrease it by the specified percentage

Stored Value Price - Allows you to place your bet at the price of an earlier stored value, when selected you will get an additional option to specify the name of the Stored Value you wish to use.

Stake (Parameters)

There is a range of staking options available from a basic fixed amount through to percentages of your current net stake, see below for full details of each one.



Fixed Amount - This is the regular way of staking – the stake you enter will be used when placing the bet regardless of the price.

By Liability (Back & Lay Only) - The stake you have entered now becomes the liability you are willing to accept on lay bets or amount you want to win on back bets. So, if your lay bet rule uses a £20 stake and is placed at odds of 3.5, Bet Angel will calculate the amount needed to realise a £20 liability; at odds of 3.5 this would mean a lay bet of £8.00 is submitted to the market. This means if that selection loses you make a profit of £8.00 and if it wins you lose £20.

If your back bet rule uses a £20 and is placed at odds of 6.0, Bet Angel will calculate the amount needed to realise a £20 profit; at odds of 6.0 this would mean a back bet of £4.00 is submitted to the market.

By Book% - When betting on multiple selections staking by book% is calculated as follows.

Using £100 stakes backing three runners By Book%.

Runner A @ 2.0 will be staked with £50 for a £50 payout on win.

Runner B @ 5.0 will be staked with £20 for a £80 payout on win.

Runner C @ 10.0 will be staked with £10 for a £90 payout on win.

However if A wins, you'll lose the stake of B & C. So £50 - £20 - £10 = £20

If B wins, you'll lose the stake of A & C. So £80 - £50 - £10 = £20

If C wins, you'll lose the stake of A & B. So £90 - £50 - £20 = £20

So level profit if A,B or C win.

But £50+£20+£10 loss if any other wins.

Book% of the three runners represents 80% of the total book, which is why the total stake is 80% of the £100 staked.

A Percentage of Balance - This of course means your stake will be calculated from your current Betfair balance, for example if you had £500 in your account and entered 10% a stake of £50 would then be used.

By Liability as A Percentage of Balance - This calculates a stake amount using your current Betfair balance, for example if you had a balance of £800 in your account and entered 20%, a stake of £160 would then be used as your liability, ie, 20% of £80 = £160

By Servant Context

This option uses the current preset stake chosen for the selection under your mouse cursor (on the ladder or oneclick screen) at the time the servant is started, or if your starting the servant via the 'Control' tab of the 'Servant Manager' you will be able to manually enter the stake required before pressing 'Start'

Percentage of Servant Context

This option lets you use a percentage of a stake, so if you had £200 selected from the preset staking area on either your ladder or One-Click screens or were to enter £200 on the 'Control' tab of the 'Servant Manager' and set 25% as this option then a stake of £50 would be placed.

Net Stake - Uses your current Net Stake, this is the size of an open position on a selection. i.e. the amount of back bets matched on a selection minus the amount of lay bets matched on a selection. So if you had £200 of back bets matched and £120 of lay bets matched then your Net Stake would be £80

Percentage of Net Stake

This uses the same staking as above except it only uses a percentage of your Net Stake, so if your Net Stake happened to be £140 and you were using this method with 10% then a stake amount of £14 would be submitted.

Stored Value Stake

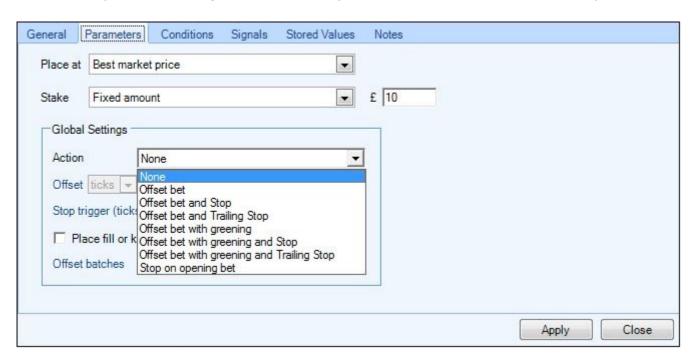
This option lets you set your stake using an amount held in a Stored Value, if used you will have additional options to choose the name of the stored value you want to use and if the stored value is from a selection, market or event.

By Liability using Stored Value Stake

This uses the same calculation as staking 'By Liability' but the stake used for the calculation is provided by a Stored Value rather than defined in the rule itself.

Global Settings (Parameters)

The global settings are an optional part of your parameter options but if you wish to use them they will allow you to add things like Fill or Kill, Offsetting and Stop losses etc to your rule. These will do the same as the 'Global Settings' found at the top of your main trading screen but will only be applicable to the individual rule they are used on.



When choosing a offset action you have the option to offset by ticks OR percentage, whichever you chose will apply to both offsets and stops for this rule type - ie; you can not chose to use the offset percentage and set your stops using ticks.

Offset bet - A equally sized opposing bet placed a specified number of ticks or percentage away from the initial bet which if filled will close the position for a profitable trade. If the initial bet is a Back bet then the offset will be a Lay bet. If the initial bet is a Lay bet then the offset will be a Back bet.

Offset bet and stop - An offset bet as above but with a stop loss attached. The market price will be monitored and if the price moves against you by the specified number of price ticks or percentage then the stop loss will be triggered to attempt to take a loss and close the position.

Offset bet and trailing stop - As 'Offset bet and stop' but the stop is moved by tick or percentage as the profitability of your trade improves.

Offset bet with greening - As 'Offset bet' but Bet Angel adjusts the stake of the offset bet so that the profit from the trade is spread across all selections in the market.

Offset bet with greening and Stop - As 'Offset bet and stop' but Bet Angel adjusts the stake of the offset bet so that the profit from the trade is spread across all selections in the market. Note: the reduction of the stake of the offset bet will result in the stake used for the stop loss being reduced also.

Offset bet with greening and Trailing Stop - As 'Offset bet with greening and Stop' but the stop is moved by tick or percentage as the profitability of your trade improves.

Stop on opening Bet - adds a stop to the initial bet in an attempt to ensure the bet is matched even if the market moves away from your requested entry price. This can be useful if you wish to ask for a price that is better than is currently on offer by the market, but also want to make sure the bet is filled. e.g. If the current market is available to back at 1.68, place a Back bet at 1.7 with an opening stop 5 ticks lower. The bet will initially be unmatched in the market and the price may drift to fill your requested price of 1.7, but if it goes the other way and touches 1.65 then your opening stop will trigger and your Back bet will be repriced to 1.65 to try to fill at the current price.

Take SP, Keep, Cancel Bet (Parameters)

When using any of the following three (Price Dependant) rule types, 'Take SP Unmatched Bets on Selection', 'Keep All Unmatched Bets on Selection' or 'Cancel All Unmatched Bets On Selection the Parameter area will allow you to configure the specific unmatched bets the rule is to target.

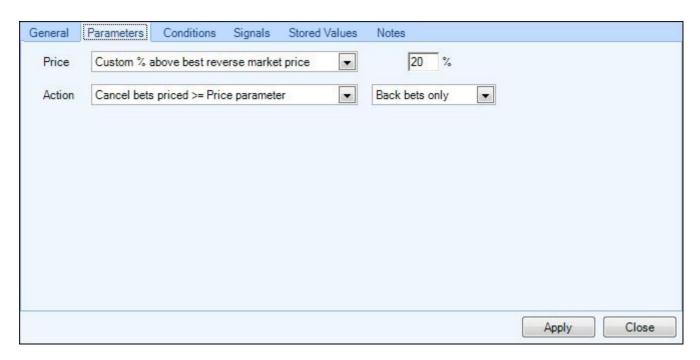
Price

Here you can choose from the same price options as you are given when using a rule to place a bet. For full details of these please see the following <u>page</u> of the user guide.

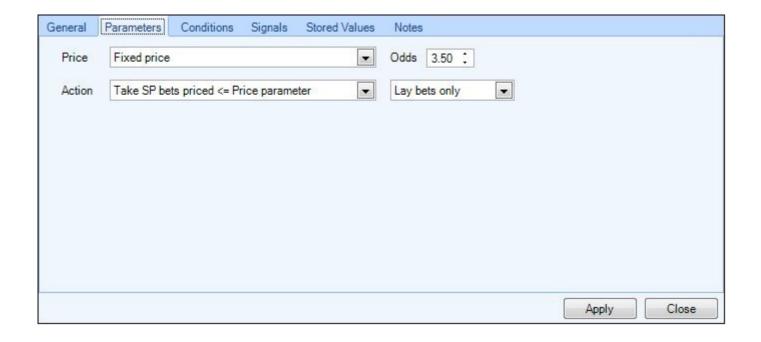
Action

Let's you select which unmatched bets in relation to the price parameter the rule will trigger on.

Below are a few examples of how you might configure these parameters, in the first image the rule type 'Cancel All Unmatched Bets on Selection' is being used and the parameters have been configured so that all unmatched back bets which are greater than or equal to 20% above the best reverse market price will be cancelled.



In the next image the rule type 'Take SP all Unmatched Bets on Selection' is being used this time the parameters have been configured to Take SP on all unmatched lay bets less than or equal to the fixed price of 3.50.



SP Bets Limits (Parameters)

When using either the rule types 'Place Back SP Bet' or 'Place Lay SP Bet' the Parameter area will allow you to configure the price limits and stakes required.

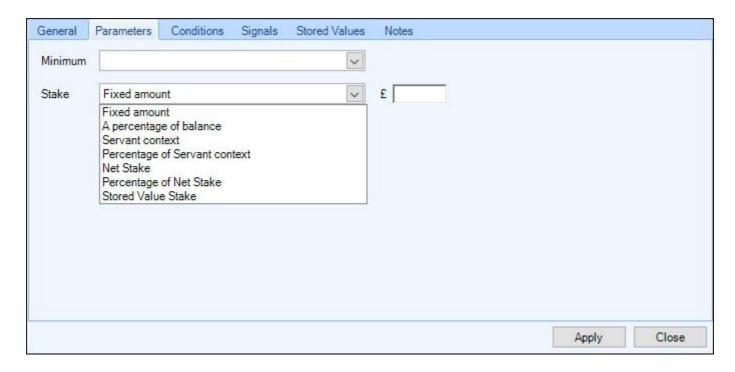
Minimum/Maximum

Here you can choose the price limit for your SP bet to be matched at, if placing a Back SP Bet this will be the lowest odds you can be matched at, and if placing a Lay SP bet it will be the highest odds you can be matched at.

The pricing options you can choose from are the same as those available when placing a regular back or lay bet, for full details of all these please see the following page of the user guide.

Stake

For your stake you can choose from any of the stake types shown in the image below



Fixed Amount - This is the regular way of staking – the stake you enter will be used when the bet is placed. **A Percentage of Balance** - Your stake will be calculated from your current Betfair balance at the time the rule triggers, for example if you had £500 in your account and entered 10% a stake of £50 would then be used.

By Servant Context

This option uses the current preset stake chosen for the selection under your mouse cursor (on the ladder or oneclick screen) at the time the servant is started, or if your starting the servant via the 'Control' tab of the 'Servant Manager' you will be able to manually enter the stake required before pressing 'Start'

Percentage of Servant Context

This option lets you use a percentage of your Servant Context stake, so if you had £200 selected from your preset staking area on either the ladder or One-Click screens or were to enter £200 on the 'Control' tab of the 'Servant Manager' and set 25% as this option then a stake of £50 would be placed.

Net Stake - Uses your current Net Stake, this is the size of an open position on a selection. i.e. the amount of back bets matched on a selection minus the amount of lay bets matched on a selection. So if you had £200 of back bets matched and £120 of lay bets matched then your Net Stake would be £80

Percentage of Net Stake

This uses the same staking as above except it only uses a percentage of your Net Stake, so if your Net Stake happened to be £140 and you were using this method with 10% then a stake amount of £14 would be submitted.

Stored Value Stake

This option lets you set your stake using an amount held in a Stored Value, if used you will be asked to enter the name of the stored value you want to use and if the stored value is for a selection, market or an event.

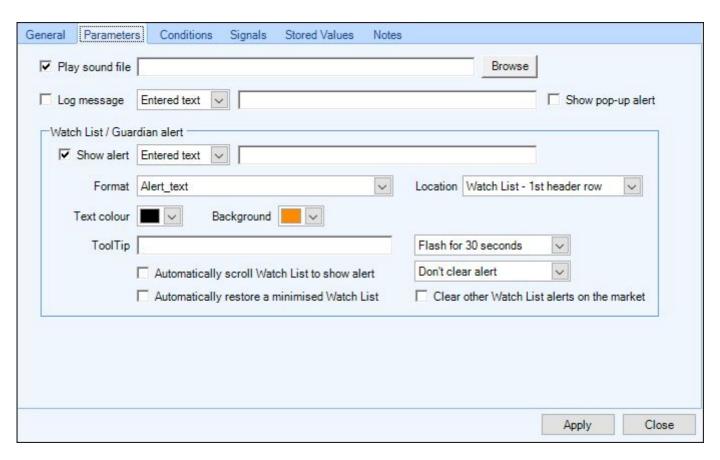
NB, SP bets are considered by betfair to be matched as soon as they are placed and cannot be cancelled, so you should be familiar with their behaviour on the web site before using them. Also be aware of the betfair minimum stake/liability limits for your account's currency that will have to be met.				

Alert / Play Sound / Show Message (Parameters)

When the 'Alert (Play Sound / Show Message)' rule type is used you have three options of the type of alert/message/sound you want to use.

You can select as many or as few options as you want to be played/shown when the rule triggers.

Note: An alert message can be text entered directly into this screen or can be the contents of a Stored Value that you have set elsewhere with the Automation features.



Play Sound File

To add a sound file as your alert click the 'Browse' button to select your required sound file from a folder on your PC.

Log Message & Pop-up Alert

To add a message simple type the message or enter the name of the Stored Value whose contents you want to appear.

If you want the message to be recorded to your activity <u>log</u>, ensure the box next to the 'log message' is ticked. If you wish to have the message appear on screen, tick the 'show pop-up alert' box; once it is triggered it will appear on top of your current screen as shown below, to then clear it just click the OK box.



Watch List Alert / Guardian Alert

To show an alert on your <u>Watch List</u> or <u>Guardian</u> start by either entering the message directly into this screen or by entering the name of the Stored Value whose contents you want to be displayed; then tick the 'Show Alert' box.

The 'Location' pick list is then used to select where to display the alert, this can be on the watch list against a specific selection or in the header of the market in your watch list or in one of the five available columns in Guardian



The remaining options of how the alerts can be configured are;

Format; allows for messages to use any combination of being; time stamped with the time they were triggered, display the alert text only, or display the selection name it triggered on

Text Colour/Background, Set the background and text colours to wish to use

Tool-tip; can be added and will appear when you hover your mouse cursor over the alert

Automatically scroll watchlist (or Guardian) to show alert; when ticked the market/selection in the Watch List or Guardian which the alert triggered on will appear at the top of the list (useful if you have a lot of markets in the watch list or guardian)

Automatically restore a minimised watchlist (or Guardian): when ticked this will maximize your Watch List or Guardian window if you currently have it minimised to your windows taskbar, this allows you to still be alerted without the need to always have the window in view.

The final three options lets you configure the length of time your alerts will flash for when triggered, if they are to clear after a period of time and if you want any existing alerts cleared if a new one triggers.

Example

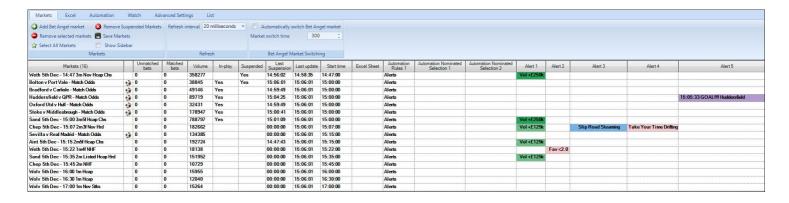
Watch List

Once you have configured your alerts before you can use them you'll need to ensure you have them enabled on your <u>watch list</u>, when an rule triggers it will be displayed to you in this 'Alerts' column.



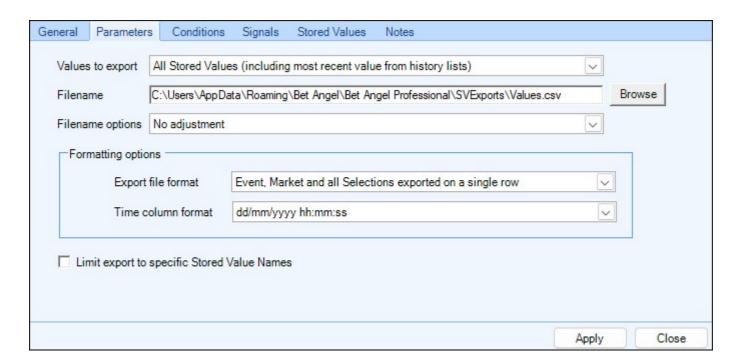
Guardian

Similar to above when displaying alerts on the main Guardian window first ensure you have enabled all the 'Alert' column/s you need displaying (there are up to five columns you can add) by selecting them from the custom column chooser in the <u>Guardian Layout</u> area.



Export (Parameters)

The 'Export all Stored Values' rule type aids the debugging of rules using stored values. It will export the current state of your Stored Values to a csv file and will allow you to see if values changed at the expected point in time. This 'Parameters' area can use be used to configure exactly which Stored Values you wish to export.



Values to Export

Here you can select the Stored Values you wish to export, there are options to export: All Stored Values, Only Shared Stored Values (with or without <u>history lists</u>), and only non-Shared Stored Values



Each time the rule is run the current values are written to a new line in the CSV file. The values are exported in sections in the order: Event Stored Values, then Market, then each Selection.

For each selection the Stored Values are output as Name, Value pairs and a count of how many pairs are in the section is output after the section type

File Name

Allows you to set the directory the file is to be saved to on your computer.

Filename Options

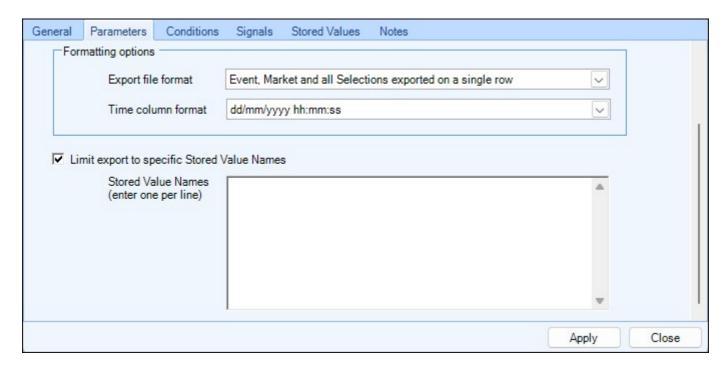
Here you can apply any adjustments to the saved filename, ie, appending the market name and/or the market ID. This is handy if you are using the rule on multiple markets for example all the days horse racing markets, and you want to save the data from each market to separate workbooks, using 'No Adjustments' will store all the data to a single workbook

Formatting Options

In the lower half of the window there are also further formatting options for you to specify whether the data is exported to single or separate rows and which time stamp formats you want to use with your exported file.

Limit Export to Specific Stored Value Names

This option can be ticked if storing multiple stored values but you only want to export certain ones that you specify.



Note: When exporting values from a history list, only the latest value written to the list will be exported. If you need to debug the state of Stored Values at different points in time, you should trigger the Export all Stored Values rule multiple times.

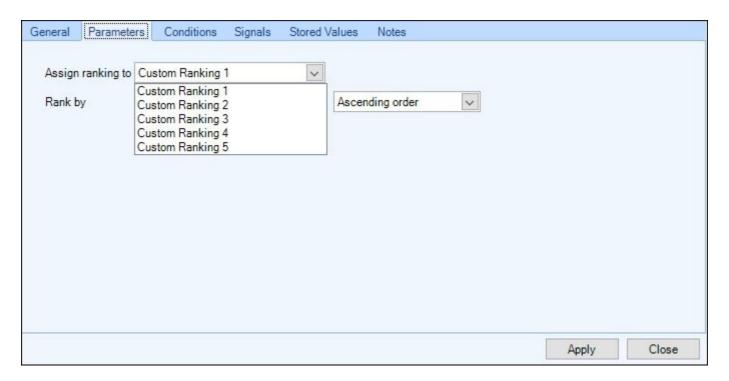
NB, If you wish to keep the values aligned in the same column from start to finish of a series of Exports (perhaps for analysis in Excel) then all Stored Values should be initialised with a value before the first Export.

Custom Ranking (Parameters)

When using the **'Update Custom Ranking of Selections'** rule type, this Parameter area will allow you to configure which of the five custom rankings to assign and how it should be populated. Once you have assigned selections into a custom ranking list you can then use that ranking with other rules. e.g. Apply a rule to a selection that ranks 1st in your custom ranking list.

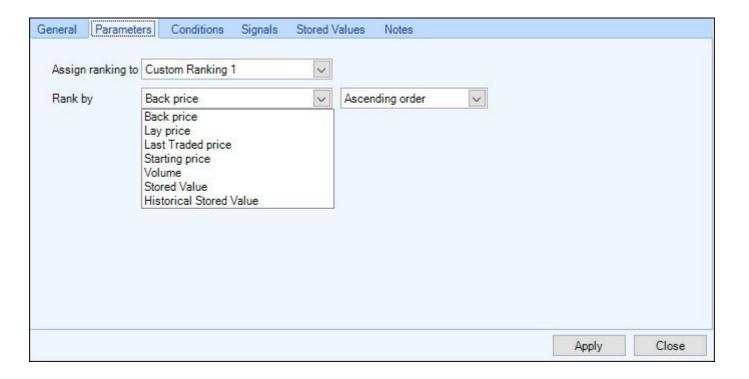
Assign Ranking to

Here you can select the Custom Ranking list (1-5) that you wish to assign the order of selections to. The selections will be re-ranked every time the 'Update Custom Ranking of Selections' rule is run.

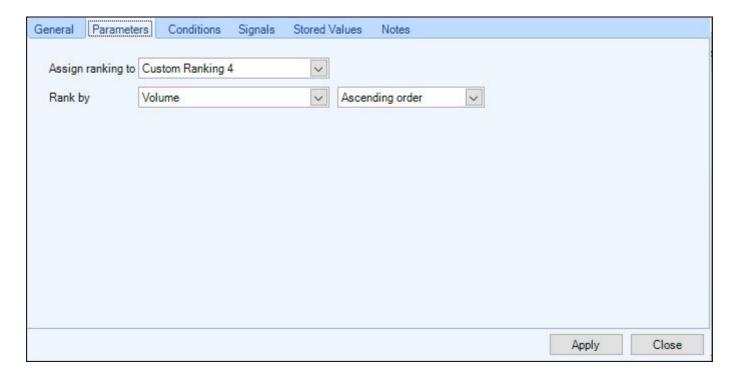


Rank By

Allows you to specify how you want the selections to be ranked (ordered) by, this can be done using their back price, lay price, last traded price, starting price, volume, stored value or historical stored value in either ascending or descending order.

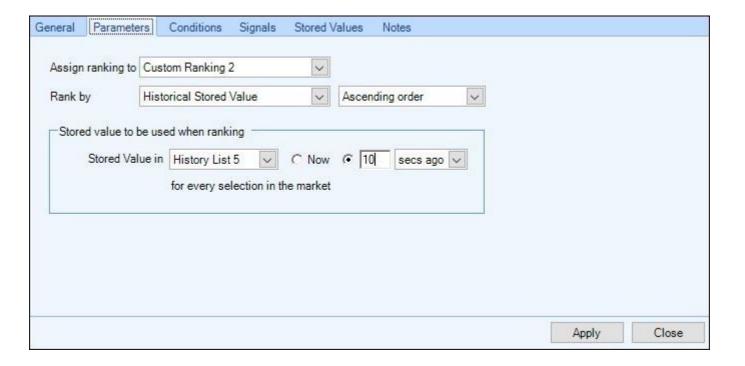


In the image below when this rule triggers it will rank runners by volume in ascending order (smallest to largest) and assign that order to custom ranking 4



Stored Values and History Lists

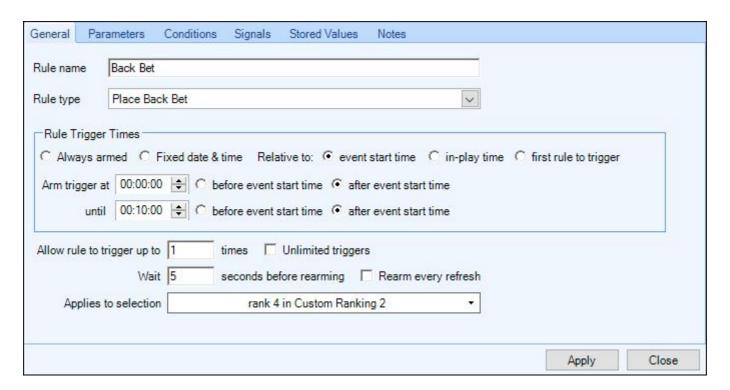
If you are using other rules to <u>store values</u> or store values into a <u>history list</u> you can also assign these to a custom ranking in a similar way, for example in the image below when this rule triggers it will look up the selections' values held in History list 5 from 10 seconds ago and rank selections in ascending order using those values



Example

If we assume we had another rule storing the lay book% of each selection into the history list 5, when this rule triggers it will take there order (ascending, so lowest to highest) by lay book% from 10 secs ago and put them into 'Custom Rankings 2'.

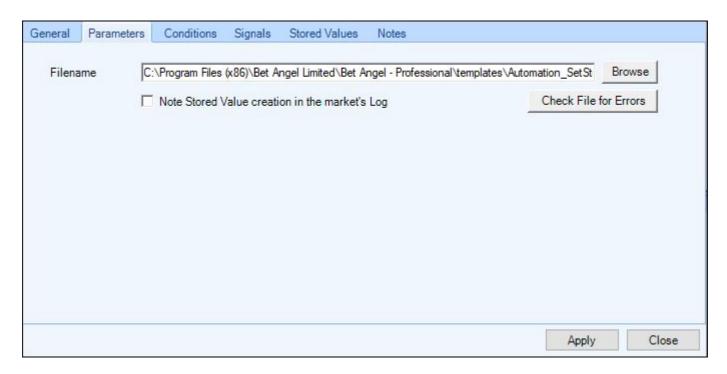
You might then want to use that order for another rule, in the image below when this next rule triggers it will place a back bet on the selection that is at rank 4 in Custom Ranking 2 i.e. the selection with the 4th lowest lay book%



Set Stored Value from File (Parameters)

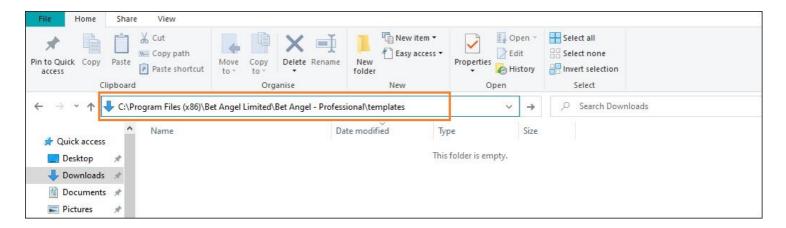
When using the 'Set Stored Value using a File' rule type, this parameters area will allow you to select the CSV file that contains the stored values and filter criteria that you wish to use.

The stored value's name, and value to be set, will be specified in the file itself along with the filter criteria. The filter criteria is used to determine if the row of the CSV is applicable to the market currently running the rule and can be one or more of the following: Market name, Market Time, Selection Name, Selection Row Number. Any criteria option that is not required should be wildcarded with a * character.



After you have selected your file there is a 'Check File for Errors' button you can use and Bet Angel will run a quick check to ensure your file is in the correct format and contains values that can be processed, at this point you will get a small pop up window appear to tell you if the file is OK or of there are any errors in it that first need changing.

There is an example CSV file in the Bet Angel templates folder, this folder can be found in the following location on your PC, or you can copy and paste the address into your Windows address bar C:\Program Files (x86)\Bet Angel Limited\Bet Angel - Professional\templates



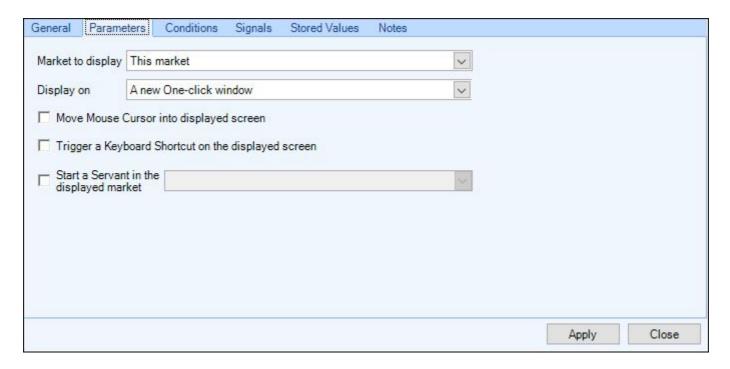
Display Market on a Trading Screen (Parameters)

When using the 'Display a Market on a Trading Screen' rule this parameters page will allow you to configure which market is opened by the rule and if it is to be opened in a new or existing ladder/one-click trading screen. There are also options to automatically moving your mouse cursor into the screen of the newly displayed market, trigger a Keyboard Shortcut on it and/or start a Servant.

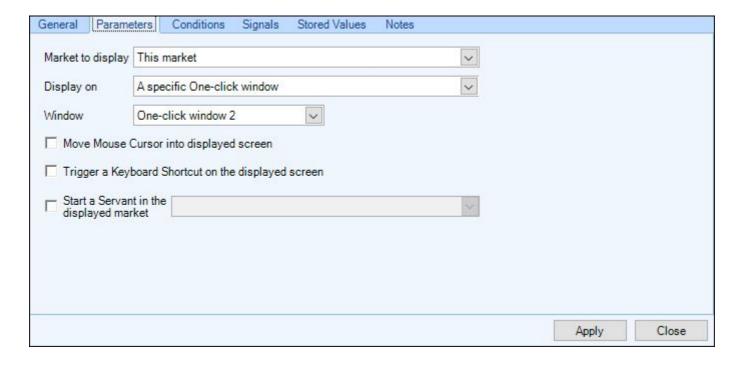
Not only does this give you full control over what happens when and how your market is displayed, but you can also you can configure the exact timing this happens using the rule's trigger times and automation conditions.

Display Market in New Window

Lets start with something simple and open a market in a new One-click window when the rule triggers, as you can see in the image this is very simple and straight forward to set up



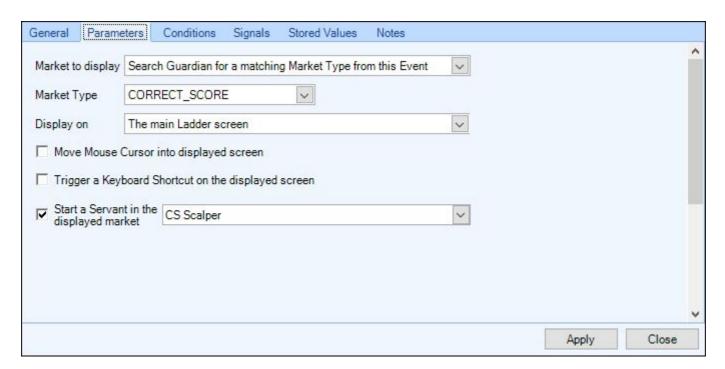
If you are trading multiple markets at once and have them displayed separate windows you can also instruct the rule to open a market in a specific numbered window, in the following image when the rule triggers it will open the market in your One-click window 2



Other Markets Types & Servants

In addition to the rule opening its own market you can also choose to search Guardian for another market type from the same event, for example if you had your rules file applied to the Man Utd V Everton 'Match Odds' market, when the rule triggers it could open any other market from that event (fixture), e.g. the Correct Score or an Over/Unders (providing you have previously added the market to Guardian).

In the next image the rule will open the Correct Score market and display it on the main ladder screen, when it opens it will also start a saved Servant named 'CS Scalper Servant' on that market.

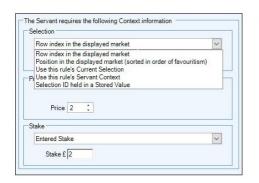


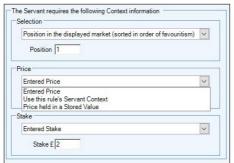
If you have chosen to 'Start a Servant in the displayed market' and the Servant you have selected requires any context information the editor will detect this automatically and in the space below you'll be given the relevant options to configure the context 'Selection', 'Price' and 'Stake' Information.

These will be the same options that you would have available if starting the Servant manually via the 'Servant Manager' window.

In addition to using the context for the 'Selection', 'Price' and 'Stake' you will also be presented with the following options, most of these are self explanatory but below the image are details of what each does

Selection Price
Stake







Selection

Row index in displayed market - Allows you to specify the Betfair row number for the servant to trigger on in the market which is displayed.

Position in the displayed market (sorted in order of favouritism) - Allows you to specify the selection by order of favouritism for the servant to trigger on in the market which is displayed.

Use this rule's current selection - Allows the servant to trigger on the same selection that this rule is applied to. **Use this rule's Servant Context -** Allows the servant to trigger on the same selection as this rule was given as its Servant Context when it was started *

Selection ID held in a Stored Value - Allows the servant to trigger on the selection matching the selection ID held in a stored value.

Price

Entered Price - Allows you to set the price the servant will use as its Price Context when it starts.

Use this rule's Servant Context - Allows the servant to use the same Price Context as this rule was given when it was started *

Price held in a Stored value - Allows the servant to be given the price held in a stored value as its Price Context

Stake

Entered Stake - Allows you to enter the stake the servant will use as its Back & Lay Stake Contexts when it starts. **Use this rule's Servant Context** - Allows the servant to use the same Stake Context as this rule was given when it was started *

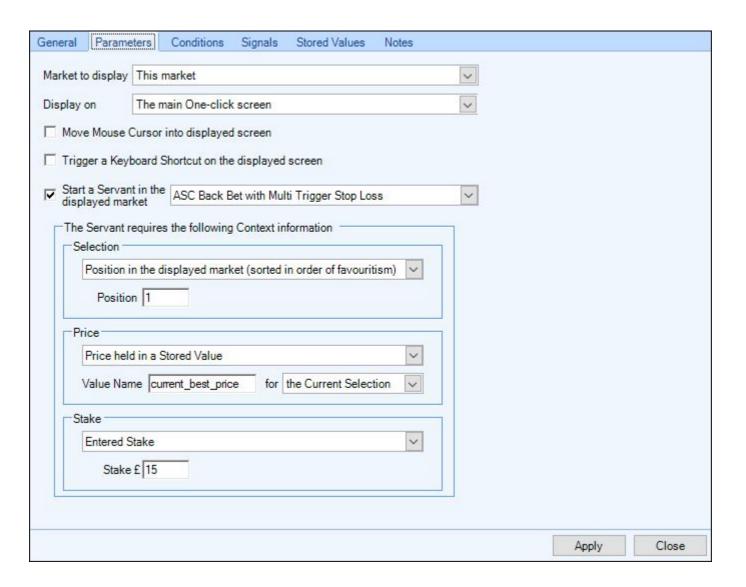
Stake held in a Stored Value - Allows the servant to be given the stake held in a stored value as its Back & Lay Stake Contexts

*These options are only applicable when the 'Display Market on a Trading Screen' rule is run as part of a Servant, rather than being run as Guardian Automation Rules

Example

When the rule below triggers the market will open on the main one-click screen and the servant named 'ASC Back Bet with Multi Trigger Stop Loss' will be started

The context information used will instruct the servant to trigger on the favourite in the market and place its bets at a price held in a stored value named 'current_best_price' using a £15 stake



Move Mouse & Trigger Shortcut Key

When a market is displayed you can also choose to have Bet Angel automatically move your mouse cursor to a preset position within the window its opened by inputting a specified 'X' and 'Y' axis values.

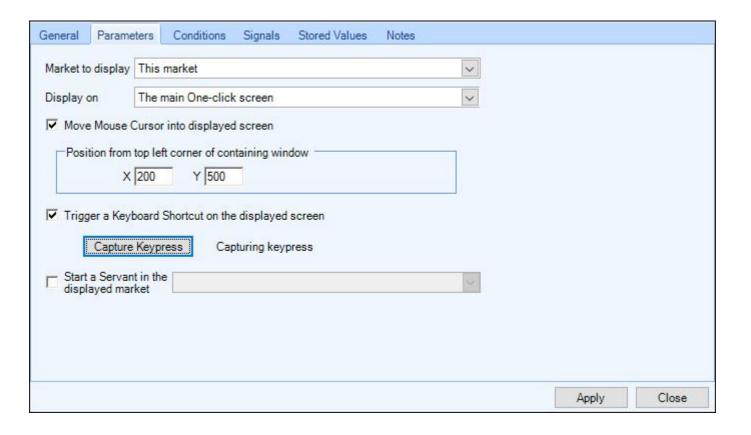
X-Axis = Sets the horizontal position (in pixels) from top-left corner of the window.

Y-Axis = Sets the vertical position (in pixels) from top-left corner of the window.

NB; If using this option we'd recommend first setting the ladder/one-click windows you'll be opening to the size you require them at then saving it in a new <u>Layout</u> profile, otherwise your cursor could end up positioned in a different place to what you intended and not work when the rule triggers.

If you have created some shortcut keys with the <u>keyboard shortcut editor</u> to perform various actions when pressed, and want to invoke one of these actions when the market is displayed, for example sorting the selections in a specified order, or selecting a preset stake you can enable the 'Trigger a Keyboard Shortcut on the displayed screen' option and specify which shortcut key you want to trigger when the market is opened. Note: If the shortcut requires the mouse cursor location to give context then you may need to use the 'Move Mouse Cursor' feature.

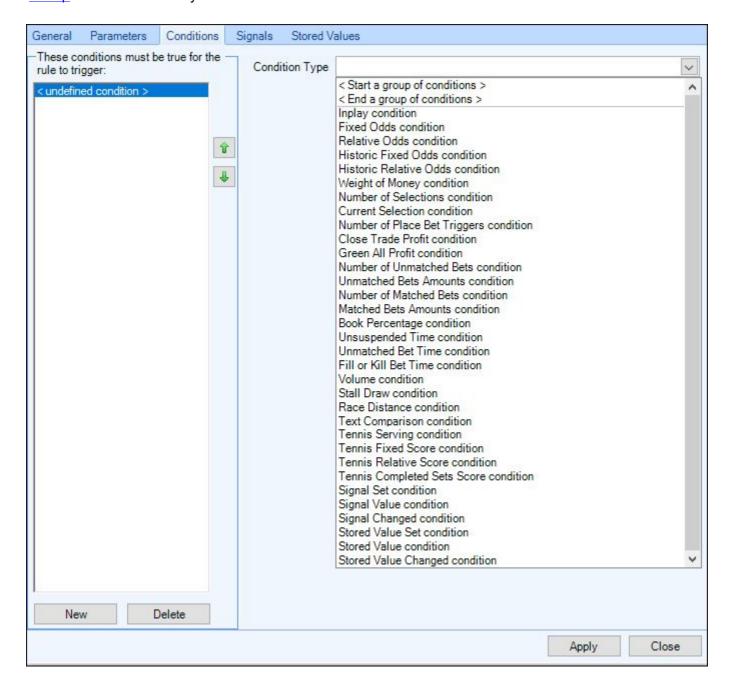
In the next image the market will be opened on the main One-click screen and the mouse cursor will be positioned 200 pixels across and 500 pixels down in that window, it will also initiate the shortcut action which is assigned to the 'S' key



Conditions

Automation rules need conditions applied to them to determine when they should trigger. Conditions should be thought of as filters for the rule trigger. Conditions can also be grouped together, by creating a 'Group' of conditions you could then specify just one of them needs to be true or false. Grouping of Conditions is explained a little further on the next page

There are thirty different conditions to choose from (fully explained in the following pages) covering many aspects of the market such as price comparisons, volume, bet information and even live tennis scores. You can add multiple conditions to each rule and even more than one instance of the same condition if required. Or you can create a 'Group' for some or all of your conditions.

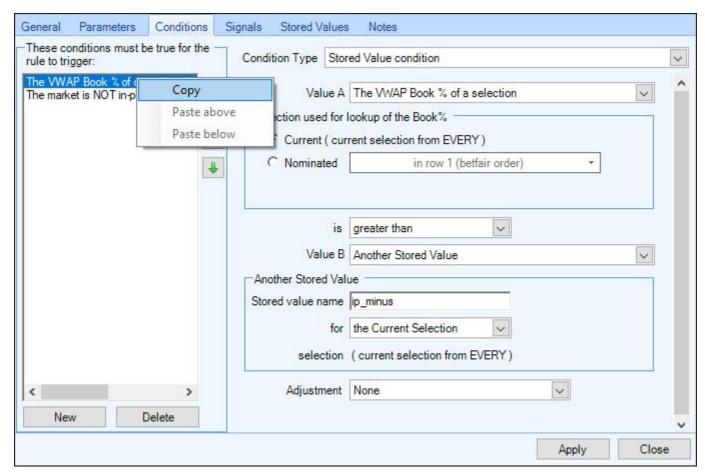


Just be careful not to create a mutually exclusive situation; if two conditions are mutually exclusive then the rule will never trigger.

Copy and Paste Conditions

After you've created a condition if you need to add another which is similar you can do this quickly and easily by using the 'Copy' and 'Paste' action.

Simply right mouse click on the condition(s) you want and select 'Copy', then right click again and select 'Paste', or open another rule (including one in another file) and go on to the conditions tab and right click there and select 'Paste'. If you have two instances of Bet Angel running, then you can also copy and paste between instances.

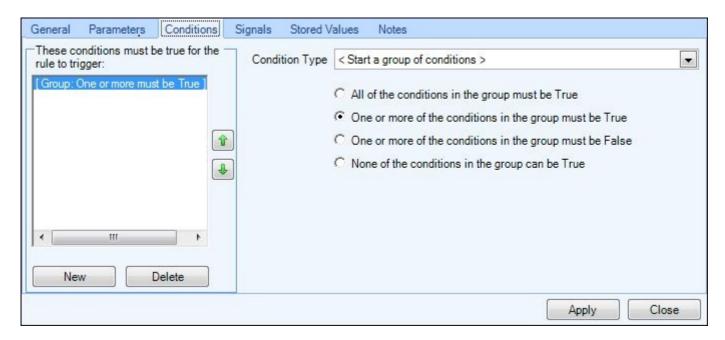


If you have multiple conditions you want to copy at once select the first condition then with your 'Shift' or CTRL' key depressed select the other conditions you want to copy.

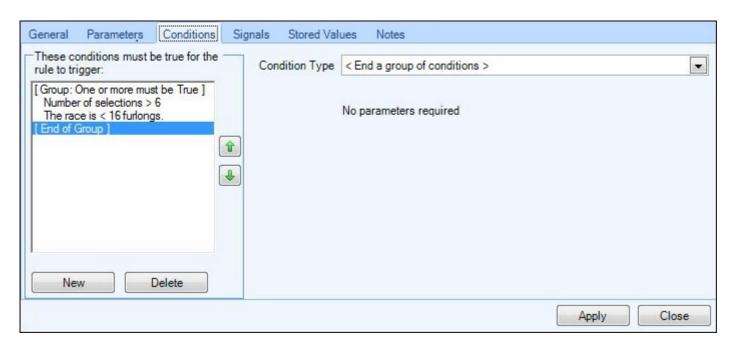
Group Conditions

By putting conditions into groups you can control how they will be tested, it's up to you if you want to group all or some of your conditions together and how many groups you want to use, groups can also be nested if required (see further down the page for an example).

To create a group of conditions start by clicking 'New in the bottom left corner of the conditions tab then using the 'Conditions Type' pick list select 'Start a New Group of Conditions'. You will then be able to select from the following four options how the conditions within the group will be tested, if your from a coding background these options represent AND, OR, NAND & NOR respectively.



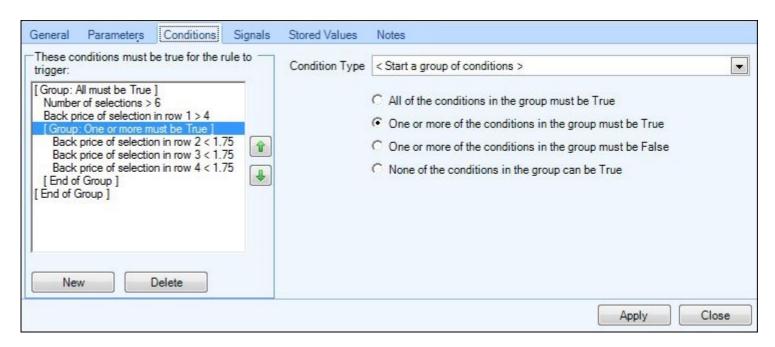
In the following image I've created a simple group of conditions where just one of the conditions I've added needs to be true for the rule to trigger, ie, this rule would trigger if there are either more than 6 runners OR the race is less than 2miles (16furlongs).



Once you have finished adding the conditions you want in a group you need to select the condition type 'End Group of Conditions' to close the group. Those conditions are now grouped and you can create another or add further conditions outside the group.

Nested Groups

In the image below it shows I've nested one group inside another to achieve the following for the rule to trigger; the market must have more than 6 selections and the selection in row 1 must be priced > 4.0 and any of the selections in rows 2 or 3 or 4 must be priced less than 1.75.



NB; Any conditions NOT contained in a group must all test 'True' for the rule to trigger.

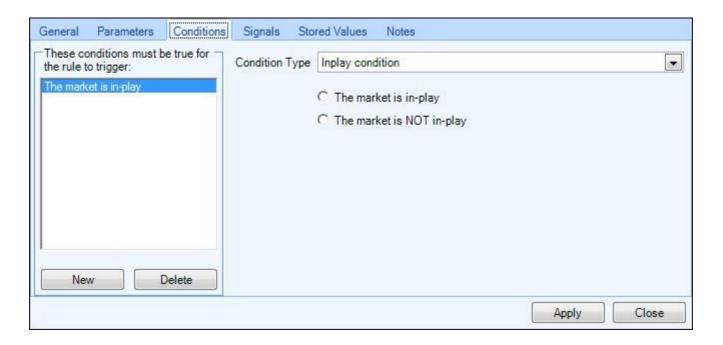
In Play

This condition allows the automation rule's trigger to be filtered by the in-play state of the market.

This is a very simple condition, but it is a good way of highlighting how the automation conditions work.

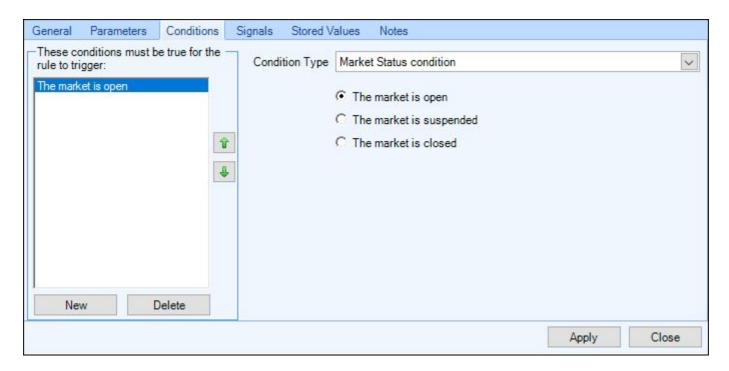
e.q.

- 1) If you don't want a rule to be triggered if the market is in-play then add this condition and select 'The market is NOT in-play'.
- 2) If you want a rule to be triggered **only** if the market is in-play then add this condition and select 'The market is in-play'
- 3) If you don't mind whether the market is in-play or not, then don't add this condition at all. Only conditions that are added to the rule will be tested during processing; only conditions added to the rule will 'filter' the rule's trigger.



Market Status

This condition allows you to restrict a rule triggering dependant on the status of the market. When using this condition you can specify if the market should be 'Open', 'Suspended' or 'Closed' before the rule is allowed to trigger.



An example of when this condition would be handy is if you had a rule to retrieve a selections 'Win status' or 'Profit/Loss' from a market, but as these are only published by Betfair once they settle and close a market, you would only want the rule to trigger when 'The market is closed'.

NB; If using the 'Suspended' or 'Closed' condition remember to ensure you have the 'Allow Trigger when Market is Suspended' box ticked in the <u>Rule Trigger Times</u> area on the General tab of this rule.

Fixed Odds

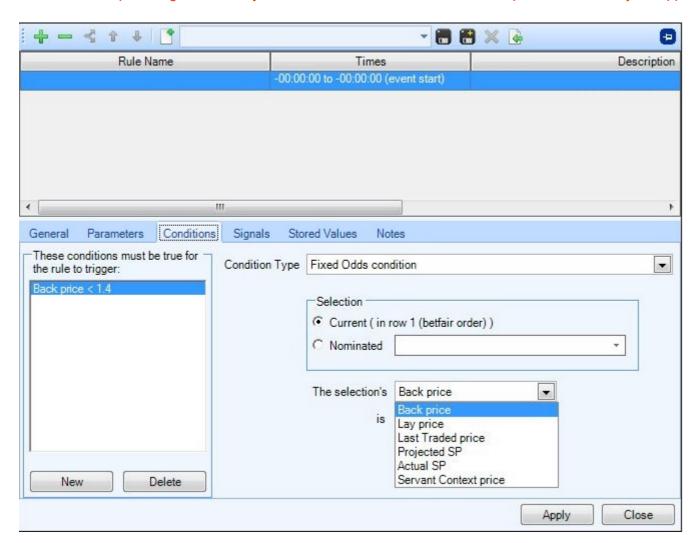
This condition allows the automation rule's trigger to be filtered by the price of its selection or the price of another selection.

To test the price of the rule's selection choose: 'Current'. To test the price of another selection choose 'Nominated' and then use the dropdown to choose that selection.

You can test the Back price, Lay price, Last traded price, Projected SP, Actual SP or the Servant Context price against your chosen price.

In the screenshot below the rule will only trigger if the Back price of its selection is less than the price of 1.4.

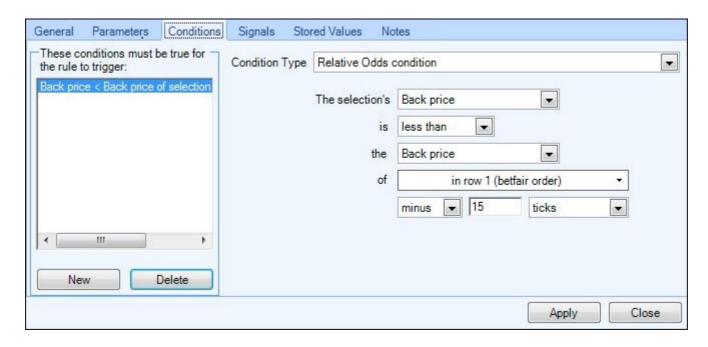
Tip: If you only want a rule trigger if a price is within a **range** of prices then add two of these conditions to the rule. One to test if a price is greater than your lower limit and the other to test if a price is less than your upper limit.



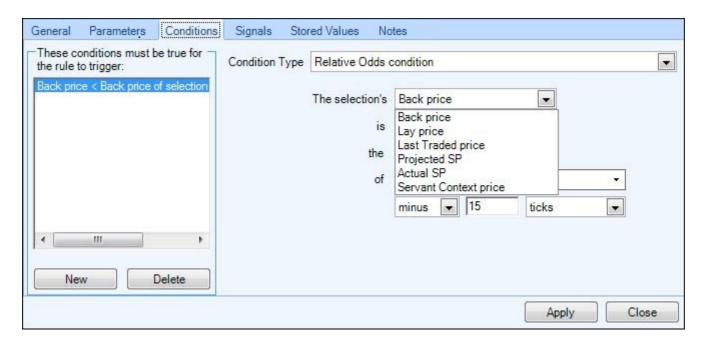
Relative Odds

This condition allows the automation rule's trigger to be filtered by how the price of its selection compares to the price of another selection.

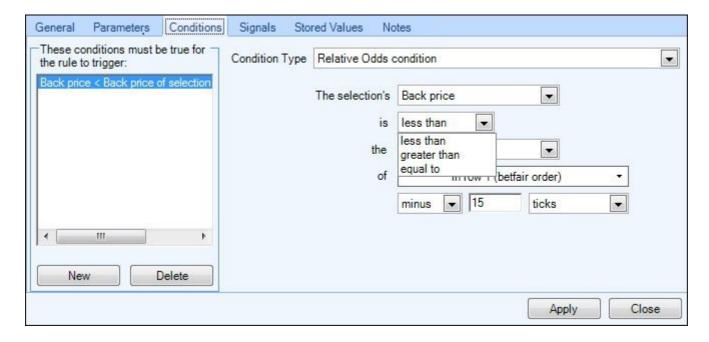
A simple example would be to test if the selection is lower in price than the first selection in the market. In the screenshot below the condition is set so that the rule will only trigger if the Back price is at least 15 ticks less than the back price of the selection in Row 1 (Betfair order). The selection in Row 1 would have been the favourite when betfair last sorted their market, so this condition would help indicate that our selection is currently more favoured than the one in Row 1.



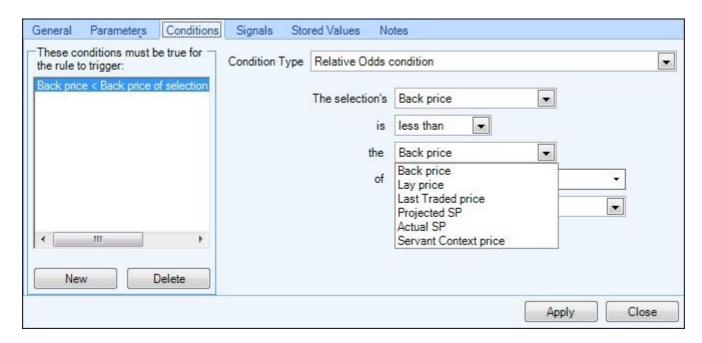
There are various options for the selections price comparison as shown below: Back price, Lay price, Last traded price, Projected SP, Actual SP and Servant Context Price.



The comparison can be 'less than', 'greater than' or 'equal to' the next part of the condition.

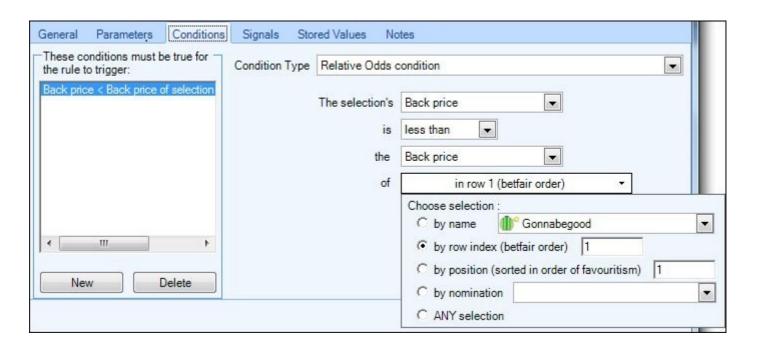


Then choose which price to compare against on the other selection.



And then choose the selection itself. either: by name, by row, by position etc.

An explanation of the 'by nomination' option is covered in <u>Letting Guardian handle Manual selections and include Automation</u>



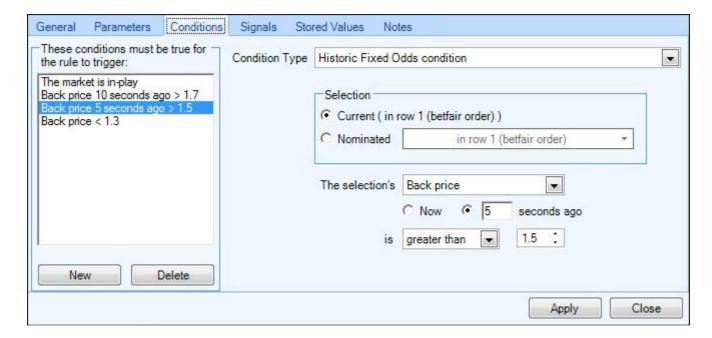
Historic Fixed Odds

This condition allows the automation rule's trigger to be filtered by the price of its selection or the price of another selection **some time ago**.

This can useful when you are trying to determine how a price has moved. You may wish to back a shortening price or lay a drifting one. This condition will allow you to do so.

In this image, the condition has been configured to see the current favourite in the market had a back price > 1.50 five seconds ago. On the left of the image it can be seen that the condition is being used in conjunction with other conditions to test:

- that the market is in-play
- that the back price was greater than 1.7 ten seconds ago
- that the back price is less than 1.3 now.



Historic Relative Odds

This condition allows the automation rule's trigger to be filtered by how the price or volume of one selection at one point in time compares to itself or another selection at a different point in time.

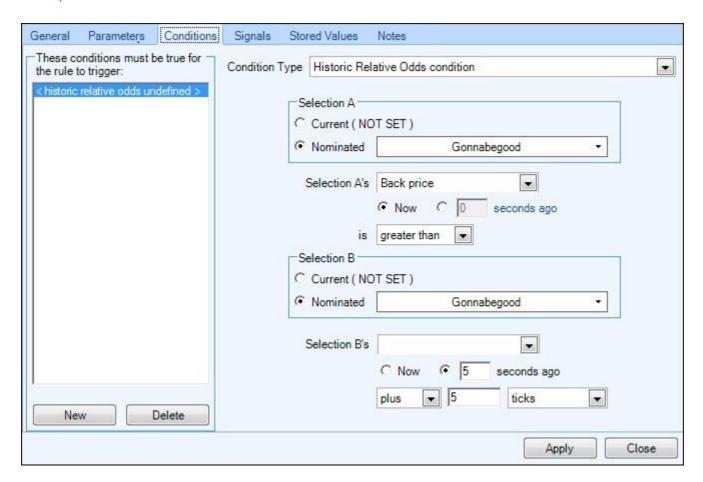
Once you have chosen which selections and what to compare against the bottom options of this tab allow you to make adjustments of Plus, minus, multiply by and divide by to derive a final value of ticks, odds, amount or percent.

This is a very powerful condition and can be used to detect if a price is drifting or shortening over time and/or the volume is increasing quickly enough.

ie, you could test if a price has shortened more than 10% in the last 5 minutes, or if the volume has increased by more than £5000 in the last 60 seconds.

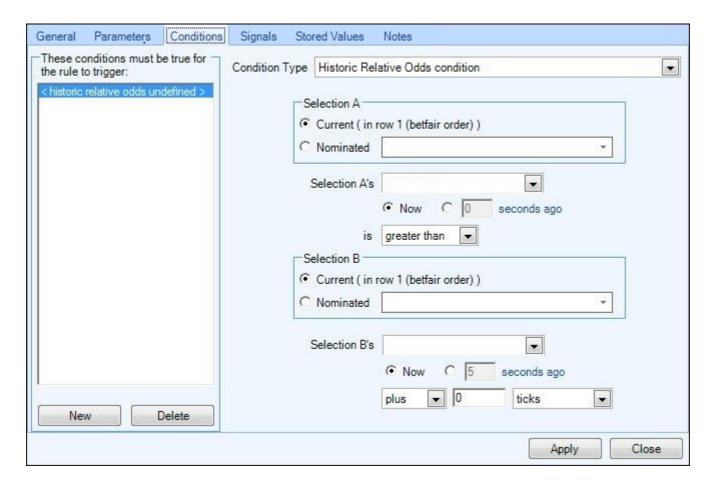
In the screenshot below the rule will only trigger if the back price of 'Gonnabegood' is currently greater than the price it was five seconds ago plus five ticks. This could be attached to a Place Lay Bet rule so that the selection is laid if it has drifted more than five price ticks in the last five seconds.

Tip: To further filter the trigger, add multiple conditions testing the price against different points in time to detect a more persistent drift.

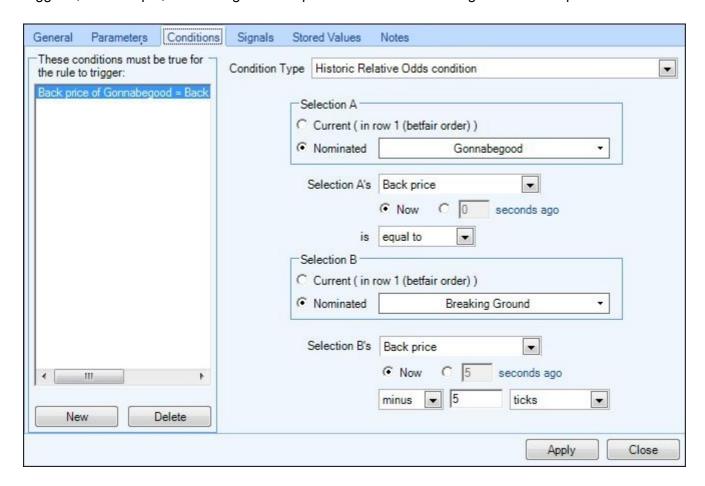


This condition can also be used to compare the prices of two different selections.

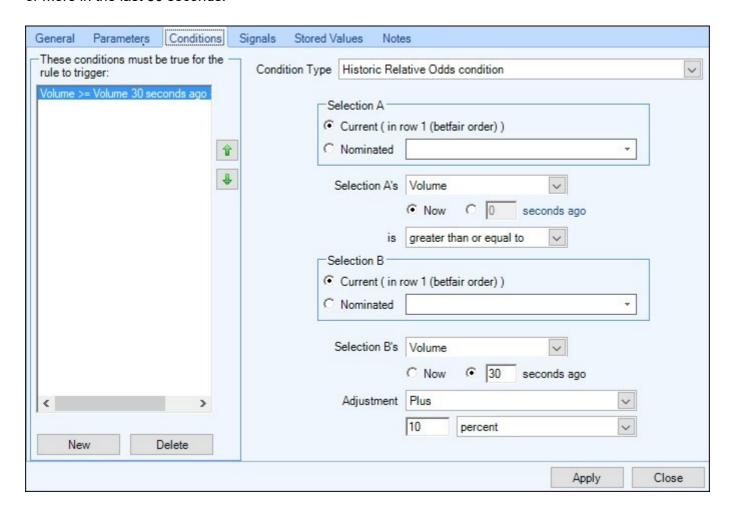
This screenshot shows the initial options you have



In this example the condition will monitor how 'Gonnabegood' compares to 'Breaking Ground'. It will allow the rule to trigger only when the 'back price of Gonnabegood' = 'back price of 'Breaking Ground' - 5 ticks'. So it would trigger if, for example, 'Gonnabegood' was priced at 2.0 and 'Breaking Ground' was priced at 2.10.



In this final example the rule will only trigger if the volume of the selection in Betfair Row 1 has increased by 10% or more in the last 30 seconds.



There is no limit on the number of Historical Relative odds conditions that can be used, so you could test not only for a price move but also that there was a significant volume increase on the selection at the same time

Weight of Money

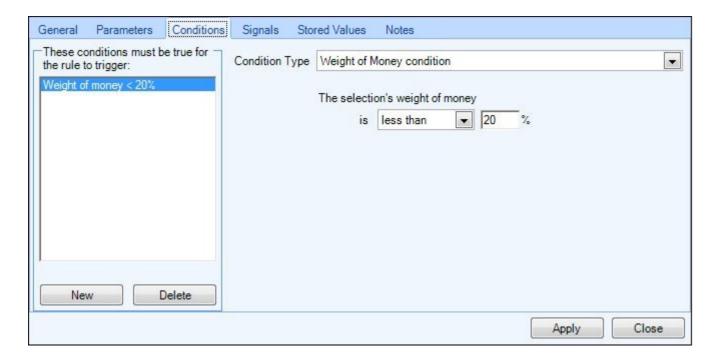
This condition allows the automation rule's trigger to be filtered by the weight of money of its selection.

The condition ALWAYS uses the lay side of the book, therefore if you wanted to set the condition to test the back side is greater than 90% you would use less than 10% (ie, if the lay is less than 10% the back has to be greater than 90%)

The weight of money will be > 50% if there is more money waiting to be matched on the lay side of the selection than on the back side.

It will be < 50% if there is more money waiting to be matched on the back side of the selection than on the lay side.

In the screenshot below the condition is set to allow a trigger if the Weight of Money (WOM) is less than 20%; indicating pressure in the market for the price to shorten.



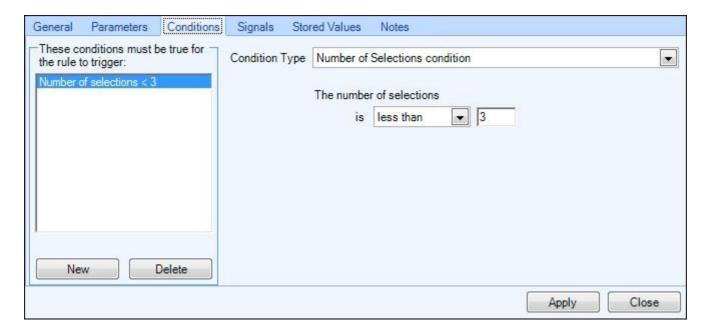
The condition could easily be changed >80% if an indicator of drifting pressure in the market was required.

Number of Selections

This condition allows the automation rule's trigger to be filtered by the number of selections in the market.

It could be used to prevent activation of a rule that you only want to apply to a market with a large field.

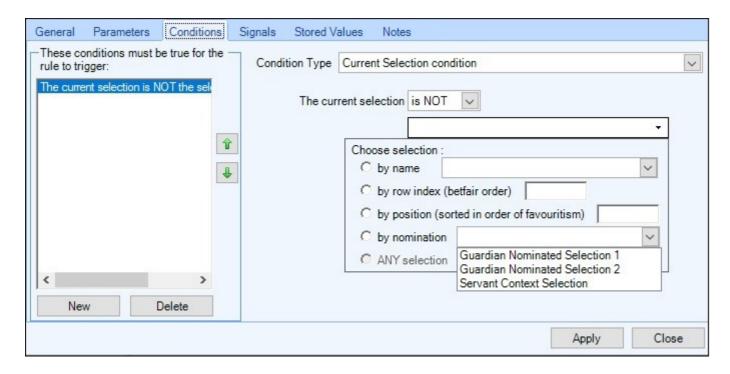
It could also be used to spot a withdrawal from a market; the selection count would decrease compared to when you applied the rule to the market.



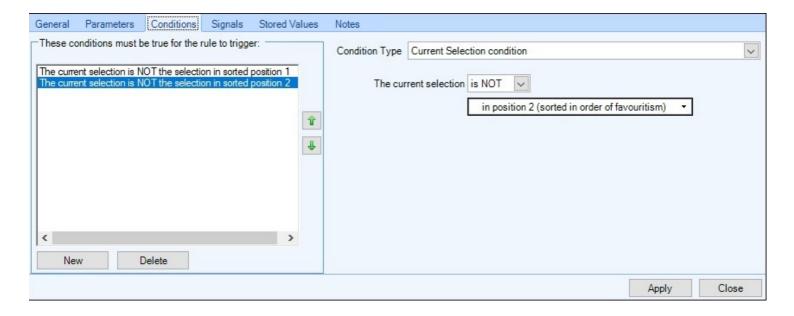
Current Selection

This condition is designed to be used when applying a rule to 'EVERY' selection if you wish to test if the selection currently being processed 'is' or 'is not' the one specified in the rule condition.

For example, you could be using a 'Place Lay Bet' rule applied to 'EVERY' selection but want to place a the lay bet on every runner except the Favourite, or Place a lay bet on every selection in a market apart from the one in the Servant Context.



If you wanted to include/exclude more than one selection from the rule you add multiple 'Current Selection' conditions, in the image below the rule will trigger on EVERY runner except the selections which are currently the 1st and 2nd favourite



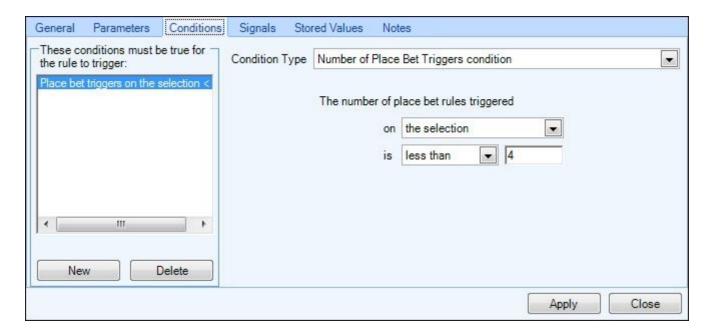
Number of Place Bet Triggers

This condition allows the automation rule's trigger to be filtered by the number of Place Bet rules that have already triggered into the market using Automation. It can be configured to look at the market as a whole or just the current selection specified by the rule.

Notes: Using 'Place Back Bet' or 'Place Lay Bet' will increase the count by one for the selection and the market. Using 'Back All Selections' or 'Lay All Selections' will increase the count by one for **each** selection and the count for the market will increase by the number of selections in the market.

Using 'Close Trade On Selection', 'Close Trade On Selection With Greening', or 'Green All Selections' will **not** increase the count.

Tip: Used in conjunction with the 'Applies to selection: ANY selection' option on the General page, this is a handy way to allow bets on multiple selections but only **one** per selection. e.g. If you wanted to lay up to three runners, one bet on each: The condition would be set so that the rule would only trigger if 'the number of place bet rules triggered on the selection is less than 1' and on the General page, the 'Allow rule to trigger up to x times' would be set to 3.

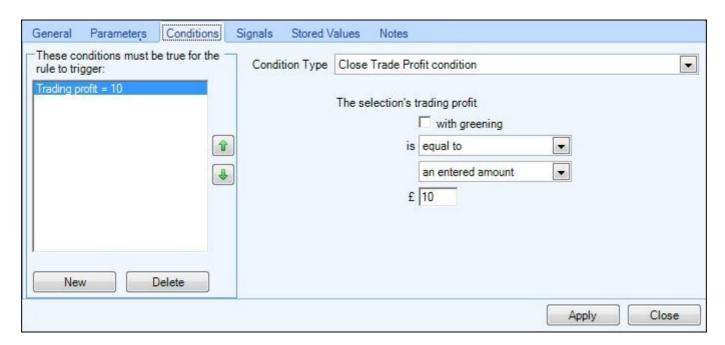


Close Trade Profit

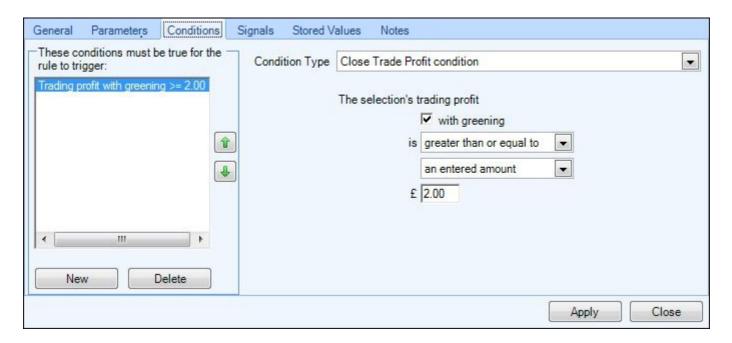
This condition allows the automation rule's trigger to be filtered by the predicted amount of profit (or loss) that would be realised by closing all trades on a selection at the current market price. The comparison can be applied with or without greening. It can also reference a Stored Value and use this to test the predicted amount of profit (or loss) against.

Below are a few examples of how you could use this condition

In the first example, the rule would be allowed to trigger if the close trade profit (without greening) was exactly £10



In this next image the rule would be allowed to trigger if the predicted greened profit on the selection was at least £2



The condition can also be used to limit losses. In this next image, the condition could be applied to a 'Close Trade On Selection' rule to trigger if the predicted greened profit on the selection was less than -£1.00. i.e. A negative profit value is a loss.

If your profit is less than a negative number then you testing the size of the loss. All the time your profit on the selection was positive or the loss was smaller than a £1 loss, then the condition would test false and the rule would

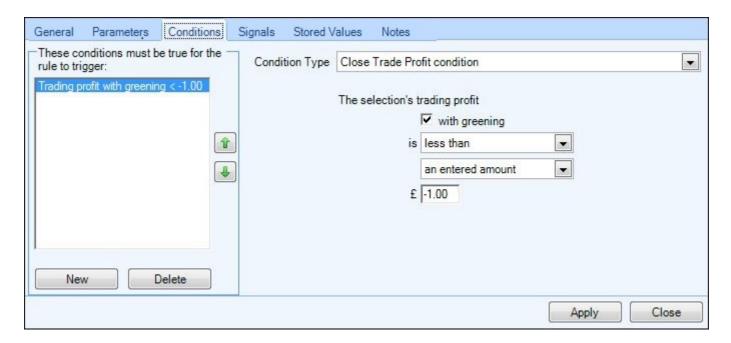
not trigger, but as soon as the loss was worse than £1 it would activate. (-£1.10 being less than -£1.00 from a mathematical point of view)

A good way to remember it is to visualize it as a ladder with greater being higher and less as lower,

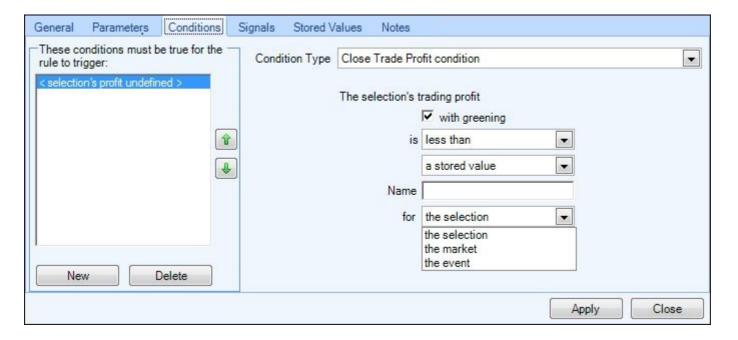
2 1 0 -1 -2 -3

3

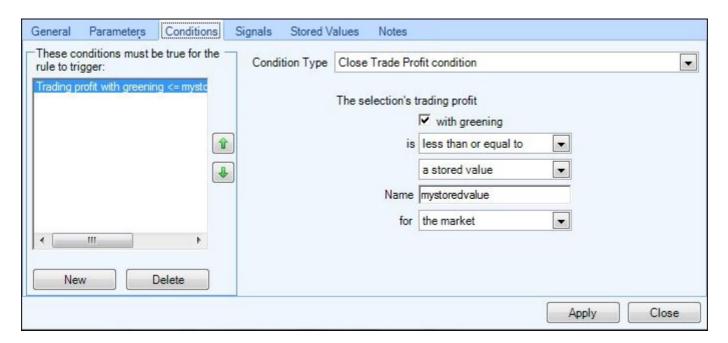
so if you wanted to set a rule to trigger if a loss is worse than -£1 you would use 'Less' than -£1 (less being any figure lower than -£1)



Rather than entering a value at the time of creating the rule you have the option to use a 'Stored Value' so you might have another rule either in this file or in another (even running on a another market from the same event) that will trigger at some point and store a value of something. Once that value has been stored you can then test the current predicted profit or loss against that value.



In this example the condition will only be allowed to trigger if the current predicted profit with greening for this selection is less than or equal to a existing stored value named 'mystoredvalue'



Green All Profit

This condition allows the automation rule's trigger to be filtered by the predicted amount of profit that would be realised by closing all trades on **all selections with greening** at the current market price.

i.e. This is a similar concept to <u>Close Trade Profit</u> but the difference being it applies to all selections. Like the Close Trade Profit condition It can also reference a <u>Stored Value</u> and use this to test the predicted amount of profit (or loss) against.

In the image below it will test and allow the rule its part of to trigger if the predicted profit and loss for the whole market is £3.00 or more



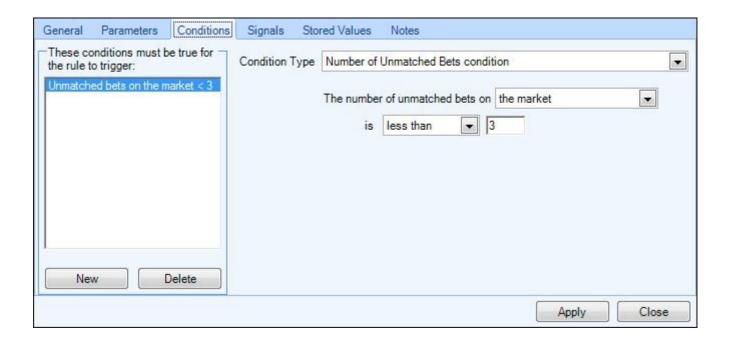
Number of Unmatched Bets

This condition allows the automations rule's trigger to be filtered by the number of bets currently unmatched on a specified selection or in the whole market.

In this example the condition will only allow the rule to trigger if there are less than 3 unmatched bets in the market

Note: When using this condition to prevent a second bet from being placed until the first bet has matched you'd set the condition as 'the number of unmatched bets on the selection equals 0'. However, the rearm rate on the General page needs to be set appropriately. You need to take into account any betting delay being applied to the market (if in-play) and the frequency that the market is being refreshed. i.e. Having placed a bet, make sure the rule **waits** long enough before rearming to ensure the details of the bet (if unmatched) have returned from betfair. Optimisation of the Bet Angel Guardian market refreshing can help... read more about it here.

Also, be careful using just this condition to filter betting when using global settings and offsets. There will be a delay between the initial bet being filled and the offset bet being visible as an unmatched bet in the market (again based on in-play betting delays and Guardian refresh rates) there is a risk that the unmatched bets count for the selection will be tested as zero at this time. To avoid an unwanted second bet, it is recommended that this condition be used in conjunction with the Fill or Kill Bet Time condition and that Fill or Kill is switched on in the global settings.

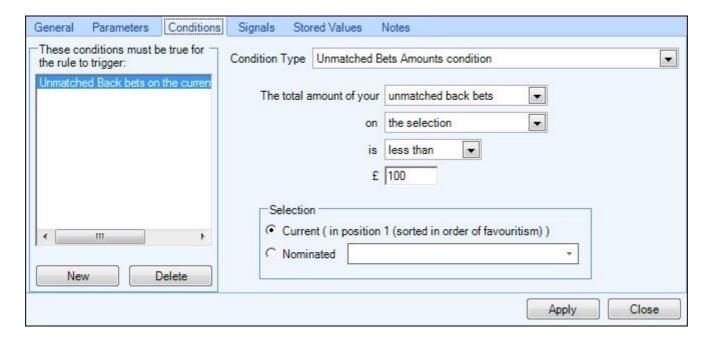


Unmatched Bets Amounts

This condition allows the automation rule's trigger to be filtered based on the amount of money unmatched on a selection or market.

It can be configured to test if the total amount of unmatched back, lay or back and lay money combined on a selection or market is less than, greater than or equal too.

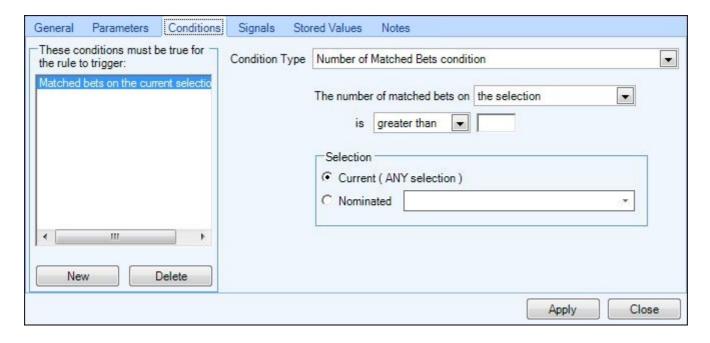
In the screenshot the condition has been configured so that it will allow the rule to trigger if the amount of unmatched back bets on the Favourite is less than £100.



Number of Matched Bets

This condition allows the automations rule's trigger to be filtered by the number of bets currently matched (or Partially matched) on a specified selection or in the whole market.

Note: On betfair the number of matched bets is the total number of unique bet references on the selection that have been either partially or fully matched. e.g. If the only bet placed on a market was a £10 bet and only £3 of that was matched, then the number of matched bets would be 1. If another £5 was matched a few seconds later then the number of matched bets would still just be 1 (as the number of bet references that have been partially or completely matched is still just the one). If you were to then place a new bet (generating a new bet reference) that was completely matched, the number of matched bets would increase to 2.



Tip: This value can be reset to 0 by using the Checkpoint Matched Bets rule

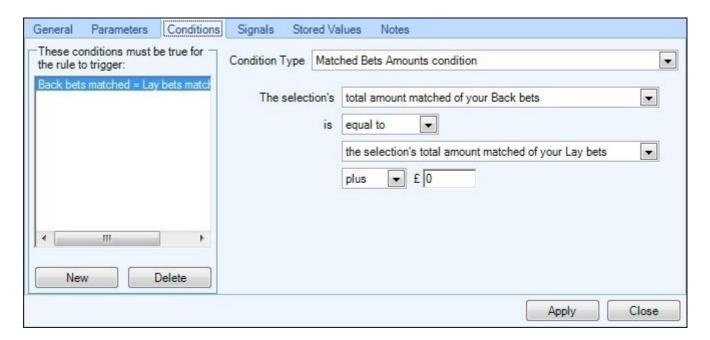
Matched Bets Amounts

This condition allows the automation rule's trigger to be filtered based on the amount of money matched on the selection.

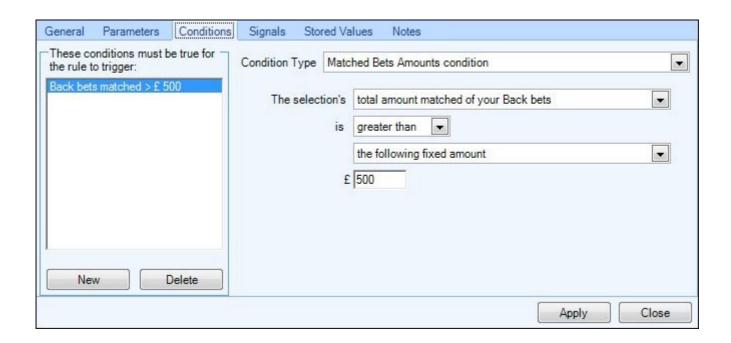
It can be configured to test:

- a) The amount of money matched on the **back** side of the selection compared to the amount of money matched on the **lay** side of the selection (with or without a monetary adjustment). This can be useful to determine if your position on a selection is even or not. e.g. You can prevent a new bet from being placed until the current open position been closed successfully.
- b) The amount of money matched on the **back** side of the selection compared to an entered fixed amount. Or the Servant context **back** stake
- c) The amount of money matched on the **lay** side of the selection compared to an entered fixed amount. Or the Servant context **lay** stake

In the first screenshot the condition has been configured so that it will allow the rule to trigger if both back and lay amounts matched are the same.



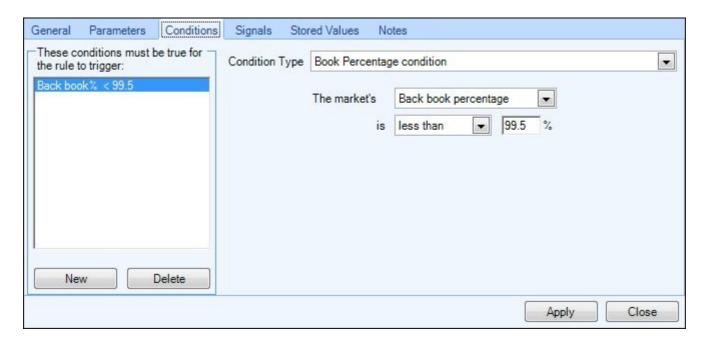
In the next screenshot it has been configured to only allow the rule to trigger if the amount of money matched on the back side (completely ignoring any lay side bets) is greater than £500.



Book Percentage

This condition allows the automation rule's trigger to be filtered by book percentage on either the back side or the lay side of the market.

It could be used to back the whole field if the book percentage drops below 100%; in the screenshot below the condition will allow the rule to trigger if the book % is less than 99.5%



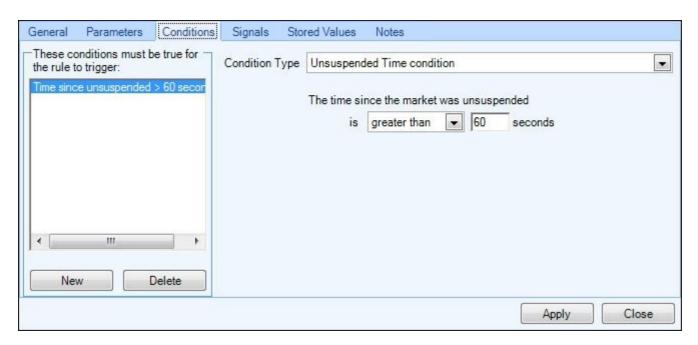
The condition can also be used to prevent betting into markets with inefficient books (indicating an illiquid markets that is likely to be volatile and difficult to trade).

Unsuspended Time Condition

This condition allows the automation rule's trigger to be filtered by the amount of time since the market was last in a suspended state.

It is useful when trading a market that could be suspended at any time. e.g. An in-play football match which would be suspended if a goal was scored, or if a red card or a penalty were given. Markets tend to become very volatile following a suspension and this condition can protect against a bad trigger as the market reforms. This condition allows you to specify a settling period before your rule is triggered; in the example below, the automation rule will be forced to wait 60 following the market coming out of the suspension before it will be allowed to fire.

Note: It is important that the market being automated is refreshed frequently to ensure all suspensions are detected. Optimisation of the Bet Angel Guardian market refreshing can help... read more about it here.

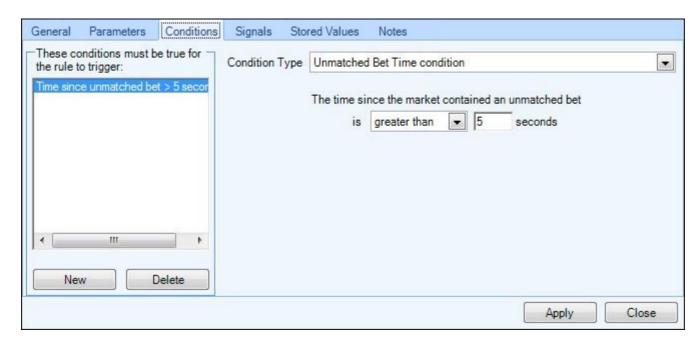


Unmatched Bet Time

This condition allows the automation rule's trigger to be filtered by the amount of time since the market last contained an unmatched bet.

Although the General page of Automation allows to control how often a rule triggers, you may need more control over the flow of new bets if you are **offering** bets for other market participants to match against. These will be unmatched when they first reach the market and will remain so for an unknown amount of time. This condition will allow you to prevent a new bet from being placed until you are sure the earlier bet has been matched.

In the screenshot below, if the condition was attached to a Place Bet rule, the rule would be prevented from triggering if you had an unmatched bet in the market at any time during the last five seconds.



Detailed worked example:

Assuming that you are placing bets before the market goes in-play (so no in-play betting delay applies) and have optimised refreshing so that prices and bets are refreshing at least once a second.

You have configured the General page to trigger a Place Back Bet rule up to four times, waiting 3 seconds between triggers.

The bets will be placed at the 'Best market price plus 1 tick' so they will most likely wait in the market as an unmatched bet for someone else to match against.

The rule will be active from 120 seconds before the start of the event until 15 seconds before. With 10 seconds to go a Green All Selections rule will be executed.

With the condition applied (as per the screenshot above) the following takes place:

Time before event start: Description

120 secs : Back bet is placed

119 secs: Shown in the market as an unmatched bet

117 secs : Place bet rule has waited 3 seconds and is now ready to trigger, but there is still an unmatched bet in the market, so nothing happens

114 secs: Unmatched bet is still in the market.

113 secs: Unmatched bet has been filled. Place bet rule is still ready to trigger, but condition is preventing it as it's only been one second since the market last had an unmatched bet

...

109 secs: Place bet rule still ready to trigger, but condition is preventing it as it's only been five seconds since the market had an unmatched bet

108 secs: Now another **Back bet is placed** as it has been greater than five seconds since the last bet was unmatched in the market

107 secs : Shown in the market as an unmatched bet

106 secs : Unmatched bet has been filled. So now one second since the market last contained an unmatched bet.

105 secs: Place bet rule has waited 3 seconds and is now ready to trigger, but still only two seconds since the market contained an unmatched bet, so nothing happens.

...

101 secs: Now another **Back bet is placed** as it has been greater than five seconds since the market contained an unmatched bet. This time the market moves during bet placement and it is filled immediately so no unmatched bet will be returned from the market.

...

98 secs: Place bet rule has waited 3 seconds and is now ready to trigger, and it has been nine seconds since the market last contained and unmatched bet, so a **Back bet is placed.**

etc until all bets are placed and the Green All Selections rule triggers

If the 'Unmatched Bet Time' condition had not been used, bets would have been placed every three seconds regardless. At times: 120 secs, 117, 114, 111 & 108 secs respectively.

Fill or Kill Bet Time

This condition allows the automation rule's trigger to be filtered by the amount of time since Bet Angel was last managing a fill or kill bet on the selection. The time can either be specified in the condition or use it can use a time held by a Stored Value.

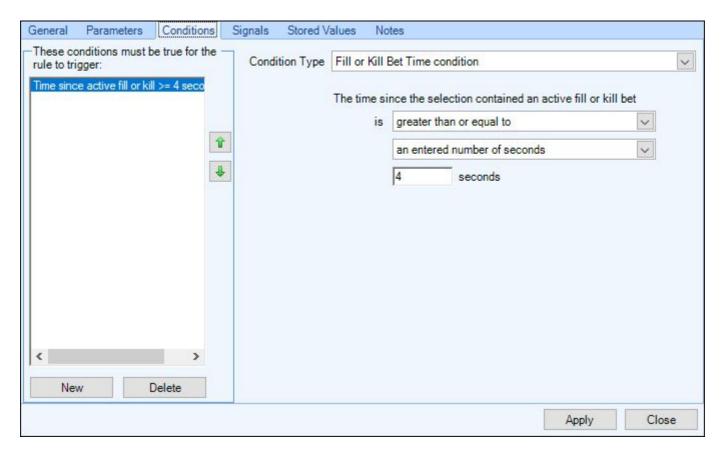
This condition is particularly useful when trying to prevent unwanted second bets from triggering on a selection when using global settings and offsets.

There will be a delay between the initial bet being filled and the offset bet being visible as an unmatched bet in the market (the exact time depending on Betfairs in-play betting delay for that market type and your <u>Guardian refresh</u> rates). During this time the <u>Number of Unmatched Bets</u> condition would not see any unmatched bets in the market, potentially allowing a new bet to trigger.

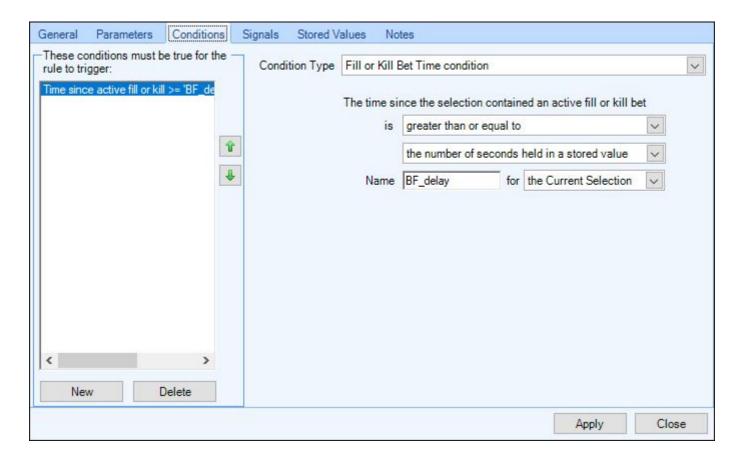
In addition to entering the number of seconds as a fixed value you can also use a time held by a Stored Value this effectively gives you a variable delay, for example you could Store the Value of Betfair's in-play bet delay then check that value with this condition.

As the in-play delay differs sport to sport this condition will adjust accordingly, for example if the rule was applied to a horse racing market the Stored value for the in-play delay would be 1sec (as there's a 1 second delay on racing markets), if it was applied to a Tennis market the stored value would be 3secs (as there's a 3 second delay on tennis markets).

In the image below the rule would only by allowed to trigger if it's been more than four or more seconds since the fill or kill timer expired (or the initial bet was filled).



In the following image the rule would only be allowed to trigger if the time since a Fill or Kill bet was handled by Bet Angel is greater than the value held by the Stored Value named 'BF delay'

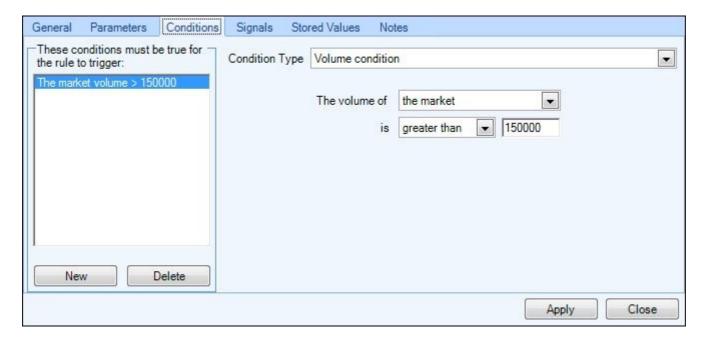


Volume

This condition allows the automation rule's trigger to be filtered by the amount of volume that has been matched on the selection or on the market as a whole.

This can be very useful for stopping a rule from triggering into a market with low volume. Low volume markets are often difficult to trade with low fill rates and price gaps.

In the screenshot below the rule would only be allowed to trigger if the market volume exceeded £150,000.

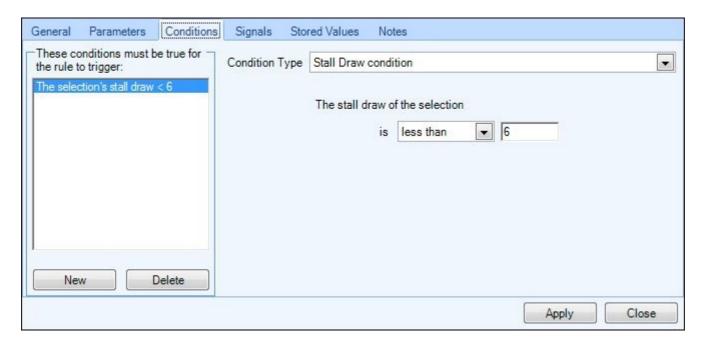


Stall Draw

This condition allows the automation rule's trigger to be filtered by the stall draw of a selection in the market.

It could be used to prevent betting on a favourite in a horse race if he happens to have been given a bad stall draw on a course with a known bias.

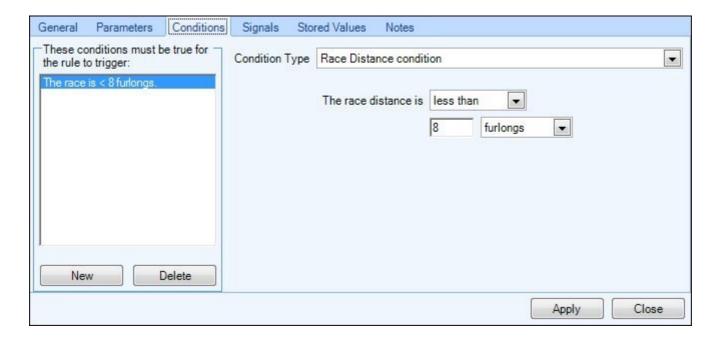
e.g. Beverley is a classic example where a low draw is thought to be beneficial. In the example below the condition is set so that the rule will only trigger if the selection has a stall draw of less than 6.



Race Distance

This condition allows the automation to filter horse racing markets by the race distance, It can be used to ensure the rule only triggers when a race of a specific distance is run or when one with a greater or less than distance is run.

In this example the rule will only trigger if the race distance is less than 8F (1 Mile)

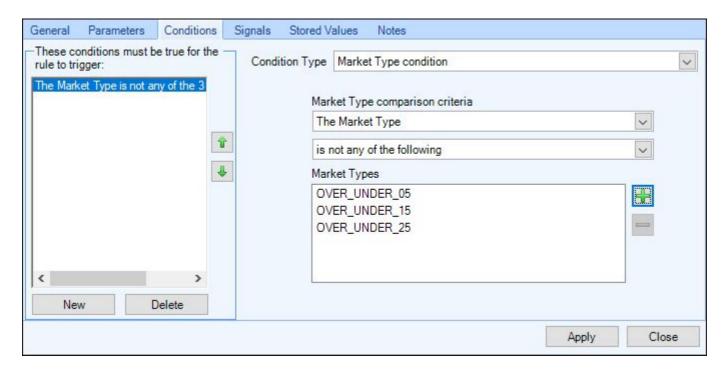


Market Type

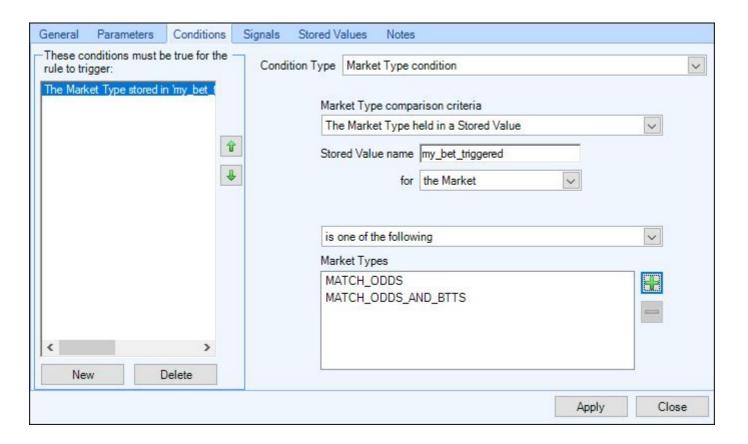
This condition can be used to filter if a market 'Is one of the Following' or 'Is Not on of the Following' market types A market type can be tested directly or you can test for a market type held in a <u>Stored Value</u> including Stored Value (shared) set by rule from another file or Servant running on another market.

Once you have selected the comparison criteria you can use the icon to add your required markets from the list of market types that will appear.

For example if you had an automation file applied to several football Over/Under markets from each fixture but didn't want this particular rule to trigger on the lower score markets you could add a Market Type Condition and configure it to NOT to trigger on the O/U 0.5, 1.5 and 2.5 markets as shown in the image below



In the following image the condition has been configured to check if the market type held in a stored value named 'my_bet_triggered', is either a 'Match Odds' or a 'Match Odds and BTTS' market, and only if it is one of those types will the rule be allowed to trigger

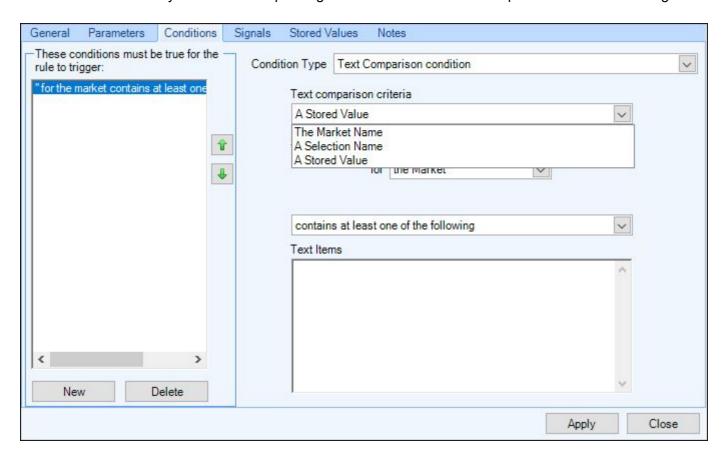


Text Comparison

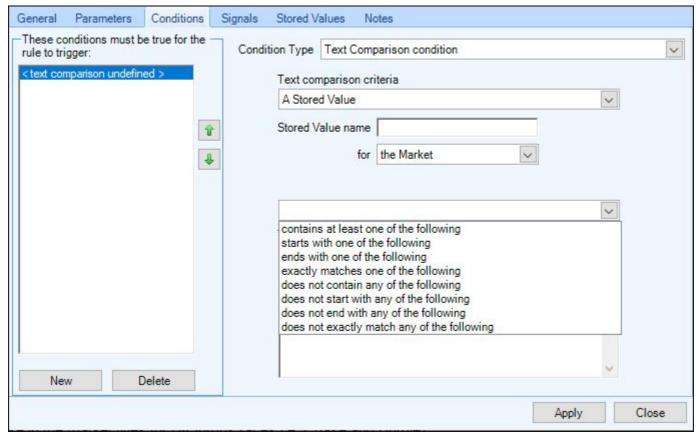
The Text Comparison condition is one of the most powerful of all the conditions and can be used in a number of ways to target your rule/s against very specific markets or even selections.

With this condition you can compare the text in the Selection Name, Market Name or Stored Value name against a list of your entered text.

First select the criteria you want to compare against from one of the three options shown in the image below.

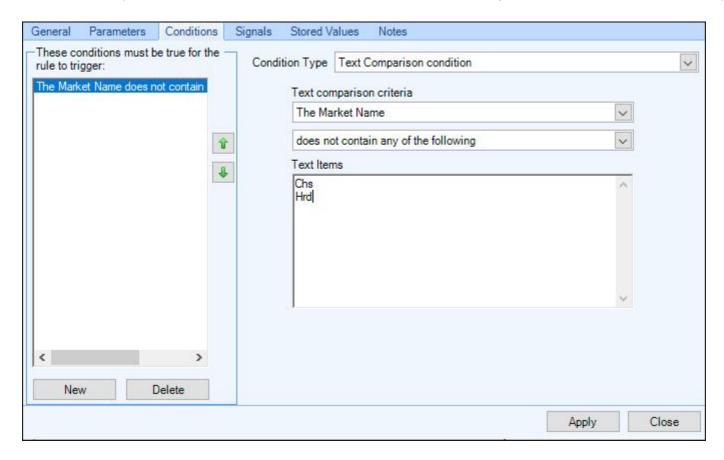


When comparing your text there is then a choice of the following criteria for you to test against.

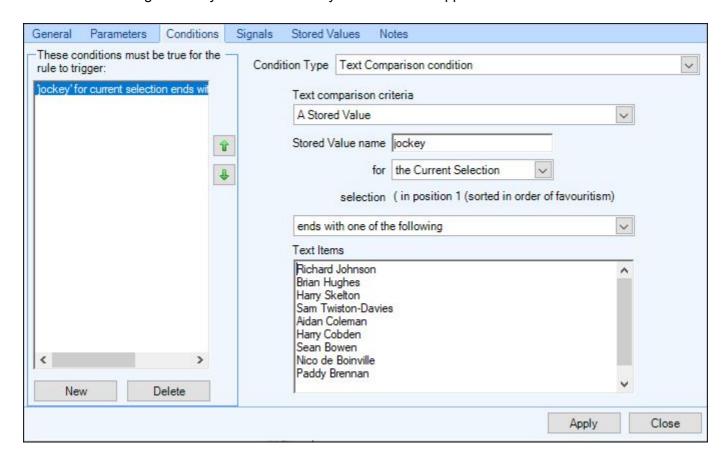


^{**}The 'Market Name' is the Betfair market title as shown in the top left corner of the one-click screen or under the 'Markets' column of Guardian.

For example you may have a rule that you only want to trigger on flat races and not a jumps race (National Hunt). In the image below the condition is configured to allow the rule to trigger if the market title does not contain the words 'Chs' and 'Hrd' (which are the terms Betfair use in the market titles for UK jumps races ie, Chase and Hurdle).



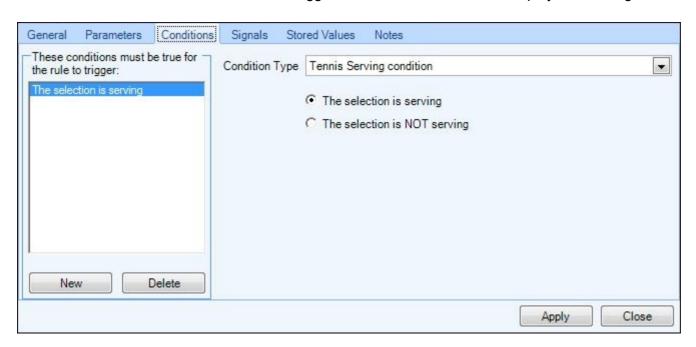
In the next example the condition is looking for a Stored Value named 'Jockey', and will only trigger on the favourite if it's being ridden by one of the Jockeys who's names appear in the list.



When this condition is used in a <u>Group</u> it is possible to construct even more complex AND/OR/NOR text matching conditions.

Tennis Serving

This condition allows the automation rule's trigger to be filtered based on which player is serving in a Tennis match.



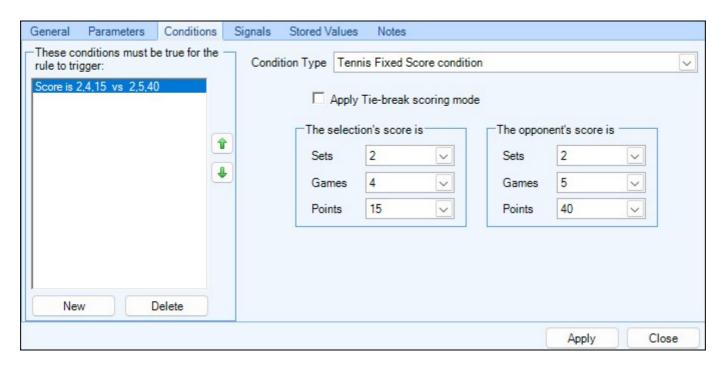
Note: This feature requires the live tennis score feed to have been provided for the match by Betfair. It is worth checking in Tennis Trader or the Watch List if the scores are available for a market before using this condition. In January 2021 Betfair informed us they will no longer be offering live scores and server feeds on ALL women's (WTA) matches.

Tennis Fixed Score

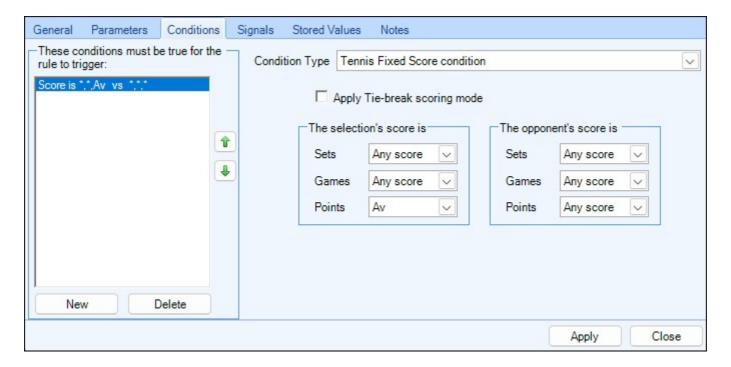
This condition allows the automation rule's trigger to be filtered based on the score of a Tennis match.

Any of the values in the pick lists can have the wildcard of 'Any score' selected, so you can make the condition as specific or flexible as required.

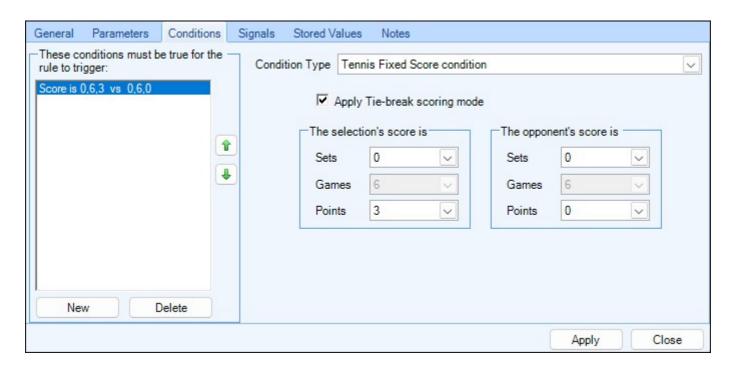
In this first example, the condition will allow the rule to trigger if the selection's opponent is on match point in a five set match.



In this next example, the condition will allow the rule to trigger if the selection has Advantage in the current game (regardless of when the game is being played in the match).



In the final image the condition will allow the rule to trigger if the selection is leading 3 points to nil in a tiebreaker at the end of the first set



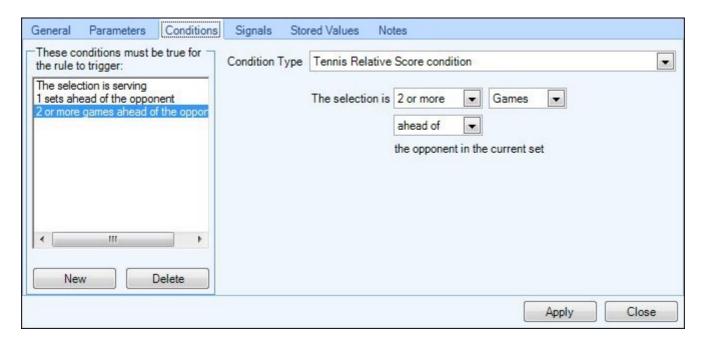
Note: This feature requires the live tennis score feed to have been provided for the match by Betfair. It is worth checking in Tennis Trader or the Watch List if the scores are available for a market before using this condition. In January 2021 Betfair informed us they will no longer be offering live scores and server feeds on ALL women's (WTA) matches.

Tennis Relative Score

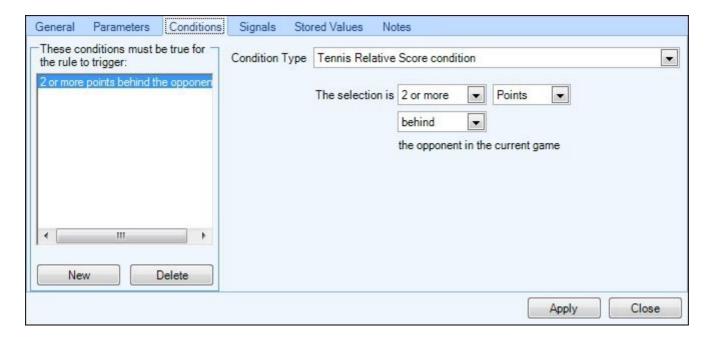
This condition allows the automation rule's trigger to be filtered based on how the selection has scored in a Tennis match **relative to his opponent's score**.

You can use multiple instances of this condition to compare relative scores for sets, games, and points for the same rule.

For instance you could place a bet if the selection is 1 set ahead, at least 2 games ahead in the current set, and is currently serving. See the three conditions in the following image.



Or more simply, only trigger a rule if the selection is 2 points behind in the current game (i.e. a score of 0 - 30 or 15 - 40)

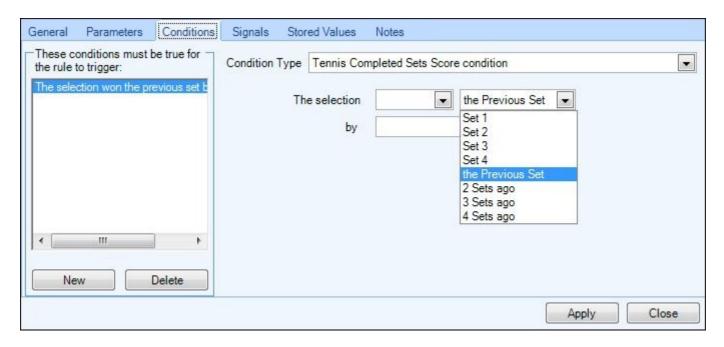


Note: This feature requires the live tennis score feed to have been provided for the match by Betfair. It is worth checking in Tennis Trader or the Watch List if the scores are available for a market before using this condition. In January 2021 Betfair informed us they will no longer be offering live scores and server feeds on ALL women's (WTA) matches.

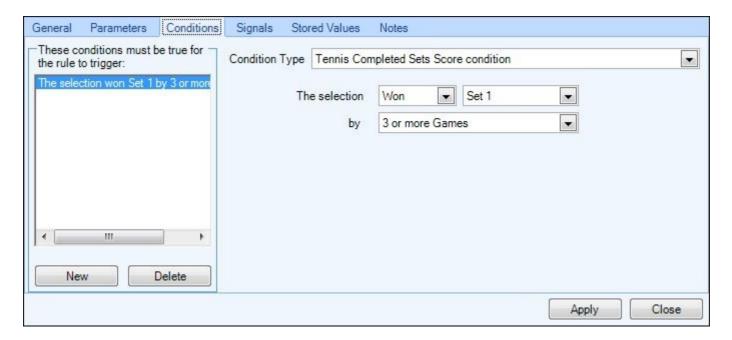
Tennis Completed Set Score Condition

This condition allows the automation rule's trigger based on a previous set score/s of a match.

The condition can test if a player won or lost an earlier set by testing against either a specific set number (ie, the score of set 2), the previous set, or the score 'X' number of sets ago.



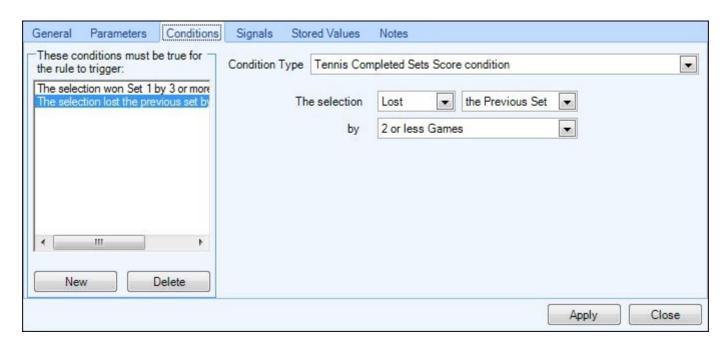
In the example below I have set up the condition so this rule can only trigger if the player the rule is applied to won Set 1 by 3 or more games (ie, they won 6-3, 6-2, 6-1 or 6-0)



If you wanted to trigger a rule based on a specific set score then you just need to work out how many games difference that would be, so to trigger a rule if the player won 6-2, you would use 'By 4 games', as no other set score can produce a win by 4 games.

You can use multiple instances of this condition to compare multiple previous set scores, so you could add another condition to test if a player won or lost the 2nd set by 'X' number of games.

In the following example I've left the original condition that the player won the first set by 3 or more games, I then want to test they only lost the previous set by 2 or less games, (ie, 6-4, 7-5 or 7-6)



So this rule could only trigger if the player won Set 1 either 6-3, 6-2, 6-1 or 6-0 and lost the previous set 6-4, 7-5 or 7-6

NB, if you want to test a player won/lost a set after a tie-break you would use 'By 1 game' (ie, the set score was 7-6)

Note: This feature requires the live tennis score feed to have been provided for the match by Betfair. It is worth checking in Tennis Trader or the Watch List if the scores are available for a market before using this condition. In January 2021 Betfair informed us they will no longer be offering live scores and server feeds on ALL women's (WTA) matches.

Signal Set

This condition will check to see if a signal name has or has NOT been set with a value (of any number). Note: When a signal is cleared, it is then considered to be NOT set.

For example, using the settings below, before this rule can trigger a signal with the name "armed" needs to have already been set by another rule for the market at a earlier time; until the signal is set, this rule will not trigger.

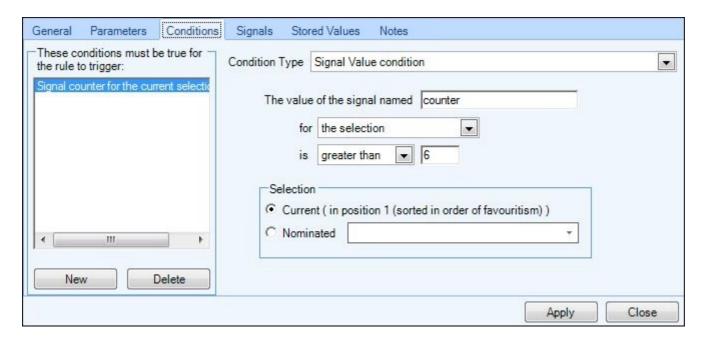


Signal Value

This condition will test for the name and value of a signal on either a selection or market, you can test if the value is Less than, Greater than, or equal to a specified number.

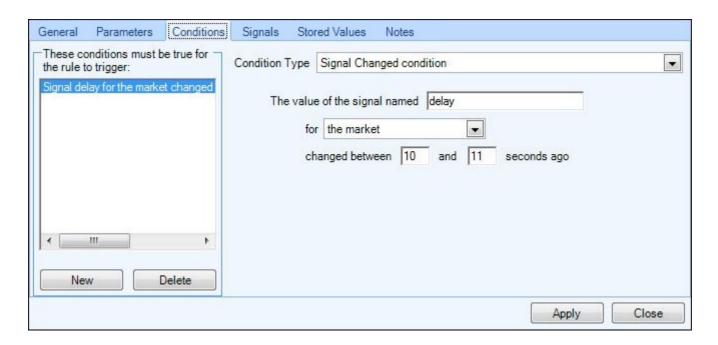
For example, using the setting below would require the selection which is currently the favourite to have had a signal named "counter" with a value greater than 6 set.

So if this condition was applied to a "Green all selections" rule and another "Place back bet" rule type was incrementing a signal named "counter" each time it was triggered, then for the first six back bets this rule would be prevented from triggering. Only on the seventh bet (with the counter signal incremented to a value of 7) would this condition be met, allowing "Green all selections" to trigger.



Signal Changed

This condition will check to see if the value of the named signal has changed during the specified time period. Note: The creation of a signal will be considered as a 'change'. When a signal is cleared, the time it was last changed is also cleared; it is reset to a state as if the named signal had never existed.

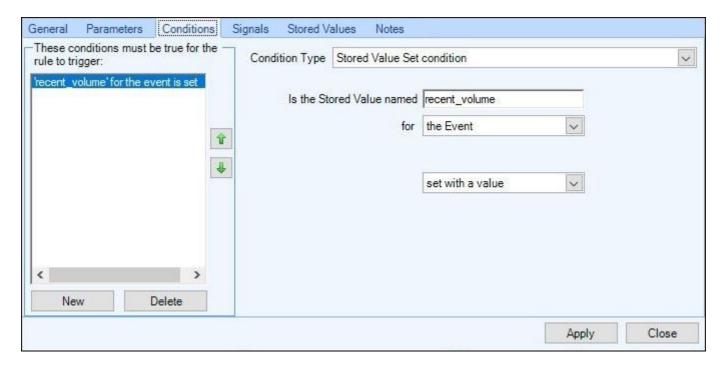


Pro Tip, When running automation triggered on Tennis score lines If this condition is used on your back, lay or green up rule type etc (and is used in conjunction with a "Set / Modify a Signal" rule configured to set a signal when a score is reached) the settings above will delay the actual triggering of the bet by the number of seconds after a score line is reached allowing the odds settle down a little.

Stored Value Set Condition

This condition will check to see if a Stored Value name for a selection, market or event has or has NOT been set with a value (of any number). Note: When a stored value is cleared, it is then considered to be NOT set.

For example, using the settings below, before this rule can trigger a Stored Value with the name "recent_volume" for the 'Event' needs to have already been set by another rule at a earlier time; until the Stored Value is set, this rule will not trigger.

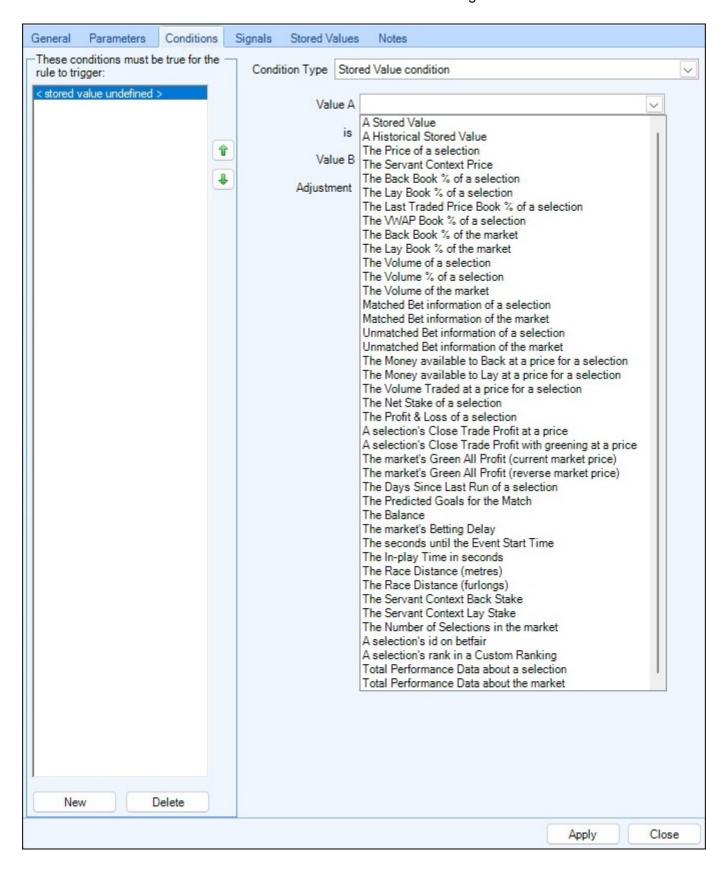


Note: One example use for this condition is when deciding to initialise a stored value. i.e. You would run a rule to set it with an initial value when this condition determines that it is not currently set with a value.

Stored Value

The Stored Value condition will allow you to test between two values to see if Value 'A', is Greater Than, Less Than or Equal To that of Value 'B', this includes testing against specific named values you have stored earlier using 'Stored Values' as part of another rule for a selection, market or event.

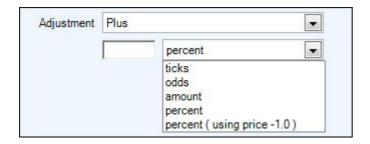
A full list of all the values which can be tested can be seen in the image below.



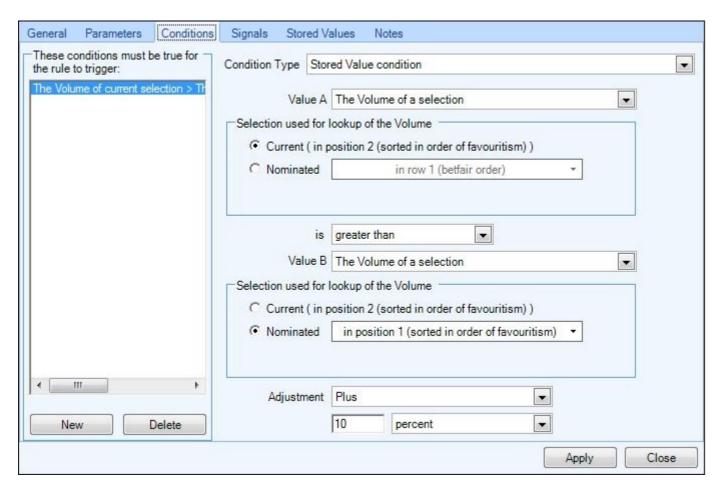
Adjustment

In addition to testing between the actual values you can also include your own manual adjustment if you wish by selecting to use either 'Plus', 'Minus', 'Multiply by', or 'Divide by' then choosing from ticks, 'Odds', 'Amount', 'Percent' or 'Percent (using price -1.0)'. Note: The adjustment applies to 'Value B' before the value comparison of A & B takes place.

There are also adjustment options to convert Value B from a price into ticks (counting up in ladder increments from 1.01) or from ticks into a price.



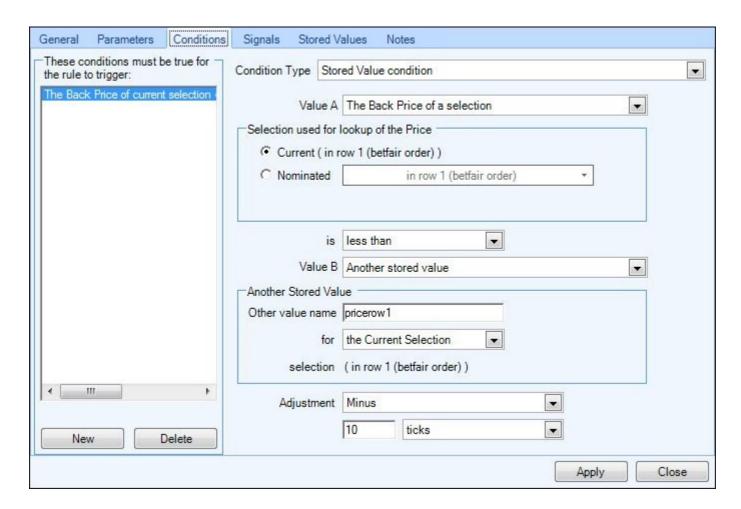
In the image below the condition is testing the volume of the favourite is greater than the volume of the 2nd favourite plus 10%, so at the time this rule runs if the favourite's volume is £250'000 then the 2nd favourite must be greater than £275'000 to satisfy this condition.



Testing Against Earlier Stored Values

In the following image I had already <u>stored the value</u> of the 'Back Price of a Selection' in row 1 with the name 'pricerow1', using another rule which triggered at five minutes to post time.

I now want this current rule to trigger on the condition the 'Back price of the selection in row 1' is now 10 ticks lower than it was when the earlier rule triggered.

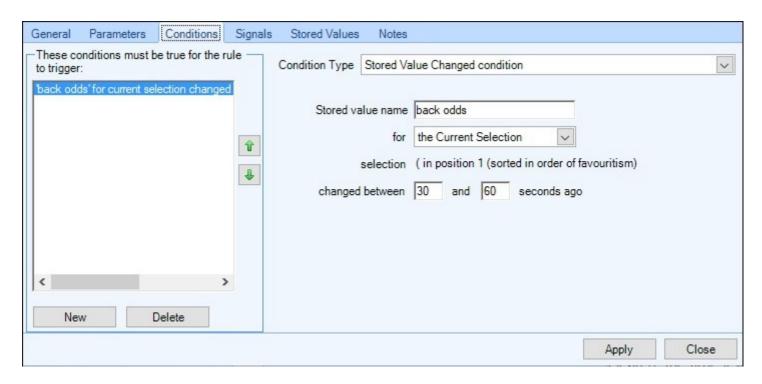


Using this concept and function it is possible to store a value at anytime and with any other rule (even one from a <u>Servant</u> running on the same market) then test and trigger a later rule dependant on the value stored by the first.

Stored Value Changed

This condition will check to see if the value held in the Stored Value was most recently changed during the specified time period.

In the image below the rule will only be able to trigger if the value held in the stored value 'back odds' for the favourite was most recently changed between 30 and 60 seconds ago

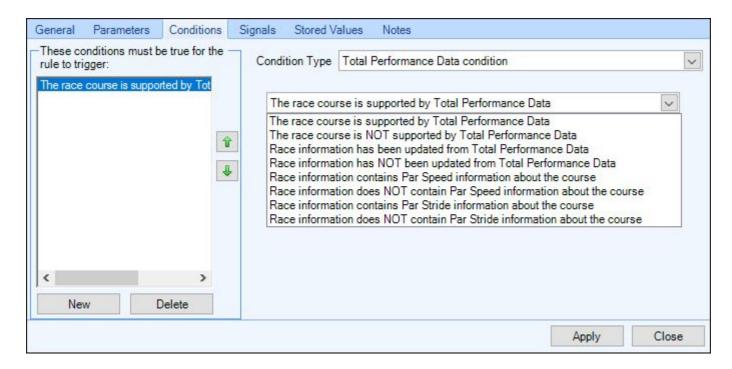


Note: The creation of a Stored Value will be considered as a 'change'. When a Stored Value is cleared, the time it was last changed is also cleared; it is reset to a state as if the named Stored Value had never existed. Setting a Stored Value with the same value as it previously held is not considered to be a change.

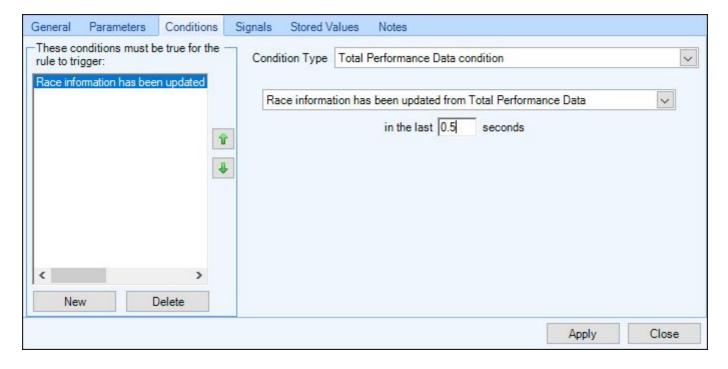
NB, This condition is not applicable to Historic Stored Values

Total Performance Data

This condition can be used to check if a race course is supported by Total Performance Data and can check the content of the information coming through the Total Performance Data connection. This can be very useful if you only want your rule to trigger if certain types of data are/aren't present, the pick list in the image below displays all the information which can be tested with this condition.



In the next image the rule would only be able to trigger if race information from TPD had been updated within the last half second. This is useful to ensure your rule only triggers if you have the most up to date information and prevents trigger using stale and out of date information, for example if there has been a brief delay or interruption with the GPS transmission on course or a temporary internet issue with your connection to TPD.



NB: Total Performance Data can supply updates as fast as 200ms (0.2secs), so when testing for when the last update came from TPD we advise using a minimum time of 0.25secs

Signals

A signal allows one Automation rule to control the behavior of another. Working together, a group of signals can produce a complex set of betting logic that was previously only possible using Excel macros.

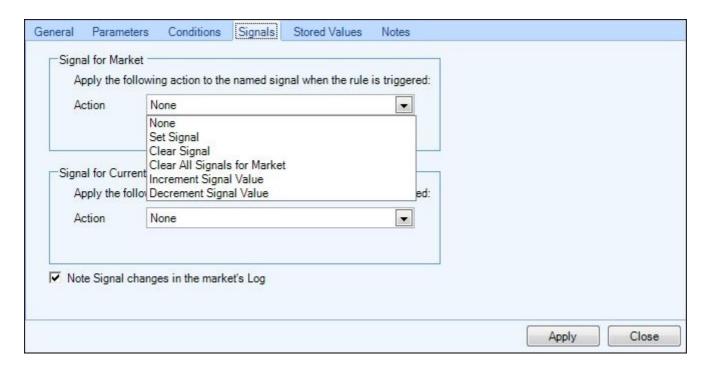
From this tab you can choose the action (task) of the signal you want to set for a single selection or the market as a whole, this is also where you name and assign any values for that signal if applicable.

You can connect two or more rules together using signals. By setting a signal with one rule, and testing it with a <u>condition</u> applied to a second rule, you have made the triggering of the second rule dependant on the first.

For example, If you had a "Place Back bet" rule type setting a signal named "armed" when triggered Then a "Place lay Bet" rule type using the condition "Signal Set Condition" named "armed" has been set This would prevent the lay bet from being triggered until after the back bet had been triggered and set its signal.

Of course you can be much more creative than this and the use of signals will give you a much greater degree of control and flexibility normally only found when using excel macro's.

Signals are optional and there is no obligation to use them on all or any of your rules; only use them were they add value to your Automation.



Click here for more ideas on how signals can be used.

Set Signal

Allows you give the signal a unique name and value (any name & value can be used which allows you to set unlimited amount of signals)

For example: if you had two separate back rules one placing £5 bets the other placing £10 bets and wanted to set a signal each time one is triggered you could name the signal for the £5 bets "back5" and the signal for £10 bets "back10"

Clear signal

Used if you wanted to clear only a named signal from a selection or market.

Clear all Signals for Selection / Market

Used to clear all named signals currently set on the selection or market.

Increment Signal Value

When this action is triggered, the value of the named signal is increased by 1. If the signal had not previously been set, then it will be initialised with the value of 1 the first time this action is triggered. This is useful as a counter on the selection (or the market as a whole).

For example: If you named a signal "back" and used **Increment signal value** the first time it triggered the signal "back" would have the value of 1, the next time it would change to a value of 2, then 3 and so on...

Decrement Signal Value

This works the same way as above except each time a signal is set the value is decreased by 1. If the signal had not previously been set, then it will be initialised with the value of -1 the first time this action is triggered.

Tip. At the bottom of the tab you will see "Note signal changes in the market log" it is advisable to always have this ticked when setting up any rule as it will make it very easy to see if a specific signal is performing correctly or not from the information in your log.

See this forum thread for step-by-step examples of how to set up some signals

Stored Values

Storing a value is just like setting a 'Signal', to start with you need to give your Stored Value a name, then select if the Stored Value is going to be on the Selection, Market, or Event, you can also specify if the stored value is to be shared, this will allow other automation files and servants to reference and use it as well as display it throughout other area's of Bet Angel, for example within a custom Column on your one-click and Guardian screens or the 'Additional Information' area on the ladder screen etc.

If you chose to store a value for the 'Event' the shared box will automatically be selected, this powerful option allows you to connect not just rules together but also full strategies including cross-market strategies making this feature especially useful in soccer markets.

Stored Values differ from signals in that you don't have to enter a value manually or just have them automatically incremented/decremented upon each trigger, instead they are used to store prices, volume, entered values etc. From a programming point of view they can be thought of as variables local to a running instance of an Automation rules file (or <u>Servant</u>) were as Signals would be considered as flags.

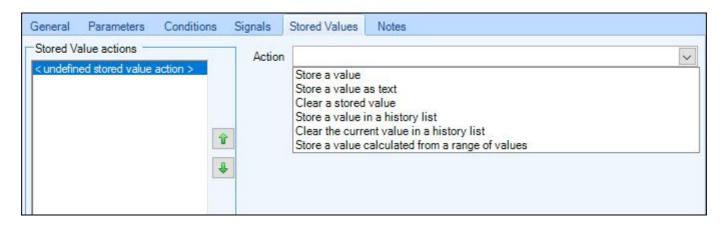
Stored Values Throughout Bet Angel

Stored Values when ticked as 'Shared' can also be referenced throughout other areas of Bet Angel. This includes :-

- Displaying their values on your <u>Ladder</u> trading screen
- Displaying their values in a Custom Column on your One-Click screen,
- Displaying their values as Markers on your ladder trading screen,
- Passing information between full Automation and <u>Servant</u> rules (even between different markets within the same event),

Storing a Value

When you arrive at the Stored Values tab the first option is to choose an 'Action' to occur when the rule triggers.



Store a Value - Will Store a new value (numeric)

Store a Value as Text - Will Store a new value as Text, these are explained further on the next page

Clear a Stored Value - Allows you to clear an existing Stored Value by name, if you wish to clear ALL stored values (that are not shared) then you can run the 'Clear all Stored Values' rule type

Store a Value in a History List - Allows you to store numeric values into a <u>History List</u> to keep track of values changing over time (there are 10 unique History Lists available per selection and another 10 for the market)

Clear the Current Value in the History List - Allows you to clear the value held in a History List

Store a Value Calculated from a Range of Values* - Allows you to store a new value from a <u>Range of Values</u> i.e. taking the sum, maximum, minimum or average of existing Stored Values.

*The 'set of values' can be:

- a) named Stored Values : different names but all on the same selection
- b) range of values in a History List: time based range from a history list sampling the data at a defined rate

- c) named Stored Value (across all selections): builds the set by looking for the same named value stored against each selection in the market.
- d) value from a History List (across all selections): builds the set by looking for a value at a specific point in time in a history list stored against each selection in the market.

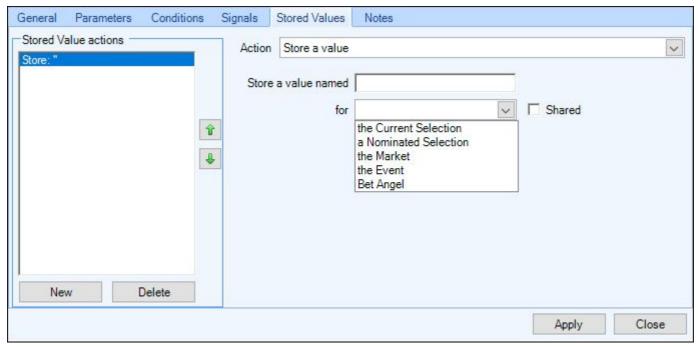
After selecting the Action you want to perform you then need to give the unique name of the value your about to store or clear then specify if your going to store the value for a selection, market, event or Bet Angel

Current Selection - This will store the value against the selection you have applied this rule to on the General tab **Nominated Selection** - This will store the value against the Selection you specify (ie, the rule may be applied to the fav but you might want to store the value against the 2nd fav or named runner)

The Market - This will store the value against the Market

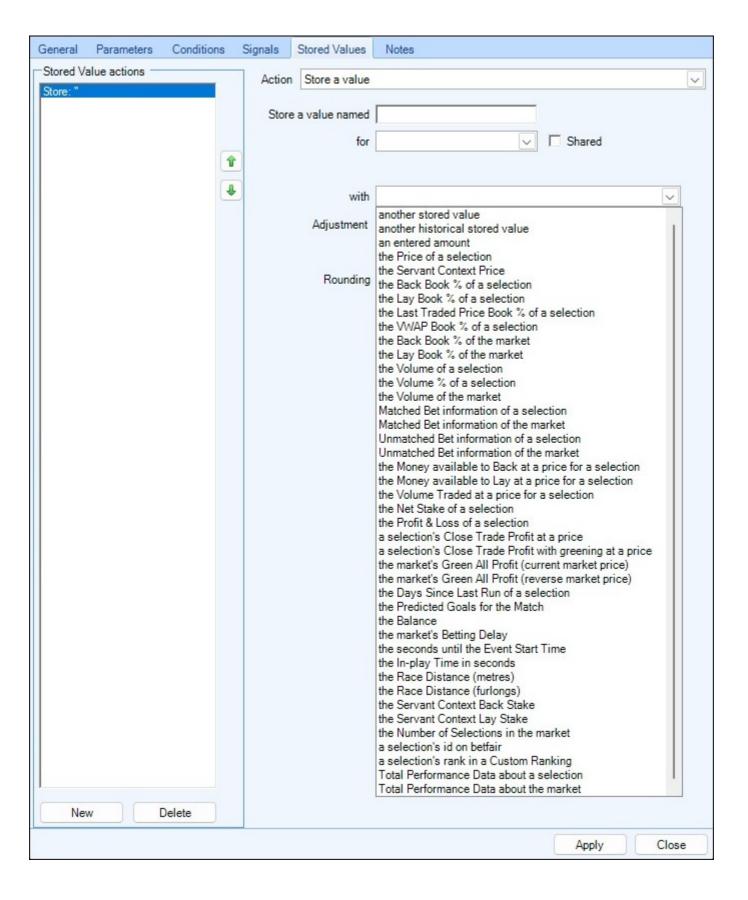
The Event - This will store the value against the Event, this is handy if you want to pass the stored value to another market in the same event, ie, in a Football market you could pass a stored value from the Match Odds market to the O/U2.5

Bet Angel - This will store the value by name in Bet Angel as a whole, which means it can be seen and used by a rule applied to ANY other market in this instance of Bet Angel. i.e. the name is global to the entire Bet Angel instance and the value under that name will be shared by all markets that will ever be opened in Bet Angel until that instance is closed.



If you also wish to make it available for other automation files and servants to use then tick the 'Shared' box, this will automatically be selected when storing a value on the 'Event' or 'Bet Angel' level

Then you can select from the drop list of options the type of value you want to store



Most of the values that can be stored are self explanatory but for clarification each is detailed below

Another Stored Value - Will allow you to select an existing stored value

Another Historical Stored Value - Will allow you to select an existing stored value held in a history list **An Entered Amount** - Allows you to enter your own amount to be stored (similar to setting a signal)

The Price of a Selection* - Will store the specified price of a selection

The Servant Context Price - Stores the value of the price your cursor is hovering over or selected when a servant is started

The Back Book% of a Selection - Will store the current back book% of a selection, otherwise know as its implied percentage IP%

The Lay Book% of a Selection - Will store the current lay book% of a selection, otherwise know as its implied percentage IP%

The Last Traded Price Book% of a Selection - Will store the (LTP) Last Traded Price book% of a selection, otherwise know as its implied percentage IP%

The VWAP Book% of a Selection - Will store the current VWAP% (Volume Weighted Average Price %) of a selection

The Back Book% of the Market - Will store the current back book%

The Lay Book% of the Market - Will store the current lay book%

The Volume of a Selection - Will store the current volume of a selection

The Volume% of a Selection - Will store the current percentage of traded volume a selection holds

The Volume of the Market - Will Store the current market volume

Matched Bet Information of a Selection - Can Store the Price of a Matched Bet, Amount Matched or Bet Reference of the most recent bet, most recent back bet or most recent lay bet on a selection

Matched Bet Information of the Market - Can Store the Price of a Matched Bet, Amount Matched or Bet Reference of the most recent bet, most recent back bet or most recent lay bet in the market

Unmatched Bets Information of a Selection - Will store the number or total value of unmatched back/lay or all bets on a selection

The Money Available to Back at a Price for a Selection** - Will store the amount of money currently on offer on the selection at the specified price (waiting to be backed)

The Money Available to Lay at a Price for a Selection** - Will store the amount of money currently on offer on the selection at the specified price (waiting to be laid)

The Volume Traded at a Price for a Selection** - Will store the amount of money traded at your specified price for the selection

The Net Stake of a Selection - Will store your current net stake of that selection

Profit & Loss of a Selection - Will store the profit or loss amount of a selection (this is the win/lose amount displayed next to a selections name above each ladder or directly below the names on the one-click screen).

A Selections Close Trade Profit at a Price - Will store a selections close trade profit at the chosen price

A Selections Close Trade Profit with Greening at a Price- Will store a selections close trade profit with greening at the chosen price

The Markets Green All Profit (current Market Price) - Will store the green all profit value at the current market price/s

The Markets Green All Profit (reverse Market Price) - Will store the green all profit value at the reverse market price/s

The Days Since Last Run of a Selection - Will Store how many days it is since a horse last run

The Predicted Goals for a Match - Will store the number of predicted goals expected in a match (requires the Correct score market for the match to be added to guardian)

The Balance - Will store your Betfair balance

The Markets Betting Delay - For use on an in-play market to store the length of the in-play betting delay in seconds **The Seconds Until Event Start Time** - Will store the number of seconds remaining until the official start time of the event

The In-Play Time in Seconds - Will store the number of elapsed seconds since the market went in-play

The Race Distance (meters) - Will store the race distance in meters (derived from Betfair's market name)

The Race Distance (furlongs) - Will store the race distance in furlongs (derived from Betfair's market name)

The Servant Context Back Stake - Will store the current servant context back stake you have chosen for that selection

The Servant Context Lay Stake - Will store the current servant context lay stake you have chosen for that selection (when using a servant on the one-click screen)

The Number of Selections in the Market - Will store the number of selections in the market the rule triggers on **A Selections ID on Betfair** - Will store the selections id as assigned by Betfair

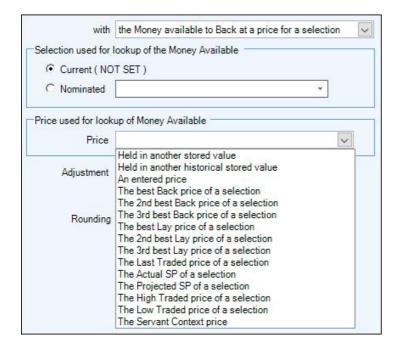
A Selections Rank in Custom Rankings - Will store the selection's custom rank within a custom rankings list **Total Performance Data about a Selection** - Will store information relating to selections brought in from Total Performance Data*** (Requires separate TPD subscription)

Total Performance Data about the Market - Will store information from relating to market brought in from Total Performance Data*** (Requires separate TPD subscription)

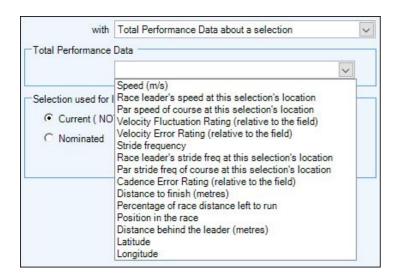
*When Storing the price of a selection another pick list will appear for you to select which price it is you wish to store for the selection



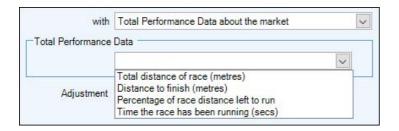
**When either of these three options are used a pick list will appear for you to select which price is used to look up the 'Money Available' or the 'Volume Traded'



*** When storing values of Total Performance Data for a selection the following picklist of data is available to select from



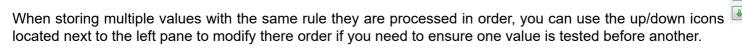
*** When storing values of Total Performance Data for a market the following picklist of data is available to select from



You may store as many values as you want with a rule and all values will be all be updated every time the rule triggers, i.e., you store the values of the back, lay, LTP and volume% of a selection etc and the money waiting at the best, 2nd best and 3rd best back prices all at the same time.

If you need the values to be updated at different intervals then you'd need to add them to another rule, they will then be updated as per the rearm time and/or conditions applied to that rule

Adjusting and Rounding



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Adjustment

For added flexibility when using stored values you can use this option to adjust the value before it is actually stored, the options you have are to:

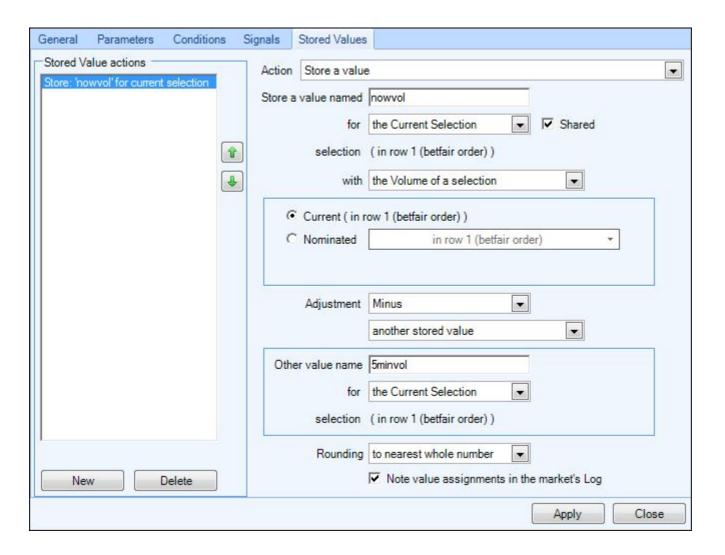
Plus, Minus, Multiply by, Divide by, Converted from price to ticks and Converted from ticks to price.

Note: When converting between price & ticks, the ticks are counted up in ladder increments from 1.01

Rounding

This gives you the options to round a value up, down or to the nearest whole number or valid price before being stored or to two decimal places.

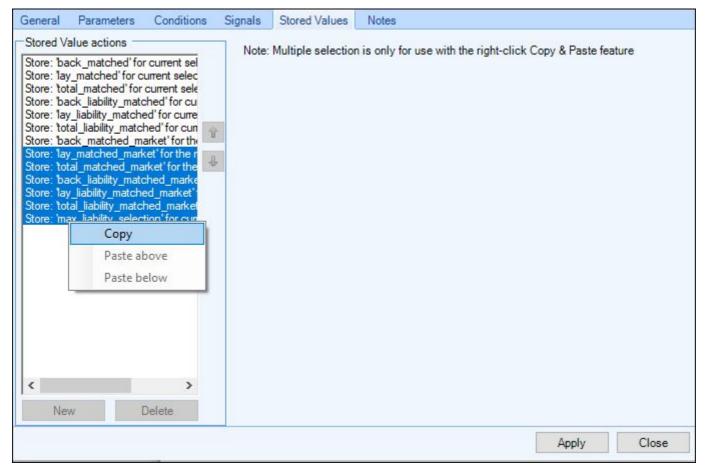
In the image below I have already stored a value named '5minvol' on the selection in row 1 using a rule which triggered 5 minutes before the start which stored its traded volume at that time, now with another rule I am storing the same selections traded volume again this time with the name 'nowvol' but before it actually stores the value it will first do a calculation of deducting the original stored value (the volume at 5mins) and round it to the nearest whole number, effectively this newest stored value will show how much the traded volume on the selection in row 1 has increased in the time between each rule triggering.



Copy and Paste Stored Values

After you've created a Stored Value if you need to add another one which is similar you can do this quickly by using the 'Copy' and 'Paste' action.

Simply right-click the stored value/s you want and select 'Copy', then right-click again and select 'Paste', or open another rule (including one in another file) and go on to its stored value tab and right-click and select 'Paste'. If you have two instances of Bet Angel running, then you can also copy and paste between instances.



Select several Stored Values to copy at once by selecting one, then with your 'Shift' or 'CTRL' key held down select the others you want to copy

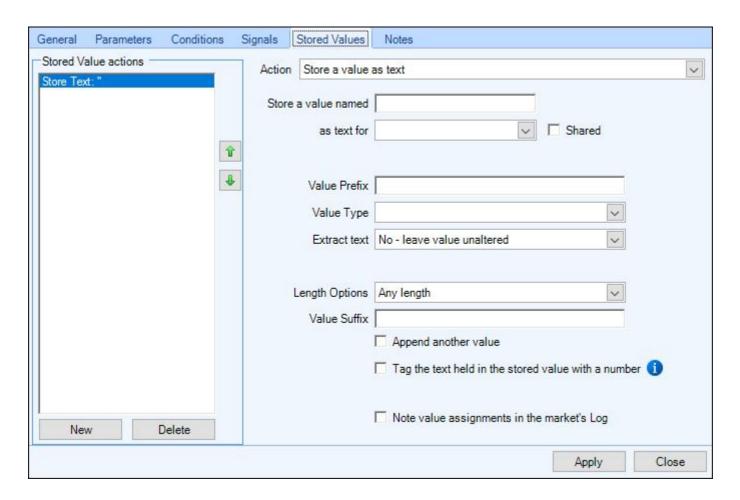
NB; Remember Stored Values (Shared) can be used as a condition of another rule including from those in a separate automation file or servant, be displayed in a custom column on your one-click screen or on your ladder screen as additional information and/or marker, plot advanced charts from, and be exported for later analysis.

Note. At the bottom of the tab you will see "Note value assignments in the market log", this is included for the purpose of debugging your Automation rules. Once your rule is functioning as intended, we recommend unticking this option and not logging the value changes.

See this section of our forum for some detailed examples of way Stored Values can be used

Store Value as Text

Storing a value as a text is similar to just Storing a Value, beginning by choosing a name for the Stored Value then selecting if the value is to be stored on the Selection, Market, or Event, and if the stored value is to be 'shared' to allow other automation and servants rules to reference it or display it in a custom column on your One-Click screen, Guardian screen, and Coupons, or in the additional information area of your Ladder Screen.

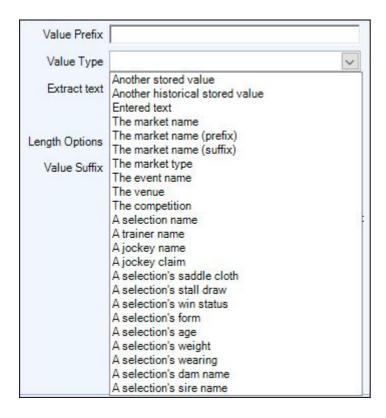


Value Prefix

This area can be used if you'd like to add any Prefix text to the Stored Value

Value Type

Here you can pick from any of the following value types you want to store as text



Extract Text

This enables you to extract parts of a text before its stored, there are options to extract the text using a number of characters or words from the left, right and middle

Length Options

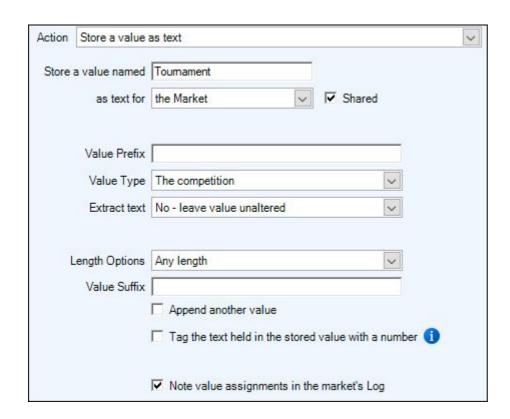
Using this option you could set a Fixed character length or set a min/max length, for example you could use this option to extract the first few characters of a race course

Value Suffix

This area can be used if you'd like to add any Suffix text to the end of the Stored Value

Example

In the example below when the rule triggers it would store a value named 'Tournament' as text on the Market (Shared) with the competition name



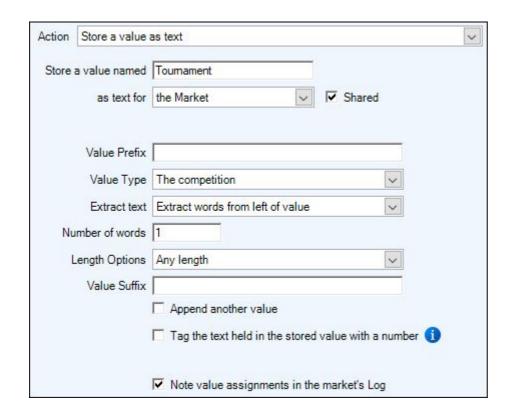
If the rule was triggered on a Tennis market and you were writing the values to the Bet Angel log it would appear something like;

29/09/2021 17:24:28: [G_Auto 1]: Store Text Value (Shared) for market: Tournament = ATP San Diego 2021

'ATP San Diego 2021' being the competition name of the tennis market it triggered on

Now you have a Stored Value named; 'Tournament' = ATP San Diego 2021 which you could use as part of a '<u>Text Comparison</u>' condition in another rule, or display it in a Custom Column on your One-Clck, Guardian, Ladder screen or in a coupon.

If you don't need the full name of the competition you could use the 'extract' option to pull out just the beginning, end or middle part of what you need from it



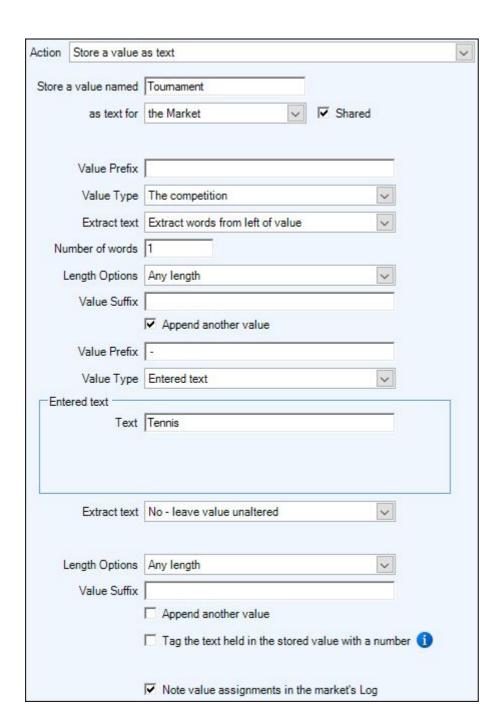
Triggering the rule again the log entry would now look like this as its extracted just the first word from the left; $29/09/2021\ 17:25:16: [G_Auto\ 1]: Store\ Text\ Value\ (Shared)$ for market: Tournament = ATP

The image below shows a Custom Column which has been named ATP/WTA in Guardian, this has been configured to display the Stored Value named 'Tournament' for the Market, so when the rule triggers on each market the column will display either ATP or WTA depending on what the first word of the competition name

ATPWTA	Markets (10)	Unmatched bets	Matched bets	Volume	In-play	Suspended	Last Suspension	Last update	Start time
WTA	Kudermetova v Dart - Match Odds	0	0	126114	Yes		17:19:38	18:17:04	17:05:00
WTA	Teichmann v Mag Linette - Match Odds	0	0	178259	Yes		17:20:35	18:17:04	17:15:00
WTA	Svitolina v Anisimova - Match Odds	0	0	135615	Yes		17:36:05	18:17:04	17:30:00
WTA	Andreescu v Rogers - Match Odds	0	0	9834			00:00:00	18:17:04	18:00:00
WTA	Pegula v Petkovic - Match Odds	0	0	12624			00:00:00	18:17:04	18:00:00
WTA	Vondrousova v Pavlyuchenkova - Match Odds	0	0	9894			00:00:00	18:17:04	18:00:00
ATP	Majchrzak v Kuzmanov - Match Odds	0	0	93465	Yes		18:04:51	18:17:04	18:29:00
ATP	Anderson v Evans - Match Odds	0	0	22920	<u> </u>		00:00:00	18:17:04	19:30:00
WTA	Azarenka v H Baptiste - Match Odds	0	0	2210			00:00:00	18:17:04	19:30:00

Append another value

Using this option you can append up to a further two more Stored values, in the image below I've appended another Stored Value with the entered text of 'Tennis', I've also added a prefix for this stored value and used a dash symbol.



When this rule triggers now the Stored value would appear as follows in the log and the Custom Column in Guardian; 29/09/2021 18:42:35: [G_Auto 1]: Store Text Value (Shared) for market: Tournament = ATP - Tennis

ATP/WTA	Markets (9)	Unmatched bets	Matched bets	Volume	In-play	Suspended	Last Suspension	Last update	Start time
WTA - Tennis	Teichmann v Mag Linette - Match Odds	0	0	318381	Yes		17:20:35	18:43:50	17:15:00
WTA - Tennis	Svitolina v Anisimova - Match Odds	0	0	277823	Yes		17:36:05	18:43:50	17:30:00
WTA - Tennis	Andreescu v Rogers - Match Odds	0	0	10059			00:00:00	18:43:50	18:00:00
WTA - Tennis	Pegula v Petkovic - Match Odds	0	0	85964	Yes		18:27:17	18:43:50	18:00:00
WTA - Tennis	Vondrousova v Pavlyuchenkova - Match Odds	0	0	12112			00:00:00	18:43:50	18:00:00
ATP - Tennis	Majchrzak v Kuzmanov - Match Odds	0	0	159515	Yes		18:04:51	18:43:50	18:29:00
ATP - Tennis	Anderson v Evans - Match Odds	0	0	23402			00:00:00	18:43:50	19:30:00
WTA - Tennis	Azarenka v H Baptiste - Match Odds	0	0	5864			00:00:00	18:43:50	19:30:00

Tag a text held in the stored value with a number

This final option allows you to assign a numeric 'Tag' to a Text Stored Value, the number can either be your own entered value or you can use a value held in another stored value.

These tag values are then used to sort the order of selections on the one-click screen (when sorting by the column showing the Text Stored Value i.e. clicking the stored value column header). The tag value would also be used to choose a colour from the Value Based Colour Settings

History Lists

History List are a further extension of Stored Values, the key difference being that instead of storing a single value by name, you are storing the value in a History List at the current point in time and all previous values set to that history list in the past will be remembered and can still be accessed. It is then possible to look up and use these historic values throughout other areas of Bet Angel, for example you could;

Plot the changes in value over time in the History List using bespoke <u>Advanced Charts</u>
Display values held in a History List on your One-Click Screen in <u>Custom Columns</u>
Display values held in a History List on your Ladder Screen in the <u>Additional Information</u> area
Create <u>Markers</u> on your Ladder Screen from values held in a History List
Trigger bets, alerts etc in other Automation and <u>Servant</u> rules using values held in a History List

There are a total of 20 History Lists (per selection per market) for you to use. This means that even with just one rule its possible to store up to 20 pieces of data as often as every refresh and on every selection in the market, making this a very powerful and versatile feature that is quick and easy to set up.

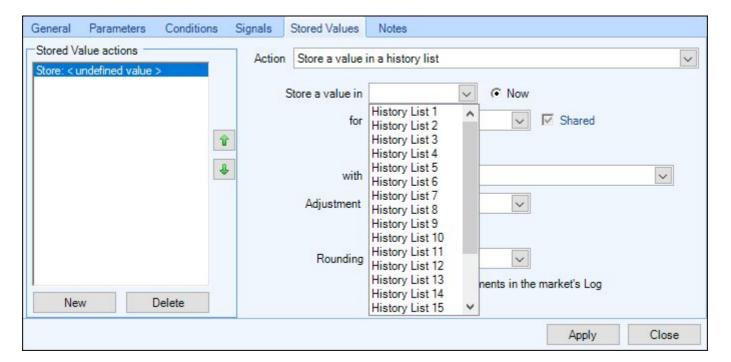
For example you could store a Selections 'Back Price' in History List 1, its 'Lay Price' in History List 2, 'The Volume of the Market' in History List 3 etc then look up and use those values in another area of Bet Angel. You could then use custom columns on the one-click screen to show how the back price has changed since 1,2 & 3 minutes ago.

When Storing values to History Lists you would normally use a dedicated 'Set/Modify Stored Value' rule type, this allows you to store them at consistent intervals/refreshes, but like regular Stored Values they can also be stored as part of any other rule type being triggered and can have conditions attached if required.

If you want to store values into History Lists using different intervals, then you'd just create separate rules, for example you could have a 'Set/Modify Stored Value' rule armed to trigger every refresh and Store a Selections 'Back Price' in History List 1 and its 'Lay Price' in History List 2, Then use another 'Set/Modify Stored Value' armed to trigger every 10 seconds and store 'The Volume of the Market' in History List 3

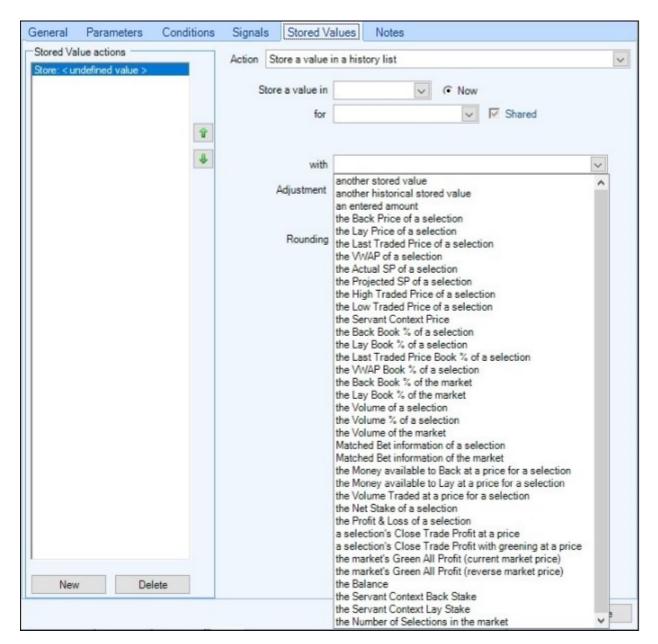
Storing a Value in a History List

Storing a value to a History List is almost identical to just storing a value as discussed on the previous page, except rather than giving the stored value a name here you selecting into which History List (between 1-20) the value is to be stored each time the rule triggers.



A value can be stored in a History list for the 'Current Selection', a 'Nominated Selection' or at the 'Market' level, each option is automatically defaulted to 'Shared' so it can be referenced in the other areas of Bet Angel as detailed earlier.

As you will then see the remaining options on the screen (the Information that can be stored, the Adjustment and the Rounding options) are the same as those available when using a regular Stored Value, which are explained in full detail on the previous <u>page</u>.



For a detailed step-by-step guide to creating and using History Lists please see the following blog

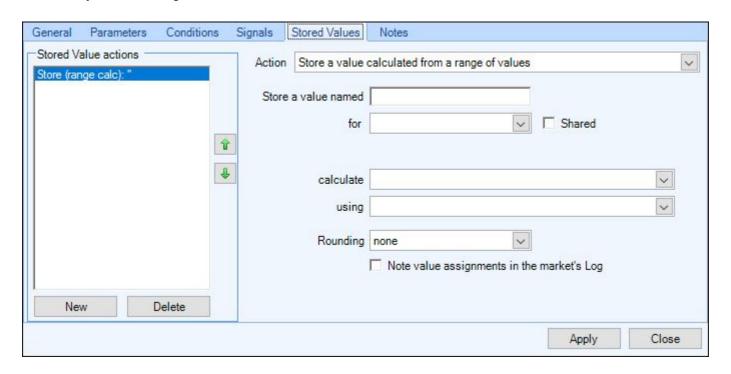
Store Value from a Range of Values

When using stored values you might find yourself needing to look up or calculate a new stored value from an existing set or range of stored values, this option basically allows you to do that without the need for dozens of individual calculations. There are several calculation options available for you to use:

Sum of a set of values
Maximum of a set of values
The 2nd Highest set of values
The 3rd Highest set of value
Minimum of a set of values
The 2nd Lowest set of values
The 3rd Lowest set of values
Average of a set of values

The 'set of values' you can look up and use include

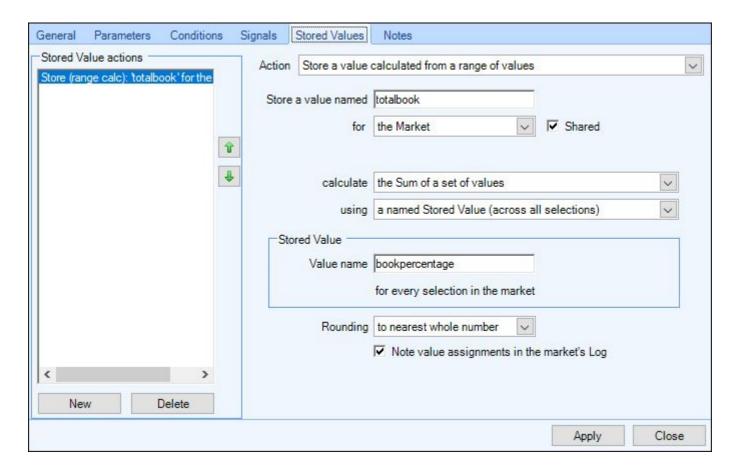
- a) named Stored Values: different names but all on the same selection
- b) range of values in a History List: time based range from a history list sampling the data at a defined rate
- c) named Stored Value (across all selections): builds the set by looking for the same named value stored against each selection in the market.
- d) value from a History List (across all selections): builds the set by looking for a value at a specific point in time in a history list stored against each selection in the market.



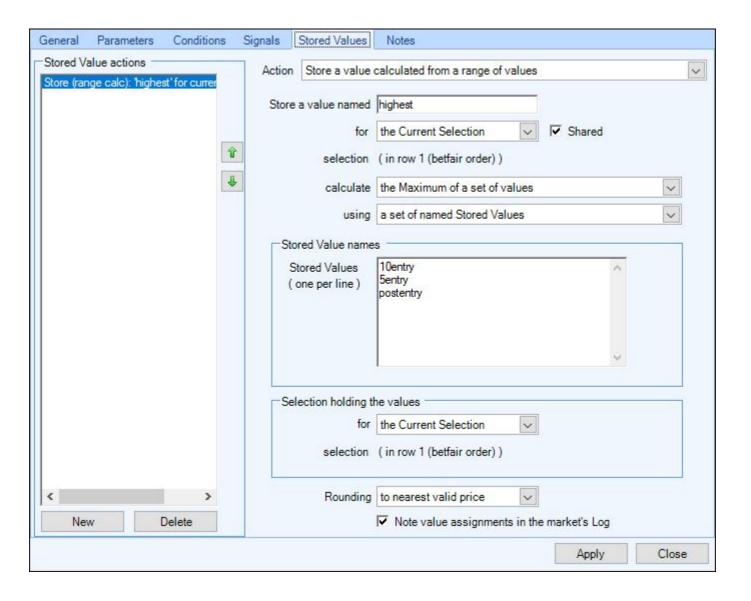
Depending on what calculation you wish to make and which range of values you are looking up there are a number of sub-options which will appear, below are a few examples showing those options.

Storing a Value from a Range

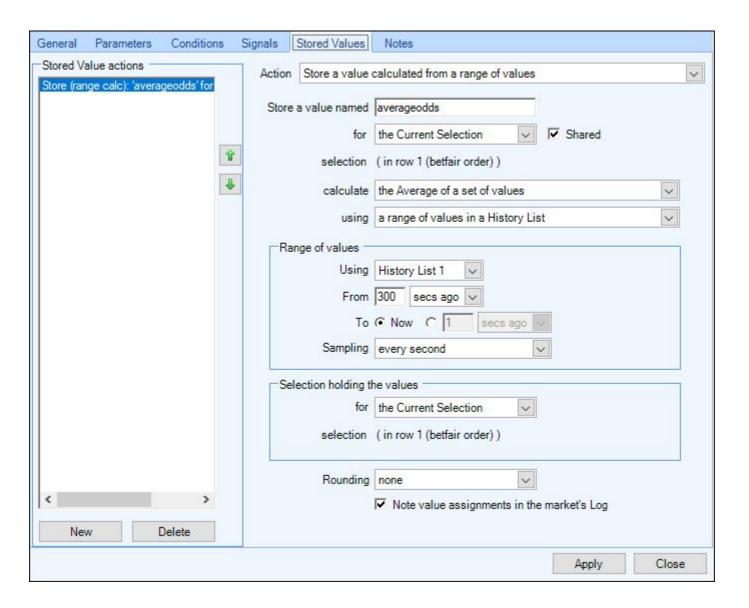
In the first Image below when the rule triggers it will store a new value named 'totalbook' for the market rounded up to a whole number, it will do this by adding up the existing stored values named 'bookpercentage' for every selection.



In the next image when the rule triggers it will store a new value named 'highest' for the selection in Betfair row 1, by looking up the maximum of the store values named '10entry', '5entry and 'postentry'.

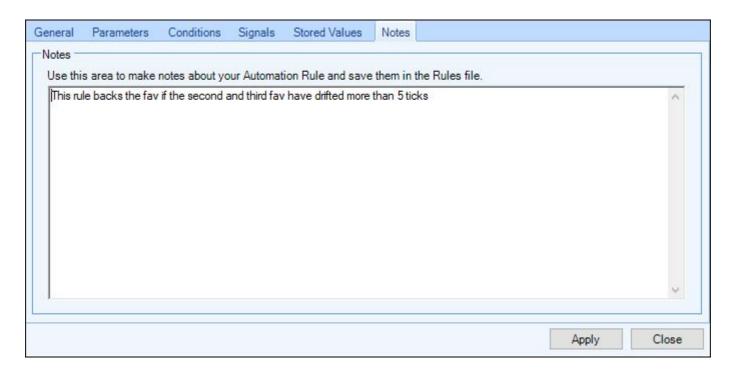


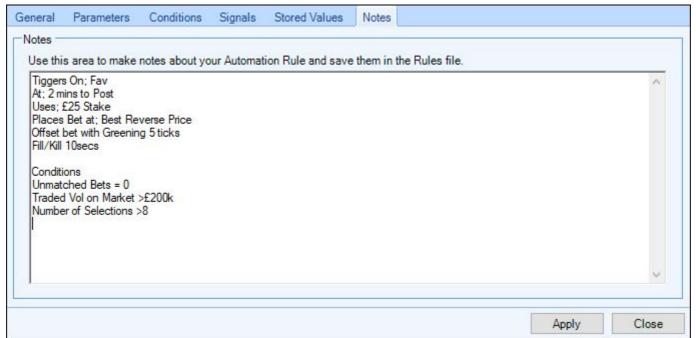
In the final image when the rule triggers it will look up all the values held in <u>History list</u> 1 over the last 5 minutes (300secs) and calculate the average value and store this as a new stored value (shared) named 'averageodds'



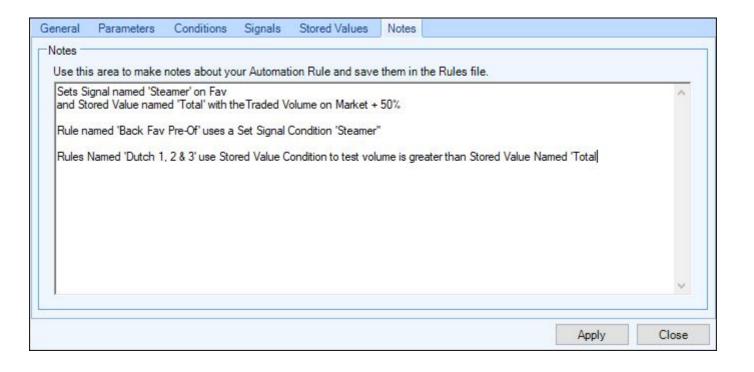
Notes

This area allows you to add your own text notes for each rule, you can add anything you want here from a brief description of what the rule does, to a full list of bullet points of everything the rule does, making it easier to refer to than going through each of the tabs individually.





It can be especially useful when using Stored Values or Signals and/or have lots of other rules to remind you the names of the other rules they are connected to.



Example rules

Below are two example rules set out step by step for you to follow

In-play Backing

Backing the first selection to touch a price of 1.3 in-play.

Scalping

This method looks to trade a steady market by backing and laying prices at the correct level to ensure a profit. The general strategy is to back at the current lay price by queuing an order and then laying at the back price to lock in a profit. The best markets are higher grade handicap horse racing in the UK or a Football markets before the kick off.

Tip: Do not perform this on a UK Horse Race where the favourite is short in price, the volatility in the market is unlikely to be suitable in all but Championship races, i.e. Cheltenham Gold Cup, The Derby, etc. In football markets scalping is most often applied to The Draw selection.

Our forum has over 60 more ready made 'Example' automation files covering all major sports which users can download and begin using immediately although we do advise that you use them as a starting point to draw some ideas from and build into your own strategy. These are also a great way to see how the various options and settings of Advanced Automation can be used.

Click here to go to the shared files section of the forum

Video Tutorial



Creating a Scalping Bot

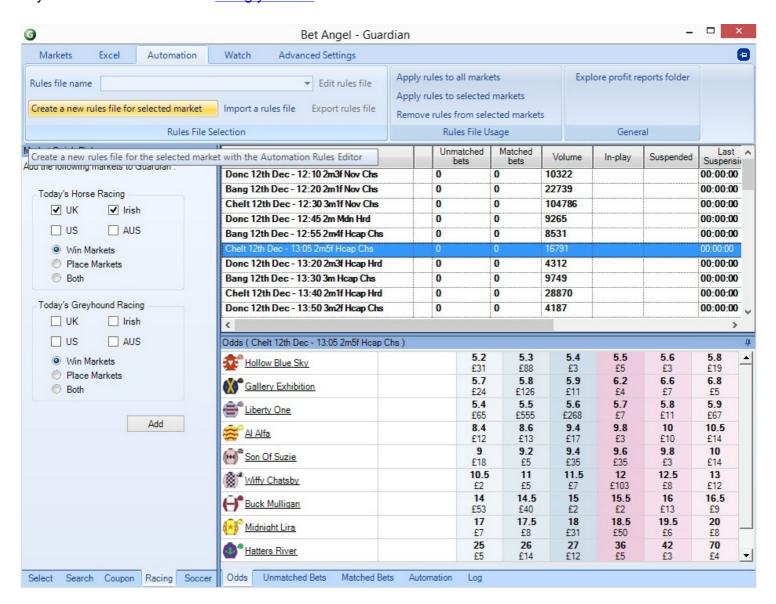
The first thing is to create our rule with an opening order. We use the simple rule from earlier as our building block. This shows how easy it is to create more complex rules once you have learned the first step, click here <u>Our First Rule</u> if you need a refresher.

Opening Order

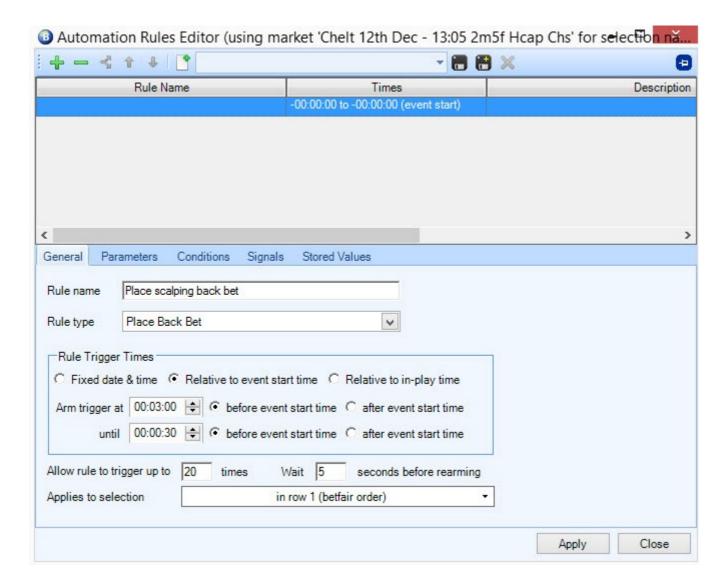
We will start our scalp with a back order as this is preferable for most new traders as it ties up less of your balance. You can start with a lay order first if you like; the outcome is the same if you make a successful or unsuccessful scalp.

In the screenshot below you can see I have opened Guardian and highlighted the Cheltenham 13:05 Handicap Chase. This is the type of market which offers a chance to scalp, the market is competitive as reflected in the close prices of the front 4-5 horses.

First we select "Create a new rules file for selected market". Once your rule is created you can apply it to the market of your choice as shown here Using your rule



When we click create a new rule, the Automation Rules Editor (below) will be shown



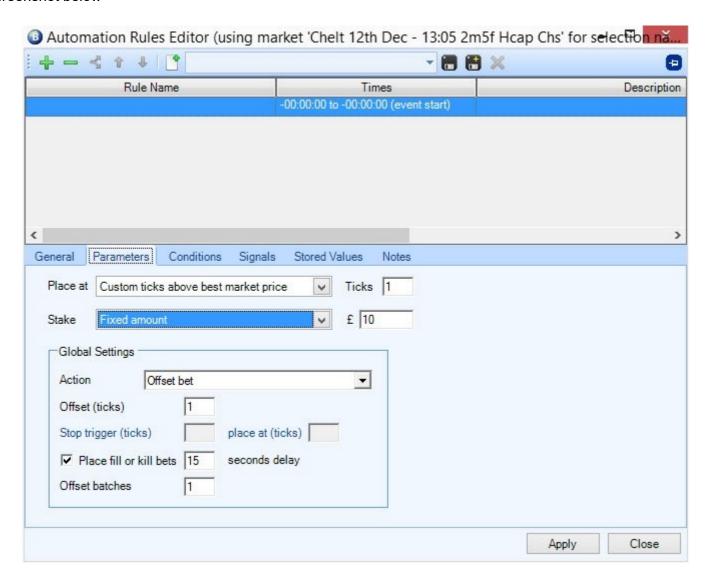
The steps are logical

- 1. We name our rule 'Place scalping back bet'. You can choose any name you want so feel free to change it to suit your needs.
- 2. The rule type is 'Place Back Bet'
- 3. We set the time 'Relative to event start time' and in this example the rule starts '3 minutes before the event start time' and stops '30 seconds before the event start time'.
- 4. We have set the rule to trigger 20 times and set it to wait 5 seconds before rearming.
- 5. We have applied the rule to selection 'in Row 1 (betfair order)'. This will likely be the favourite and have the most money trading through it as Betfair sorts the runners in ascending price order each time it re-sorts the market

We next move onto Parameters

Parameters

In this part we tell Bet Angel our parameters for our back bet so it knows where we want to place the bet and how much we wish to stake. We will then add an offset in the Global Settings section. You can see our setup in the screenshot below



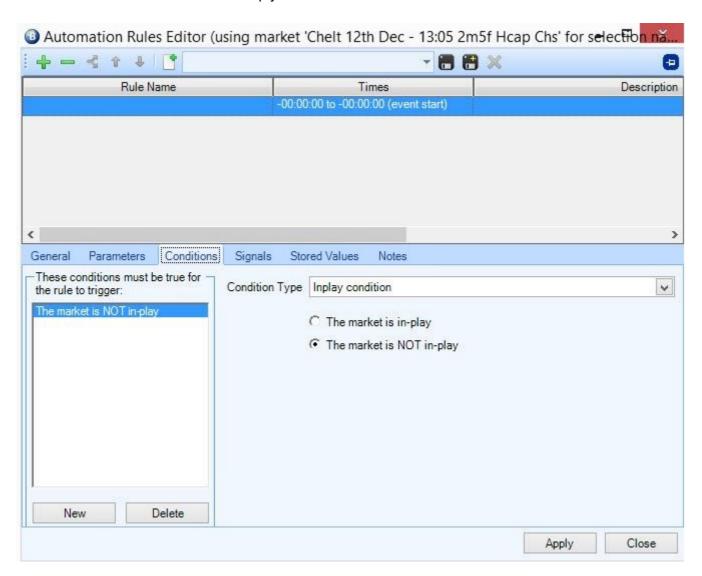
- 1. Place at 'Custom ticks above best market price' and our choice is 1 tick. We wish to offer the bet to the market so we are asking for a price 1 tick better than the current price.
- 2. The 'Stake' is set at a Fixed amount of £10. You can amend this to suit your needs but ensure it is not below the minimum stake for your region.
- 3. In "Global Settings" we choose the action Offset Bet.
- 4. We set Offset (Ticks) to 1
- 5. We set Fill or kill to 15 seconds. This is important because we want to ensure our initial bet is matched before offsetting and also to remove it from the market if it hasn't filled within 15 seconds.
- 6. The offset batches is set at 1.

That concludes our parameters so now we must add conditions

Conditions

In this section we add <u>Conditions</u> to our rule to control when bets are allowed to be triggered into the market. This is a vital part of the setup as we do not want Bet Angel to trade when conditions are wrong.

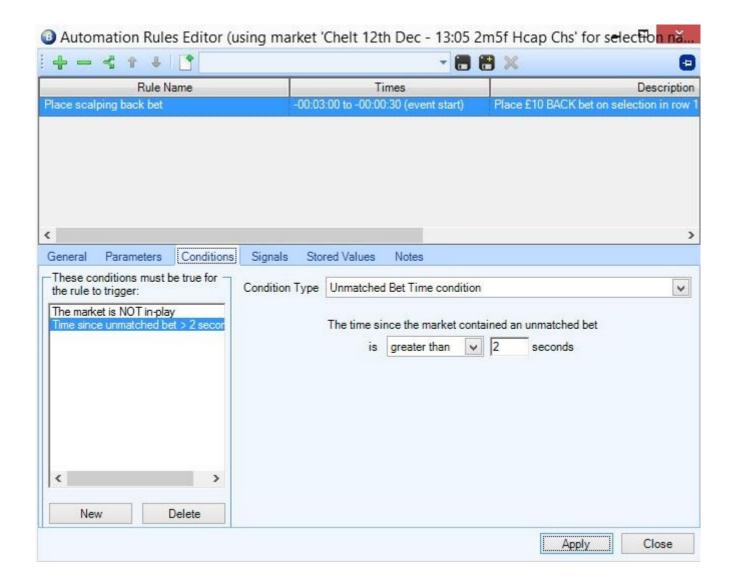
The first condition is shown below. We simply click "New" and add the condition.



We do not want to trade this market if it is In Play. Although we have set time conditions this is a fail safe in case our system clock is incorrect or the race happened to start early.

We then add a further condition to ensure that only one bet is placed at a time. We are going to optimise Guardian refreshing to ensure the market we are scalping will refresh quickly. However as we are offering bets to the market, we do not know how long it'll take for the unmatched bet to fill. The rule is configured to place bets no quicker than once every 5 seconds but this extra condition tells Bet Angel to pause for 2 seconds after the market contained an unmatched bet. Due to the refresh rate, any bet placed that has not been matched will be visible to Bet Angel within a second, so this condition will ensure that the previous bet has been filled (or killed) before another bet is allowed to trigger.

You can see this below, we click "New" and add the condition.

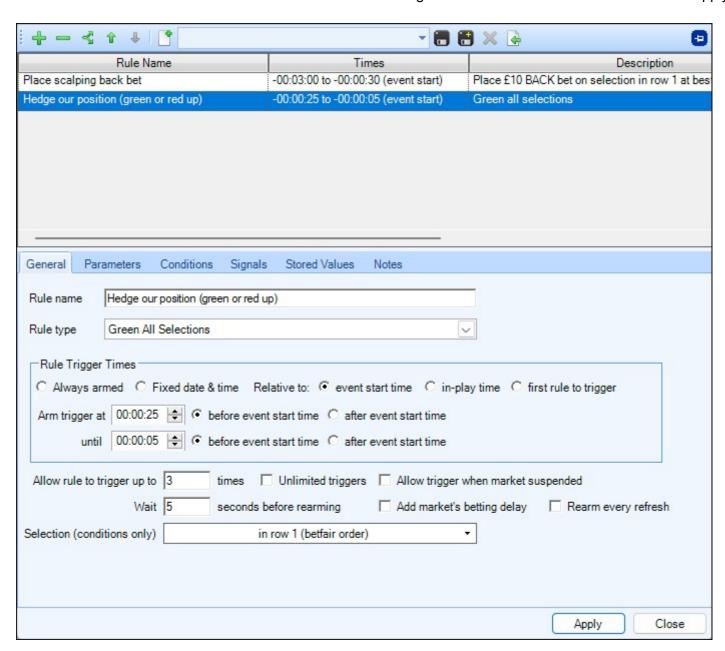


Secondary rule

As we are trading the market using a Scalping Bot we want to spread the profit (or loss if it isn't profitable on the market) across all runners.

We need to add a second rule to instruct Bet Angel to hedge our profit/loss.

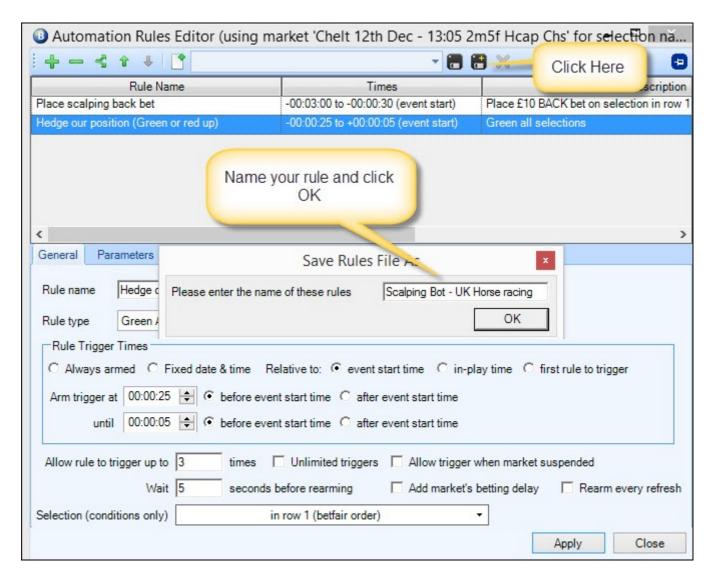
You can see from the screenshot below how we do this. We configure a 'Green All Selections' rule and click Apply.



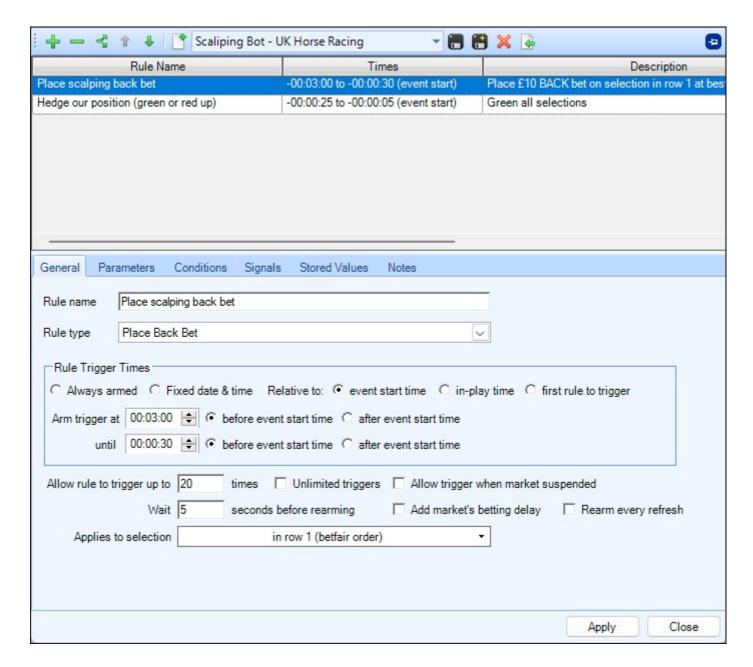
The times are flexible and you can adjust them to suit your needs.

Naming the rules file

We have our rules with the appropriate parameters and conditions set. We now have to name the rules file so we can save it and use it in future markets. The screenshot below shows how we do this



When you have performed the steps shown above you will see your rule as shown below

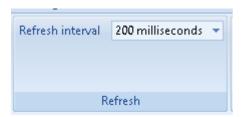


You can now apply your rule to the market(s) of your choice as shown here Using your rule

Optimising Guardian for this rule

To ensure our rule is processed at least once a second we need optimise the refresh settings in Guardian.

We will set the Refresh Interval to 200ms



And activate the <u>Restricted Refresh</u> feature to only refresh markets if the current time falls within the time window of 'ten minutes before the start time of the event' to 'five minutes after the start time of the event'



Video's to watch

To help further we have a video showing the creation of a similar rule file. You will notice the slight differences in times, stake, etc, but the essential steps are the same.

The link to the video is here <u>Trading on Betfair - Scalping Bot</u>

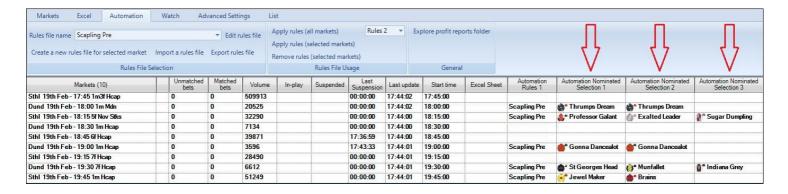
Applying rules to selections individually Chosen via the Guardian market list

The essence of this feature is that you can create a 'generic rule' then apply that to an individually nominated selection within a market. This means that when you create the rule, you don't need to specify a selection within the rule itself. You can select it later once you've studied the market. You no longer have to use generic methods to pick a runner in the rule (such as favourite, selection in row 2, first runner to trade under 2.0 etc); you can nominate it yourself from Guardian when the opportunity arises.

Examples

- create a set of automated back to lay strategies and while in Guardian choose which to use on a race and which runner to apply it to.
- wait until a race is in-play and only choose a runner once you've seen the first part of the race play out. It's very quick to chose the selection in Guardian whereas editing a rule during a race would be very cumbersome.
- deploy a tennis trading strategy if a player double-faults.
- lay the underdog team if they surprisingly take the lead in a soccer match.
- temporarily activate a sound alert rule on a selection if you need to leave your desk for a while.

In the image below I've added three 'Automation Nominated Selection' columns from the <u>column chooser</u>, this now allows up to three 'nominated' selections/runners to be applied to each market.



Example

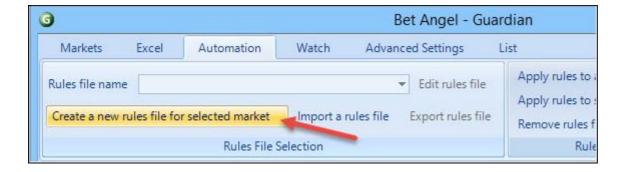
For this next detailed example let's create a rule that we can apply to any short priced horse that we believe is looking weak and is likely to struggle in the race.

Lay in running on a drifting price

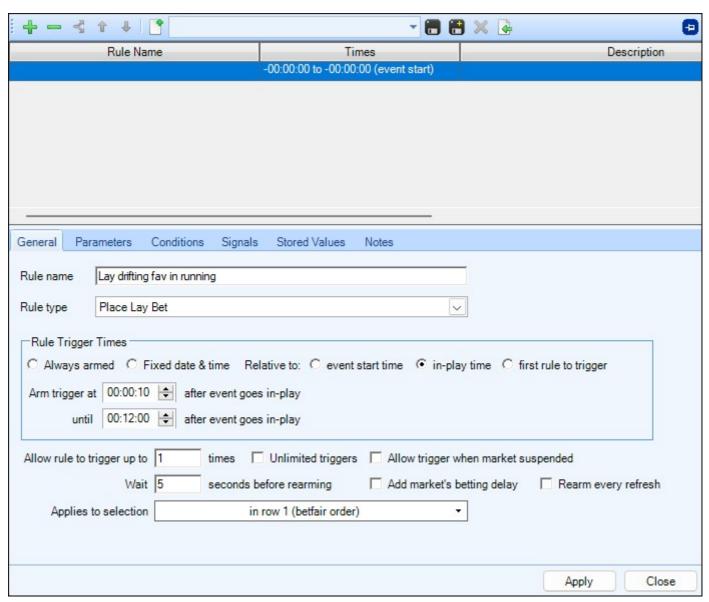
Here we are combining the ability of automation to compare prices and quickly place a bet, with our own ability to watch the runners before the race and pick a suitable candidate to lay. We are looking to lay our nominated runner if it drifts in running. The plan is simple, if we suspect a horse is weak and the price drifts in-play then it meets our criteria for a lay bet. We know that a horse can drift and still win the race, but this is the strategy that we wish to test and the Nominated Selection capability makes this very straightforward to execute.

Our rule and how we set it up in Guardian

First we open Guardian by clicking on the icon and highlighting our chosen market. We then click on "Create new rules file for the selected market", as shown in the screenshot below, to show the Automation Rules Editor.



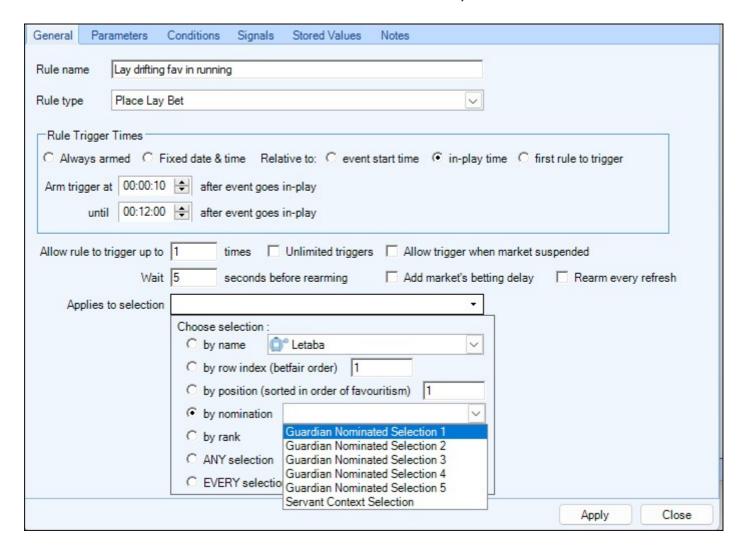
Now we create the rule as per the screenshot below.



You can see how I have added a name, rule type and time for the rule.

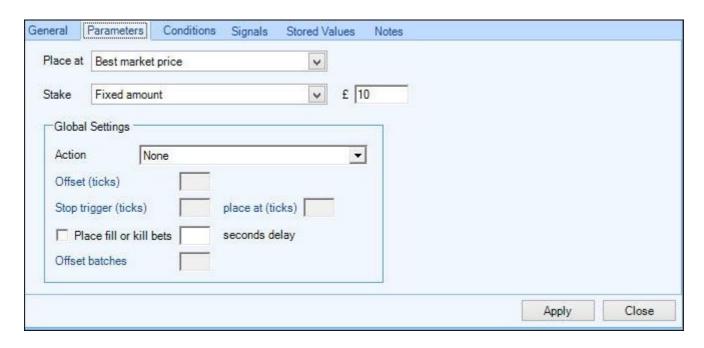
- 1. Rule name: Lay drifting fav in running
- 2. Rule type: Place Lay bet
- 3. The time is set for In-play. You will note it is allowed to triggers10 seconds after the market turns in-play as this allows the market to settle which can prevent false triggers. It also allows the SP to be created which can subsequently be used in a rule.
- 4. The 12 minutes is used because it should cover most horse races. In football you can extend this time as you can in cricket, tennis, etc.

This is basically the same process shown in <u>Creating the automation rule</u> but we now have the ability to apply the rule to the selection nominated in the Guardian Market List; Guardian Nominated Selection 1 to 5.



These options allow us to use our selected horse in Guardian as the nomination. This can be used for any selection in any sport: cricket, rugby, football, tennis etc. We don't create the rule with a specific selection in mind, we are just creating a general purpose rule that can be deployed as required.

Parameters



I have selected Best Market price but you can stipulate an exact price if you wish. The stake is a simple fixed amount of £10 which again can be modified as required. We will not use Global Settings in this example but you can include them in rules if you choose.

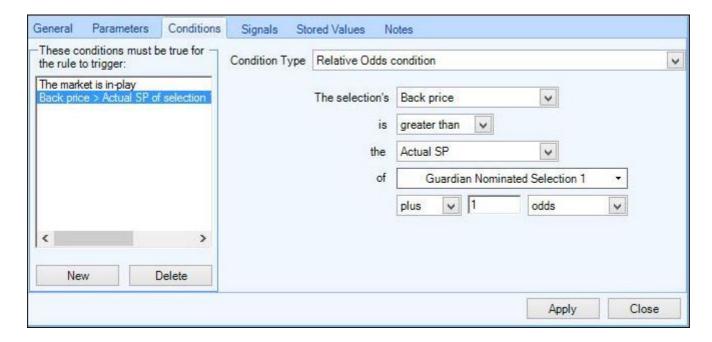
Conditions

There will be a couple of conditions in this example, the first is shown below



Our strategy is based around the in-play market so we set the condition to check that 'The market is in-play'

Next we will look at the price change and this will determine if Bet Angel will place our bet or not.

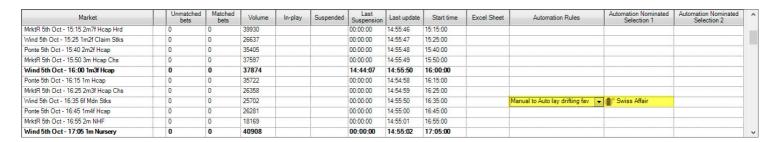


I have set a Relative Odds condition to check if the price of the selection is drifting. I have stipulated the back price of my nominated selection must be greater than its Actual SP +1.0 odds. So if I applied this to a selection with an Actual SP of 1.66 the rule will only trigger if the in running back price exceeded 2.66

Now I name the rules file and save it, ready for use in Guardian.



In the following image, I have applied the rule to the 16:35 race and selected the runner 'Swiss Affair' by using the 'Automation Nominated Selection 1' column, but I could easily switch to another runner if that grabs my attention.

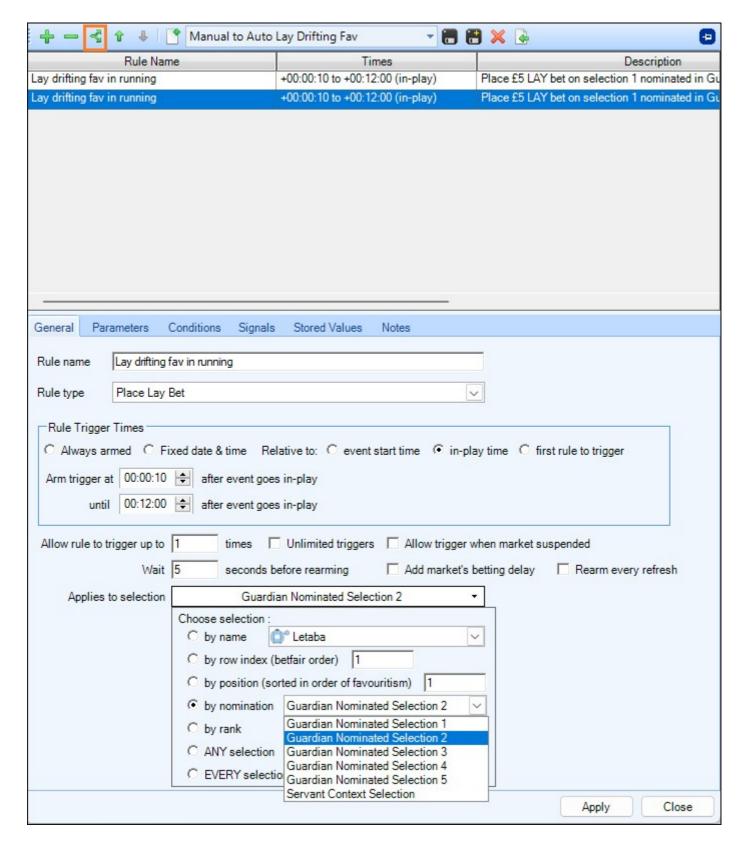


If I identify another market and selection on which I wish to use the rule, then that is quick to setup too (screenshot below)

Market		Unmatched bets	Matched bets	Volume	In-play	Suspended	Last Suspension	Last update	Start time	Excel Sheet	Automation Rules	Automation Nominated Selection 1	Automation Nominated Selection 2
MrktR 5th Oct - 15:50 3m Hcap Che	s	0	0	39491			00:00:00	14:59:23	15:50:00				
Wind 5th Oct - 16:00 1m3f Hcap		0	0	39035			14:44:07	14:59:24	16:00:00				
Ponte 5th Oct - 16:15 1m Hcap		0	0	36119			00:00:00	14:59:25	16:15:00				
MrktR 5th Oct - 16:25 2m3f Hcap C	hs	0	0	26660			00:00:00	14:59:26	16:25:00				
Wind 5th Oct - 16:35 6f Mdn Stks		0	0	25879			00:00:00	14:59:32	16:35:00		Manual to Auto lay drifting fav	Swiss Affair	
Ponte 5th Oct - 16:45 1m4f Hcap		0	0	26598			00:00:00	14:59:27	16:45:00				
MrktR 5th Oct - 16:55 2m NHF		0	0	18524			00:00:00	14:59:28	16:55:00				
Wind 5th Oct - 17:05 1m Nursery		0	0	41097			00:00:00	14:59:29	17:05:00				
Ponte 5th Oct - 17:15 1m Mdn Stks		0	0	11995			00:00:00	14:59:30	17:15:00		Manual to Auto lay drifting fav	Amazing Speed	
Wind 5th Oct - 17:35 1m Hcap		0	0	20108			00:00:00	14:59:31	17:35:00				
Brig 6th Oct - 13:50 7f Mdn Stks		0	0	0			00:00:00	14:58:38	13:50:00				
Odds (Ponte 5th Oct - 17:15 1m Md	n Stks)				·	<u> </u>	<u> </u>				·		·
Amazing Speed	£0.00	1.62 £34	1. 63 £101	1.64 £66	1.65 £56	1.66 £108	1.67 £219						
<u>Dinaria</u>	£0.00	4.3 £8	4.4 £39	4.5 £37	4.6 £29	4.7 £225	4.8 £6						
Somethingthrilling	£0.00	10.5 £26	11 £24	11.5 £6	12 £46	12.5 £6	13.5 £16						
Master Zain	£0.00	13.5 £15	14 £11	14.5 £3	15 £5	15.5 £17	16.5 £15						
			46	48	65	75	80						
Seamus The Paver	£0.00	44 £4	£4	£2	£2	£2	£2						

It does not have to be a favourite, you can apply the same rule to another horse with just a couple of clicks. For instance, as soon as I select 'Amazing Speed, the rule will be configured to look for an in-play drift on that horse. If it started with a SP of 4.5, then the rule would trigger if the price exceeded 5.5.

By duplicating the whole rule (select the first rule then click the icon with two green arrows and that will make a full duplicate of it) you can then apply this second rule to Guardian Nominated Selection 2, you can then use the 'Automation Nominated Selection 2' in the Guardian market list to choose a second runner for this rule to trigger on



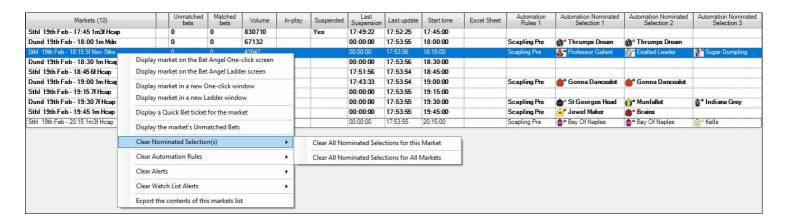
This is a very powerful feature. You can prepare a set of rule files well in advance and with a few clicks apply any strategy to any selection all from within Guardian. Providing you have the rules already created in your file and applied to a Guardian Nominated Selection you can then nominate up to 5 selections per market on the main Guardian market list

NB; If you have rules applied to a nominated selection but don't pick a selection in the main Guardian window then the rule just won't trigger, i.e. you can create more rules applied to a Guardian Nominated Selection than you might need but then select the ones you want it to trigger on each market in the Guardian list.

Clearing Nominated Selections

Individual nominated selections can be cleared by clicking on them and choosing the 'blank' field at the top of the picklist.

To clear multiple nominated selections if you right-click on a market a menu window will appear, clicking 'Clear Nominated Selection(s)' you have the options of clearing all nominated selections for the selected market or all nominated selections in all markets



Exiting and Saving Nominated Selections

If you close down Bet Angel any nominated selections you have chosen will automatically be removed, however there is an option to save them located on the main ribbon on the '<u>List</u>' tab

Manual control over Automation rules

In addition to being able to <u>manually nominate a selection</u> for a rule to run on the 'Automation' tab which is below the bottom window in Guardian contains a pick list where you can quickly intervene or disconnect a rule from a market if your viewpoint changes whilst the rule is running. The following four options are available to you from this pick list located in the bottom right corner of your screen.



Reset Trigger Counts - Resets the number of times a rule has triggered back to zero **Remove Rules From Market -** Removes the whole automation rule from the market

Checkpoint Match Bets - Resets the number of matched bets back to zero. This is the same as the 'Checkpoint matched bet' rule type available in the Automation Rules Editor and is useful for Tennis markets where the same score/scenario can repeat many times in a match.

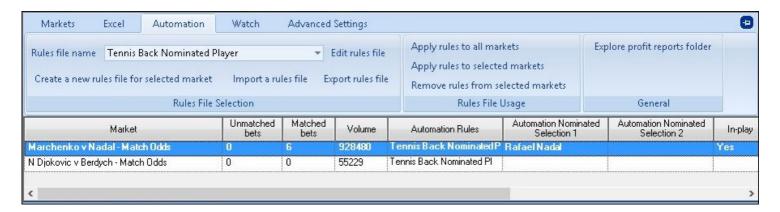
Clear ALL Signals - Clears ALL signal names and values which have been set on a selection and market

Example

Normally the number of times a rule is allowed to trigger is controlled from inside the rule itself (and it's progress is displayed in the bottom window of guardian when the 'Automation' tab is selected).

In the screenshot below you can see an automation rule is being used to back a player in a Tennis match. The rule has been written in a generic way so could be applied to either player.

After applying the rule to a tennis market I have opted to nominate 'Rafael Nadal' for the rule to run on by selecting him from the 'Automation Nominated Selection 1' column on the main guardian page - also in the screenshot you will notice the current Matched bets count is showing 6 bets matched.



However if we look at the bottom window of guardian with the 'automation' tab selected it shows both the entry and exit rules are only allowed to trigger once (so two bets per usage). So this rule has been used three times already in this match. The 'Triggers' column is showing that the rules have finished as they are already showing '1 / 1' triggers and the entry rule 'Last Triggered' at 15:51:38

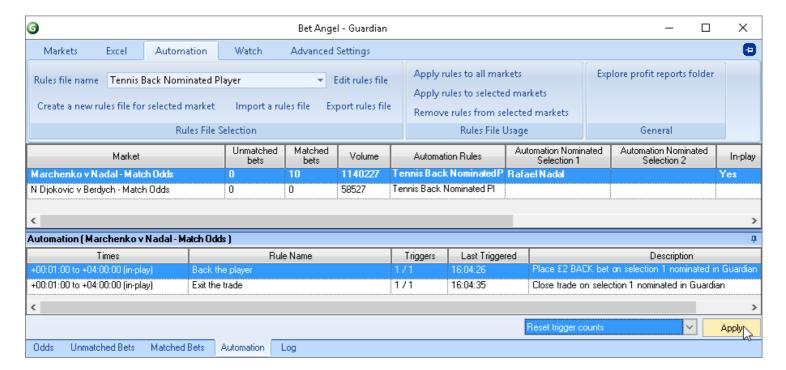
At the bottom right corner of this window you'll see the pick list where 'Reset trigger counts' has been selected and I'm hovering over the mouse cursor over the 'Apply' button.



I spot another opportunity and click the Apply button, as you can see in the next screenshot, the 'Triggers' have been reset to '0 / 1' and the Last Triggered times have been cleared. **The rules are ready to trigger again**.



Fast forward till later in the match and the Matched bets count is now 10, showing that the rules have been used again and again:

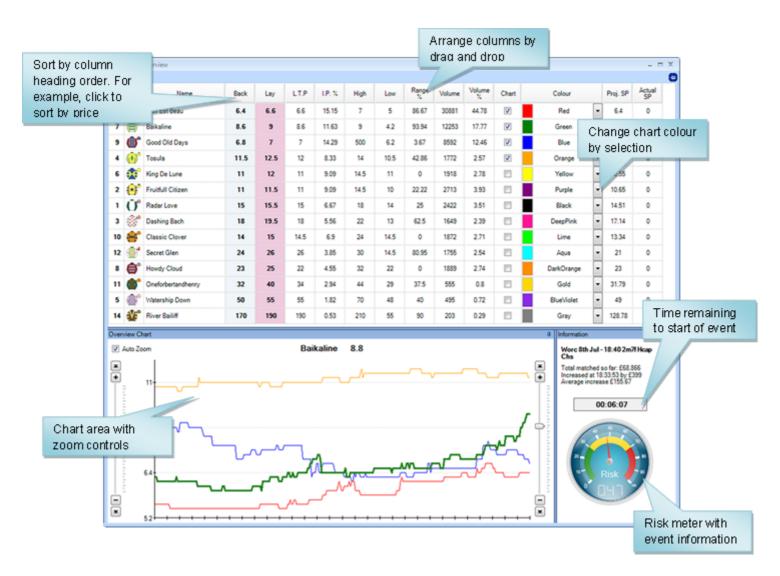


Market Overview Screen

Concept



Betting exchanges provide lots of information that could be useful when deciding how to trade a particular market. Bet Angel Professional can now display a wide range of information from last traded price to volume percentages.



Column Headings

Name - Name of market selection

Back - Currently available back price

Lay - Currently available lay price

L.T.P. - Last Traded Price. The last price matched on the exchange.

I.P.% - Implied Probability (1/L.T.P.).

High - Highest traded price.

Low* - Low traded price.

Range % - Where the current price sits in the range between high and low prices.

For example if the range is 3.0 - 3.6 and the current price is 3.6 the range will read 100%. Or 0% if current price is 3.0.

Volume - Actual amount of money matched.

Volume % - Per cent of total market volume traded on that particular selection.

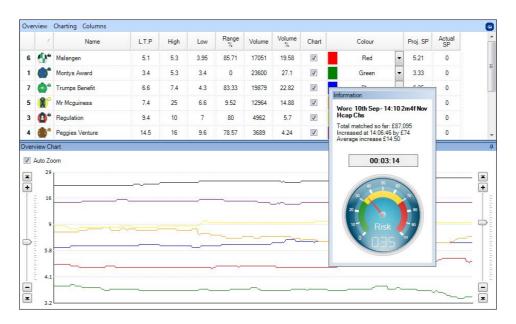
Proj. SP - Projected Betfair Starting Price.

Actual SP - Actual Starting Price (populates once event is underway).

*A volume filter has been applied to High and Low traded price to remove low volume price spikes.

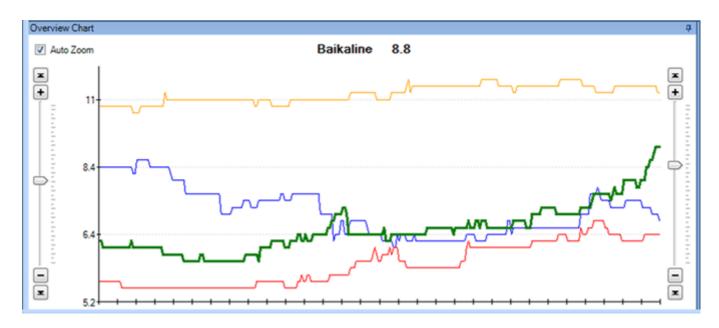
The chart and information windows can be undocked and re-arranged. For example, the risk meter can be detached and floated above your trading window by moving across and clicking on the drawing pin icon -

Double click on the window to detach and move (Double click on it again to restore) See illustration below. Once you have arrived at a screen layout you wish to keep, click on the 'File' menu item to <u>save the layout</u>.



Overview Chart

The chart contains a long view of the market based upon last traded price. The chart can 'Auto Zoom' to frame the selected prices or can be manually zoomed by using the slide controls on either side of the chart area. Use the mouse to adjust the sliders and familiarise yourself with the use of the charting area.



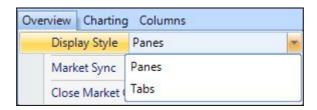
You can highlight each selected runner by hovering the mouse over the chart line. The price shown next to the horse name will be the historical price traded at that time and is not the current price.

Video of Market Overview Screen

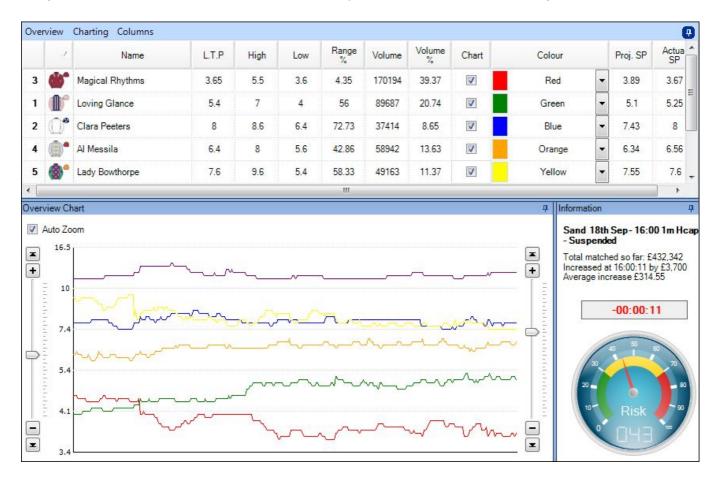
Preview is not available

Overview

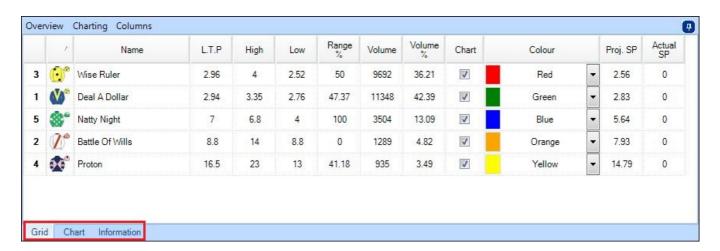
The Market Overview can be displayed as either 'Panes' in a single window or in 'Tabs' were each of the three elements can be displayed in it's own window.



The image below is the Market Overview screen displayed in its default state as a single 'Pane'

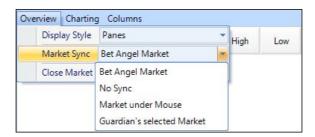


Displaying as 'Tabs' the overview screen is split into three area's, 'Grid', 'Chart' and 'Information', you can select which of these you wish to view using the tabs in the bottom left corner of the window.



Market Sync

This option let's you configure which market is displayed on the Market Overview screen.



Bet Angel Market - This will display the market you currently have on your main trading screen ie, your ladder or one-click

No Sync - This will prevent new markets being displayed in the overview window, you might want to use this to always keep the days feature horse racing market in the overview window even as you open and trade other markets in the run up to it.

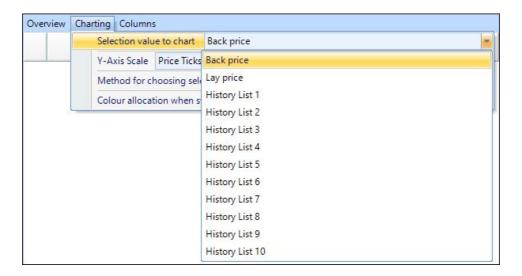
Market Under Mouse - This will display the market your mouse cursor is currently hovering over, this is useful if you have multiple <u>ladder</u> or <u>one-click</u> screens open as it will allow you to move your cursor over any of them and see that market in the Overview window.

Guardian's Selected Market - This will display the market you currently have selected in your main <u>Guardian</u> window.

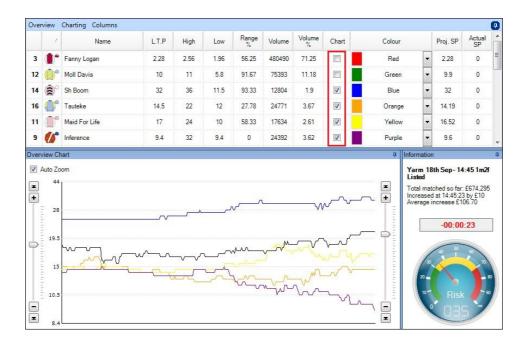
Close Market - Closes down the Market Overview Window.

Charting

The charting tab offers you the options to auto-choose the selections you want to be displayed on the overview chart, this can be configured 'By Price' or 'By Quantity', for example only show runners priced between 2.50 and 20.0, or only show the first ten selections.



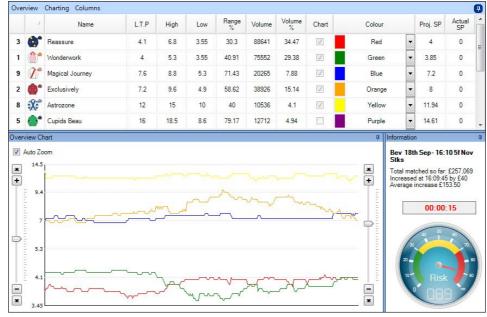
Manual selection - this is the default option and will show all selections, you can the un-tick those you do not wish to have displayed on the chart, in the image below the 1st and 2nd favourite as well as some outsiders have all been un-ticked leaving only the four selections still ticked being displayed in the chart window.



By Price - allows you to set the minimum and maximum prices of the selections you wish to have displayed on the chart, so if you like trading selections within certain prices ranges this can be used to filter out those that are of no interest to you.

In the image below only selections with a price of between 1.01 and 12.0 are being displayed on the chart.

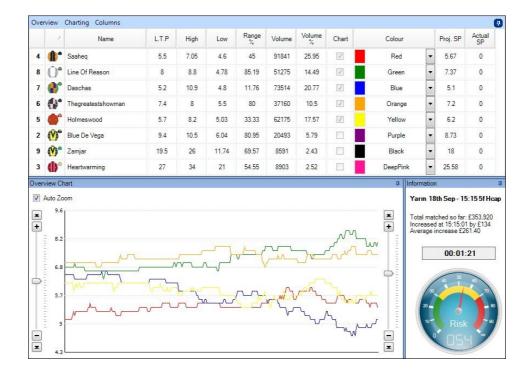




If a selection's price is currently outside your minimum/maximum prices it will still appear on the chart if it moves within your price range, likewise if a selection is currently within the prices set but moves outside of them it will be removed from on the chart until it returns back into your price range.

By Quantity - lets you specify the number of selections you wish to automatically be displayed on the chart, for example if you have five ladders displayed on your main trading screen you might only want the overview chart to automatically show the first five selections in a market.





Sort Order Used when Choosing by Quantity - When choosing a quantity of selections to display this option let's you specify whether you want to use the Betfair Order, Ascending Back Prices or Ascending Lay Prices ie, display the selections in the first five Betfair rows or the first five favourites in order of lowest back price

Colour Allocation When Switching Markets - Used in conjunction with the option above you could specify each colour is always assigned to a selection by order of favouritism, ie, the fav always appears in red. The default colour allocation is in order of the Betfair rows on the grid (which you can edit to whatever colours you want) so the selection in row 1 is red, the selection in row 2 is green and so on as shown in the next image.

1	Name	L.T.P	High	Low	Range %	Volume	Volume %	Chart	Colour		Proj. SP	Actua SP
	1. Domestic Dynamo	4.1	4.2	3.55	90.91	1638	35	V	Red	-	3.96	0
	2. Skyfall Bomber	8.2	8.4	7.6	75	288	6.16	V	Green	-	8.2	0
	3. Ballymac Avagio	3.45	3.75	3.35	25	1154	24.66	V	Blue	-	3.55	0
	4. Ashbourne Actor	15.5	18	13.5	44.44	572	12.21		Orange	-	15	0
	5. Roseville Drive	5.9	9.2	5.9	0	769	16.44		Yellow	·	6.5	0
	6. Joyful John	8.4	9.8	8	22.22	259	5.54		Purple	-	8	0

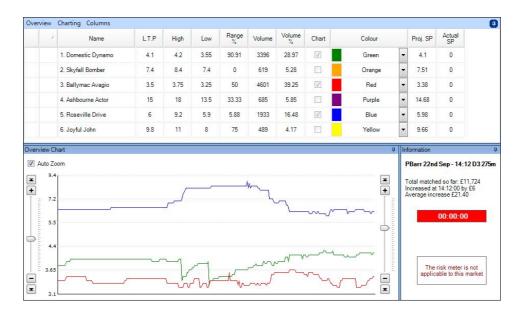
In UK horse racing markets this normally translates into the order of favouritism so Red would also be the Fav, Green the 2nd Fav Blue the 3rd Fav and so on.....

However if you are trading other markets like Australian horse racing US horse racing or Greyhound racing the favourite could be in any Betfair row number, so using this 'Colour Allocation when Switching Markets' option let's you assign the order of favouritism to always use the same colours.

For example; if you wanted to display the 1st-3rd fav on the chart but always have the fav displayed in red, 2nd fav in green and 3rd fav in blue you would use the following charting settings



In the next market even though the fav is in Betfair row 3, the second fav in row 1 and 3rd fav in row 5 these have still been allocated the colours red, green and blue respectfully on the market overview chart.



Once you have configured any overview charting settings they can be saved as part of your main settings profile.

Columns

By clicking on the 'Columns' menu item you can add or remove columns to show or hide the information you require, hovering over each column heading will bring up a 'tool tip' with a brief explanation of what each column means.

The column headings can be re-arranged in any order by clicking and keeping your left mouse button pressed and dragging and dropping where required.

If you wish to customize the text and background you can do this from the chart setting in your main settings.

	1	Name	L.T.P	High	Low	Range %	Volume	Volume %	Chart	Colour		Proj. SP	Actual SP	
10	()°	Canford Art	2.48	4.6	2.46	1.89	179294	64.47	V	Red	-	2.64	0	
4	(V)**	Smokey Lane	7.8	11	5.8	45.83	28220	10.15	V	Green	-	7.16	0	
3	()°	Bounty Pursuit	9.6	12	6.6	71.43	19265	6.93	7	Blue	-	8.53	0	
9	₽*	Plumette	10	13	7.8	64.71	12060	4.34	V	Orange	•	9.82	0	
5	(V)	The Groove	14.5	16	10	75	9639	3.47	V	Yellow	-	12.56	0	
8	@ *	Foxy Femme	16.5	17	8.2	95.65	6560	2.36	V	Purple	•	14.74	0	
13	X	Fantasy Justifier	27	32	11	86.21	5998	2.16	V	Black	•	21.31	0	
2	()°	Danecase	29	29	8.6	100	7936	2.85	V	DeepPink	-	26.06	0	
11	% °	Itmakesyouthink	38	60	26	50	3169	1.14	V	Lime	•	29.35	0	
6	(E)°	Gold Hunter	36	55	17	70.37	3874	1.39	V	Aqua	-	28.39	0	-
7	ąVa	Dreaming of Paris	95	95	23	100	1068	0.38	V	DarkOrange	-	70.35	0	

Risk Meter

The meter has been developed after analysing data for thousands of races over several years. Bet Angel can now detect if a market is behaving 'normally' or is behaving in a manner that is not consistent with the usual make up of that market. It does this by using complex calculations and our own algorithms developed over that time.

If the meter is reading around 50% then the market is behaving as expected. A lower reading would indicate lower volatility than expected and a higher reading would indicate higher than expected volatility in the market. Therefore a high volatility value would indicate greater uncertainty and higher risk.



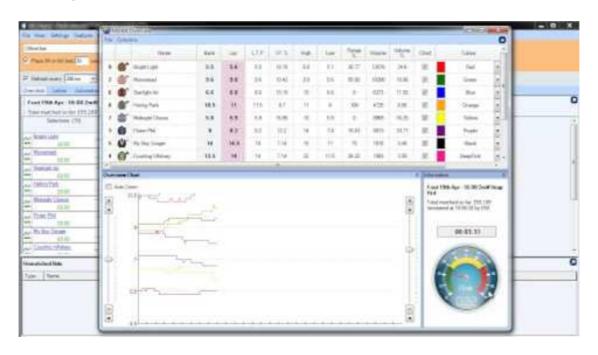
You can choose to use this to your advantage. A higher volatility may mean higher profits may be available from the market but at greater risk. A lower risk reading may mean smaller profits are available but may be available many times over.

Be aware that the meter does not take into account loose horses, sudden withdrawals or other market anomalies which could affect the reading.



The Risk Meter is not available for all markets and will only work for UK Horse Racing Win markets on Betfair.

Video of Using the Risk Meter



Bet Angel - InPlay Trader

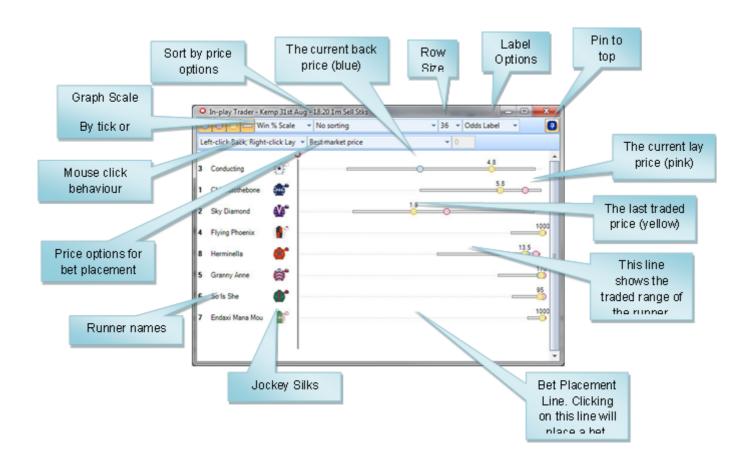
Overview

The unique In-Play Trader tool is an intuitive and easy to use interface designed for in-running markets.

To start the interface click on the 'winning post' icon located top right of the main Bet Angel screen.



Take a few minutes to familiarise yourself with the main features of the interface.

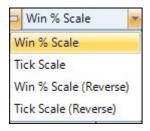


Configuration Options

There are a few options available to you and they affect how the interface displays the information and how you place bets.

These buttons allow you to choose whether or not to display the current back or lay price, the last traded price and the traded range. Click each button to toggle the option on or off. The traded range graphically displays the range of prices where bets have been matched on this selection.

The next menu to the right of these are the scaling options

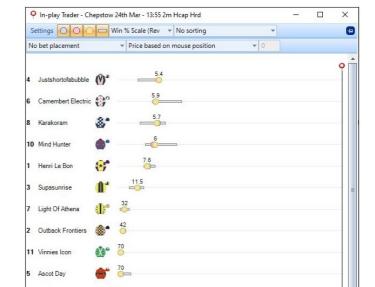


You can choose to display a scale from 1.01 to 1000 (Tick Scale) or the implied probability (Win % Scale), where odds of 2.0 (50% implied probability of winning) are plotted at the midpoint of the scale. This scale is weighted towards the display of shorter priced runners. The tick scale price increments are evenly distributed across the width of the chart. 4.5 is the midpoint price of the Tick Scale.

The bottom two options allow the x-axis to be reversed so the finishing line appears on the right side of the window

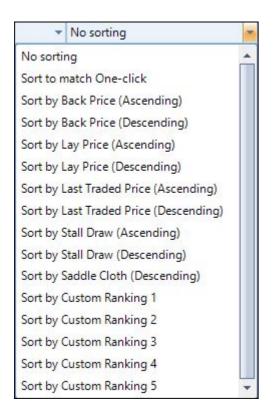
Normal





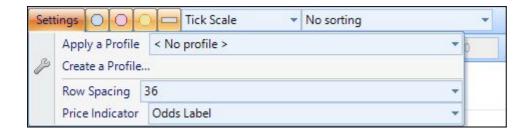
Next you can select how to sort the way runners are displayed, 'No Sorting' means they will be displayed in their default Betfair order

9 Airton



The next option lets you configure the row spacing, this can be customised to suit your layout preferences. If you wish to display many runners in a small area you can compress the row height to 22 pixels; if you wish to spread out the runners, to provide a larger clickable betting area for each runner you can increase the row height to a maximum of 50 pixels. If you plan to align the In-play Trader alongside the One-click screen, use a row height of 36 pixels to match the One-click's row spacing

In the upper left corner you'll see the 'Settings' tab, from here you'll be able to apply a saved profile or create a new profile (which are explained further on this <u>page</u>), also set the row spacing between the selections in the Inplay Trader



The final option here let's you choose whether to display the last traded price, the implied probability (Win % label) of each runner or use no labels, for example, if the current price is 7.6 it will be shown like this:



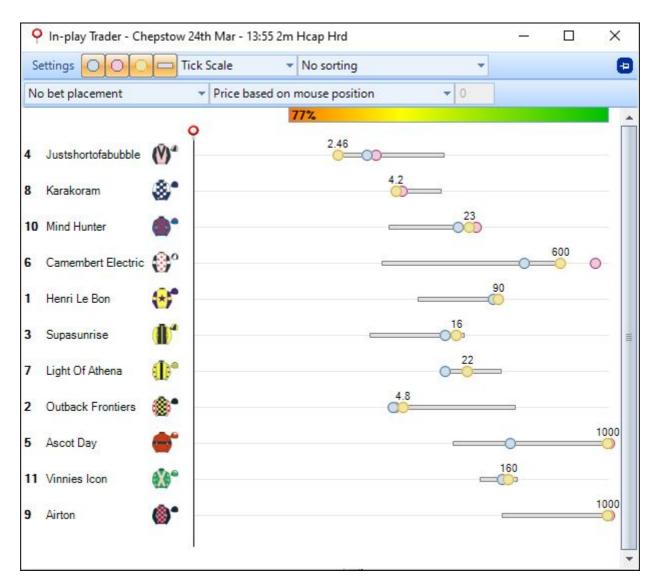
Or you can choose to show the implied probability of winning (1 divided by 7.6)



Race Meter

A race meter can also be displayed across the top of your In-Play Trader window in the form of a progress bar (moving in either direction) to give you a visual indication of how much of the race is remaining in percentage terms,

the race meter can use either real-time GPS data or estimate the progress using Bet Angel historical timings or your own standard times.

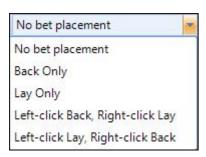


The race meter can be enabled/disabled and configured to your liking from the <u>Race Meter</u> tab in your main settings area.

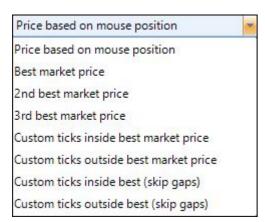
Bet Placement Options

You can click anywhere on the dotted line to place a bet <u>unless</u> you have the bet placement option set to 'No bet placement'. In this case, clicking the mouse button will have no effect.

For ease of use you can set to any of the following options



When selecting these options the mouse button will place either a back or lay bet into the market depending upon the configuration chosen.



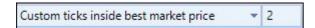
*(Skip Gaps) These two options can be useful in illiquid markets where there are large gaps between the prices being offered, using either of these options means the number of ticks you specify will only count those with money waiting to be matched, and will ignore prices were there is no money waiting

The price selected can be configured to suit your strategy, for example, you may wish to request a price that is outside of the current prices available. You can either choose 'Price based on mouse position' or 'Custom ticks...'

Placing a bet based on the mouse position means you can click anywhere on the dotted line and this will equate to a price. You will see the price currently at your mouse position at the bottom of the window:

Left Click to BACK Miss Marble with £5.00 at 2.94

If you wish to place a bet a number of ticks above or below the current price you can set the tick value on the box next to the drop down



For example, In a gappy market where the best back price is 2.0 and the best lay price is 2.20, you can price your bet to fill the gap by using the 'Custom ticks inside best market price'. Setting the custom ticks to 2 would price a back bet at 2.04 and a lay bet at 2.16. A setting of 4 ticks would price a back bet at 2.08 and a lay bet at 2.12.

In a volatile market you may wish to ask for a price below the best price when backing or above the best price when laying to improve your chances of being matched. If the best back price is 2.0 and the best lay price is 2.20 and you choose the 'Custom ticks outside best market price'. Setting the custom ticks to 2 would price a back bet at 1.98 and a lay bet at 2.24. A setting of 4 ticks would price a back bet at 1.96 and a lay bet at 2.28.

Staking for In-Play Trader

The stake used for placing bets is taken from the <u>stake setting in the one click screen</u>. See the 'Back Stake' and 'Lay Stake' columns. The Tick Size and Liability auto staking facilities are supported.

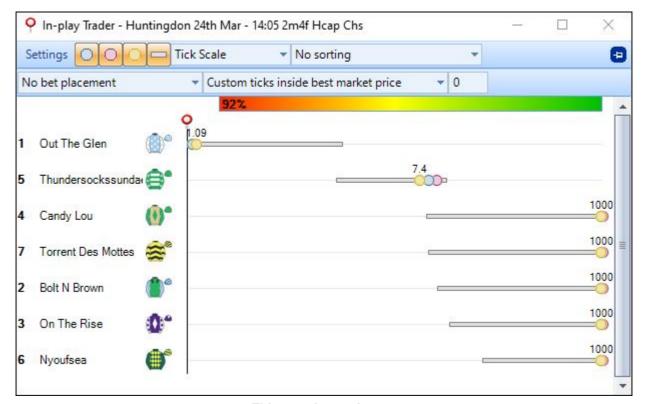
In-Play Trader Global Settings

When placing bets via the In-Play Trader window there is no blue cog icon to uncross, instead 'Global Settings' are always enabled, so you'll be able to initiate the placing of a back or lay bet on a runner and automatically have it offset the bet with greening etc by the software which increases the chances of a successful trade during volatile In-play markets

If you do not wish to use any Global Settings when betting via the In-Play trader ensure you have none of them selected on the left side of the main ribbon before placing any bets.

Using In-Running

Using in running is where this tool comes into its own. It will display in a graphical format who is leading in the betting and who else might be doing well. You can instantly judge the market and using your skill and judgement decide whether to lay or back a runner.



This race is nearly over
You can see at a glance who is leading based on the prices

Video Tutorial

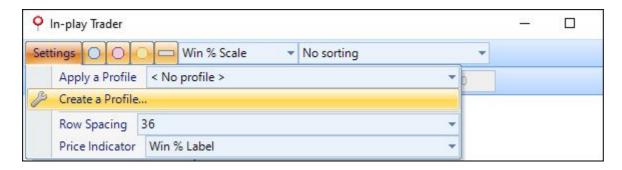


In-Play Profile Editor

Using the In-Play Profile Editor you can create and save your own customized profiles to make the in-play trader screen personal to you and/or your strategy, customized profiles can include 'Markers' to highlight key points on the in-play trader screen for example recent high/low traded prices for each runner, their SP, or key price points for example 2.0, 4.0 etc.

Markers can also be used to visualise <u>stored values</u> passed from an automation or servant rules file giving you the ability to display your own bespoke indicators or values derived from real-time GPS telemetry like current speed, distance to leader, position etc straight from a runner's saddle via Total Performance Data (TPD).

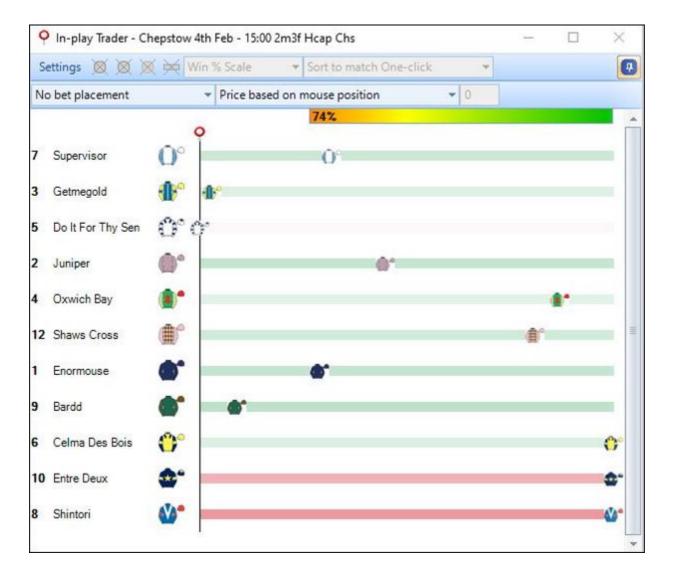
To begin creating an In-Play profile click on 'Settings' then 'Create a Profile'



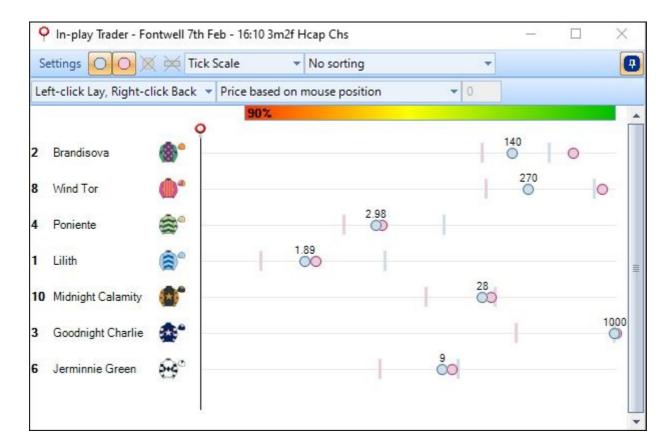
The following pages will then explain how to configure your Markers and settings, but before that have a look below at some of the examples showing just a few things that can be done with the In-Play Profile Editor

Examples

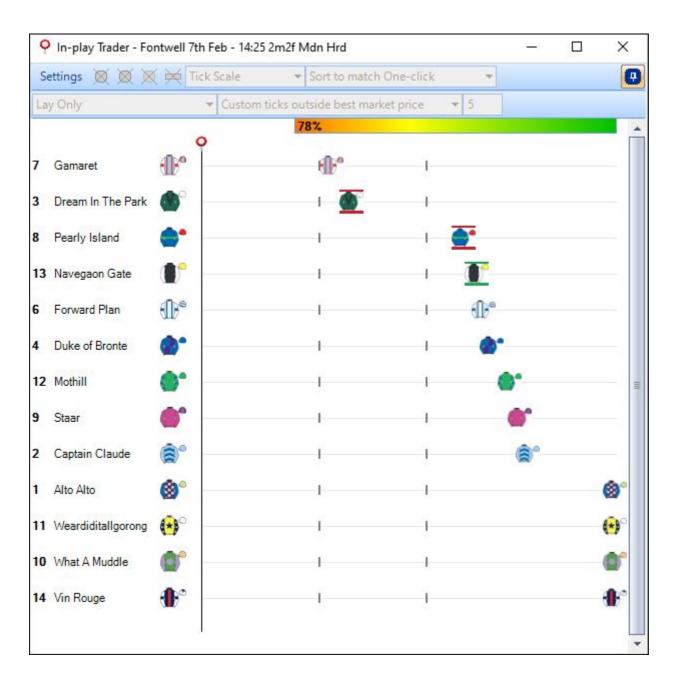
In this screenshot each runners position and there distance to the leader and each other is shown by the location of their silks, while bars using a colour gradient from green to red displays their current speed



In the next screenshot markers have been used to highlight each runner's in-play high/low traded prices during the previous rolling 30second period



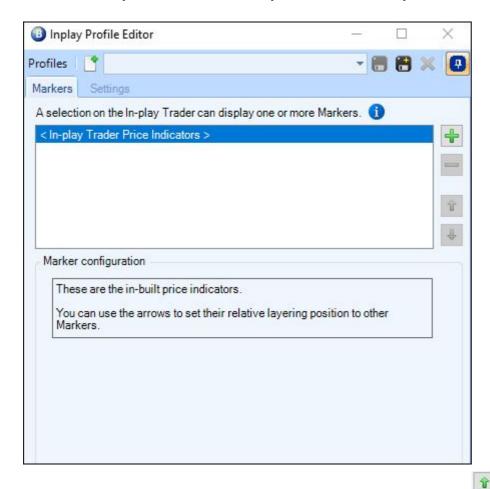
In this final image the jockey silks have been used to display each runner's current lay price, vertical markers have then been added to highlight where the fixed prices of 2.0 and 6.0 are along the x-axis. Finally two horizontal bars have been used for each runner (which are also positioned at the lay price) to sit above and below the silks, these bars are only displayed around the silks of the current 2nd-4th fastest runners and use there own colour settings to highlight if their speed is within 1mph of the fastest runner.



If you'd like to use any of the profiles above they and many more can be downloaded from the 'In-Play Trader' customization area on the Bet Angel Forum

In-Play Trader Markers

The 'Markers' tab of the profile editor allows you to configure your markers the way you want in your in-play trader window, you can create as many or few Markers as you need.



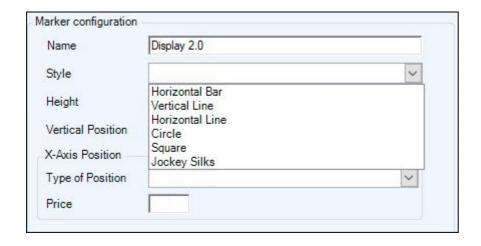
If you were creating multiple markers you can layer them by using the icon to set their relative position to other markers, ie, you might have a vertical marker to display a key price point then have another Silk style marker to display a runners back price - but as that approaches your line marker you'll probably want the silk icon to remain on top as it passes over the vertical line rather than partly being out if view as it goes under it, therefore you'd ensure the 'Silk' marker was positioned above the 'Vertical' marker in this window.

Marker Configuration

To begin creating a marker click on the icon and that will display the 'Marker Configuration' options in the low half of the window, the first step is to then give the marker a name, this is just for your own reference and is helpful if you have created multiple markers and need to go back and edit one at a later time

For this example we'll create a simple marker that will highlight where the price point 2.0 is located on the in-play trader screen.

Once you've given the marker a name you'll need to select what style it will be from the list of options shown below



Then you can begin configuring the general position and appearance of the marker

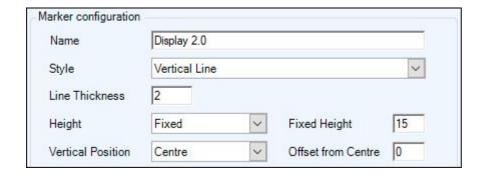
Line Thickness* - Lets you set the thickness of the lines of the marker

Height - (Fixed or Row Spacing), 'Fixed' sets the height of the marker position - 'Row Spacing' sets the gap of the marker in the runners row

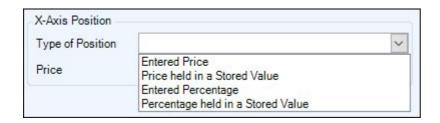
Fixed Height/Row Spacing minus - Set the number of pixels for the height or spacing of the marker **Vertical Position -** Lets you set the marker from the 'Top', 'Centre' and 'Bottom' position **Offset From Top/Centre/Bottom -**Lets you set an offset value to be used

*If using the 'Silk' style marker you won't see the 'Line thickness' option

For this example here I've created a vertical line marker which is two pixels wide, and set it to a fixed height of 15 pixels from the centre with no offset



The X-Axis Position - This option lets you set where your marker will appear along the X-Axis, (if you select either the Horizontal bar or line style you'll be give the option of setting two X-Axis positions - a start and end point), for all other styles only the one X-Axis position is required by choosing from any of the four options below



Entered Price - Lets you enter your own fixed price

Price Held in a Stored Value - Lets you use a price held by a stored value (you'll be given a text area to enter the name of the stored value you wish to use)

Entered Percentage - Lets you enter your own fixed percentage

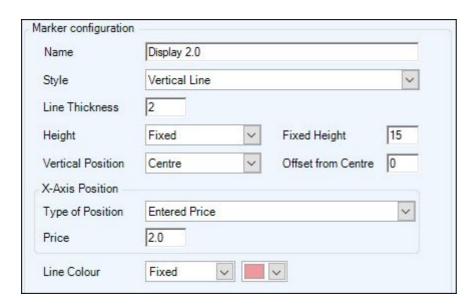
Percentage Held in a Stored Value - Lets you use a percentage held by a stored value (you'll be given a text area to enter the name of the stored value you wish to use)

The Line Colour section allows you to configure your marker's colour, here you can use a Default, Fixed, Profit/Loss or Value Based Colour Setting

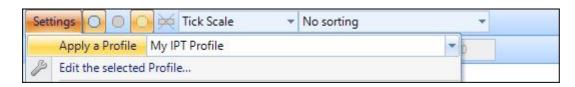


NB; This option will not be available when using 'Silks' as your marker style

For the X-Axis Position in the example I've used 'Entered Price' and set it to 2.0, I've also used a fixed colour for the marker and chosen a pinkish shade



The profile can now be saved by clicking the icon at the top of the window, it will then be available to select and use in your In-play trader window by clicking 'Settings' then choosing it from the 'Apply profile' menu. You can also right-click the toolbar of the In-play Trader to quickly change profiles.



In the image below you can see how the example profile created above will look, with the vertical line markers clearly showing were the price point 2.0 would appear



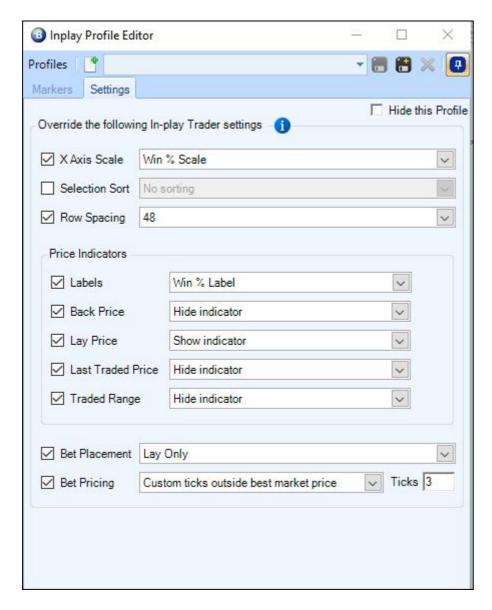
Pro Tip; Once you've created and saved a marker, if you select it as your In-play Trader profile then return back to this configuration page (while still having the In-play Trader window open) you can adjust each of the configuration options and the In-play Trader screen will update to reflect the changes as you make them.

In-play Trader Profile Settings

The settings tab will allow you to override any of your current In-play Trader settings, enabling you to use bespoke settings for each individual profile you create.

All of the settings available here are the same as those which have already been explained on the 'Configuration Options' and 'Bet Placement Options' pages of this section, the only difference being the settings you select here will only be applicable when this profile is used.

For example, if you've created a profile which has markers focused around the win% for each runner and you intend to use it alongside a laying strategy, you might want to override your default in-play trader settings and use something like in the image below



As you can see the settings used will display the In-play Trader using a Win% Scale with only a Win% and Lay Price label shown, it also allows only lay bets to be placed and no matter where you click on that runner it will place the lay bet 3 ticks outside the best market price

Bet Angel - Tennis Trader - Tennis profiling tool

Concept

Tennis Trader is our brand new software for Betfair. It will take your in-play Tennis trading and betting to new levels. You will no longer need to guess where the odds are going, Tennis Trader will tell you!

Here is a video overview of Tennis Trader:



The large price movements in a lot of matches produce significant swing trading opportunities. This make Tennis one of the most popular trading markets on Betfair. Catch a good move and you can make good money, but catch a wrong move and it can cost you a lot of money. The underlying question has always been, "Where are the odds going and how much risk am I taking?"

Now, thanks to Tennis Trader you can have all the answers in real time, right in front of you. Using this unique software you can answer fundamental questions like;

- "What will happen if there is a break of serve?"
- "How much risk do I have on this position?"
- "How much can I win if I back now?"
- "What chance does the server have of winning the next game or set?"
- "Where should I exit my position?"

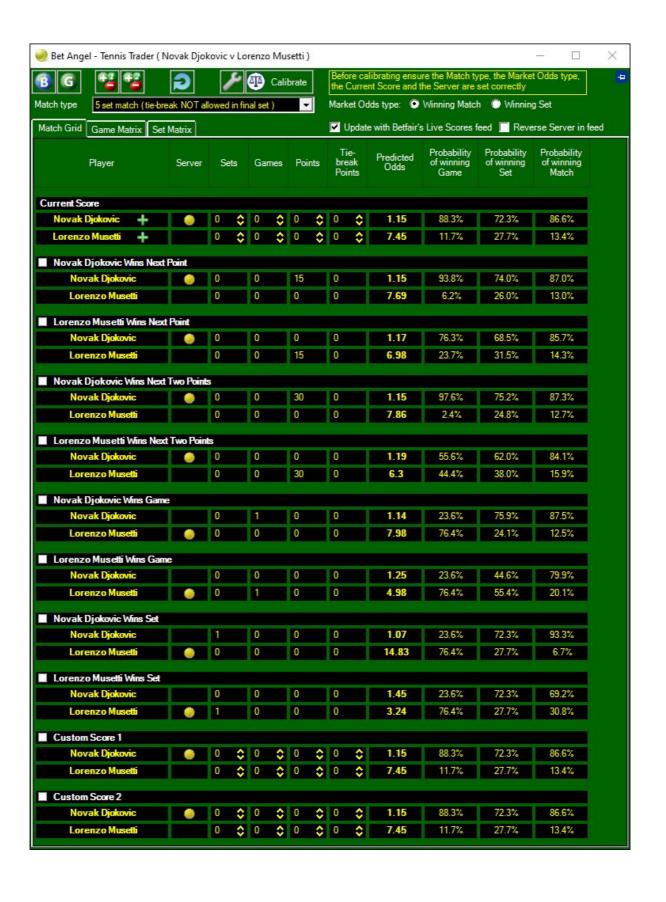
Tennis trader has been specifically created to allow you to carefully manage your in-play positions in each market. It is a profiling tool that lets you know where the odds will be whatever happens next in the match, whoever wins the next point, game or set. Modelling Tennis odds is notoriously difficult thanks to the almost infinite ways a match can go. Tennis trader solves that problem by bringing unique odds modelling functionality straight to your trading desk. If you bet or trade on Tennis this unique software will deliver a vital edge.

Starting Tennis Trader and linking to a market.

Starting Tennis Trader is easy. First you must find a Tennis match which you want to look at. When you have found it, go to the top of the main Bet Angel screen and you will see the Tennis Trader button



Click on the tennis ball icon to reveal the tennis trader interface shown below: -



Application Buttons

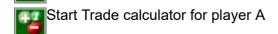
You will see the following buttons across the top Tennis Trader.



From left to right: -







Start Trade calculator for player B

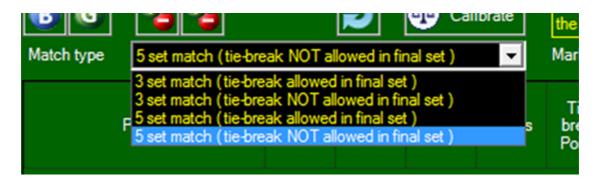
Reset Tennis Trader. This will reset the scores to zero.

Calibrate TennisTrader. See explanation shown later in this guide.

Setting Up for a Tennis Match.

Go to Bet Angel and select a tennis 'Match odds' market.

Check you have the correct 'Match Type'. If you do not know the match type refer to the tournament rules. Pro Tip This is important as ultimately it determines how the final result is decided



Entering the current score (if not available)

Bet Angel can import the current score of a match if it is 'delivered' by Betfair. By 'delivered', we mean that the score will be available if Betfair choose to share the score feed with Bet Angel users via their API. If that score feed is available, it will automatically be updated. Most key tournaments will have automated score updates, but there are the odds exceptions.

If the game is already underway and no score feed is available, you will need to enter the score manually. If the game has not started, ensure the score is set to zero or click on 'Reset'. If the game is already underway, you will need to enter the score. If the game has not started, ensure the score is set to zero or click on 'Reset'.



In the example above you can see that I have entered the current score above. Hewitt is trailing by 2 games to 3 in the first set but the games have gone with serve. Hewitt is next to serve so I click on the server column against his name.

Calibrate the system

Click on the 'Calibrate' button.

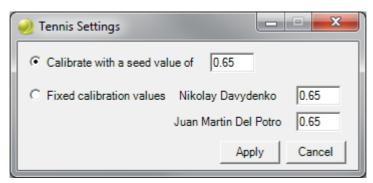


This allows Bet Angel to study the market and choose the best algorithm for approximating future prices in your chosen tennis match.

Do this just before the start of a match or during a break in play. Make sure you don't calibrate the software during periods of play or when the server is about to perform a second serve. Only use the calibration tool before the start of a match, during a break of play or before the first serve in a point has been struck. You may also wish to calibrate the software again during a match as market conditions change. A change in market conditions e.g. an injury, or where the odds are slightly out of sync with the software or where a fundamental change has taken place. Calibration works better when the market is **NOT** at very short odds for either player.

Calibrate Settings

Next to the Calibrate icon is a spanner symbol. If you click this it will open up the advanced calibrate settings editor.



The default seed values provided in the software are suitable for most situations and are based upon the chance of the players winning a point. If you have researched tennis and have lots of data and statistics on each player you may feel this seed value needs adjusting. The percentage chance of a player winning a point can vary so advanced users can adjust this as they see fit.

Video Tutorial



Updating the current score

Scores are updated automatically where the score feed is available from Betfair.

If you need to update the score manually, this is how you would do it: -

Clicking on the '+' next to a player's name will register a point as won for that player. From here we can model certain scenarios. If a point is challenged or overruled then you can click on the 'undo' button to step back a point.



When you call up Tennis Trader you will need to set the current score. In this illustration you can see I've just linked to a game.



This particular match was halted overnight so I need to set the current score. I do this by typing directly into the score fields or by using the up and down arrows . I can also set the current server by clicking against the correct player in the 'Server' column.



When the game commences I can update the score by clicking on the '+' button next to the relevant player.



This will add one point onto the score and automatically update the games and sets scores as the game progresses.

If at any time I leave the game and miss a few points I can enter the correct score as above by typing the correct values into the relevant fields.

Built in Predictor Scenarios

Underneath the 'Current Score' area there are some built in predictor functions. Tennis-Trader will tell you the likely Match Odds prices for the following for EACH player:

- win the next point
- win the next two points
- win the current game
- win the current set

At the bottom you will see 'Custom Score 1' and 'Custom Score 2'. These allow you to set your own scenarios by adjusting the number of sets, games and points won and how if impacts on the predicted odds.

How to use predictions

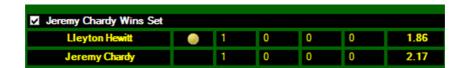
The key benefit of TennisTrader is to effectively see the future and understand how this affects your trading position. This allows you to carefully manage your risk in the market and helps you to identify new trading opportunities.

For example, in the following game we can see Hewitt is currently leading by a set to and is leading the 2nd set by 3 games to love. Chardy is serving for the current game in play.



What will happen if Chardy turns this set around and goes on to win it?

We can see this in the 'Wins Set' predictor section for that player.



So BEFORE IT HAPPENS we now know the likely match odds should Chardy win the current set.

This enables us to see what risk is involved if we open a position. For example, you could place a lay bet on Chardy at the current price knowing that if he goes against play and wins the set your risk is still manageable.

Arranging Scenarios

If you wish to keep your favourite scenarios close to the top of the screen you can place a 'tick' in the check box as in the illustration above. This will move that scenario to the top of the screen underneath the 'Current Score'.

You can see in the illustration below I have selected to use a custom score scenario and the 'Andy Murray Wins Game' scenario by placing a tick in the relevant boxes. This easily allows me to keep an eye on what will happen if the game goes to Andy. The custom box allows me to quickly enter a 'what-if' score and see what the likely odds will be should circumstance arise.

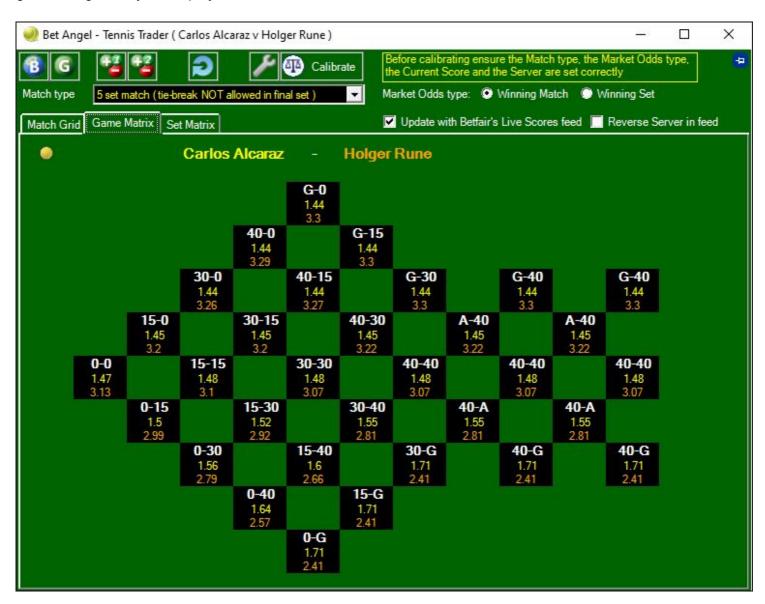


To see a detailed example of how Tennis Trader can be used to identify a trading opportunity see this example from our <u>forum</u>	

Game & Set Matrix

The Game Matrix tab within Tennis Trader will present you with a visualisation of how the game may progress and the likely odds available at all the possible POINTS outcomes of the game.

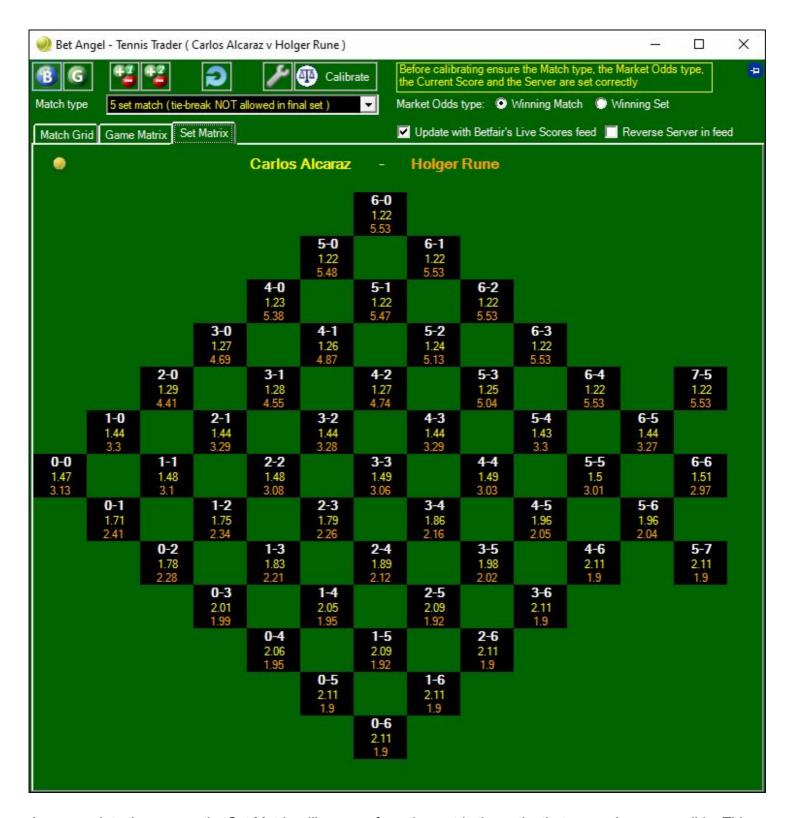
For example, in this match below we can see the current score of 0-0 over on the left. The current odds are displayed underneath - in this case 3.2 for the player highlighted in YELLOW and 1.45 for the player highlighted in ORANGE. As the matrix progresses towards the right you can see the possible scorelines and paths to the game being won by either player.



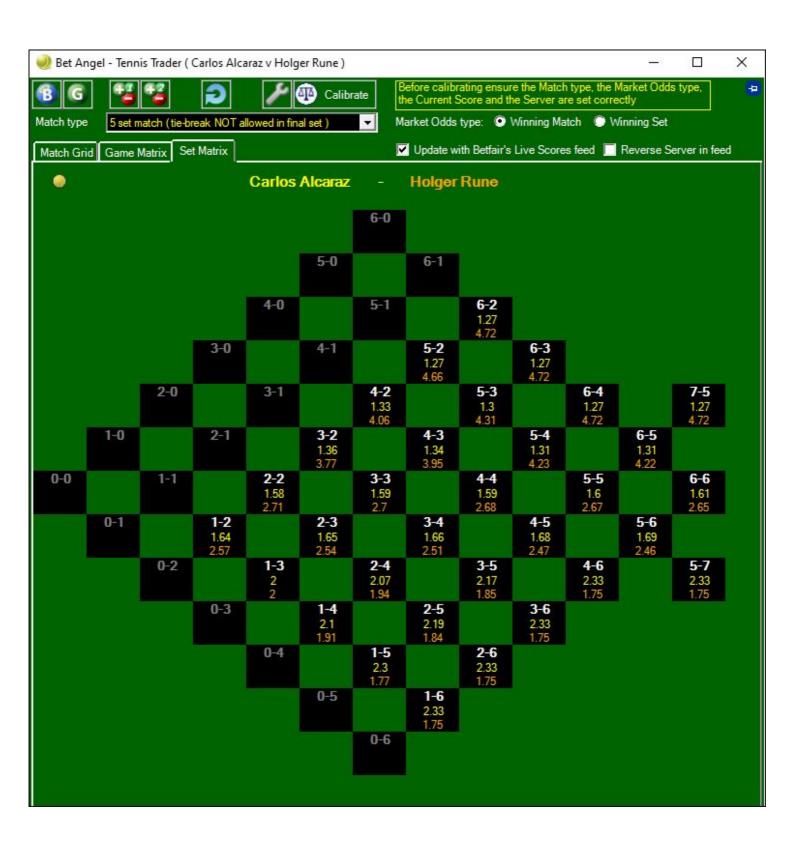
This can be a tremendous help if you are about to open a position within a game. You can see at a glance all the possible odds that could occur as the game progresses.

The Set Matrix tab is similar to the Game Matrix but this time it shows all the possible GAME outcomes the set progresses. When you look at the matrix it allows you to understand where the odds may be given certain scenarios.

On the left is where the set begins and as the set progresses it could follow any one of the paths as it moves towards the right where the set is won by either player.



As you update the scores, the Set Matrix will remove from the matrix the paths that are no longer possible. This allows you to concentrate on possible outcomes only.



Live scores on Tennis trader

Where available, Bet Angel can provide live score feeds straight into <u>Tennis Trader</u>, through the <u>watch lists</u> and via Excel.

Live scores in Tennis trader

Tennis trader will automatically pick up if live scores are available and display those for you within the Tennis Trader tool.

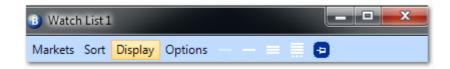
Tip: On the rare occasion that the first server has been tagged incorrectly at the courtside and is affecting the live scores feed, you can tick the 'Reverse Server in feed' option in Tennis Trader for that match.

Live scores in the Excel spreadsheet function

In Excel you can add the Tennis scores to your spreadsheets using the 'additional data' area in the settings tool.

Live scores in the watch lists

The <u>watch lists</u> are a perfect for displaying multiple live scores all at once. To activate Tennis scores on the watch list go to the watch list and click on the display option in the top menu in watch list: -



From the drop down menu you will see the Tennis score options, if you two both these options your watch lists will now also display the Tennis scores, where available.



When you have selected both the 'Tennis scores' and 'Tennis scores (Previous Sets)' your watch list should now display scores and look similar to this: -



Bet Angel - Soccer Mystic - Football profiling tool

Concept

Soccer Mystic is the **first ever application designed specifically for Betfair soccer markets**. It has been specifically created to give you the **best chance of profiting** from one of the fastest growing markets on the betting exchanges. If you bet or trade on soccer, getting an edge is critical and soccer mystic is the tool that will deliver that edge. Quite simply, **soccer mystic is your unfair advantage!**

At the top of the screen you will see the specialist tools area. Click on the soccer ball icon to get started. If the current market is not compatible with Soccer Mystic you will see a pop up message saying so and the predictor will not be available.

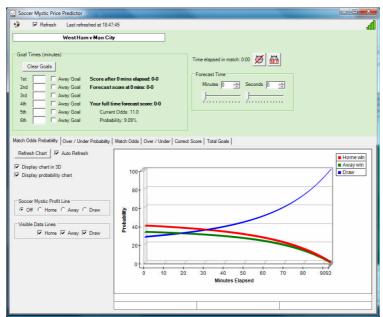


It takes a few seconds for the price predictor to gather data and form its prediction. When that has taken place the price predictor is ready to use. The most important thing to do initially is to quickly look at the signal strength indicator in the top right.

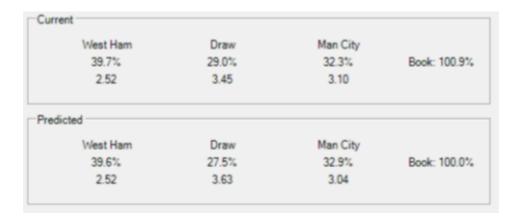


This indicator is designed to give you an idea of how well the market is formed. This determines how well Soccer Mystic can model it. If the market is ideal for Soccer Mystic it will display five bars on the indicator. If the market is poor it may not display any bars at all.

Starting The Predictor

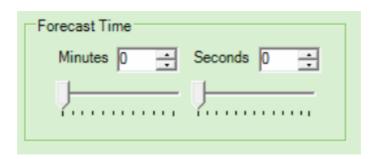


In this particular example the bar indicator is showing five bars and if you click on the "match odds" tab on the price predictor you can see the market is reasonable well correlated. The values on Betfair will always have an over round book, i.e. there is always margin for the layers on Betfair. Therefore it is highly unlikely that the two sets of figures will ever perfectly match. This is because the price predictor always prices at 100%, whereas the Betfair market is very unlikely to be priced at 100%.



The "forecast time" sliders

In its simplest form you can use just this area to do some predicting. On the same screen you will see the 'forecast time' area. You can use the two sliders to "wind forward" the time to any point in the match. When you do this Soccer Mystic will automatically adjust the predicted prices to reflect the amount of time that has passed according to the forecast time indicator. You will see how time affects the pricing of the match odds, the over/under markets, the correct score and the total goals.



Goal Area

If you have not used the goals area, then when you use the forecast time area you are merely predicting what will happen to the odds if the score remains 0-0. To simulate what would happen if a goal is scored, use the 'goal times' area. If you want to simulate a goal that has been scored, simply enter the time of the goal in this area by typing in the boxes.

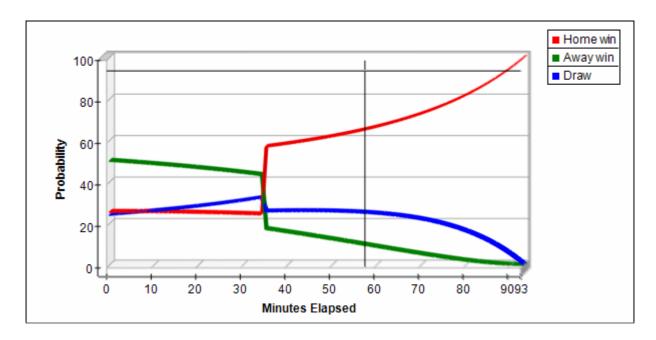
_G	Goal Ti	mes (n	ninutes)	
	Cl	ear Go	als	
	1st		Away Goal	Score after 0 mins elapsed: 0-0
	2nd		Away Goal	Forecast score at 0 mins: 0-0
	3rd		Away Goal	
	4th		Away Goal	Your full time forecast score: 0-0
	5th		Away Goal	Current Odds: 16.5
	6th		Away Goal	Probability: 6.06%

If you right click in this area you can also use a slider to quickly set the goal time. If it is an away goal simply click the Away goal tick box.

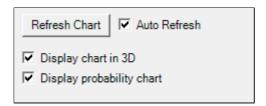
In this example we have a home goal at 38 minutes. If we move the forecast time slider it will now reflect a score of 0-0 to 38 minutes and 1-0 from 38 minutes onwards. You will immediately see the affect that a goal has on the odds and how the odds move over time before and after the goal. A better way to view this is not through numbers bet visually.

Probability forecast charts

Clicking on either the 'Match odds probability' or the 'Over / Under probability' tabs will reveal a visual representation of how the match will progress.



The graph can be re-sized and can also be displayed in an eye pleasing 3D format, or a more precise 2D format. You can also display the odds in probability terms, i.e. the percentage chance of something occurring, or in decimal odds. The reason soccer mystic displays odds in percentage terms is because this makes it much easier to read and interpret. This also allows you to see how the odds move in proportion to each other. If you un-tick the 'display probability chart' option the chart will display in decimal odds and allow you to limit the decimal odds to a reasonable number so as not to distort the display. To practice we suggest switching the 3D off and remaining on the probability charts until you get familiar with using the charting capability.



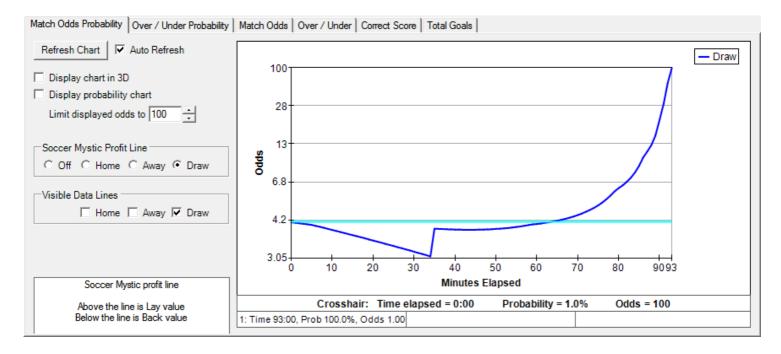
To see a detailed example of how Soccer Mystic can be used to find a trading opportunity see this thread from our forum

Soccer Mystic profit line

You can set visible data lines on the chart very easily. The default is for all the data lines to be switched on but most people tend to looking at the match from one particular perspective, a win for the home team, a win for the away team or a draw. Therefore it makes sense to switch off unwanted lines. Let us assume that in this match we want to assess how the price of the draw moves as the match progresses.

In this example we have switched off the data lines for the home and away win and just left the draw plot on the chart. We have also switched off the 3D display. If you move your mouse over the chart you will see that a set of cross hairs appears and this allows you to pin point how the odds move, how much and over what time.

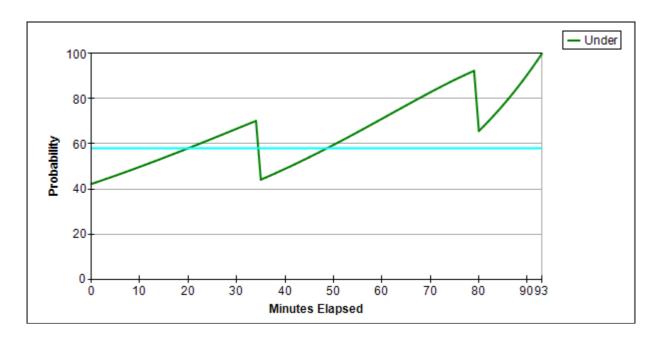
As the match starts the draw gets more certain and therefore the price of the draw has come in to around 2.66. At that point the goal is scored and the price on the draw jumps out as expected. If we use the cross hairs we can point and click at any two areas and the bottom of the chart populates with the price and time data at the first click, then the price and time at the second click and also the difference, the potential profit, between the two. You can see from this example that the price jumped out quite a bit when the goal was scored. As the match progressed and there were no more goals and the price continued to drift right out. Of course, by then, you would have made your money and be long gone from the market!



It is highly unlikely that you would have been active and in the market just before a goal, in fact you are more likely to have taken a position before the match started. If we were laying the draw and looking for a goal to be scored, that is a much more likely scenario.

The Soccer Mystic profit line allows you to see at a glance just how a scenario like this could play out. When you switch on the profit line, Soccer Mystic draws a line across the entire chart to illustrate to you periods when a backing or laying strategy would make sense. In this example you can see that for the vast majority of the match the draw is trading at a price much higher than it started at. Therefore you should lay the draw as you get plenty of time to profit from this scenario. When you use the profit line a useful reminder appears in the bottom left of the charting area indicating which scenario is the best to adopt given your scenario.

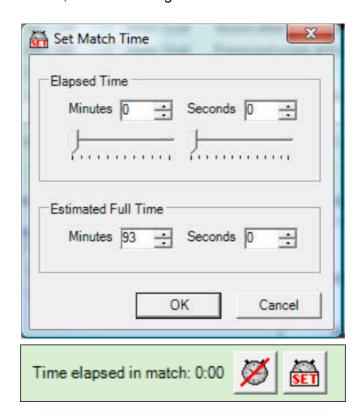
You can use the profit line on the Over / under area charting area also and just 'playing' around with different scenario using the charting is a good way of getting an idea of which strategy you should adopt in a match.



In this chart of the over / under market you can see that we are in profit for the whole of this match whatever happens and despite the fact that there have been two goals scored! If you wish you can change the target number of goals required on the chart and Soccer Mystic will instantly recalculate the chart for you so you can dynamically decide what the best strategy will be.

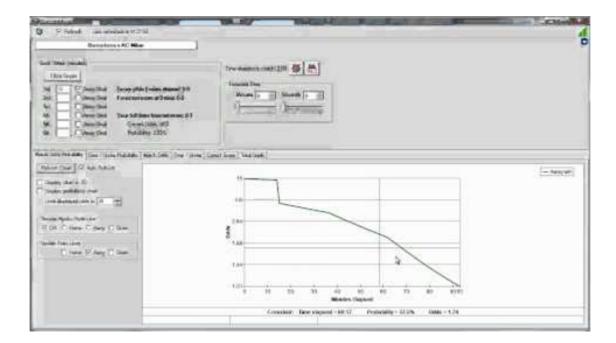
Using charting in-play, synchronising the predictors clock

If you intend to use the Soccer Mystic price predictor in-play, it is critical to align both the goals and the time to match exactly the underlying characteristics in the match. To do this set your goals in the 'goal times' area and then set the time by clicking on the clock 'SET' icon. A dialogue box will appear with settings for the elapsed time and the estimated full time. Use the sliders, the boxes or right click to set the times.



When the time is correct then click to the left of the 'SET' clock and Soccer Mystic will set the clock in motion and ensure that it is fully synchronized. This ensures that the prediction is automatically adjusted for the amount of time already gone in the match and the amount of time left in the match.

Video Tutorial



Bet Angel - API

Since version 1.60, Bet Angel has had its own Application Programming Interface (API).

This provides a set of operations that can be called by your own application running on the same PC or network. You can create that application in any language that is capable of sending and receiving JSON formatted messages e.g. JavaScript, C#, Python, VBA etc.

For full details about the capabilities and usage of the Bet Angel API please see the separate user guide here

The Log File

Bet Angel has a log screen that records all the activity performed with Bet Angel during the active session, Logs are especially useful for tracking down events where things may have played out differently to how you expected. The log records the time and type of bet together with any global settings selected in the top settings area. It will also record bets triggered via Servants, Automation or with Excel.

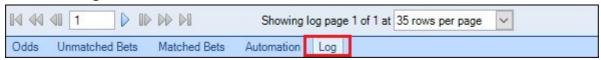
There are separate logs for your activity on the main interface (ie, when using the ladder, one-click, dutching), and for individual markets you have running in <u>Guardian</u>, to access the log page simply click 'Log' tab on your main screen

Main Log



Or select a market in the top window of Guardian then click the 'Log' tab below the bottom window to view the activity from that market, including any bets placed by automation etc.

Guardian Log



Log Paging

At the bottom of the log page you can specify the number of log entry rows you want to have displayed on each page. As your pages begin to fill up you can use the buttons on the left side to navigate forwards and backwards page by page, 5 pages at a time or skip to the first and last pages, or you can simply type the page number you want into the box provided and click the single blue arrow icon to jump straight to that page number.



Log Entries

For example, here is a log entry recording a simple bet made:

04/03/2013 14:58:01: £ 2 Back bet placed on Fling Me at 2.14. Fully matched at 2.14. Ref: xxxxxxxxxxxxx

The Reference number at the end is a unique bet identifier provided by Betfair. Note it is not a Bet Angel reference. If you use practice mode the bet references will start at 10000.

Here is a log entry recording a requested LAY bet:

04/03/2013 14:58:28: £ 2.15 Lay bet placed on Arfur Didit at 8.2. Entirely unmatched when it initially reached the market. Ref: xxxxxxxxxxxx

Unmatched Bets

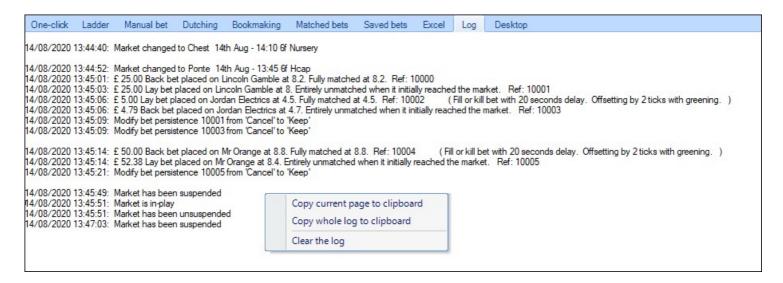
This phrase - 'Entirely unmatched when it initially reached the market.' means just that. The price asked for (8.2) was not available for LAY bets when this was placed. It is important to note that the log only records the status of the bet when initially submitted to the market. It will not update itself with any changes such as the above bet subsequently being matched.

Here is a bet placed complete with offsetting and other global settings applied:

04/03/2013 14:58:34: £ 2 Back bet placed on Fling Me at 2.14. Fully matched at 2.14. Ref: xxxxxxxxxxx (Fill or kill bet with 0.5 seconds delay. Offsetting by 3 ticks with greening. Stop at 7 ticks. Place stop at 10 ticks.)

Clear/Export Log

If you 'Right-Click' anywhere on the log page you will see a pop-up menu appear giving you the options to 'Clear the Log', 'Copy the Current Page to the Clipboard' or 'Copy the Whole Log to the Clipboard'



Saved Log Files

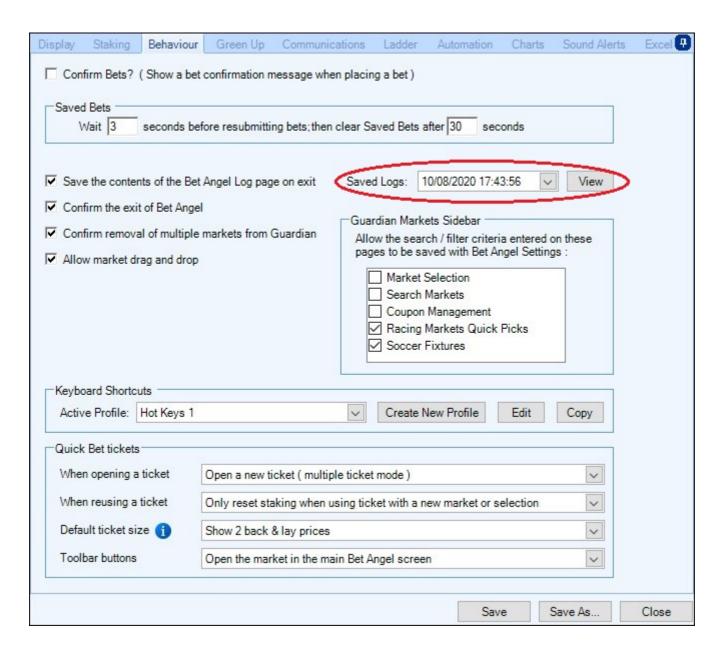
The log will clear each time you exit Bet Angel however, a copy of the log from your activity on the main screens is saved to your computer hard disk just in case.

Bet Angel will record the last six sessions worth of log entries and store them here:

C:\Users\{YOUR WINDOWS LOG IN NAME}\AppData\Roaming\Bet Angel\Bet Angel Professional\Log

Note that the oldest entry is automatically deleted each time you exit Bet Angel.

You can also access stored log files directly from the settings editor by choosing a date and clicking on 'View'



Bet Angel - Settings tool

The settings govern certain characteristics of Bet Angel and the way it interacts with the market. Most of the settings are covered in the respective areas of this document and are specific to very certain functions and capabilities. When initially installing Bet Angel, take some time to get familiar with the various settings and configurations possible.

It is possible to save different profiles, so if you have two users who use the same machine you can have your own personal settings. Or you may choose to have different settings for horse racing and football. And something else again for tennis or golf.

Being able to choose different settings profiles makes it easy and convenient to set up Bet Angel to your personal preferences. Also you can import or export saved settings, this is handy you use multiple PC's and laptops as you can quickly transfer them between each one without the need to recreate them from scratch

Import a settings profile

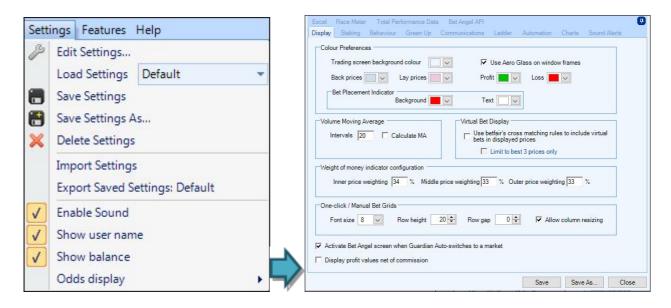
To import a saved settings profile click 'Import Settings' and navigate to the folder you have it saved in

Export a settings profile

To export a saved settings profile choose its name from the pick list next to 'Load settings' and click 'Export Saved Settings

Main Settings Editor

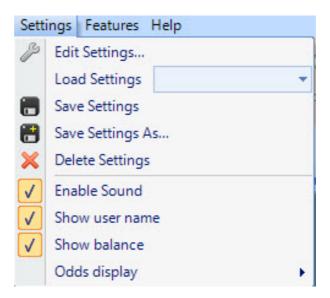
To call up the main settings window click the 'Settings' tab in the top left corner then on 'Edit settings'.



From here there are ten tabs or sections of settings that can be configured.

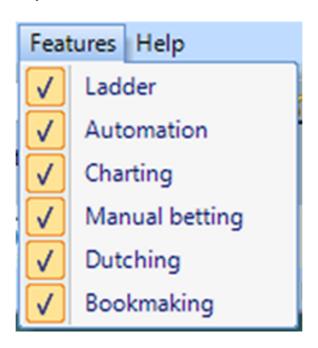
Show/Hide Username or Balance

The top menu bar has some settings for using Bet Angel. For example, you can hide or show your balance or user name, disable the sound alerts.



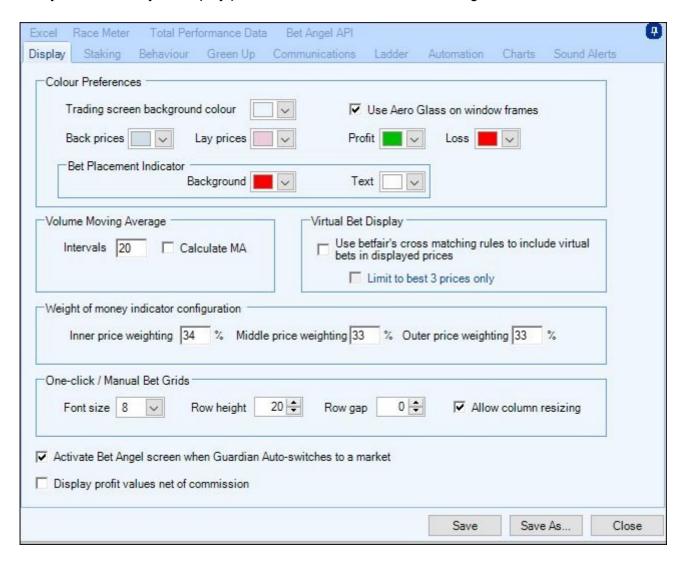
Features Menu

The features menu item allows you to disable unused items. For example, if you do not use the dutching feature, you can disable this and save some system resources.



Display

On this tab you can set all your display preferences to be used within Bet Angel



Colour Preferences

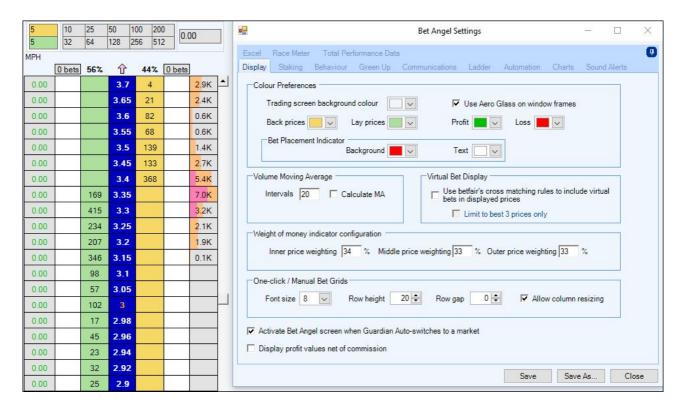
From here you can select the colour of the trading screen background and back and lay columns colours for your ladder screen

In the next image a green trading background colour has been selected.

One-click	k Lac	der	Automatic	n Ch	arting	Manual b	et	Dutchi	ing Bo	ookmakir	ig Ma	tched be	ts Sav	ed bets	Е	xcel	Log	Desktop											
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	0 bets	64%	Û	36%	0 bets			- 1	0 bets	62%	Û	38%	0 bets				0 bets	66%	仓	34%	bets			0 bets	70%	仓	30%	0 bets	
0.00			2.6	126		0.6K	_	0.00			2.82	81		0.3K	≟	0.00			7.8	5	0.	K	0.00			18	18	·	
0.00			2.58	101		0.7K		0.00			2.8	60		0.0K		0.00			7.6	22	0.3	K	0.00			17.5	29		0.0K
0.00			2.56	139		0.6K		0.00			2.78	231				0.00			7.4	64	0.	K	0.00			17	17		0.0K
0.00		139	2.54			2.1K		0.00			2.76	104		0.8K	1 1	0.00			7.2	69	0.0	K	0.00		9	16.5			0.2K
0.00		293	2.52			1.4K		0.00			2.74	30		0.9K	li	0.00				54	0.0	K	0.00		39	16			0.4K
0.00		220	2.5			4.7K		0.00			2.72	285		1.1K	1 1	0.00			6.8	155	0.9	K	0.00		101	15.5			0.5K
0.00		119	2.48			3.3K		0.00			2.7	114		0.9K	Ħ	0.00			6.6	72	1.9	K -	0.00		41	15			0.5K
0.00		291	2.46			2.5K		0.00			2.68	76		0.4K	1 1	0.00			6.4	55	1.0	K	0.00		66	14.5			0.4K
0.00		834	2.44			1.8K		0.00			2.66	162		2.3K		0.00			6.2	241	1.0	K	0.00		7	14			0.4K
0.00		664	2.42			0.8K		0.00		121	2.64			0.6K	1 1	0.00				84	0.1	ĸ	0.00		151	13.5			0.7K
0.00		141	2.4			0.5K		0.00		345	2.62			0.3K	1 1	0.00	-		5.9	128	0.1	ĸ	0.00		2	13			1.0K
0.00		265	2.38			0.8K		0.00		120	2.6			0.2K	1 1	0.00	-		5.8	20	0.3	K	0.00		7	12.5	»		0.7K
0.00		228	2.36			0.4K		0.00		107	2.58			0.2K	1 1	0.00		111	5.7	2000	0.	K	0.00		21	12			0.7K
0.00		295	2 34			0.5K		0.00		242	2.56			0.6K	H	0.00	-	247	56		0	ĸ.	0.00		11	11.5			0.2K

Back Prices, Lay Prices, Profit, Loss

In the image below yellow has been selected as the colour for the back price column, green for the lay price column, and purple for the profit figures in the trade profit column.



Volume Moving Average

The total amount matched in a market is shown at the top of the screen in Bet Angel. In some cases it may be useful to know the moving average and 'smooth' out the reading and you can choose to set this to a value that you choose. For example, if you have the refresh set to 500ms and set the interval to 20 then the average increase will be calculated over 20 x 500ms or ten seconds.

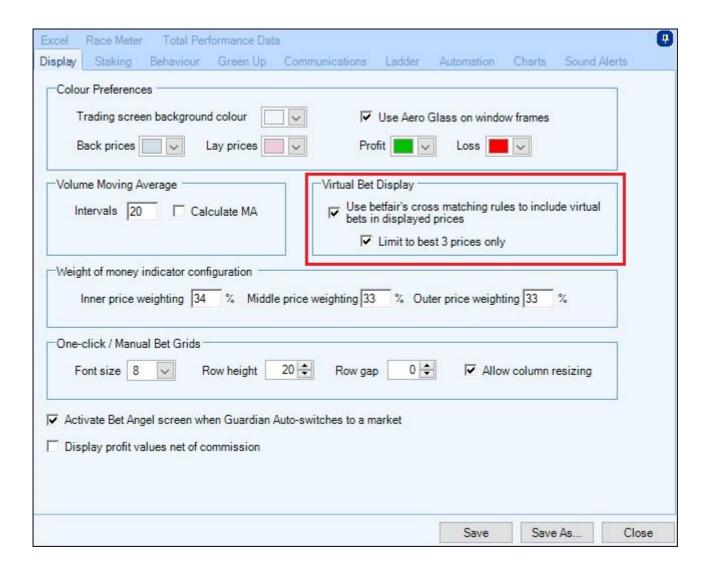
Virtual Bet Display

For some markets the prices displayed on Betfair may appear to be different to those seen in Bet Angel. This is because Betfair tries to match bets in different ways where possible.

See here for a statement from Betfair.

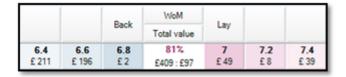
http://bdp.betfair.com/index.php?option=com_content&task=view&id=242&Itemid=108

Bet Angel can compensate for this by switching to the Virtual Bet Display option. This forces Bet Angel to use the same cross matching rules that Betfair use when they display available prices on their website. In the latest version of Bet Angel we have added a setting to limit this to the best 3 prices only. This is because some clients do not want to see the prices changing on each price point. You can see the setting highlighted on the screen shot



Weight of money indicator settings

The weight of money (WOM) refers to the amount of money waiting to be matched on either side of the book. When drawing WOM charts or indicating the WOM in the middle of the one click screen for example, you can adjust how much weighting Bet Angel places on the amount available on the three prices either side of the book.



For example, here we can see the amount of money available on either side is £211 + £196 + £2. If we set the weighting to outer 33%, middle 33% and inner 34% then we calculate the WOM accordingly. So 33% of £211, 33% of £196 and 34% of £2. This would be repeated for the lay side. We can then manipulate the WOM reading to fit the market or our own trading style.

One-Click / Manual Bets Grid

Allows the resizing of the one-click and manual bet screens boxes, you can set the font, row height and row gap you want to use.

Ticking the 'Allow Column Resizing' will also allow you to manually adjust the width of the boxes, to do this point your mouse cursor over the right side border of a column header then press and hold your left mouse button and drag to your required width before letting go of your mouse button.

In the image below the best back and lay columns have been widened

		Back	WoM	1-04		
		Dack		Lay		
2.16	2.18	2.2	44%	2.22	2.24	2.26
£ 160	£ 71	£ 144		£ 25	£ 447	£ 16
3.5	3.55	3.6	90%	3.65	3.7	3.75
£ 19	£ 47	£ 202		£ 14	£3	£ 12
4.5	4.6	4.7	16%	4.8	4.9	5
£ 45	£ 47	£ 18		£ 16	£ 29	£ 553

Activate Bet Angel Screen when Guardian Auto-Switches to a Market

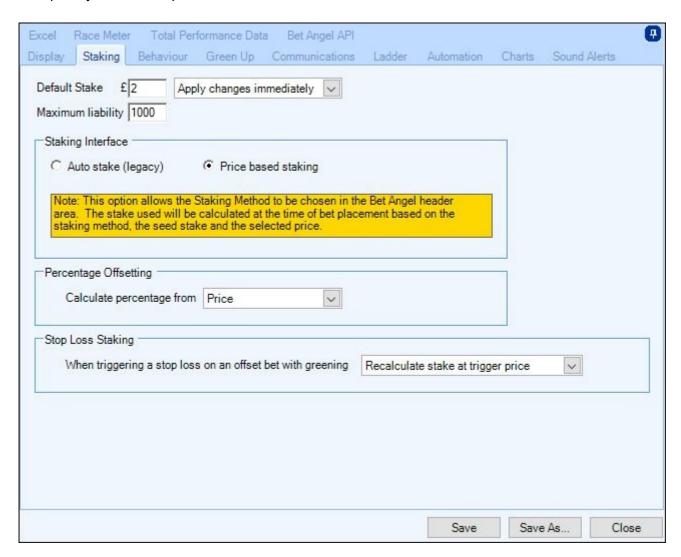
Enables/Disables the 'Automatically Switch Bet Angel Market Option' located on the main Guardian banner, when enabled here and in Guardian it will open the market to the on-click betting screen automatically at the time you have set within Guardian.

Display Profit Values Net Of Commission

Will display profit value net of commission (after Betfair's standard 5% commission deduction)

Staking & Liability

We can set a default stake and maximum liability in Bet Angel. It is a good idea when starting out to set these low. **Please be aware** that if you are trying to trade and positions are not acting as expected, for example offsetting positions are not firing. Then you may have set your maximum liability setting too low and Bet Angel will not be able to complete your counter position.



It is important to note that these settings only apply to your initial bet rather than any subsequent bet triggered by your initial trade or by any automatic features in Bet Angel. Therefore if you used offsetting to put two orders into the market these settings will only apply to your initial order.



NOTE: Your Betfair account profile also contains a liability setting. If your bets are being rejected and the Bet Angel liability setting is above the level then check your Betfair account settings.

Staking Interface

This option lets you chose between the old 'Auto Stake' now a Legacy or the newer 'Staking Methods' - the option chosen appears at the far right on the main Bet Angel banner.

Percentage Offsetting

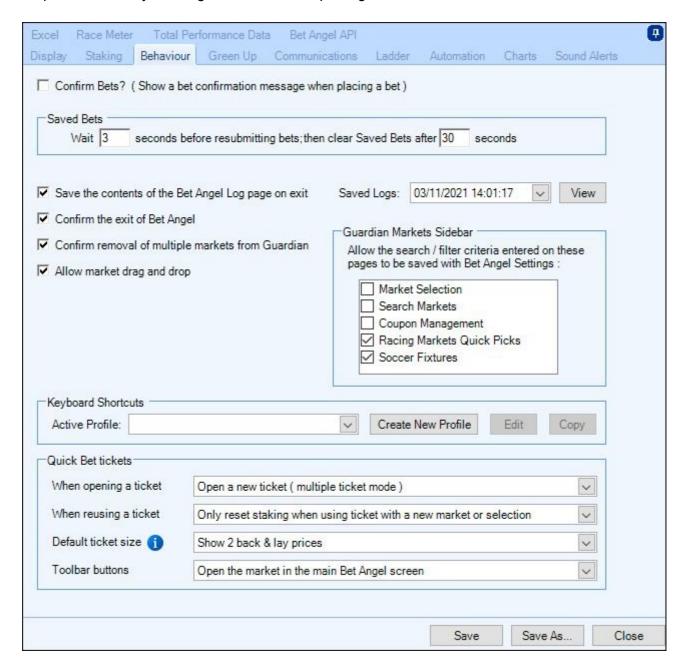
When offsetting by percentages this calculates percentages based on the price and also the (price -1.0)

Stop Loss Staking

Configurable staking method for your Stop Loss when using one of the Global Settings 'offset with greening' options. You can choose whether to use the offset, trigger or placement price when calculating the stop loss stake.

Behaviour

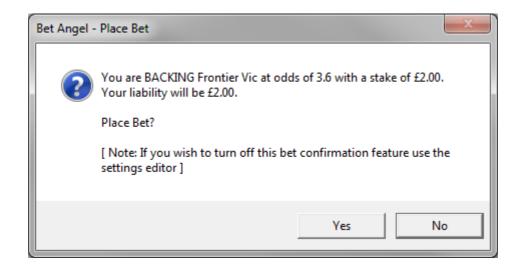
Certain aspects of the way Bet Angel behaves when placing a bet can be controlled here.



When you first install Bet Angel and start betting, you will see a box appear on the screen with details of the bet, your liability on the bet and asking you to confirm that you wish to place the bet.

Confirm Bet Setting

Once you are comfortable with how Bet Angel places bets you can turn this off by un-ticking 'Show a bet confirmation message when placing a bet'





Guardian Markets Sidebar

When ticked any search/filter settings on these pages will be saved as part of your main <u>Bet Angel Settings</u> Profile

Saved Bets Settings

When using the saved bets tab or feature to resubmit bets in markets where Betfair's bet persistence options (TakeSP, Keep Bet) are not suitable, you can choose to have Bet Angel wait a period before resubmitting the bets into the market once it is turned in play. This allows the market to reform correctly such as after a goal is scored in soccer.

Keyboard Shortcuts

Bet Angel allows many of its features to be mapped to keyboard shortcuts; those shortcuts can then be saved to a named profile.

You can quickly switch from one shortcuts profile to another by using the 'Active Profile' picklist in the Settings Window. For instance you may wish to create a different profile for each type of sport you trade, or have different profiles for different staking levels.



You can customize over 60 keyboard shortcut actions covering features such as: Bet Angel screen display, bet modification & cancellation, trade closure & greening, staking, ladder & one-click settings, layout & settings profile changes.

To get started start click on 'Create a New Profile' to launch the <u>Keyboard Shortcuts Editor</u>. You can use 'Edit' to modify a shortcuts profile that you have previously created.

Quick Bet Tickets

Here you can configure the behaviour of your <u>Quick Bet tickets</u>, the options of the four pick lists are fairly self explanatory but if you need a brief description please read below



When Opening a Ticket - With multiple ticket selected each time you right click on a market and launch a quick bet ticket it will spawn a new window (up to 10 tickets), the single ticket option reuse's the same ticket, using a single ticket maybe useful if you have limited screen space.

When Reusing a Ticket - When 'Always reset staking to default' is used each time either a new ticket is opened or reused the stake will revert back to the default stake you have set on the Previous page. You can also specify if the stake value is only to be reset on a new market/selection or if using 'Do Not Reset Staking' then each new market opened will use the most recent stake value used.

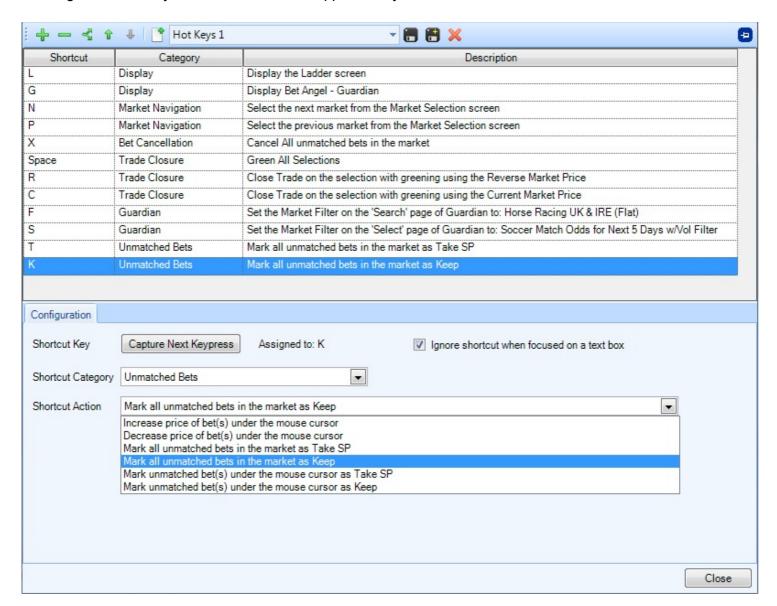
Default Ticket Size - This option lets you specify the number of back/lay prices to be shown on the Quick Bet ticket. NB; Quick Bet tickets will be re-used and open in the position and size they were last used, so this setting ONLY applies to first creation of a ticket window in a trading session (or screen layout profile)

ie, if you have already opened 5 tickets in a session using a saved profile that has the 3 best prices showing and then switch to a different saved profile with only the best prices showing on the ticket, the first 5 tickets opened with this profile will still show the 3 best prices - tickets displaying the best price will begin from the 6th ticket opened.

Toolbar Buttons - When using the following toolbar buttons within the Quick Bet ticket ¹ to fully open a market this option lets you specify if the market will be opened on the main Bet Angel screen or in a new spawned window.

Keyboard Shortcuts Editor

Bet Angel allows many of its features to be mapped to keyboard shortcuts.



The keyboard shortcut actions cover features such as: Bet Angel screen display, bet modification & cancellation, trade closure & greening, staking, ladder & one-click settings, layout & settings profile changes.

Click on the green plus icon to make a new shortcut, select a category followed by an action related to that category from the drop down menu's, once you have chosen these click on the "Capture next keystroke box" and press the key you would like to assign this action to.

Add or remove additional shortcuts using the green plus & minus icons and when finished and to save a new profile click the disk+ icon and enter a name for the profile, to save changes to an existing profile click the disk icon

Move short cuts up or down the list by highlighting one and clicking the green up/down arrows, not only does this allow you to keep your shortcuts organised it is also to control the order of processing when multiple actions have been assigned to the same keystroke.

In that situation, they are processed from the top of the list downwards.

When capturing a keystroke combinations of Ctrl, Alt & Shift are supported in conjunction with the usual alphanumeric keys.

Some actions are context sensitive and track your mouse movement, Example: If you assign "close trade on selection" to keystroke X then pressing the X key will close the trade on which ever selection your mouse cursor is currently hovering over.

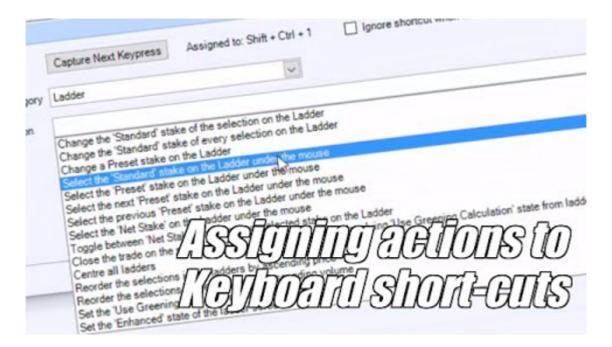
Tip

It's possible to assign multiple shortcut actions to the same Shortcut Key so that when you press the key, the actions get processed in the order they are defined in the editor.

For example you could use this to apply a number of different automation rules to different market types in Guardian. ie, you could assign a shortcut key to select all the Match Odds markets, then assign the same key the task of applying a chosen rule to those selected markets, then assign the same shortcut key to select all the Over/Under markets and finally the same shortcut key again to apply a another rule to those markets types. So you have created a sort of macro where with just one press of a key four tasks will be performed

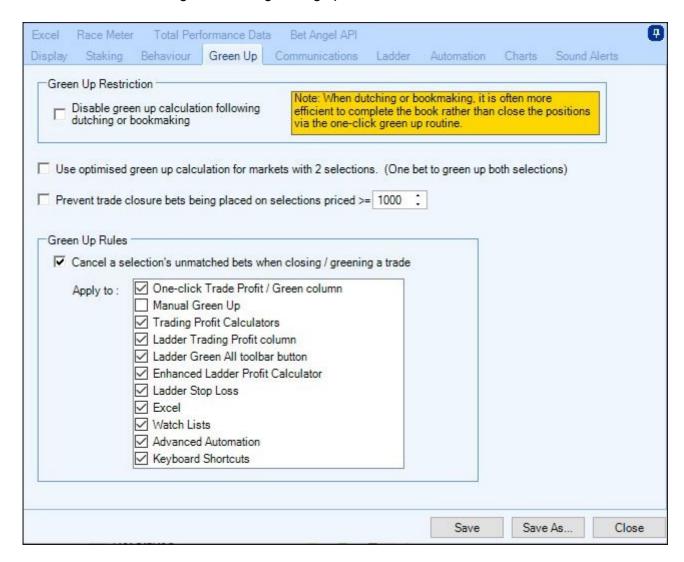
To see a step-by-step example on how to configure a shortcut key to do this please see this post from our Forum.

Video Tutorial



Green Up Settings

This area contains all the settings related to greening up within the software



Green Up Restriction

When using the dutching or bookmaking features of Bet Angel, you are trying to realise a profit by taking advantage of a book over-round or under-round in your favour - you are not realising a profit by closing a trade or greening up. Using it to exit a bookmaking or dutching session is inefficient and can be dangerous if you have repeatedly used the bookmaking feature in one market. For example, you may require a large amount of money to exit an individual bookmaking bet. If the market cannot stand this amount it is likely you will not exit all positions and may end up in a losing situation.

Therefore by default greening up is disabled when bets are placed via the dutching or bookmaking tabs. This means on the ladder & one-click trading screens instead of seeing any green up figures all you will see is N/A



Use Optimized Green Up Calculation for Markets with Two Selections

Bet Angel will calculate the stake and price required to green up both selections with a single bet, choosing the selection that maximises profit. This is particular beneficial in tennis and cricket markets, but can be used on any win only market with two selections. When enabled via the settings screen, Bet Angel will automatically switch to this method when it detects an appropriate market (otherwise it will continue to green up using the original method).

Prevent Trade Closure Bets Being Placed on Selections Priced >

This will block any closing bets before the order is sent to Betfair when the specified odds of a selection are greater than specified.

(Blocked bets are written as a note to the log)

This is useful when using smaller stakes and closing or greening up a trade with a bet value that is below the £2 min stake.

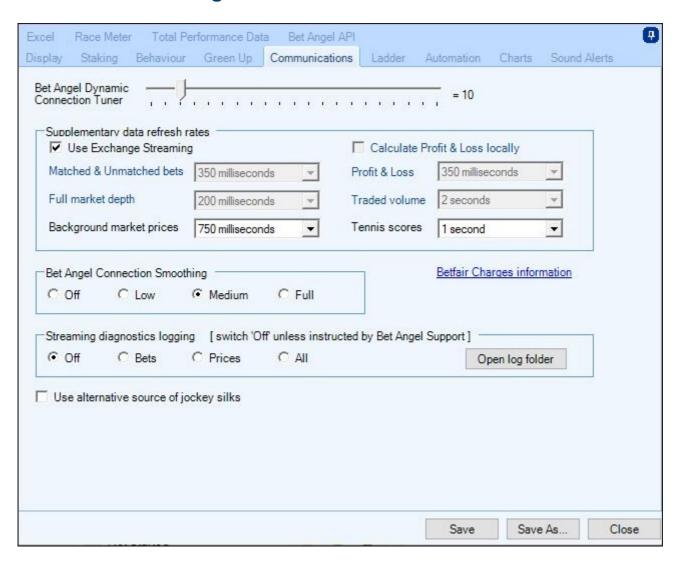
Bet Angel first has to place £2 @ 1000 then cancels the excess to leave the amount required and then moves that down to the odds you requested to green up at. In fast moving markets the £2 stake maybe matched @ 1000 before Bet Angel can cancel part of it which may result in any built up profits being wasted.

Green Up Rules

Its possible to close a trade or green up from a number of places in Bet Angel, this option lets you choose weather or not you want Bet Angel to cancel any unmatched Bets when closing a trade or greening up from that location.

So for example if you trade using the ladder screen and use the 'trade profit' column on the left side of the ladders to green up your positions by ticking the 'Ladder Trade Profit column' you can instruct Bet Angel to cancel any unmatched bets on that selection each time you do so.

Communications Settings



Use Alternative Source For Jockey Silks

Switch to an alternative source for Betfair jockey silks (use this if you sometimes see blank silks using the normal source)

Dynamic Connection Tuner



The dynamic connection tuner is a unique Bet Angel tool which further enhances your ability to get the best possible performance from Bet Angel, your internet connection and Betfair. You will find the dynamic connection tuner in the settings area.

There is no right or wrong usage of the connection tuner, each machine and Internet connection will exhibit different and unique characteristics. Your objective should be to adjust the refresh rate in Bet Angel to a reasonable level and pull the connection tuner to the lowest number possible.

If the connection tuner is too low in comparison to your refresh rate you will see that Bet Angel is unable to refresh and the responsiveness indicator will stall or freeze. This is an indication that your setting is too low. If this happens move your refresh rate up or the tuner down. If your setting is too high you will not notice or see any characteristics that will indicate this as Bet Angel will continue normal operation and the tuner will have no effect on the operation.

Supplementary data refresh rates

These settings can be found on the Communications page of the Bet Angel Settings Window

250 milliseconds ▼	Profit & Loss	350 milliseconds	*
		Too minoconia	
500 milliseconds	Traded volume	2 seconds	•
750 milliseconds ▼	Tennis scores	1 second	•
	Soc miniocoondo		

Polling

By default Bet Angel will 'Poll' Betfair for the latest market data. When 'Polling' is used Bet Angel will call the exchange for you on every refresh to retrieve the latest market information this refresh can be done as fast as every 200ms.

Streaming

When 'Use Exchange Streaming' is enabled the information is pushed through to Bet Angel each time it changes, you can then request an update of this as fast as every 20ms making streaming much faster than using the traditional 'Polling' method.

If your trading or even just monitoring multiple markets using <u>Coupons</u> or <u>Watch Lists</u> you can ensure they are displaying the most up to date information by setting a fast refresh rate for 'Background market prices'.

If you are using 'Polling', Bet Angel allows you to control which items of data are refreshed from Betfair at time intervals of your choosing. For example if you feel that getting rapid updates of the Profit and Loss information is important to you then you can instruct Bet Angel to retrieve this information more frequently. The default settings are likely to be suitable for normal usage, but you've got the flexibility to modify them as required.

Connection Smoothing

There are four settings to choose from here from 'Off' to 'Full'. This is designed to make the flow of information appear to be consistent on your screen. If you have an internet connection that is slow or if you are a long way from Betfair for example, then this setting can be useful in providing a more stable appearance.

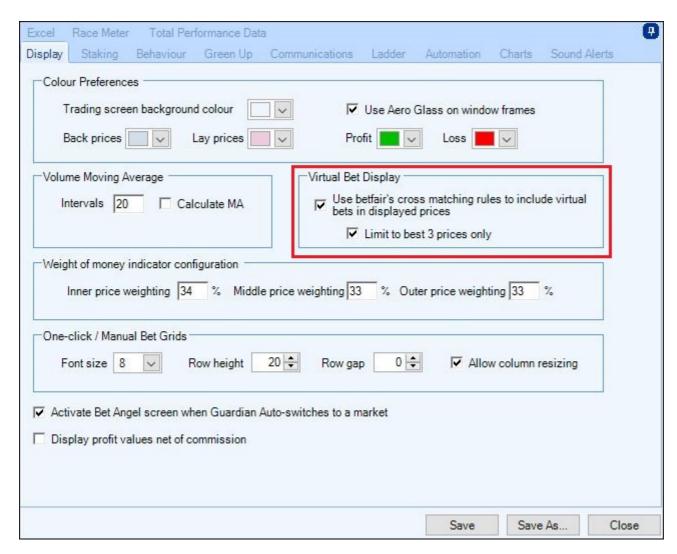
Note: 'Betfair Data Request Limits' - removed from Bet Angel

Betfair used to charge based on the number of calls made to their API, but with the advent of API-NG this limitation has been removed. Full information about Betfair's charges can be found here <u>Betfair Charges</u>

Calculate Profit and Loss Locally

Bet Angel can calculate the profit and loss itself rather than retrieve the P&L from the exchange. This can display the P&L more quickly and saves bandwidth across your internet connection.

If you choose to select this then the P&L refresh rate will have no effect as this relates to the calls made to the exchange.



There may be occasions where rounding differences may make the locally calculated P&L slightly different to the actual figure from the exchange. This could happen if making extensive use of the bookmaking and dutching features. If using these features extensively you can turn off the locally calculated P&L in the settings editor.

NB; Calculate Profit & Loss locally will always be ON when 'Use Exchange Streaming' is enabled.

Ladder Settings

The ladder can provide a lot of information and to give users the most flexibility and control Bet Angel offers 100+ configurable settings and items to chose from in the Ladder Settings Editor area which are all explained over the next few pages.

To open the Ladder Settings Editor click the licon from your ladder screen.

Or from the top left corner of your screen click; Settings > Edit Settings > Ladder and you will see the following window, to begin customising your Ladder settings click 'Show the Ladder Settings editor'.



General

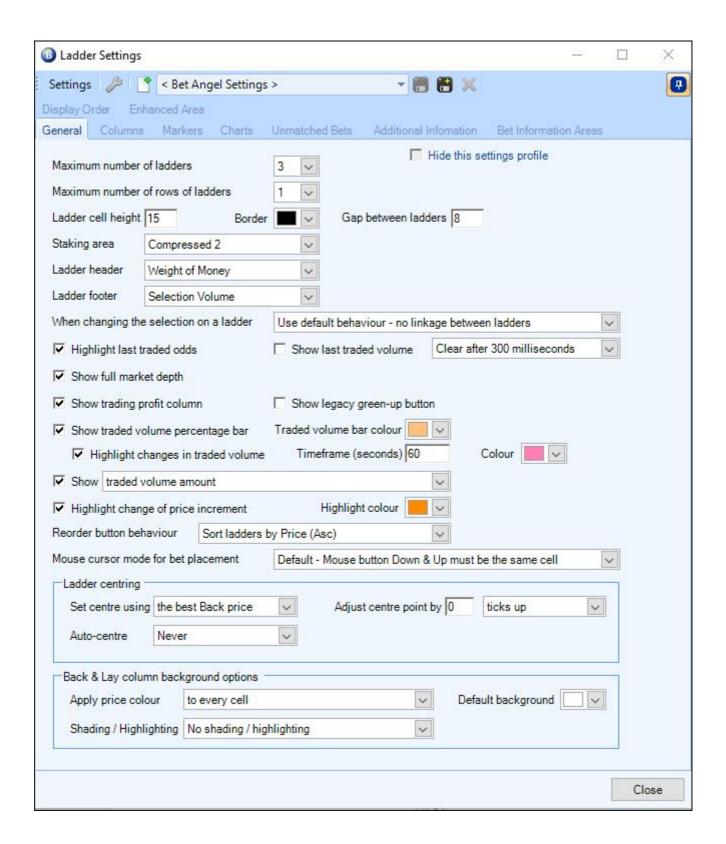
In this area you can customize the general settings and display of your ladder screen

The toolbar on each ladder screen contains a pick list of saved Ladder Settings profiles to allow you to easily switch from one ladder design to another.

Bet Angel is supplied with eight example designs, with the ladder settings editor allowing you to create your own named designs which will be added to the pick list.

This means you can have multiple ladder layout designs, ie, you could could have one ladder screen configured for in-play tennis running alongside another that is setup for horse racing and another set up for football etc. You can even display different layouts at the same time by spawning markets in to a <u>new ladder window</u>

Ladder profiles can also be chosen via <u>keyboard shortcuts</u> so it's very quick and easy to switch back and forth between different displays.

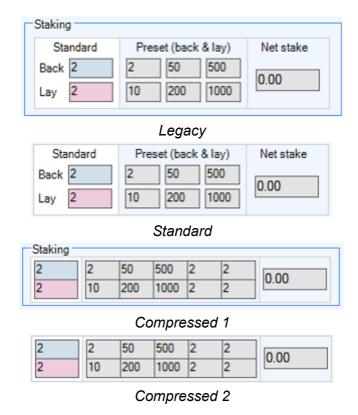


- Maximum number of ladders Choose to display up to 18 ladders at any one time.
- Maximum number of rows of ladders Choose to display up to three rows of ladders.
- · Ladder cell height Make the ladder cells larger or smaller by adjusting this value
- Gap between ladders A large number of ladders can look a little cluttered. You can adjust the gap with this setting.

The number of ladders chosen in the above settings is displayed evenly over the number of rows. For example, if you choose 8 ladders and two rows you will see two rows of four ladders. If you choose 9 ladders and three rows you will see 3 rows of 3 ladders. If there are less runners than ladders chosen the distribution will automatically adjust.

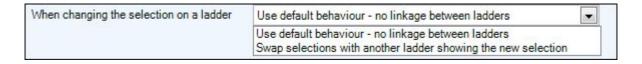
Staking Area Options

There are four ways to display the ladder staking area. Choose whichever suits you. Compressed settings are more suited to layouts with lots of ladders as display real-estate is at a premium.



Changing Selections on a Ladder

When changing the selection displayed on a Ladder there are options as to how the ladder screen should behave. The default is for there to be no linkage between ladders, but you can also choose to swap selections with another ladder, i.e. by using the 'swap selections' option if you change the selection of the 2nd ladder to show the selection currently shown on the 5th ladder, then the two selections will swap places, so that the 5th ladder will now show the one the 2nd ladder was previously displaying. This prevents duplication so that no two ladders show the same selection from the market.



General

Other information is available via the ladder also such as:

• Highlight last traded price (Full API mode only) - If you tick this box Bet Angel will highlight the last traded odds in a market. Last traded odds are different from last available odds or last price. Last traded odds represent the last price matched in a market as opposed to the last available odds or odds movement. When money is matched, taken, from a certain price Bet Angel will display one of three colours for a short period of time.

	6.4	524
	6.2	766
	6	194
398	5.9	
154	5.8	
132	5.7	

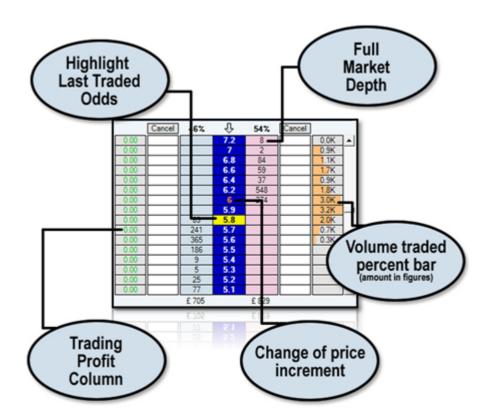
Green – The price just moved up, Drifted (I.e. 6.00 to 6.20)

Yellow – The last traded price was the same **Red** – The price just moved down, Came in (I.e. 6.00 to 5.90)

If you see no price movement then there is no current activity on this market. If prices are moving without any colours appearing then check you are in an API connection mode and if you are then it is likely that you are seeing orders pulled from the market and that is making prices move rather than bets being matched.

- Show full market depth (Full API mode only)
- Trading Profit Column
- Show legacy green-up button (retired feature superseded by new green-up features)
- Show traded volume percentage bar (and adjust colour)
- Traded volume amount
- Recently traded volume within user defined time frame (and adjust timeframe & colour)
- · Highlight change of price increment

This 'Highlight change of price increment' option will show where the tick size or difference between one price and the next on the exchange changes. For example the increment is 0.01 at 1.01 to 1.02. This increases to 0.02 from 2.00 to 2.02. And other increments occur as the price increases.



Volume Traded Amount

This option allows you to choose how you want the traded volume displaying at each price, this can be as a monetary amount, the percentage of a selections volume or percentage of the total market volume.

In the images below you are seeing the same ladder, the one on the left is displaying the traded volume as an amount, the one on the right is displaying the traded volume as a percentage.

0.00		5.3	250	0.0K
0.00		5.2	75	0.1K
0.00		5.1	27	0.0K
0.00		5	170	0.3K
0.00	18	4.9	183	0.9K
0.00		4.8	170	1.2K
0.00	18	4.7	138	2.5K
0.00	159	4.6		2.8K
0.00	181	4.5		2.3K
0.00	227	4.4		1.4K
0.00	156	4.3		1.0K
0.00	225	4.2		0.6K
0.00	130	4.1		1.1K
0.00	87	4		0.3K
0.00	114	3.95		0.0K

0.00		5.3	250	0.1%
0.00		5.2	75	0.7%
0.00		5.1	27	0.2%
0.00		5	170	1.9%
0.00		4.9	183	6.0%
0.00		4.8	220	8.3%
0.00		4.7	138	17.2%
0.00	137	4.6		19.0%
0.00	162	4.5		15.9%
0.00	210	4.4		9.8%
0.00	156	4.3		6.8%
0.00	225	4.2		4.0%
0.00	130	4.1		7.6%
0.00	87	4		2.2%
0.00	114	3.95		0.1%

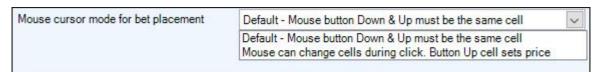
Reordering Selections

This option allows you to configure how the selections on the ladder screen are ordered when you click the icon on the ladder trading screen, by default the selections are sorted by the order they appear on Betfair (Known as the Betfair row index), but you can sort selections by each of the following ways shown in the image below



Mouse Cursor Mode for Bet Placement

This option lets you choose whether your mouse needs to be pressed and released over the same cell to place the bet, or if it can allow the mouse cursor to be moved up/down to another price cell in the same column (while the button is still depressed) with the bet not being submitted until the button is released



Ladder Centring

Using these options you can configure the ladders to 'Automatically Centre' at specified intervals, the centre point can be defined by the 'back price', 'lay price' or the 'last traded price'.

The default option is to 'Never' auto-centre but you can choose to auto-centre when a market is in-play only, preplay only or both.



When any auto-centre option is chosen another pick list will appear where you can define when an auto-centre should occur. This can be when a back/lay/last traded price goes out of view, or at a preset times ranging from every update to 10 second intervals.

You may also want to adjust the centre point up or down by a number of ticks, this can be useful if you have charts at the top or bottom of your screen and offset the centre point. Adjusting the centre point will apply when autocentring and manually centring using your 'Enter' key or shortcut key

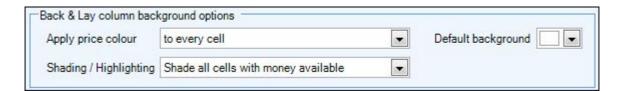
NB, A ladder will **NOT** auto-centre while your mouse cursor is hovering over it, this is to prevent unwanted bets being placed at the wrong price. i.e. without this protection a ladder could auto-centre just as you click the mouse resulting in the bet being placed at the wrong price, and if was a lay bet being placed this could lead to potentially large liability.

Back, Lay Column Back Ground Options

Using these options you can apply the price colour to 'None of the Cells', 'Every Cell', 'Cells from the Best Three Prices Onwards' or 'Every Cell with Money Available'.

Shade/highlighting can be used on the 'Best Three Prices' and 'All Cells with Money Waiting'.

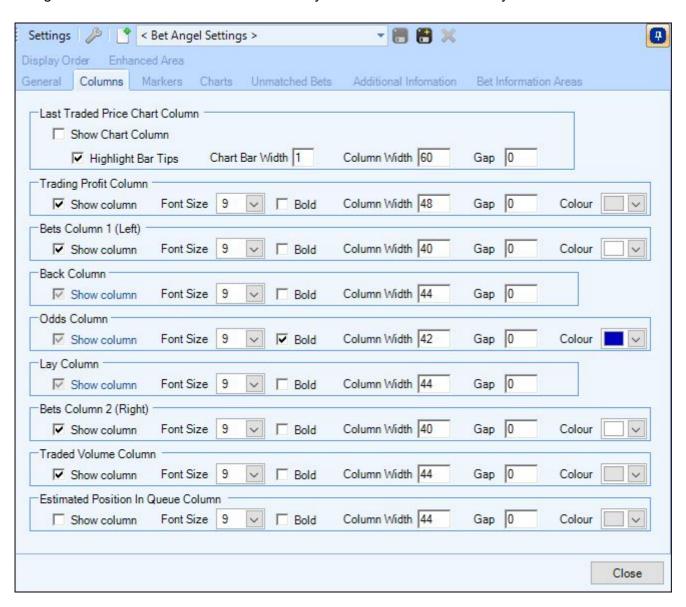
In the image below I have configured it to apply a price colour to every cell then shade all cells with money waiting to be matched, you can then see the effect that has on the ladder screen below that.



0.00			8.4	3		0.00			9	11		_	0.00		9.2	2,		_	0.00	S	12.5		9	0.0K
0.00			8.2	6		0.00			8.8		0.0K		0.00		9	\$.	- 10		0.00	8	12	3		0.0K
0.00			8		0.0K	0.00			8.6		0.0K		0.00		8.8	10	18	0.0K	0.00		11.5	3		0.0K
0.00	1		7.8		0.1K	0.00			8.4	2	0.0K		0.00		8.6	9	10	0.0K	0.00	8	-11			0.1K
0.00			7.6	3	0.1K	0.00			8.2	15	0.1K		0.00		8.4	8		0.0K	0.00	8	10.5	2		0.1K
0.00			7.4	10	0.1K	0.00			8		0.1K		0.00		8.2	50		0.1K	0.00	8	10			0.2K
0.00			7.2	10	0.3K	0.00			7.8	20	0.2K		0.00		8	16		0.2K	0.00		9.8	5		0.1K
0.00		6	7		0.4K	0.00	2.2	2	7.6		0.3K		0.00	,	7.8	9		0.1K	0.00	8	9.6			0.1K
0.00		3	6.8		0.1K	0.00			7.4		0.2K		0.00	11	7.6			0.0K	0.00	8	9.4			0.1K
0.00		32	6.6		0.1K	0.00			7.2		0.2K		0.00	11	7.4	2.	- 10		0.00	8	9.2			0.1K
0.00		13	6.4		0.2K	0.00		11	7		0.0K		0.00	7	7.2			0.0K	0.00	8	9			0.1K
0.00			6.2		0.3K	0.00			6.8	3	0.0K		0.00		7	ž.		0.1K	0.00	4	8.8			0.0K
0.00			6		0.2K	0.00		20	6.6		0.0K		0.00	9	6.8			0.1K	0.00	6	8.6			0.1K
0.00		8	5.9		0.1K	▼ 0.00	-	7	6.4		0.0K	•	0.00	73	6.6			0.0K 🗸	0.00	6	8.4			0.2K

Columns

From this area you are able to adjust the font sizes and column widths as well as the gap between the columns, there background colours and which of the columns you want to show or hide on your ladder screen.



Last Traded Price Column

This will enable Last Traded price chart commonly referred to as Matchstick Charts

Estimated Position in Queue Column

When this is enabled it will display your Estimated Position in Queue (EPIQ) when you offer a bet to the market, as money starts to get matched and your order moves towards the front of the queue this figure will begin to decrease. In the image below you can see a £50 back bet has been offered to the market at 3.45 the EPIQ column is showing there is £118 ahead of our bet waiting to be matched.

0.00		3.65	26			
0.00	.0	3.6	110		0.	
0.00		3.55	10			
0.00	.0	3.5	36			
0.00		3.45	168	50.00	0.0K	118
0.00	.0	3.4	109		0.4K	
0.00	6	3.35			1.3K	
0.00	294	3.3			3.5K	
0.00	188	3.25			2.6K	
0.00	258	3.2			0.3K	
0.00	95	3.15			0.7K	
0.00	44	3.1			0.4K	
0.00	2	3.05			0.9K	

If you place multiple bets at the same price, it will show the amount of money estimated to be before the first bet, once it is fully filled, it'll show the estimated amount in front of the next bet etc.

Please Note; While we have done everything possible to try and ensure the EPIQ is as accurate as possible please be aware this is only an <u>estimate</u>, factors out of our control such as virtual bets from Betfair cross-matching algorithms and other bets being cancelled in the queue can effect your true overall position in queue.

Matchstick Charts

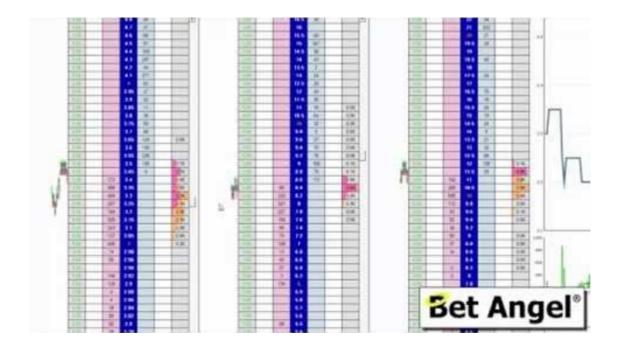
The Matchstick chart (Last Traded Price Column) when enabled appears to the left of each ladder. Unlike other chart types the matchstick chart is not a time based chart and is instead plotted using the last traded price. This means as market activity increases so will the speed the chart is plotted.

To enable the Matchstick charts go to the columns tab within the main ladder settings tool.

Also in the setting area you have a number of options available including how wide to make the charting area and how you would like the matchsticks displayed, for example, you can have a solid colour or chose to have the tips highlighted, with the tips highlighted if the last traded price was higher than the previous traded price then the tip will be green, if the last traded price is now lower it will have a red tip.

0.00		4.3	194	e e	0.8K	1			0.00		5.5	75		0.1K	_		0.00	2	9	16		0.0K	
0.00		4.2	131		0.3K				0.00		5.4	40		0.1K			0.00		8.8	7	- 10	0.0K	
0.00		4.1	491		1.2K			3	0.00		5.3	52		0.0K		-	0.00		8.6	39		0.0K	
0.00		4	352		2.6K				0.00		5.2	45	18	0.1K	(0.00		8.4	25	- 10		
0.00		3.95	285		2.0K				0.00		5.1	70		0.2K	1.0	-	0.00		8.2	51			
0.00		3.9	180		4.3K				0.00		5	170		0.8K			0.00		8	69		0.0K	
0.00	159	3.85			2.7K				0.00		4.9	268		0.5K			0.00		7.8	91		0.6K	
0.00	966	3.8			0.3K				0.00		4.8	160		1.4K			0.00		7.6	90		0.5K	
0.00	395	3.75							0.00	111	4.7			2.2K			0.00		7.4	47		1.3K	
0.00	275	3.7					i j		0.00	182	4.6			1.4K			0.00	204	7.2			1.1K	
0.00	199	3.65		0 0					0.00	269	4.5			1.1K			0.00	269	7			0.9K	
0.00	244	3.6							0.00	312	4.4			0.6K		1	0.00	230	6.8			0.5K	
0.00	182	3.55							0.00	227	4.3			0.6K		-	0.00	152	6.6			0.8K	
0.00	121	3.5							0.00	268	4.2			0.2K		1	0.00	687	6.4		- 39	0.9K	
0.00	128	3.45				•			0.00	199	4.1				-	-	0.00	98	6.2			0.1K	-

Video Tutorial

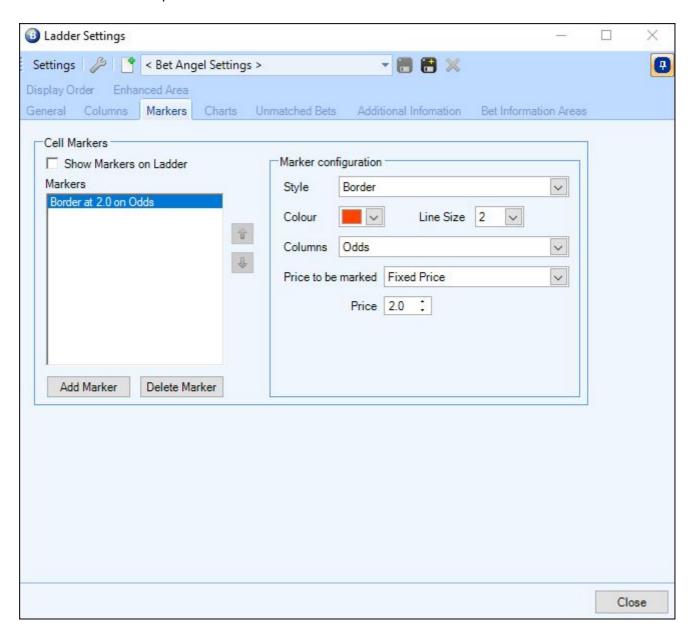


Markers

Markers allow you to highlight <u>any</u> of the cells on the ladder screen making it easier and clearer to see areas of interest to you.

Markers can be displayed in several styles, these include as horizontal top/bottom lines or vertical side lines at the edge of a cell, as a full border around the cell or by filling the whole cell with a colour of your choice. They can be placed in a single cell or adjacent cells allowing you to highlight up to a full row of cells on your ladder.

When you first open the 'Markers' tab we have included one example which as you can see in the image below will put a red border around the price of 2.0 in the odds column



To begin creating a new marker for a cell click the 'Add Marker' button, you can then choose the style, colour and columns of where you want the marker to appear. The last option allows you to set the marker at a fixed price or at a price held in a Shared Stored value.

For example in the image below Markers have been created for the odds column using fixed prices by filling in the cells white to highlight at all the cross-over prices (the prices were there is a change in increment size on each side, ie 2.0, 4.0, 6.0, 10.0 etc)



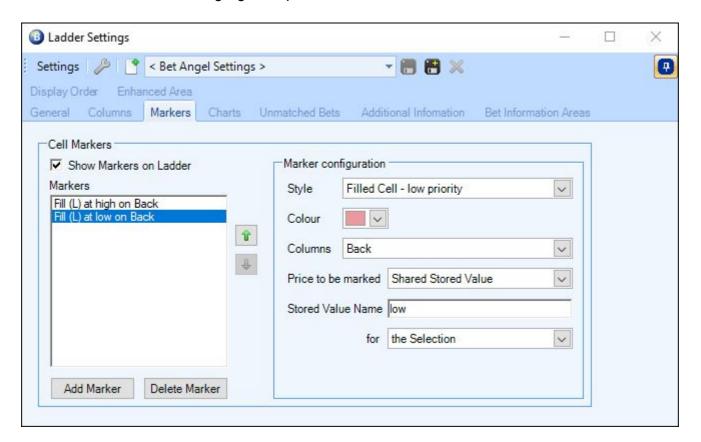
Markers can be placed either at a fixed price as shown above, or at a price determined by a shared stored value (or Historical Stored value) that has been stored by a <u>Servant</u> or <u>Automation</u> rule, if you are not familiar with stored values please see the following section of this guide for further details on using <u>Shared Stored Values</u>.

Note: When multiple markers are placed in the same cell they are drawn in the order they appear in the list. However a 'high priority' filled cell will always be drawn on top of a 'low priority' one.

Markers From Shared Stored Values

Using Shared Stored Values allows you to set/remove and update markers automatically based on the criteria you set, for example you could create a Servant with a Stored Value (shared) rule to continually store a selections new high/low back and lay prices.

You can then configure a marker to look up and use that shared stored value and place a marker in the back/lay columns of that selection to highlight the prices it's reached.



Or you could create Servant that will allow you to point your mouse cursor over a cell then have a 'Marker' appear on it, effectively setting markers on the fly anywhere you want where you've maybe seen activity of interest to you.

Examples

For step-by-step details on setting up either of these markers please see the following post from our and for more examples of how 'Markers' can be used please see this blog	forum

Embedded Charts

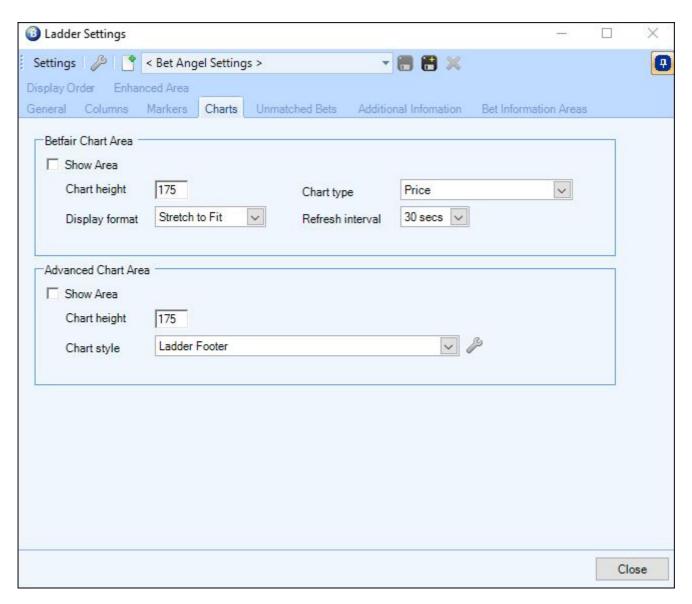
In addition to the regular floating charts which you can resize, position and pin anywhere on your screen here you also have the option to embed both the Betfair and/or Advanced charts into each selections ladder.

When using embedded charts you can decide how much of the ladder area the charts are to take up by adjusting the height of either chart type.

For the Betfair chart you also have the ability to stretch to fit and the choice of what refresh rate to use, you can also choose if you want to display the 'Standard' Betfair chart or the 'Implied Probability' Betfair chart

The Advanced Chart area offers a pick list allowing you to chose which of your pre-saved chart styles you want to display.

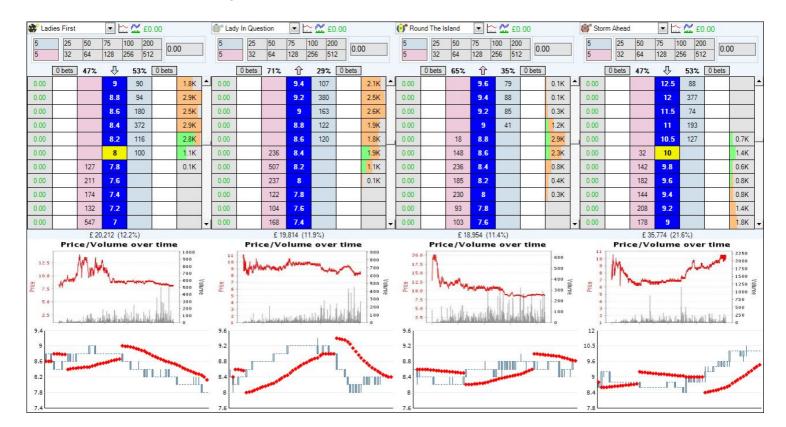
If you wish to modify any of your advanced charts click the spanner icon next to the pick list to open the <u>Advanced Charts</u> editor.



To embed a chart to your ladder tick the relevant 'Show Area' box - you can choose to embed either or both charts at the same time.

In the image below the 'Show Area' has been ticked on both the Betfair and Advanced Chart, this has now embedded both types of chart to the bottom of the ladder screen.

If you reorder the ladder or change to a different selection on one of the ladders then embedded charts will auto update to show the data relating to new selection.

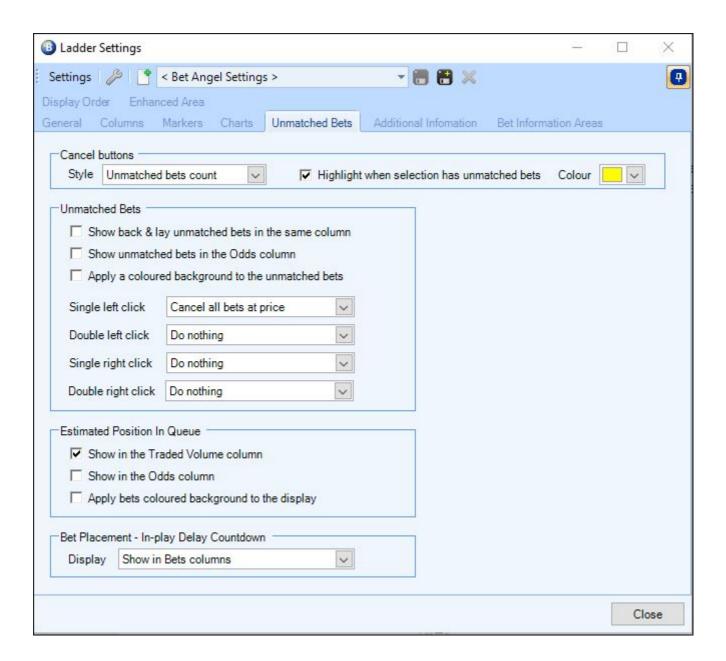


Unmatched Bets

Bet Angel gives you a number of options of how unmatched bets on the ladder screen can be handled and shown, this page explains these options

Cancel Buttons

This option lets you highlight the Cancel buttons situated above the Ladders whenever a selection has any unmatched bets. The 'Cancel' text can also be changed to show either the number of unmatched bets or the total value of the unmatched bets on a selection.



Unmatched Bets

The following three options can be enabled by ticking the respective boxes

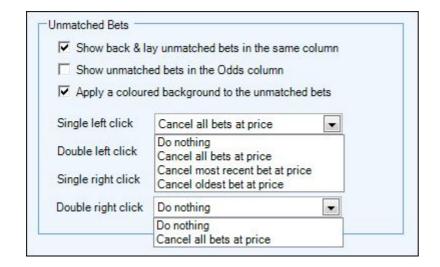
- * Show back & lay unmatched bets in the same column
- * show unmatched bets in the odds column
- * Apply a coloured background to the unmatched bets

In the following image I have ticked the 1st and 3rd boxes to show the unmatched back and lay bets in the same column and with a coloured background and placed 1 back bet and 2 lay bets on the ladder.

0.00	38		2.62	34	84 8	1.8K
0.00	(2)		2.6	279	() t	2.2K
0.00	35		2.58	157	0 0	1.9K
0.00	10.00		2.56	125	10.00	2.1K
0.00	35		2.54	198	20	2.4K
0.00	35		2.52	262	8. 3	4.0K
0.00	355		2.5	146	8 8	4.8K
0.00	35	357	2.48		0, 3	9.6K
0.00	35	468	2.46		0, 3	7.0K
0.00	10.00	232	2.44		10.00	2.0K
0.00	355	579	2.42		0	2.6K
0.00	10.00	562	2.4		10.00	1.0K
0.00		300	2.38		0. 3	2.7K
0.00		255	2.36		0 3	1.9K

The bottom four pick lists allow you to configure Double/Single left & right mouse click actions for cancelling unmatched bets from a ladder selection. These options give you full control over how to handle unmatched bets.

The image below shows the actions you can assign to your left and right mouse clicks.



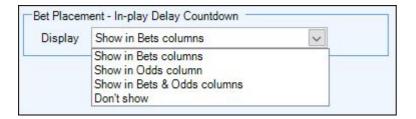
Estimated Position in Queue (EPIQ)

These options will allow you to specify which column your position in queue will be shown in, (Remember you still need to enable the EPIQ option on the <u>column</u> tab)

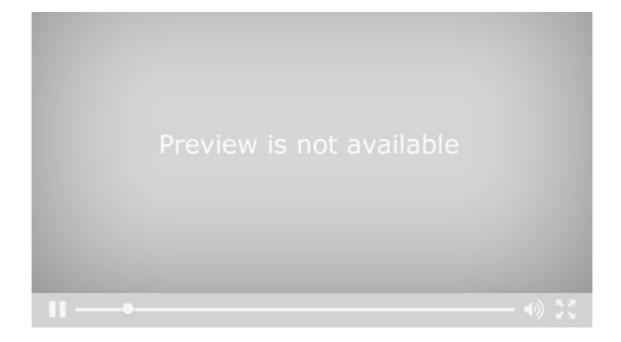
Estimated Position In Queue	
Show in the Traded Volume column	
Show in the Odds column	
Apply bets coloured background to the display	

Bet Placement

Betfair will impose a delay when placing any bet on a in-play market, the delay varies depending on the sport and market type, you can use this option to display a countdown timer showing how many seconds are left until the bet is placed in the market



Video Tutorial



Additional Information

Here you can configure an area of your ladder to show up to 10 rows of extra information of your choice. This can be preset additional information such as jockey and trainer names, form, Hi/Lo traded prices, or preset TPD information such as a horse current speed, position, distance to leader, stride frequency, <u>Stored Values</u> (shared), <u>Historical Stored Values</u> passed from automation or servant rules and Profit Values.

To begin click the 'Add Item' button, The 'Item Configuration' area then gives you full control over what you wish to display on your ladder and how its to be displayed including font size, colour, height etc.. you can even give it a label of your choice.

Show Area - Tick this box to enable the information on your ladder

Add Border - Adds a border around your chosen additional Information

Row - Sets the order the information will appear in on your screen if your displaying more than one piece of info

Height - Sets the height of the row

Font Size - Select a font size to use

Colour - Chose a font colour for your addition information to be shown in

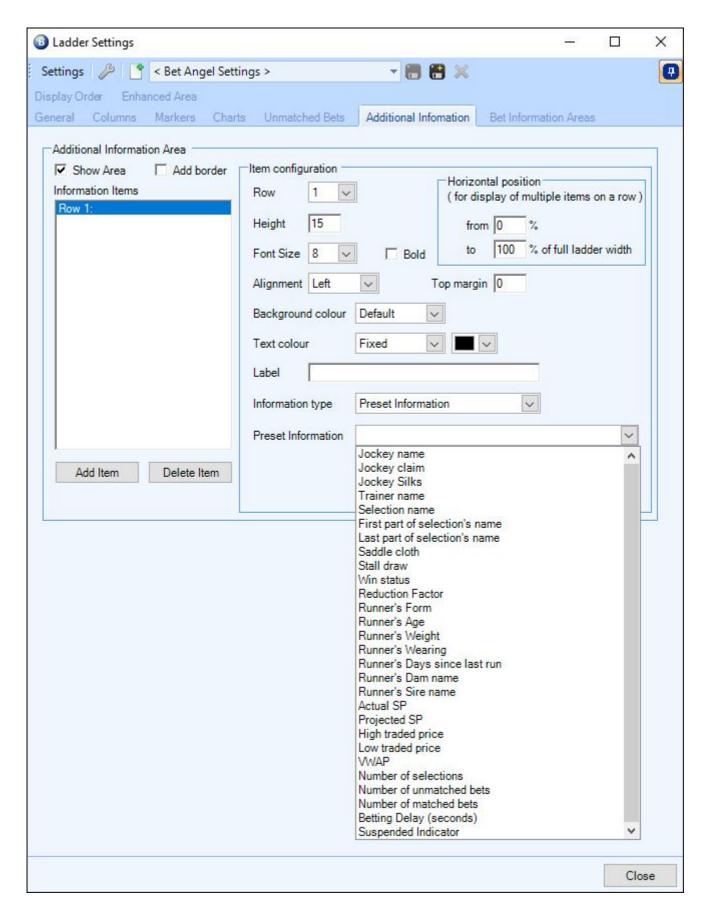
Horizontal Position - Allows you to position multiple items on the same row

Label - Allows you to display a name ahead of the information your displaying

Information Type - Chose from; Preset Information, TPD Information, Profit Values or a Shared Stored Values, Historical Stored Values and Profit Values

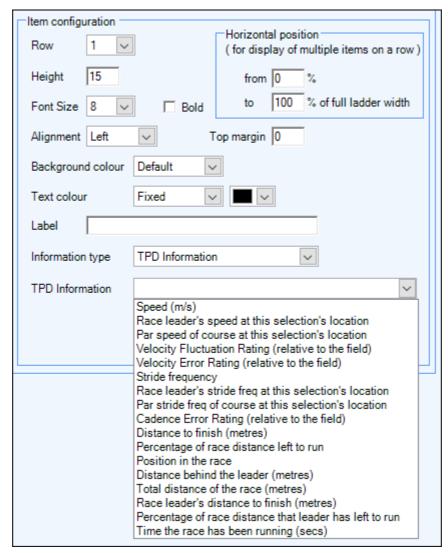
Preset Information

In the image below you can see the full list of all the preset information available which you can display on your ladder screen, you can select as many or as few as you need and arrange them the way you require by selecting a row and horizontal position for each.



Total Performance Data (TPD) Information

The information type of 'Display TPD Information' allows you to display preset information from TPD's real time GPS feed sent directly from a horses saddle to your ladder screen, in the image below you can see a list of all preset information that is available from TPD to be displayed.



NB; Please note you will need an active subscription with Total Performance Data to receive any of the data listed in the image above

Examples

In the first image below both the Jockey and Trainer information from the Preset Information list has been displayed on row 1

To do this the horizontal position of the Jockey name was placed from 0% to 50%, and the position of the Trainer name was positioned from 50% to 100%

2	25	50	100	200	25	0.0	0
2	32	64	128	256	51	2 0.0	U
am Tw	riston-Dav	ries	ik :	Dr F	Richard	Newland	i
	0 bets	69%	仓		31%	0 bets	
0.00			1.7	8	74		0.3K
0.00			1.7	7	114		0.2K
0.00			1.7	6	48		0.5K
0.00		37	1.7	5			0.4K
0.00		61	1.7	4			0.9K
0.00		417	1.7	3			0.0K

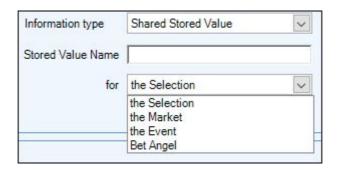
In the next image two rows have been used to display some TPD information which is sent directly from the horses saddle in real time

MPH 34.34 MPH (Avg) 33.31				Position Gap to Leader					
	0 bets	84%	仓	16%	0 bets				
0.00			5.1			U P			
0.00		- 55	5	20					
0.00		- 13	4.9		100	1.6K			
0.00		157	4.8	3		5.1K			
0.00			4.7	7	2	4.0K			
0.00	, n		4.6	8	0.00	4.3K			
0.00			4.5	3		11.5K			
0.00		- 12	4.4	5		21.4K			

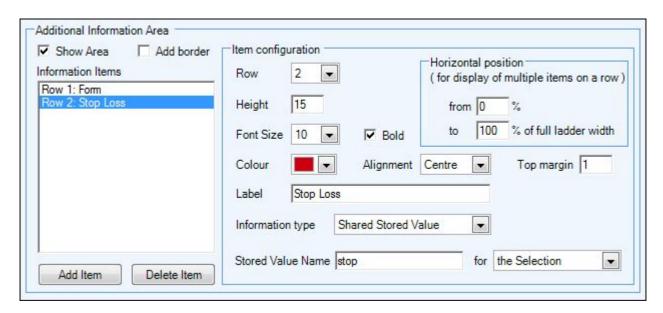
Shared Stored Value

Having selected this information type the following options will appear allowing you to specify the name of the <u>Stored Value</u> and whether its for the selection, market, event or the whole of Bet Angel.

The value stored to this name (either by a Servant or by Guardian's Automation) will then be shown in the additional information area.



In the example below two rows of additional info have been created to display on the ladders For the first row the Information type chosen from the preset information pick list was 'Form' For the second row it displays a stored value named 'Stop' for the selection



In the next image you can see how the information configured above appears above each ladder,

The row below the staking area which was labelled 'Form' is now showing the recent form for this horse
The next row is labelled 'Stop Loss' and is now showing the odds I have just set a stop loss at using a <u>servant</u>
and <u>stored values</u>

5	200		75 128	100 256	200 512	110	82
	0 bets		rm op Lo:		_	0 bets	
1.09			2.96	8	7		0.8K
1.03			2.94	10)5		0.6K
0.96			2.92	23	31		0.8K
0.89			2.9	47	70		1.5K
0.82			2.88	11	18		3.8K
0.75			2.86	76	61		10.0K
0.68			2.84	25	91		12.6K
0.61		751	2.82				5.0K
0.54		326	2.8				6.4K
0.47		671	2.78				5.4K
0.39		602	2.76				10.9K
0.31		244	2.74				11.9K
0.24		314	2.72				8.1K

Historical Stored Value

By selecting this information type you are shown options to lookup and display a value (either current or from some time in the past) that has been stored in a <u>History List</u>.

Profit Values

This option lets you display either your current Profit and Loss or a 'What If?' value. Choosing to display 'What if? - Projected Profit and Loss' allows you to see what your profit/loss would be prior to actually placing the bet on the Ladder based on your chosen price/stake/staking method.

For more information please see the next page.

Examples

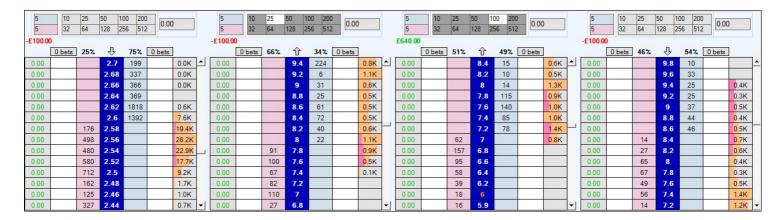
To see a step-by-step guide on displaying Additional Information on your ladder screen please see this blog

'What If'

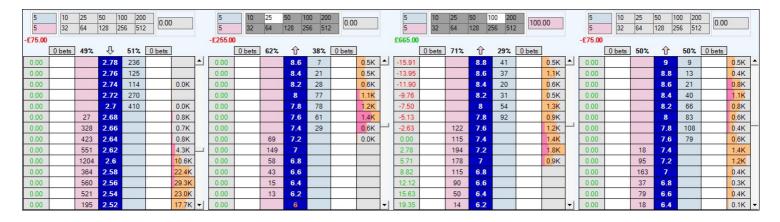
The 'What If' allows you to see what your profit and loss would be prior to placing a bet on the Ladder screen. Once enabled when you hover your mouse cursor over any of the back/lay prices (as if you were going to place a bet) the software will display the predicted profit/loss if the bet was matched at this price (using your current stake and staking method).

This can be very handy if your opening up multiple positions and want to see how an additional bet will influence and change the profit/loss on your existing bet(s) - you may then want to adjust your stake or even staking method prior to placing the bet.

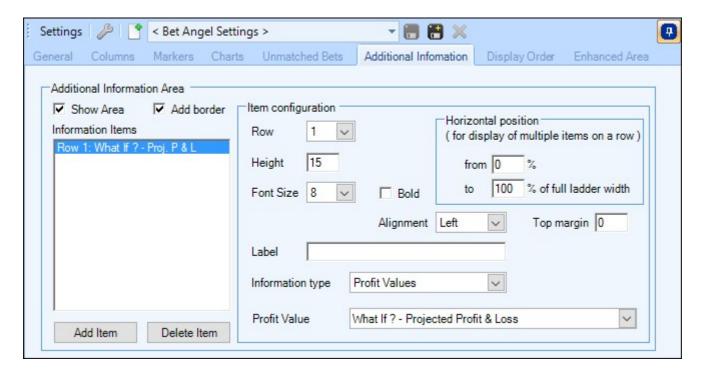
In the image below I have a £100 stake selected for the 3rd fav and have my cursor pointing to place a back bet at the price of 7.4, you can see in the 'What If' area above each ladder it showing I would win £640 if my selection wins and I will lose £100 if any of the other selections win.



Skip forward a few minutes and I now want to offer a lay bet on the 2nd fav at the best reverse price (7.2), for £25, as I point the cursor over this cell the 'What If' figures have now updated to show the new predicted P/L on each selection if this 2nd bet were to be placed and matched at 7.2



To display the What If Projected Profit & Loss, select 'Profit Values' from the 'Information Type' pick list in the Additional Information tab. Then from the 'Profit Value' pick list that will appear select 'What If? - Projected Profit & Loss'



For details on enabling and seeing the 'What If' profit/loss on the One-Click and Manual Bets screens please see the following <u>page</u>.

Bet Information Areas

The Bet Information area allows you to configure how your matched and unmatched bets are displayed for each selection on your ladder screen

There are two Bet Information areas available for you to customize giving you full control of how they are displayed, to begin in the 'Bet Information Area 1' click the 'Show Area' box, then you can use the options below that in the 'Display Configuration' to display how your matched and unmatched bets are displayed on your ladders.

Show Area - Tick this box to enable the information on your ladder

Add Border - Adds a border around the information area

Border Colour - Sets the colour of the border

Rows - Specify the number of rows of matched/unmatched bets you want to display

Row Height - Sets the height of each row

Allow Scrolling - When ticked this will add a scroll bar to the Bet information area, when unticked only the recent number of bets equal to the amount of rows specified will be displayed

Sort - Chose your sort preference by either bet reference ID or the price of your matched/unmatched bets

Odds Font Size - Select a font size to use for the matched/unmatched odds

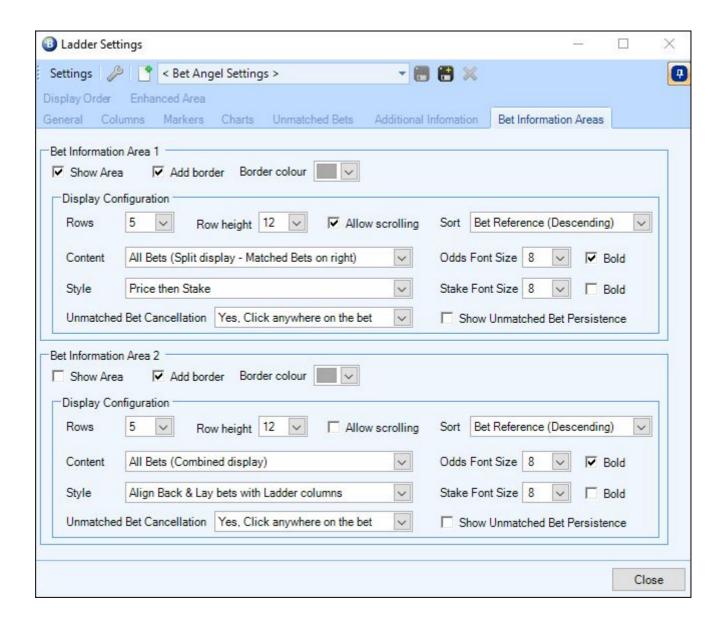
Stake Font Size - Select a font size to use for the matched/unmatched stake

Content - Chose whether to display matched bets, unmatched bets or both and if to display them in a split screen or combined

Style - Allows you to specify the arrangement of the displayed information on each row (e.g. Price then Stake, Stake then Price, or in some cases Aligned with the back & lay bets of the ladder itself).

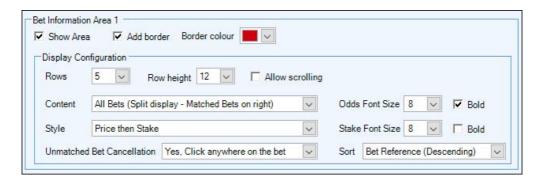
Unmatched Bet Cancellation - Specified if and how unmatched bets can be cancelled directly from the unmatched bets area

Show Unmatched Bet Persistent - When enabled this will show a bet persistence indicator next to each unmatched bet in the form of a single letter (C = Cancel, K = Keep, S = Take SP), right clicking on the letter will open a menu were you can change the Bet Persistence for a single bet, all bets on a selection or all unmatched bets on all selections in the market.



Example 1

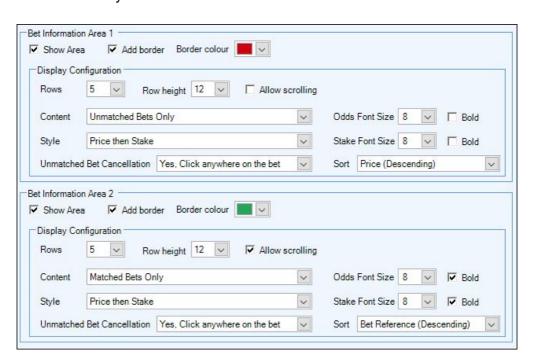
In this example I have used just the Bet Information area 1 and configured it to show the unmatched bets on the left and matched bets on the right as shown below





Example 2

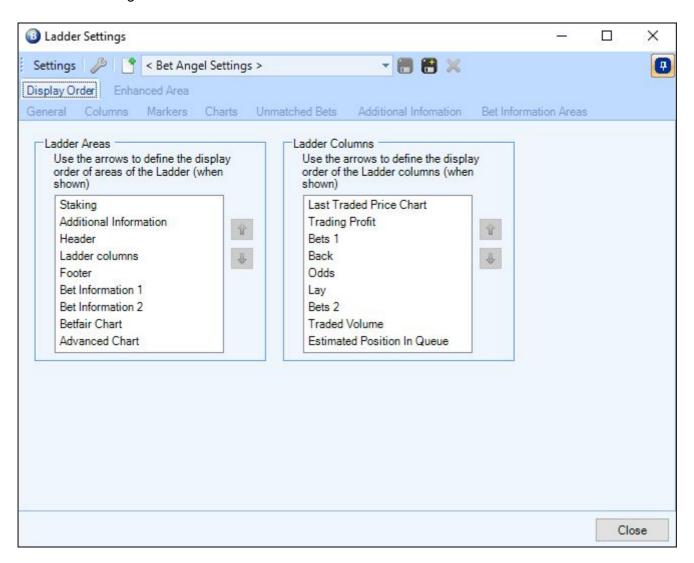
In the next example I've used both Bet Information areas and split the unmatched bets only into the Bet Information Area 1, and the matched bets only into the Bet Information Area 2





Display Order

Here you can customize the order of how your ladder is displayed on your screen by moving areas up and down and columns left and right.



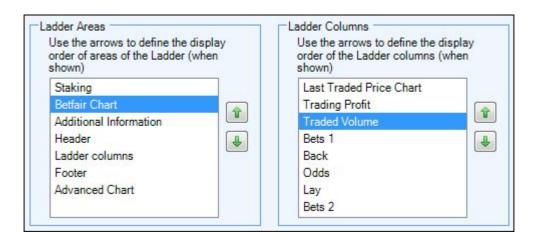
Ladder Areas

In the left window you can change the vertical position of each area of the ladder, simply select an area then click the up/down arrows to set the order you want

Ladder Columns

In the right window you can change the column orders of the ladder, after selecting a column click the up/down arrows to move a column up or down the list, moving a column up will move it to the left on the ladder screen and moving a column down in the list will move it to the right on the ladders screen

In the following image I have moved the Betfair chart near to the top of the ladder screen just below the staking area and moved the 'traded volume' column normally on the far right of the ladder screen across to the left next to the 'trading profit' column



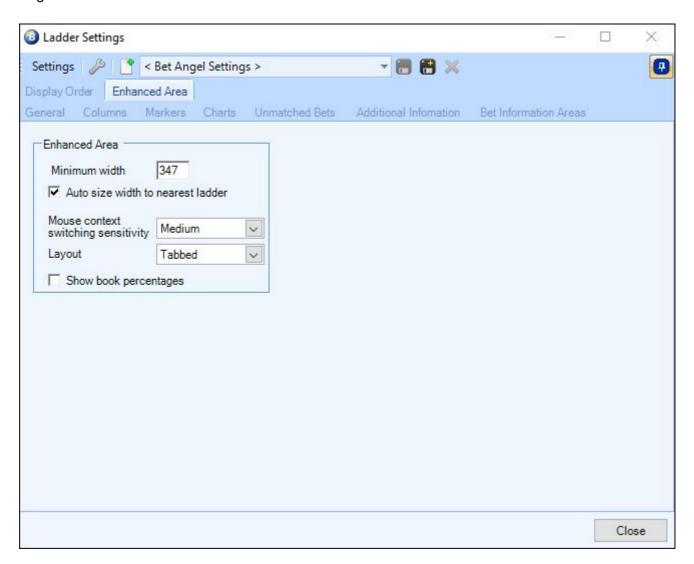
This will now change the ladder display to look like this



Enhanced Area

This page will show how you can configure your Enhanced Area to look.

For more details on using the 'Enhanced Area' please see the following page from the <u>Ladder Interface</u> section of the user guide



Minimum Width

This refers to the minimum width of the chart. You can either manually specify the width in pixels or choose to have the chart automatically resize to fit your screen.

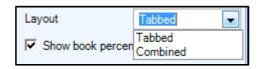
Mouse context switching sensitivity

As a default the chart is in sync with the mouse. This means if you hover the mouse over the ladder of any selection, the chart will switch to display that particular set of data after a small delay.

You can set the mouse sensitivity in the enhanced area of the <u>ladder settings</u> if you wish the charts to change more quickly but be aware a setting of 'high' will cause the chart to change as you move the mouse across the each ladder. A setting of 'medium' will allow you to hover over a ladder and move the mouse to the info area without the selection changing as you move the mouse across neighbouring ladders.

Enhanced Ladder Layout

There are two options with the layout. Combined or Tabbed.



Combined Layout

The Combined Layout will show lots of information but take up lots of room on your screen. It will show:

- Chart
- Selection Grid
- Trading Profit (Cash-out) Calculator
- Bet History

Tabbed Layout

The Tabbed Layout will allow you to save space on your screen. This can be useful if you wish to show multiple ladders.

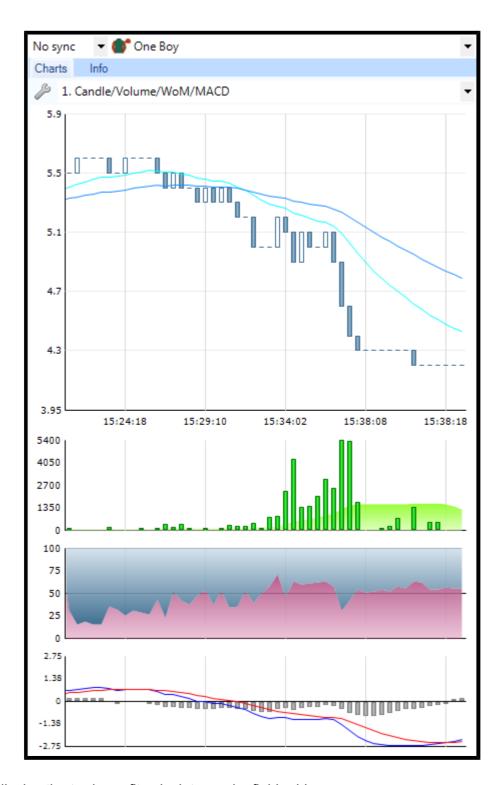
The same information is available as in the Combined Layout. However, the information is now tabbed.



There are two views to choose from:

- Charts
- Info

Charts view will display the chosen charts group.



The Info view will display the trade profit calculator and a field grid.

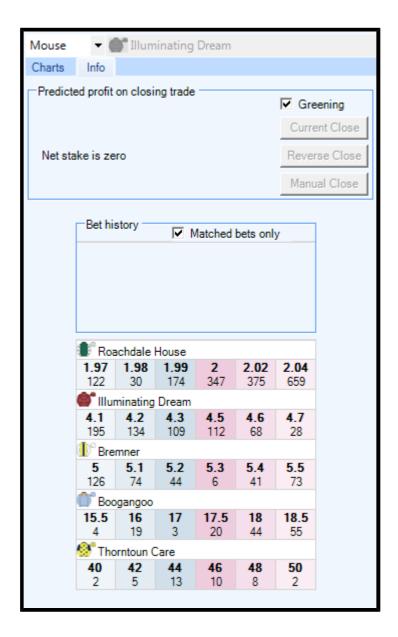
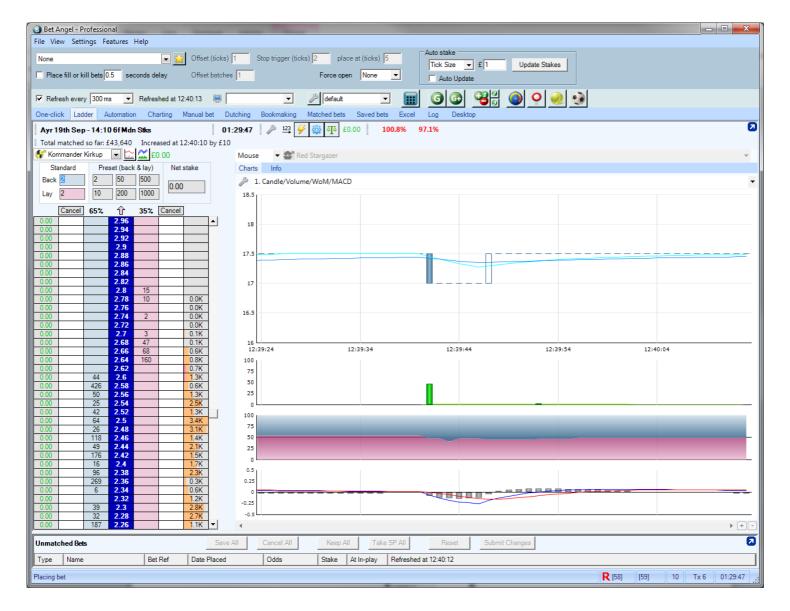


Chart Settings

Visit the Advanced Chart <u>settings editor</u> to change ladder options such as the number of ladders, number of rows, chart width and mouse context sensitivity (see below).

Here is a layout with only 1 ladder but with a wider chart:

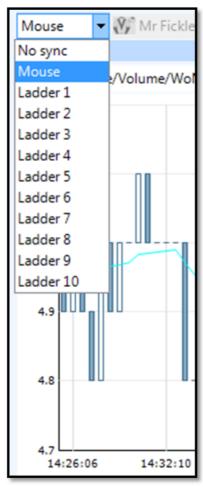


Here is a display with 8 ladders over 2 rows:



Chart Sync Options

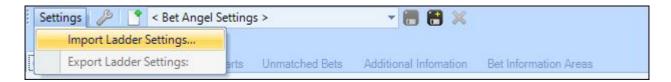
In the top left hand corner of the chart you will see the chart sync options. This controls which market data from the current market is displayed in the chart.



Sync options include syncing the chart with a particular ladder or 'no sync' if you wish to use the drop down box to choose a selection.

Ladder Settings Import / Export

Saved Ladder settings maybe imported and exported by clicking on the 'Settings' tab of your Ladder Settings area and selecting the appropriate option. This is useful if you quickly want to transfer ladder settings from one PC to another



Examples

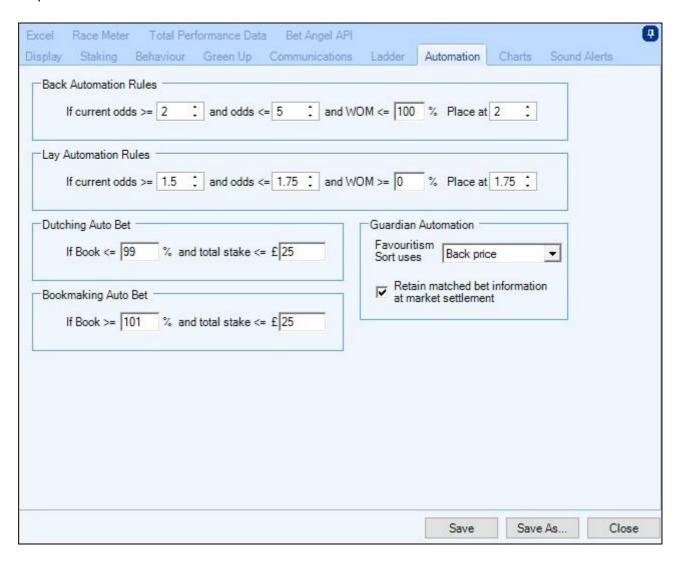
There are also plenty of ready-made ladder settings files you can download and import into your Bet Angel from the Shared Ladder Settings area on our <u>forum</u>

Basic Automation Settings

In this tab we can set out the various rules for basic automatic betting.

For example, we can specify a price window to trigger back or lay bets when using the 'Automation' tab in the main application.

We can also set the dutching and bookmaking features to trigger when our profit conditions are met. For example, when dutching an entire field we would like the total book to be less than 100%. If we trigger at 99% then we will make 1% profit on the total stake used.



In the example above we have specified the BACK rule to be as follows:

If the current price of the selection is equal to or higher than 2.0 but no higher than 2.5 then place a bet at 1.01.

This bet will only trigger when we tick the appropriate boxes in the automation tab.

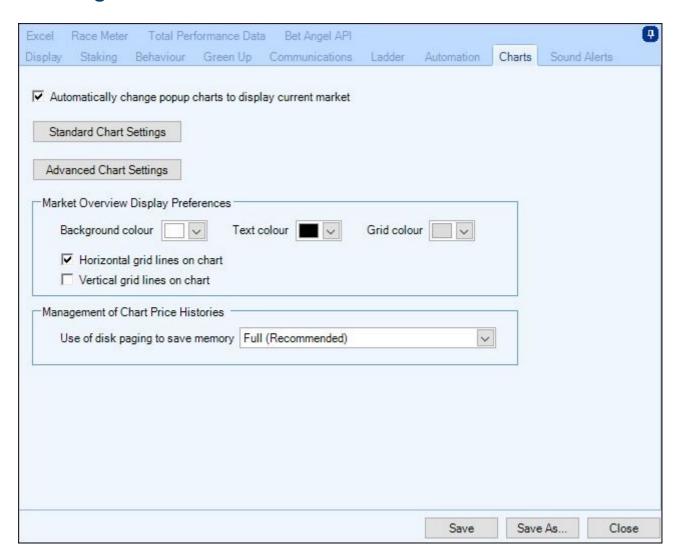
We choose a lower price as the market may move quickly and choosing 1.01 almost guarantees that we will get matched as Betfair ALWAYS match at the best available price. If you set the 'Place at' figure close to your trigger amount you run a risk of the bet remaining unmatched.

Guardian Automation

You can specify the way Guardian automation rules define the order of favouritism, by choosing either 'Back Price', 'Lay Price', 'Last Traded Price', 'Starting Price' (SP) or Volume (Desc).

Retain Matched Bets Information at Market Settlement when ticked will store your matched bets, P/L and logs etc of markets still in Guardian even after Betfair have closed and settled the market.	

Chart Settings



Automatically change popup charts to display current market

With this option ticked, new popup charts will be displayed with their synchronisation set to 'Market'. When unticked, new popup charts will be marked as not synchronised. See the charting section later in the manual.

Standard Chart Settings

Lets you configure how your standard charts look and what they display. (This is an older feature of Bet Angel and has been super seeded by the Advanced Charts)

Advanced Chart Settings

There is a dedicated section to the chart settings later in the manual. This explains in great detail how to change the advanced charts and adjust the colours, intervals to your own preferences.

Market Overview Colour Preferences

Let's you configure how you want your 'Market Overview' screen to look

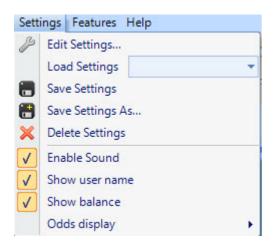
Management of Chart Price Histories

Here you can control the usage of disk paging. The setting defaults to 'Full' which will page all types of chart histories to the disk to conserve as much memory as possible.

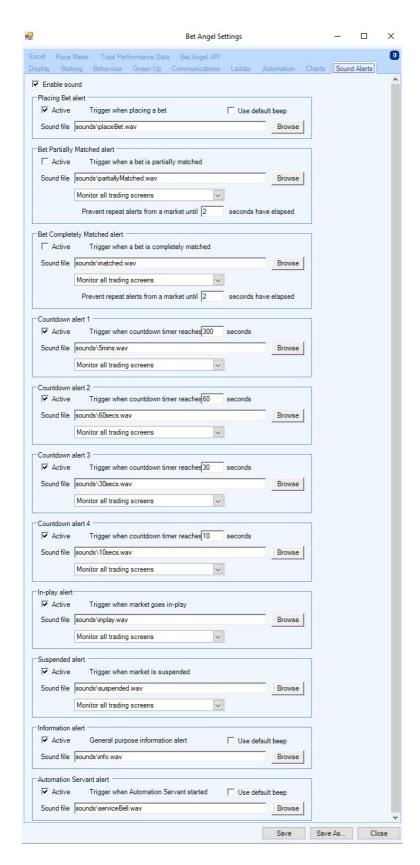


Sound Alerts

Under the settings menu there is the option to 'Enable sound'. The most common sound in Bet Angel is in the placing bet sound. This is played whenever a bet is put into the market. This enables you to be clear that a bet has been placed and avoids you placing multiple bets. If you do not like this additional sound prompt you can switch it off from the 'settings' menu.



Additional sounds can also be played during critical moments and timings during an event. Click on the 'Sound Alerts' tab in this menu to set these sounds.



There are four countdown alerts and additional alerts for 'fully matched bets', 'partially matched bets', 'in-play', 'suspended' status, 'information alerts' and 'automation servant alerts'.

All alerts have options to monitor all trading screens and Guardian markets if you want to extend the alerts beyond just your main trading screen



You can switch on any alert by clicking on the 'active' tick box next to the sound alert.

For the countdown alerts you will also need to specify the time before the event is due to start that the sound needs to be played. For instance in the image above, the first Countdown alert is set to 300 seconds, so the sound you have specified will play five minutes before the start of the event.

The default audio sounds are spoken warnings such as 'This event starts in one minute'. You can modify any of the sounds to whatever you wish by changing the source path of the sound. To do this click on the 'Browse' option on the sound you wish to change. This will bring up a file explorer and you should 'point' this to the sound wish to use instead of the default sound.



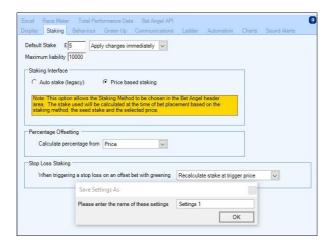
When you have located the sound file you wish to use, double click on it or click once and then click the open option in the dialogue box. Your new sound is ready to use.

Using Settings Profiles

Bet Angel allows you to store settings under profile names so you may load them up at any time. This allows you to easily configure Bet Angel for use with different trading styles to suit different markets or to experiment with new settings without harming your existing ones.

Saving your settings

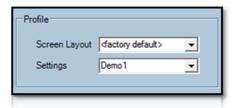
Once you are satisfied with the changes made within the settings editor, you should save them. Click on the 'Save' or 'Save As' button to do this and give the profile a name.



Loading a settings profile

There are two ways to load the settings by name:

Either select the Settings from the pick list in the Profile section of the Bet Angel Log In screen when you first start Bet Angel.

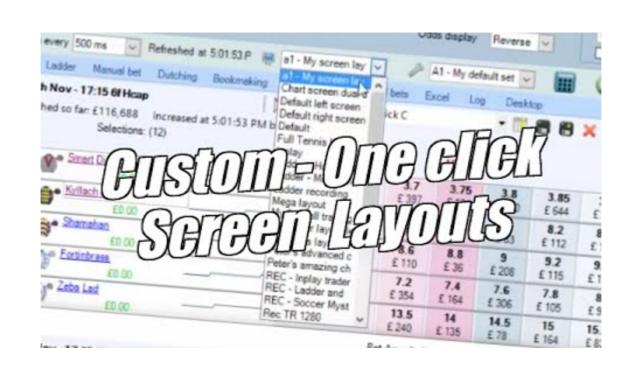


Or when Bet Angel is running you can switch between settings profiles by selecting the name from the pick list in the header area of the main trading screen (to the right of the Spanner icon).



The screen layout settings can also be saved to a profile and different profiles can be selected by choosing from the drop down box next to the monitor symbol.

Video Tutorial

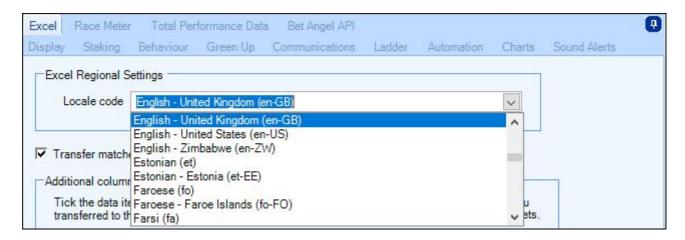


Excel settings & additional data

The Excel settings tab contains two areas.

Regional settings in Excel

The first is the regional settings. If you use a non-English version of Excel you will need to select the regional variation here. Setting this correctly will prevent the error message - 'Description: Old Format or Invalid Type Library' that can appear if there is a language conflict within Excel.



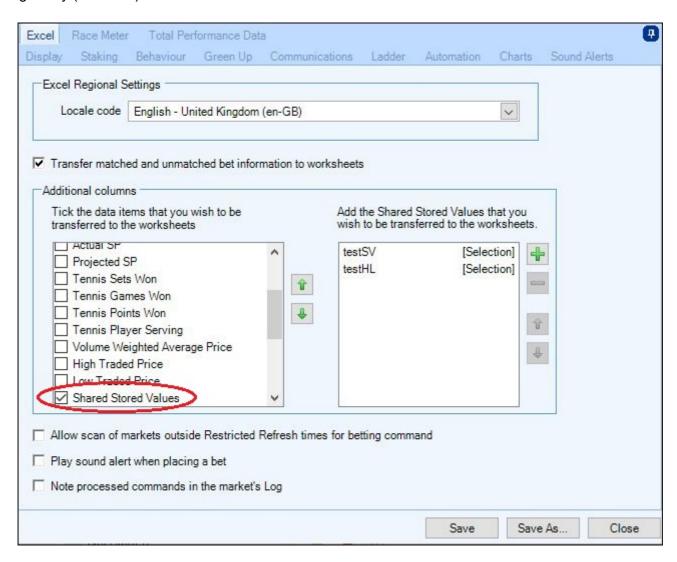
Adding additional data columns in Excel

You can also choose to send additional data to the Excel spreadsheet when it is connected to a market. Note that sending this data will have a performance overhead so keep these to a minimum. These will be added to columns AF through AL. Note that they will be displayed in the order below in sequence. For example if you select jockey name and projected SP these will populate columns AF & AG. If you select only stall number and reduction factor these will be displayed in AF & AG also. If you select all four of these they will be displayed in order from columns AF though AI.

There are many additional columns to choose from:

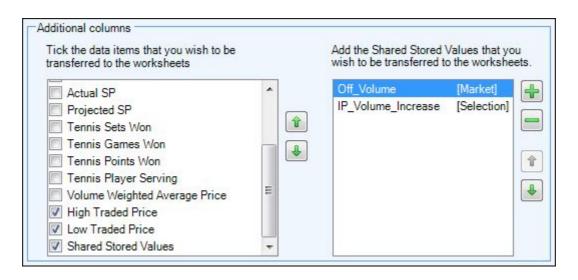
- · Saddle cloth number
- Stall number
- Jockey name
- Trainer name
- Reduction factor percentage
- Actual SP
- Projected SP
- Tennis Sets Won
- Tennis Games Won
- Tennis Points Win
- Tennis Player Serving
- Volume Weighted Average Price
- High Traded Price (Taken from Market Overview Screen)
- Low Traded Price (Taken from Market Overview Screen)
- Shared Stored Values*
- Jockeys Claim
- Runners Form
- Runners Age
- Runners Weight
- Runners Wearing
- Runners Days Since Last Run
- Runners Dam Name
- Runners Sire Name

• Betting Delay (Seconds)



*This option allows you to display and reference <u>Shared Stored Values</u> that have been set using Guardians <u>Advanced Automation</u> or a <u>Servant</u> on your excel worksheet, when this option is selected a box will appear on the right as shown in the image above, from there you will be able to select the name(s) of the Stored Values you want to have shown.

In the image below the 'High Traded Price' would be displayed in cell AF, Low Traded Price' displayed in cell AG, the Stored Value named 'Off-Volume' in cell 'AH' and the Stored Value named 'IP Volume Increase' in cell AI.



Allow scan of markets outside Restricted Refresh times for Betting Command

This defaults to 'ignore' as that's the most optimised way of interacting with Excel, however if the market time is outside of the Restricted Refresh time window and you do want to place any bets this option can be ticked and enabled to allow the scanning of these markets.

Play Sound Alert When Placing a Bet

Enabling this will play the 'Bet Placement' sound file you have selected on the <u>Sound Alerts</u> tab whenever a bet is placed using excel.

IMPORTANT NOTE: Be very careful if you switch between MS Excel versions especially if you move backwards from 2013 to 2010 or 2007 or 2010 to 2007. The registry keys are different and it can cause failure as Bet Angel will look for the newer version based on the registry keys. This is a Microsoft issue and is very complex to fix.

Video Tutorial



Race Meter

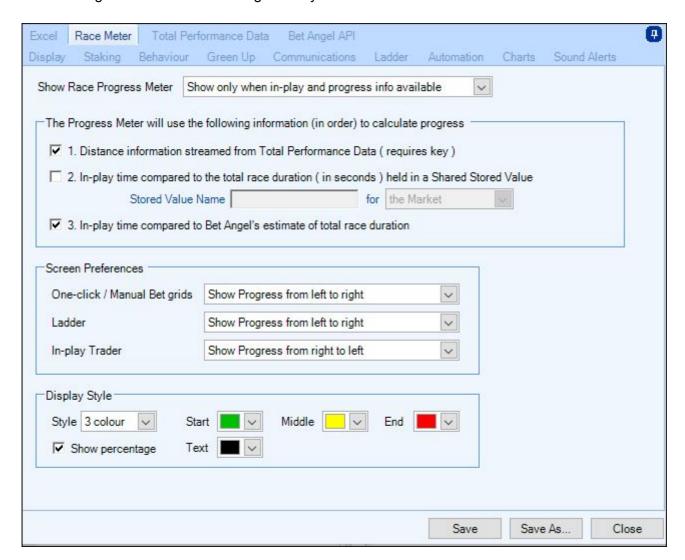
The Race Meter is a progress bar that displays the progress of a race in percentage terms across your screen, it can be displayed on the Ladder, One-Click / Manual Bets screens as well as the In-Play Trader window



Using this settings tab you can choose to display or hide the race meter, and configure it to your own liking, the options allow you to select what information is used by the Race Meter to derive the progress including your own times (see further down for more details on this).

From this window you can also set which direction the progress bar moves across each of your screens i.e. left to right or right to left.

You can also configure the colour formatting used by the bar.



Race Meter Information

The race meter can calculate the progress using any of the three methods displayed below

		2000	2 2 2	
 1. Distance information stre 	amed from Total Performanc	e Data (requires key)	
2. In-play time compared to	the total race duration (in se	conds)	held in a Shared	Stored Value
Stored Value N	lame My_Standard_Times	for	the Market	~

The second option on the list allows you to import and use your own race times via a rules file and <u>Stored Values</u>, for example you could have your own list of course/distance times that you want to use, these can be imported into Bet Angel via a rules file then passed to the race meter using a Stored Value

Total Performance Data

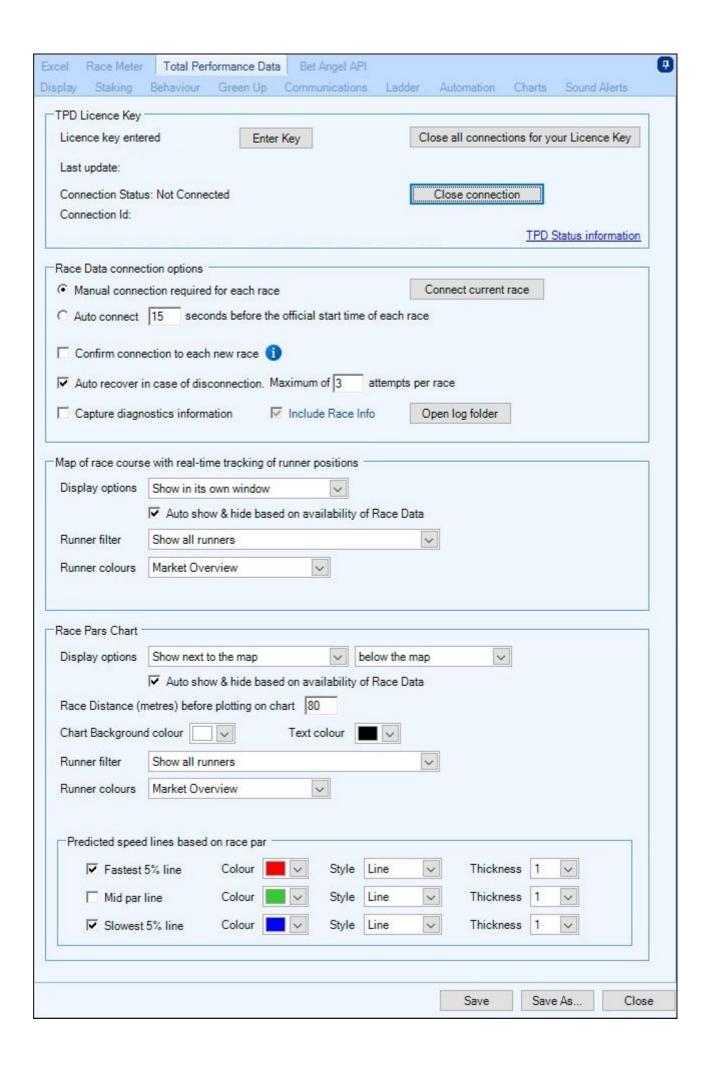
Total Performance Data (TPD) deploy the latest GPS / GNSS technology at UK and US racecourses to provide real-time horse racing tracking for each runner.

For Bet Angel users who also have an active Total Performance subscription you can connect to TPD via Bet Angel and make use of their real-time GPS data and display real-time tracking of each runners position on a interactive map of the race course.

The data from TPD is brought into Bet Angel's Advanced Automation and Servant rules via <u>Stored Values</u>, the data can then be shared and passed throughout other areas of Bet Angel, for example you can display data like each runners speed, position, distance to leader, stride frequency etc on your Ladder, One-Click, Guardian trading screens or in a watch list to assist you with your manual betting activity - giving you several seconds advantage over those betting in-running using TV and live video feeds which are typically delayed by between 2-8 seconds.

For more information on Total Performance Data, its integration with Bet Angel and ways it can help you, please see this <u>blog</u>

The Total Performance Data page of Bet Angel Settings will allow you to manage the all the settings relating to the connection, data, map and par charts from Total Performance Data - for details of how to configure and use the map of the race course and the par charts, please see the next page



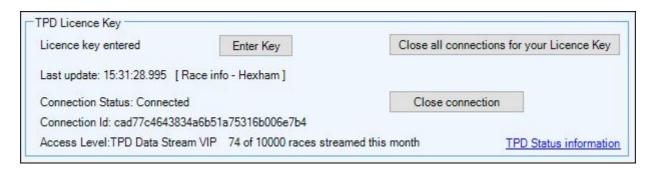
TPD Licence Key

As mentioned above before Bet Angel can connect to Total Performance Data, and begin receiving real time GPS tracking of horses, you'll need to enter your Total Performance Data licence key, by clicking on the 'Enter Key' button. This only need to be done the once until your subscription expires, but you can open the key entry screen again if you ever enter a new key code.

Close Connection - Will close this instance of Bet Angel's connection to TPD.

Close all connections for your licence Key - Will close all current connections associated with your licence key, so if you have Bet Angel installed and running on multiple PCs and one or more of these are also connected to TPD clicking this button will close the connection to ALL instances of Bet Angel. This is useful if your level of TPD subscription has a tight limit on the number of concurrent connections and you want force disconnection so that this instance can connect.

While you have an active connection to Total Performance Data and are receiving data this top part of the window will display the time of your last update and next to that the name of race course you have just received the update for. If you connect early to a race that isn't currently providing live data then you should receive a Heartbeat message every 6 seconds.



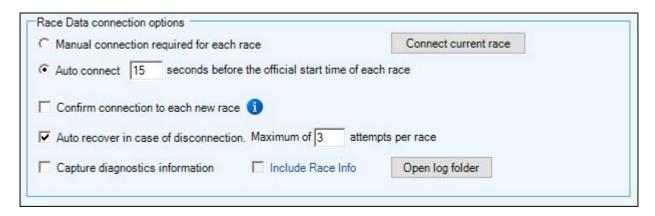
*On busy days you might be connected with two or more races at different courses if you have the markets in Guardian and the races are overlapping, if this happens you'll see each of the course names you are currently connected to in turn as they receive their latest update.

TPD Status

The link in the lower right corner will take you to the <u>TPD status information</u> web page where you can check if there are any known issues with the data feed and also what upcoming race courses TPD will be providing data for

Race Data Connection Options

Bet Angel can connect to Total Data Performance automatically at a time of your choosing, or you can manually connect by clicking the 'Connect current race' button, (you can also connect to TPD using a short cut key created in the <u>Keyboard Editor</u>, or via automation and servants using a <u>rules</u> file).



Below these you can choose to 'Confirm Connection to each new race' if you'd like to be notified before connecting each race to TPD, this can be handy if your subscription is limited to a small number of races each month but you still want to use the 'Auto Connect option' - with this option ticked, Bet Angel will ask permission to connect to each new race.

The auto recover option allows Bet Angel to try and recover a connection to TPD in the event the connection is lost or no new data arrives when expected. Next to this you can set the maximum number of times Bet Angel will attempt to automatically reconnect to each race before giving up and waiting for the next race.

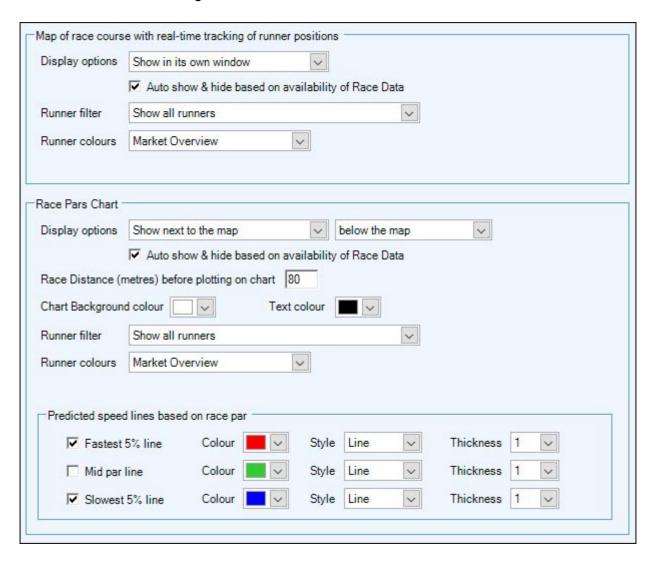
The final two boxes at the bottom of the window should be left un-ticked unless instructed to enable them by Bet Angel Support for the purposes of debugging and troubleshooting. It will capture a timestamped log for the connections to TPD and the data packet received. The 'Include Race Info' option causes Bet Angel to log the full contents of the data packet, while although useful for diagnostics, this can create very large log files!

NB; Because the GPS feed is for in-running use, TPD only activate their feed for an upcoming race shortly before its official start time, if you try to manually connect or have your 'Auto Connect' set to early you'll see the text (Heartbeat) next to the 'Last Update' time, only once TPD activate the feed will the race course name/s be displayed with the update.

We'd therefore recommend not connecting till fairly close to the start time, something like 15-20secs before the offical start time is early enough.

TPD Map & Par Chart

Here we will cover all the settings relating to the interactive course map and par charts shown in the bottom half to the Total Performance Data settings window shown below



Map of Race Course with Real-time Tracking of Runner Positions

Display Options

Here you have the option of hiding the map, displaying it in its own window or displaying it in your <u>In-Play Trader</u> window either at the top or the bottom

Auto Show & Hide based on availability of Race Data

Ticking this box will open the map automatically as soon as you are connected to a race supporting TPD

Runner Filter

Allows you to configure the number of runners displayed on a map. You can choose to display all runners, or to limit to a specified number of runners (either by lowest back price or by their position in the race).

You also have the option of limiting it to a number of runners only when in-play - this is very handy on races with larger fields but it still allows you to see the whole field while in the parade ring and going to post.

Runner Colours

Black - Displays the saddle cloth number of each runner on a black background.

Market Overview - Uses the colour of each runner as you have specified on your <u>Market Overview</u> screen US Racing Colours - Uses the US racing colours, ie, Red for runner 1, White for runner 2, Blue for runner 3 etc etc

Value Based (Saddle Cloth) - Allows you to configure and use your own <u>Value Based Colour Settings</u> profile, with this option you can display each saddle cloth number in the colour of your choice

Value Based (Stored Value) - Allows you to use a <u>Stored Value (Shared)</u> for the selection with your own Value Based Colour Settings Profile, giving you the ability to dynamically change the colours of each runner throughout the race

Example

In the example below I have the map displayed in its own window, this can be positioned anywhere on the screen and resized by dragging the sides and corners. The window size and position will be saved when the Screen Layout profile is saved.

For the runners colours I'm using a Shared stored value named 'speed' (the underlying data for this stored value is the current speed for each runner), for the colours I'm using a value based colour settings called 'Speed Gradient'; this colour setting is a colour gradient which goes from red to green depending on the speed each horse is travelling at

So the slower the current speed a horse is travelling the redder the colour will be on the map, and the faster the current speed a horse is travelling the greener the colour - this now gives a good real time visualization of where each runner is and how fast each one is travelling in relation to others around them.



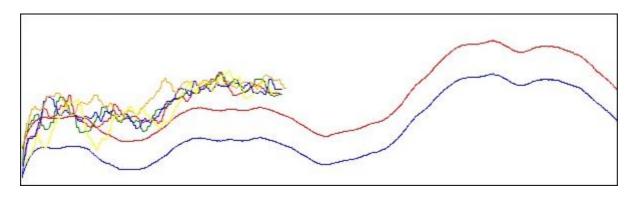


Race Pars Chart

The race par chart displays in real-time the speed of individual runners over the distance of the race and compares that to race par (average/expected speed) information for the course & distance which has been prepared by TPD from its archive of previous races run. By default two speed lines are displayed, an upper speed line which is built from the fastest 5% of races run and a lower speed line which is built from the slowest 5% of races run, effectively creating a 'Speed Envelope'.

Before the race has even started this enables you to see where the fast and slow parts of the course are, then once the race is under way you will see how each horse is running in relation to the course par.

In the image below the first third of the race has been run at a much faster pace than the line showing the Fastest 5% of races run. It's unlikely that they will maintain this pace for the whole race so the second half of the race is likely to plot between the speed lines and you can look out for runners running out of steam.



Display Options

Here you have the options of hiding the par chart, displaying the par chart in its own window, displaying it in your in-play trader window (top or bottom), or you can choose to display it next to the map. When displaying next to the map you can also specify if you want the chart to be above, below, left or right of the map.

Auto Show & Hide based on availability of Race Data

Ticking this box will open the map automatically as soon as you are connected to a race supporting TPD

Race Distance (meters) before plotting on chart

Allows you to configure how many metres into the race a runner needs to have travelled before it starts to be plotted on a chart, most people would tend to want this to be from around the time they settle into a stride/pace which is typically 80-100 metres into the race. By removing the start of the race from the chart, you'll ensure the scale of the y-axis isn't spoiled by the initial slower pace of the runners.

Chart Background colour

Lets you specify the par charts background colour

Text colour

Allows you to specify the the text colour of the runners name (displayed when hovering the mouse over its chart line)

Runner Filter

Allows you to configure the number of runners displayed on the chart. You can choose to display all runners, or to limit to a specified number of runners (either by lowest back price or by their position in the race).

Runner Colours

These options are explained above in the 'Map of Race Course' area

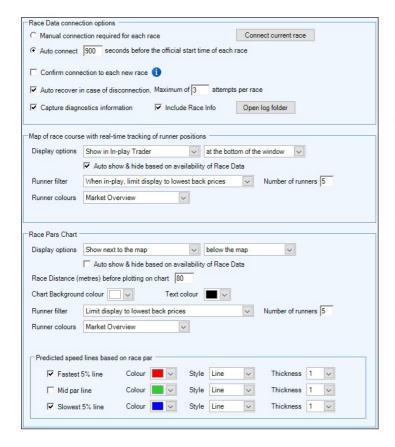
Predicted Speed Lines based on race par

This section allows you to configure which predicted speed lines are shown on the par chart and the colour used, by default the chart will display the fastest 5% and slowest 5% lines

Example

In the following example I have the map displayed at the bottom of the in-play trader window and below that is the par chart window, the colours for each runner on both the map and chart are those used on the market overview screen, I've also limited the number of runners displayed to 6 (by order of their back price).

You can see on the par chart that they have ran the first half of this race well above the par for this course and have even gone above the fastest 5% of previous races measured by TPD, so you'd expect to see the pace to slow as they begin to tire during in the second half of the race and can adjust your strategy to cater for this.





(Interactive) Betting via the Map

You can also place bets directly from the map by starting an Automation Servant, the selection context will be taken from the runner under the mouse (when runners are stacked on top of each other under the mouse, the one at the top is used)

NB, Before the start, the runners are stacked with the shortest price on top, but when the race is <u>in-play</u> the runners are stacked so that the leading runner is drawn on top.

Bet Angel API

The Bet Angel API provides a set of operations that can be called by your own application running on the same PC or network.

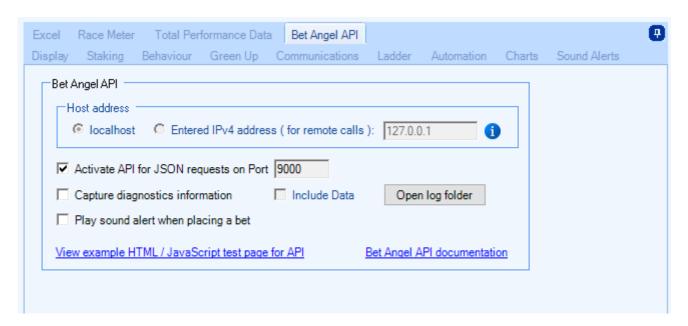
You can create that application in any language that is capable of sending and receiving JSON formatted messages e.g. JavaScript, C#, Python, VBA etc.

The API has a number of discrete components to cater for different aspects of Bet Angel.

For full details on using the Bet Angel API please see here

Use the Bet Angel API settings page to activate the API, on a specific port, for this current running instance of Bet Angel.

You can also use this page to enable/disable the capturing of diagnostics information and to spawn a HTML test page for the API.



Value Based Colour Settings

A Value Based Colour is a colour that changes based on the value it is given. For example the background colour of a button on the One-Click screen could change as the price of the selection get lower and it become more likely to win the event.

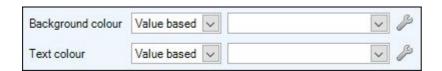
The Value Based Colour Settings Editor is used to define and edit a named colour profile. Once defined, a profile can be used throughout Bet Angel to quickly assign a style of colouring to any cell/button that supports the colour profiles (both text and background colour). e.g. The Additional Information area of the Ladder trading screen or Custom columns on: the One-click screen, Guardian's markets list, and Watch List Coupons.

Each profile can define up to ten colours to be selected based on the underlying value and if required the colour can gradient between the defined colours to give a smooth transition between values.

The editor can be launched from Custom Column Editor on the One-Click screen or Guardian by selecting 'Value Based' as the 'Background' and/or 'Text' then clicking the

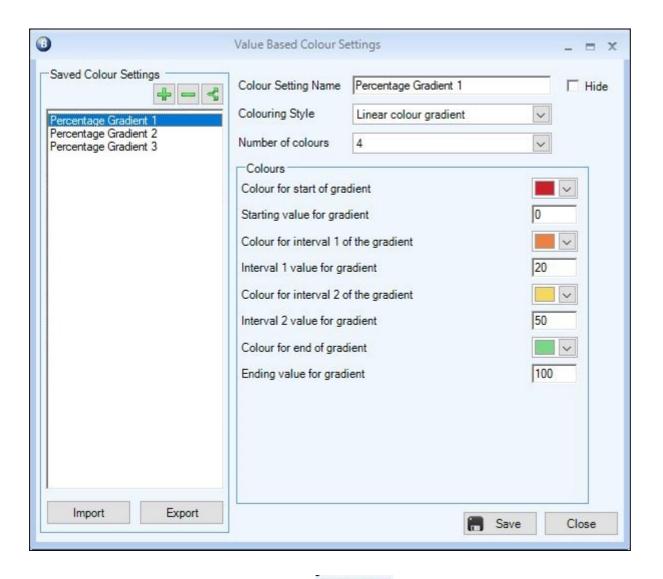


Or you could launch it from the 'Additional Information' area in the Ladder Settings editor.



It can also be accessed when creating a Custom Column for a Coupon.

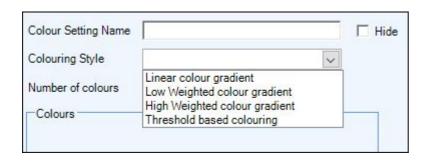
When the editor first opens you will see a few template profiles have already been created which are ready to use as background/text in any of the above or you can use them as a starting point for your own profiles.



The first icons you'll see in the top left are 'buplicate' an existing profile.

Create a New Profile

To get started with creating a new profile, begin by clicking the then give the profile a name of your choice, next you have a choice of which of the four colouring styles you want to use.

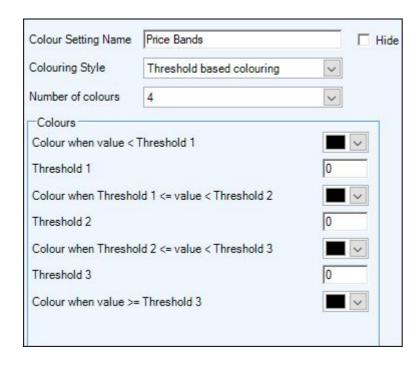


Linear Colour Gradient - This uses a two or more colour points to display a colour gradient between the start and end values

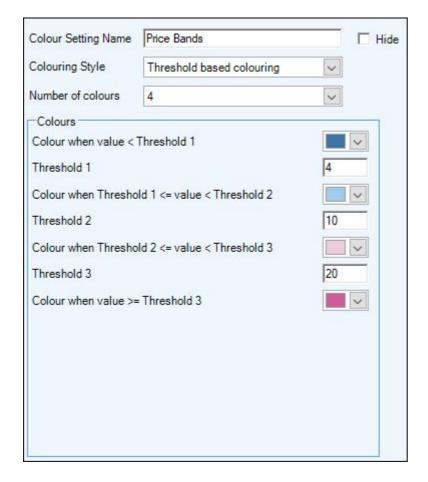
Low Weighted Colour Gradient - As above but this will move the midpoint towards the low end*
High Weighted Colour Gradient - As above but this will move the midpoint towards the high end*
Threshold Based Colouring - This will change the colour when the value becomes greater/less than your exact specified amounts

*For best results when using a Weighted Colour Gradient we recommend using only two colour points

The next option lets you pick the number of colours you want to use, this can be set anywhere from 2-10 colours, once you've done that in the area below you can begin configuring the colours and values you want to use.



In the next image I'm creating a profile to help highlight a selections price range by using different colours, I want the colours to change at exact values for this profile so I've chosen the colouring style 'Threshold based colouring' with 4 colours.

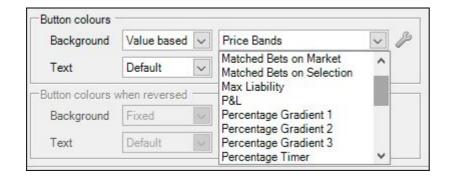


When this profile is used, if a selections price is below 4.0 it will be dark blue, if the price is between 4.0 and 10.0 it will be light blue, then light pink if its between 10 and 20 and dark pink if the price is 20 or above.

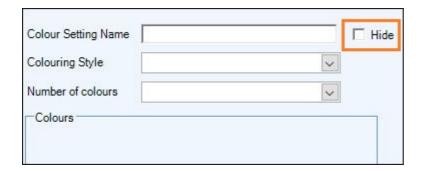
For more details on using Value Based Colour Settings please see the next page

Hiding Profiles

Once you have begun creating your own profiles your list of available profiles may start to get quite long. You can optimise this list by hiding the profiles that you don't use very often. They'll still be available in the editor to unhide in future or to use as a basis for a new profile, but they'll be hidden from the screens that select a Value Based profile.



To hide a profile, select it in the settings editor and tick the 'Hide' box in the upper right corner.



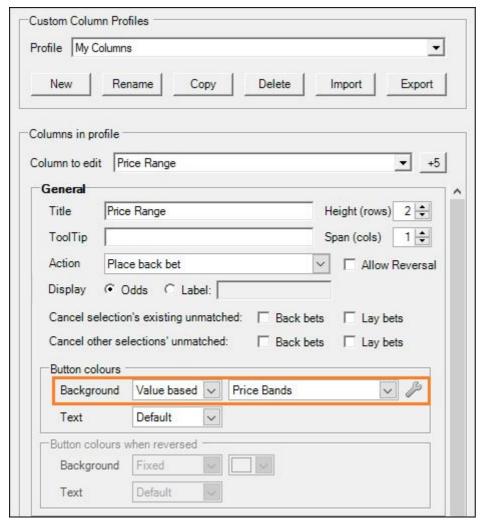
Using Value Based Colour Profiles

Once you've created and saved your Value Based Colour profile, it will be ready to be used as a 'Background' and/ or 'Text' colour in your Custom Columns (or in the Ladder's 'Additional Information' area).

One-Click Screen

Using the example created on the previous page on the One-Click screen, begin by opening the <u>Custom Column</u> <u>Editor</u> on the One-Click screen and create your custom column, then in the 'Button Colours' area you'll see the options to set a '**Background**' and/or '**Text**' colour.

Your 'Value Based Colour' profile can then be selected from these pick list menus.



NB; all your Value Based Colour profiles can be used as either your 'Background' or 'Text'

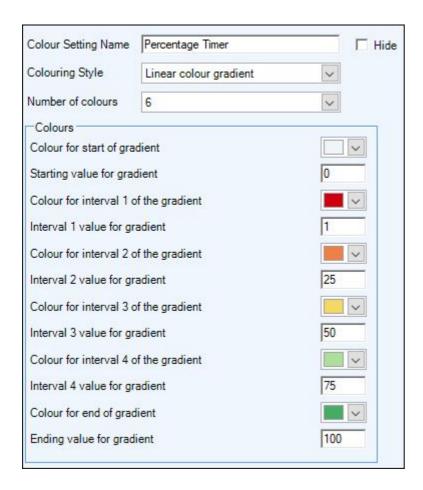
Once you've selected your colour profile and saved your custom column go back onto your One-Click screen to enable by clicking the icon and select it from your list.

You will now see the 'Price Range' custom column and how the 'Value Based Colour' will display the prices to you

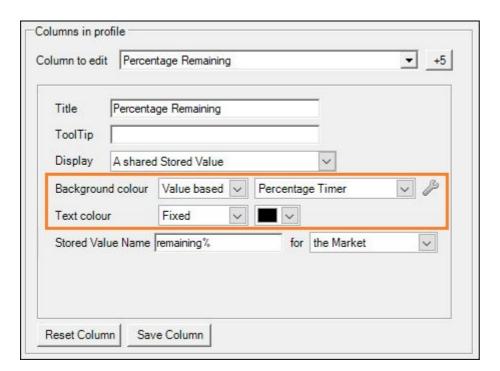
				Name P&L	Micro Chart	Trade profit			Back	Lay			Back stake	Lay stake		Price Range
light,	11	(11)	(1)	Surrey Gold £0.00	~~~~	£0.00	6.8 £ 60	7 £ 14	7.2 £8	10 £2	11.5 £ 4	12 £ 11	5	5	Make Market	7.2 £8
light.		(5)		Makram £0.00	m	£0.00	2.24 £5	2.56 £ 2	2.6 £ 97	2.76 £1	2.86 £ 20	2.9 £2	5	5	Make Market	2.6 £ 97
lighti Taran	12	(6)	©	Star Caliber £0.00	- Marine	£0.00	3.1 £ 44	3.15 £5	3.2 £ 41	5.5 £ 10	5.6 £ 50	6.2 £ 10	5	5	Make Market	3.2 £ 41
lijihi Paran				Twisted Reality £0.00		£0.00	5.2 £ 17	5.7 £9	6 £5	14 £2	15.5 £3	17 £3	5	5	Make Market	6 £5
light The				Labeebb £0.00	- My	£0.00	11 £6	11.5 £3	12 £5	40 £ 4	44 £1	46 £ 1	5	5	Make Market	12 £5
light.				Favorite Moon £0.00	~~ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	£0.00	32 £ 3	50 £ 2	55 £ 2	370 £ 1	650 £ 1	900 £ 1	5	5	Make Market	55 £2
light.	1	(3)	()	On To Victory £0.00	~~~~ <u>~</u>	£0.00	44 £1	48 £ 4	140 £2	250 £ 1	850 £ 1	950 £ 1	5	5	Make Market	140 £2
light Taran	4	(7)	(h)°	Sextant £0.00	~~~/~	£0.00	17 £ 25	18 £ 15	19 £ 2	36 £ 1	40 £3	46 £ 4	5	5	Make Market	19 £ 2
light,	2	(2)	•	Calling The Wind	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	£0.00	11 £ 29	12 £7	22 £ 3	23 £ 2	25 £ 14	26 £ 11	5	5	Make Market	22 £3
light.			Change,	Master The Stars £0.00		£0.00	8.4 £ 20	8.8 £3	9 £ 29	29 £ 2	40 £3	42 £ 2	5	5	Make Market	9 £ 29
light.				Nate The Great £0.00	~	£0.00	80 £ 9	100 £5	110 £5	900 £ 1	990 £1		5	5	Make Market	110 £5
light.	9	(1)	(I)*	Galahad Threepwood £0.00	~~~___\	£0.00	36 £ 14	100 £ 4	160 £ 16	870 £ 2	960 £ 1	980 £ 0	5	5	Make Market	160 £ 16

Guardian

Using a Value Based Colour in your Guardian markets list is identical to the One-Click screen and is done by creating a custom column. In the image below I already have a colour settings profile which uses the colour style 'Linear Colour Gradient' with 6 colours, and the profile is named 'Percentage Timer'.



The custom column I'm creating in Guardian is to display a stored value for the market named 'remaining%', this value is derived using a rules file applied to the market which works out how much of the horse race is remaining as a percentage.



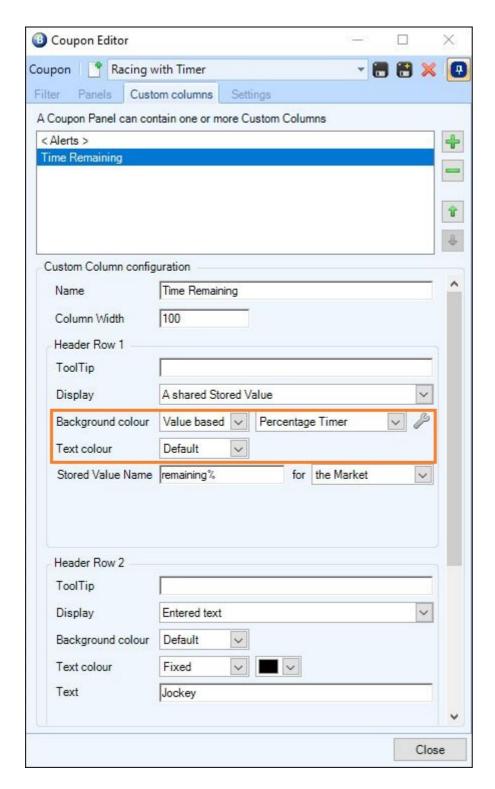
The custom column will display the numerical value of the percentage remaining and by using the Percentage Timer colour profile as the 'background' colour for the column means it will dynamically change from green when there is 100% of the race remaining through to red as the percentage value reduces and it nears the end of the race.

Markets (20)	Percentage Remaining	Unmatched bets	Matched bets	Volume	In-play	Suspended	Last Suspension	Last update	Start time	Excel Sheet	Automation Rules 1	Automation Nominated Selection 1	Automation Nominated Selection 2
Lingfield 25th Aug - 14:10 1m Hcap	43	0	0	314745	Yes		14:12:58	14:13:54	14:10:00		In-Running STD Timer		
Musselburgh 25th Aug - 14:20 1m1f Hcap		0	0	55447			13:58:54	14:13:54	14:20:00		In-Running STD Timer		
Catterick 25th Aug - 14:30 6f Hcap		0	0	58829	<u> </u>		00:00:00	14:13:54	14:30:00		In-Running STD Timer		
Lingfield 25th Aug - 14:40 7f Mdn Stks		0	0	12229			00:00:00	14:13:54	14:40:00		In-Running STD Timer		
Musselburgh 25th Aug - 14:50 5f Hcap		0	0	43041			00:00:00	14:13:54	14:50:00	1	In-Running STD Timer		
Catterick 25th Aug - 15:00 6f Hcap		0	0	18925			00:00:00	14:13:54	15:00:00		In-Running STD Timer		
Lingfield 25th Aug - 15:10 7f Mdn Stks		0	0	10472			00:00:00	14:13:54	15:10:00		In-Running STD Timer		
Musselburgh 25th Aug - 15:20 2m2f Hcap		0	0	14903			14:00:14	14:13:54	15:20:00		In-Running STD Timer		
Catterick 25th Aug - 15:30 6f Hcap		0	0	14173			00:00:00	14:13:54	15:30:00		In-Running STD Timer		
Lingfield 25th Aug - 15:40 7f Hcap		0	0	15802			00:00:00	14:13:54	15:40:00		In-Running STD Timer		
Musselburgh 25th Aug - 15:50 7f Hcap		0	0	10960			14:09:17	14:13:54	15:50:00		In-Running STD Timer		
Catterick 25th Aug - 16:00 7f Nov Stks		0	0	19043	<u> </u>		00:00:00	14:13:54	16:00:00		In-Running STD Timer		
Lingfield 25th Aug - 16:15 2m Hcap		0	0	22672			00:00:00	14:13:54	16:15:00		In-Running STD Timer		
Musselburgh 25th Aug - 16:20 5f Hcap		0	0	9429			00:00:00	14:13:54	16:20:00		In-Running STD Timer		
Wolverhampton 25th Aug - 16:30 5f Nursery		0	0	7007	<u>† </u>		00:00:00	14:13:54	16:30:00	1	In-Running STD Timer		
Catterick 25th Aug - 16:35 7f Hcap		0	0	11159	<u> </u>		00:00:00	14:13:54	16:35:00		In-Running STD Timer		
Lingfield 25th Aug - 16:50 6f Hcap		0	0	10757			00:00:00	14:13:54	16:50:00		In-Running STD Timer		

Coupon

When creating a coupon open the custom columns tab and click the to add a new custom column, from here you'll be able to select the colour settings you want to use on the Header Row 1, Header Row 2 and Selection Row.

In the image below the same 'Percentage Timer' colour settings profile as the Guardian example above has been used.



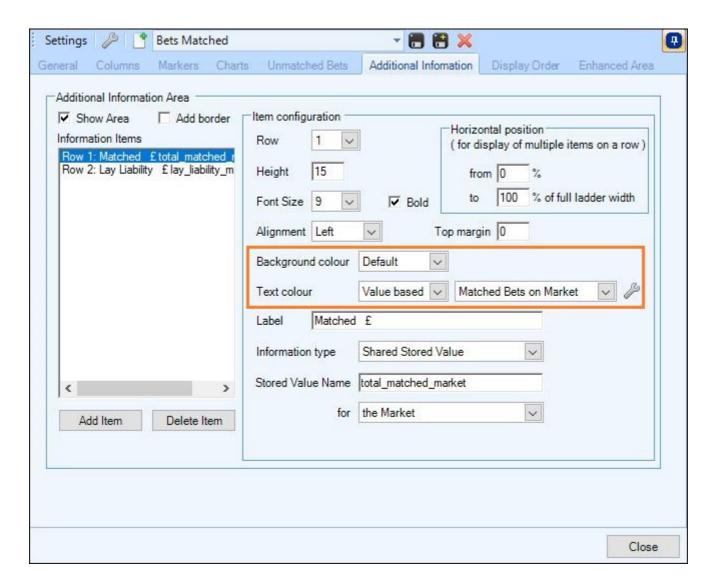
The percentage remaining in a race with changing background colour will now be displayed in the Header Row 1 column in your Coupon



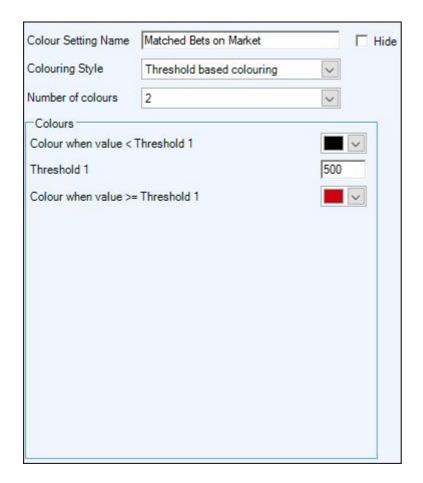
Ladder

To use a 'Value Based Colour' on your ladder trading screen you need to open the ladder settings editor by clicking the next to your ladder profiles and select the 'Additional Information' tab

In the image below the 'Additional Information' has been configured to display two Shared Stored Values for the market named 'total_matched_market' and another named 'lay_liability_matched'. These values are derived using a rules file applied to the market which calculates your total matched bets.



This time rather than a 'Background colour' a 'Text colour' has been selected to be used, the profile chosen is called 'Matched Bets on Market', this profile uses the colouring style 'Threshold Based Colouring' and will display text in black while the value is less than 500, but once the value is greater than 500 the colour will change to red. The image below shows how this Value Based Colour profile was configured



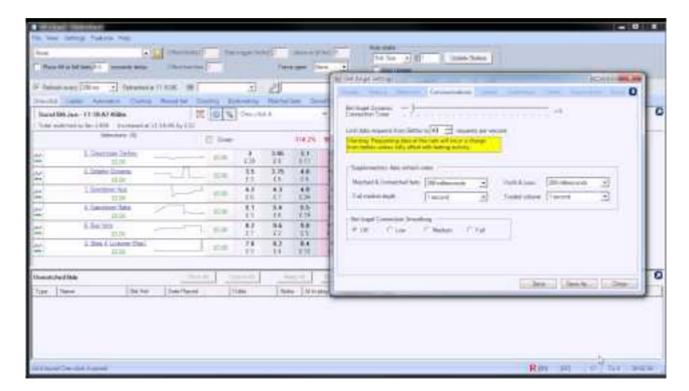
When the profile is used we can see above the ladders in the 'Additional Information' space the matched bets and lay bet liability totals, and because there has been greater than £500 of bets matched in this market that Stored Value has changed colour to red

₩ Itsal	laboutluc	ck	~ <u>\</u>	F. India	1,100.4	10		Thur	nderoad		~ <u>`</u>	· Illian E	453.50)		@ * Belle	evue La	d	~ <u>\</u>	· Philip	256.00)	
5	10 32	25 64	200	00 200 256 512	13/	06.00		5	10 32	25 64	5000	00 20	5(0.00		5	10 32	25 64	200	00 200 56 512		00	
Matche Lay Lia		160	Û	53%	0.00			Matche Lay Lia		225	①	51%	50.00			Matche Lay Lia		EO	仓	44%	0.00		
-45.15			5.2	27				10.50			5	52		3.0%		0.00			13.5			0.4%	_
-40.04			5.1	56		0.1%		9.69			4.9	29		0.6%		0.00			13	3		0.6%	6
-34.72			5	47				8.85			4.8	14		1.6%		0.00			12.5	29		0.6%	6
-29.18			4.9	54				7.98			4.7	16		0.9%		0.00			12	38		0.4%	
-23.42			4.8	77		0.0%		7.07			4.6	20		3.0%		0.00			11.5	7		0.1%	
-17.40			4.7	114		0.2%		6.11			4.5	101		8.6%		0.00			11	41		0.7%	
-11.13			4.6	89		0.1%	4	5.11			4.4	109	25.00	84		0.00			10.5	13		3.7%	+
-4.58			4.5	121		2.7%	-	4.07			4.3	129	25.00			0.00			10	31		7.6%	+
2.27			4.4	171		12.7%	-	2.98			4.2	174		11.1%		0.00			9.8	26		1.9%	+
9.44			4.3	198		12.9%	-	1.83			4.1	258		8.0%		0.00			9.6	33		2.3%	-
16.95			4.2	163		5.6%	-	0.63			4	141		17.7%		0.00			9.4	121		0.8%	+
24.83		050	4.1	101		14.1%		0.00			3.95	155		3.8%		0.00			9.2	59		7.0%	4
33.10		253	4			27.2%		-0.64		43	3.9		-	5.3%	۲	0.00		99	9			7.6%	4
37.39		73 85	3.95			10.7% 4.2%	1	-1.30 -1.97		263	3.85			7.6%	-	0.00		76 94	8.8			8.0%	+
41.79	100.0	181	3.85			4.2%	1	-2.67		395	3.75			0.1%		0.00		59	8.4			7.3%	+
50.95	100.0	100	3.8			20	1	-3.38		151	3.73				1	0.00		53	8.2			9.8%	
55.71	100.0	513	3.75			0.5%	1	-4.11		76	3.65		-		1	0.00		34	8			9.4%	1
60.59		26	3.7			0.576	1	-4.86		43	3.6				1	0.00		64	7.8			7.5%	
65.62		20	3.65					-5.63		169	3.55					0.00		19	7.6			7.4%	
70.78		10	3.6				1	-6.43		202	3.5				1	0.00		64	7.4			7.3%	1
76.08		52	3.55					-7.25		20	3.45					0.00		193	7.2			1.2%	
81.54		29	3.5					-8.09		47	3.4				1	0.00		192	7				1
87.16			3.45				+ 1	-8.96		17	3.35				+1	0.00		209	6.8			0.1%	1.

NB, The Bet Angel forum has a dedicated section where you can download ready-made settings files including those you see above, these can all be found in the <u>Customization</u> section.

Getting the fastest and most reliable connection

View this video to see how to optimise your connection to Betfair:



Understanding local performance

Concept

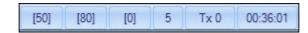
Monitoring your position and maximising a connection will improve not only your ability to trade the market but also allow you to spot if there are any potential issues.

Excessive response times can cause potential risk to you trading position in the market and cause your software to malfunction. By logging and constantly displaying your responsiveness to Betfair in Bet Angel you can assess whether your connection to Betfair via the internet is performing in line with your expectations and take appropriate action if it is not performing as expected.

Usage

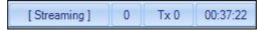
Responsiveness indicator

The first and most obvious are the responsiveness indicators at the bottom of the main Bet Angel screen that you will be using. To verify what you are looking at just hover your mouse over the number which is constantly updating. These numbers measure the response time in milliseconds to Betfair for either odds retrieval or bet retrieval when using polling to retrieve market updates. There is no default correct response time. This will be very specific to your set up but by keeping an eye on the response time you will quickly come to understand what is a right or wrong response time.



Bet Angel - Polling Responsiveness indicator

When Streaming mode is enabled the three responsiveness indicators numbers are replaced by the word 'Streaming'.



Bet Angel - Streaming Responsiveness indicator

Transaction Counter

The number of transactions made in any one hour is counted by Betfair. The transaction counter at the bottom of the screen will allow you to keep a track of how many transactions have been made by the software. You can see here there are zero transactions as no bets have been placed yet this hour - there is still 24:23 left until the race is due to start.



NB; The limit on transactions per hour is set by Betfair. Any transactions over this limit are chargeable. Always ensure you are familiar with the charges which are available here Betfair charges

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Ways to test and improve your responsiveness

Close down all additional applications including task bar and background tasks

Remove task bar and background tasks and check that you do not have any software open that may access or attempt to access the internet such as an email client or remote access tool. Background tasks are very common in Windows and several background tasks can cause poor performance even though you can't actually see any applications running.

Reboot your router, especially if it is wireless

We have often experienced poor performance from routers, especially wireless routers. Therefore we recommend periodically rebooting your router to eliminate overheating or clashes with your router. To check if there is a problem with your wireless router, try a direct, rather than wireless connection. Link your computer directly to the router via an Ethernet cable rather than via the wireless link. You may also want to explore DLAN technology that allows you to pass broadband over mains electricity.

In Windows XP/Vista/7/8.x/10 create a new user

Go to control panel on your computer system and select user accounts. Create a new account and name it appropriately. Log off or shut down your computer and log in under this new account. Logging into your PC after you have created a new user will often remove some background issues that you can't clearly identify. If this also fails to improve performance and Betfair is not experiencing any general issues then it is likely to be an Internet / service provider issue.

Try running Bet Angel on a different computer

By running Bet Angel on a different computer you can test the software in isolation. If Bet Angel runs well on one computer but not another on the same connection then it is likely that there is a problem on your original computer.

Try running Bet Angel at a different location

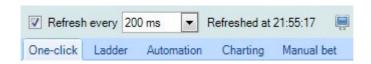
By running Bet Angel at a different location you can test the connection in isolation. If Bet Angel runs well at one location but not another then it is highly likely that there is a problem on the connection to the Internet from your original location. You may also be able to isolate your issues to the Internet provider you are using or an environment issue.

Retrieving Betfair Market Information

Bet Angel can retrieve market information/data from the Betfair in two ways.

Polling

Traditionally this has been done by Polling which is where Bet Angel calls the exchange to request the latest market information like prices and money waiting to be matched etc. It's up to each user to set the frequency they wish to 'poll' for this information at. This is done by setting the 'Refresh' rate on the main Bet Angel page. You can chose to refresh anywhere from every 200ms up to 1min.



Streaming

In 2016 Betfair introduced streaming which means market changes are now pushed directly from Betfair to your PC, so you'll be able to receive more updates per second than using the traditional 'polling' method of API usage. With streaming enabled you will be able to retrieve the latest market information as quick as every 20ms, which is 10 times faster than can be done by 'Polling', you can also set the refresh to Refresh Every 'Update' which will cause the screen to be updated as soon as new information arrives on the data stream from Betfair,

You can switch between either option in the <u>Communications</u> area in the main settings.

Note: If you are on a less active market and no data arrives within 500ms then the market is refreshed anyway to keep charts and Servants ticking over. using 'Update' as your refresh rate will save a few milliseconds over the 20ms rate on an active market and save some CPU load on a less active market.

At 20ms the ladder can get a bit mesmerising so you may wish to run the main screen a bit slower, however even if slowing your main trading page down you still can keep 'Guardian' refreshing at full speed as the biggest advantage of streaming is when using Automation in Guardian, enabling you to run rules against dozens of markets every second.

Bet Angel product differences

This guide is primarily designed to show you how to use Bet Angel Professional for Betfair.

You are welcome to use this guide as a reference for Bet Angel Trader, Basic and Betdaq, but you should be aware that while a number of features are similar across the different products, only Professional has every feature explained in this guide.

Bet Angel Professional versions

Starting with the v1.50 release, this section will detail new features and updates to Bet Angel Professional and this guide

v1.50 Overview

Bet Angel Professional v1.50 contains the following new features and updates

Automation / Servants

<u>Stored Values</u> – any rule can now store a price or value to be used later. Stored Values can be used as a filter in other rules with the new <u>Stored Value condition</u>. Bets can be placed at a previously stored price.

The 'Context price' of a Servant can now be referenced in the Fixed Odds and Relative Odds Conditions.

One-Click Screen

Right mouse clicking on a <u>stake box</u> of the one-click screen now gives quick access to your preset stakes from the ladder screen.

What-If columns can now be added to the one-click & manual bet screens to show the impact new bet(s) will have on the profit & loss.

Drag individual columns wider or narrower before saving your layout, also ability to change the display font, the height of each row and apply a gap between rows enabled via the <u>Display</u> tab in the main settings.

<u>Custom columns</u> can now display 'Additional Information' e.g. Jockey name, Trainer name, SP, Reduction Factor, High and Low Traded Price, and Matched/Unmatched bets count. The maximum number of custom columns is now increased to 100 (defaulted to 20, but can be increased 5 at a time).

Custom columns can also show a 'Shared' Stored Value for a Selection, the Market or the market's Event.

A custom column's height & width span can be changed from the default – e.g. use this to have a wide column span above multiple narrow columns. Note: This is exposing a feature from the development toolkit, so following modification of the custom column, to get things looking just right you'll need to drag and drop the columns on the one-click screen using the on-screen black placement arrows (then save the one-click layout to a named profile of your choosing). Not the easiest of features to use, but it does offer extra layout flexibility that could otherwise not be provided.

Other changes (all accessed via the Main Settings editor)

Market Overview background and font colours can now be changed (Chart tab)

All profits values throughout Bet Angel can now be displayed 'Net of Commission' (Display tab)

Configurable staking method for Stop Loss when using 'offset with greening' – choose whether to use the offset, trigger or placement price when calculating the stake (Staking tab)

Maximum number of Ladders has now been increased to 18 (Ladder tab)

'High' & 'Low' values from Market Overview are now available in Excel as additional values (Excel tab)

Choose if Excel triggers the bet placement sound when placing a bet (Excel tab)

Switch to an alternative source for Betfair jockey silks, use this if you sometimes see blank silks using the normal source (Communications tab)

Goal Lines and Asian Handicaps

Bet Angel now fully supports the Goal Lines and new style Asian Handicap markets. The one-click P&L and What-If columns reflect the concept of Double Line asian handicaps.

The Profit & Loss report window (button appears in the toolbar for appropriate markets) has been enhanced to support combination half & whole goal handicaps – sometimes referred to as 'Quarter-Goal Handicaps'

v1.51.1 Overview

Bet Angel Professional v1.51.1 contains the following new features and updates

Fully Customisable Ladder Settings

The toolbar on each ladder screen now has a picklist of saved Ladder Settings profiles to allow you to easily switch from one ladder design to another.

Bet Angel is supplied with eight example designs, but the new <u>Ladder Settings Editor</u> allows you to create your own named designs which will be added to the picklist.

Key features:

- # Named ladder settings profiles are shared across (and disconnected from) the Bet Angel Settings profiles avoiding the need for ongoing ladder reconfiguration when working with multiple Bet Angel Settings profiles.
- # Ability to embed Betfair and/or Advanced charts into each selection's ladder
- # Configurable Double/Single left & right mouse click actions for cancelling unmatched bets
- # Ability to rearrange columns or hide them completely to save space
- # <u>Unmatched bets</u> can now be merged into a single column and/or displayed on the 'Odds' column if required
- # A background colour can be applied to <u>unmatched bets</u> to help distinguish back from lay bets.
- # A new <u>Additional Information</u> area can be displayed on each ladder. This is fully configurable with regard to font/colour/size/position and can display Stored Values and certain presets such as trainer and jockey names.
- # The <u>vertical position</u> of each area creating the ladder can be changed (e.g. header, ladder columns, footer, charts, staking etc)
- # A new Estimated Position In Queue column has been added to the ladder
- # Each ladder window can choose a different named ladder setting, as required

One-click screen

Place bets & manage <u>multiple markets on the one-click screen</u> at the same time by launching new one-click screens from anywhere your able to select a market.

e.g. from a market selection window, from Guardian, from any Watch List etc. by right-clicking on a market and selecting 'Display market in a New One-Click window'. Alternatively launch a new one-click screen at the press of a button using a keyboard shortcut.

Extra items have been added to the <u>Custom Columns</u> additional info option, such as number of selections and runners form.

Also the ability to 'Skip' price gaps has now been added.

Bet Angel Settings

On the <u>Display page</u>, you can now configure the colours used for back & lay prices throughout Bet Angel and also the colours used for Profit & Loss values.

The <u>Charts</u> page of the Bet Angel Settings now has additional options to hide/show horizontal & vertical grid lines on the market overview chart

Ability to import and export saved settings and layout profiles from the settings and view tabs.

Advanced Automation

A <u>Stored Value</u> can now hold the VWAP of a selection and a book% for the selection calculated using its VWAP. Also the adjustment pick list now includes multiply and divide options.

The 'Matched bets amount condition' can now compare against the 'servant context stakes' (back & lay stakes used when starting the servant)

The 'Alert (Play Sound / Show Alert)' rule type has been enhanced to allow alerts to be displayed in a column on the Watch Lists. The specifics of the alert being configured with the parameters tab

These can be configured to display against a specific selection or in the header of the market. The alert can flash and/or auto-clear after a set period if required. You also have control over the colours used, can timestamp the message, and add a tooltip. There are also options to have the watchlist auto scroll to the market/selection which triggered the alert (useful if you have dozens of markets in a watchlist) and display itself if it's currently minimised to your windows taskbar.

Watch lists

As explained above, <u>Watch lists</u> can now display Alerts. The display menu on the watch list will allow you to show/hide the 'Alerts' column and this choice will be saved with your settings profile, they can also be cleared manually by right clicking in the Alert column of the Watch list.

Advanced Charts

In the <u>Advanced Charts</u> settings a new option allows both the left & right y-axis to be hidden – use this if you want a clean chart display to visualise direction of movement but aren't interested about specific prices.

The ability to hide any of the defined charts from the charts pick list has been added. Useful if some of your charts are seasonal or specific to certain sports and you want to simplify the pick list. This can also be used to hide Bet Angel's default chart design if you don't want to use them.

Keyboard Shortcuts

The following new keyboard shortcut actions have now been added to the keyboard shortcut editor

One-click layouts, Custom column profiles and Ladder Settings profiles can now be assigned to a shortcut key – making it very quick to change ALL screen designs at the press of a button

New actions added to the 'Market Navigation' category to display a market in new One-click / Ladder windows (or on the main One-click / Ladder screen).

This applies to all lists of markets in Bet Angel (e.g Market Selection tabs, Guardian, Watch Lists); just hover the mouse over a market and press the shortcut key.

New bet cancellation shortcuts have been added to cancel just the most recent bet or just the oldest bet at a price on the ladder.

Option to set the one-click stake or the ladder 'standard' stake to a percentage of the current net stake, so users now have a choice of Fixed stake or Percentage of Net Stake

v1.52 Overview

Bet Angel Professional v1.52 contains the following new features and updates

Customisable Market Filtering

<u>Coupons</u> (combining market filtering with an enhanced Watch List to create a customised view of multiple markets)

Support for stakes/traded amounts in Automations stored values

Extra Keyboard Shortcuts to make your daily setup quicker and easier

Some targeted changes to improve product usability

Full detail of the features:

Market Filtering:

The main <u>Market Selection</u> window and the Guardian Market Selection window now support highly customisable market search filters, with example filters already included to select from in the new pick lists on those screens. By clicking the filter icon in those pages you can launch the new <u>Market Filter Editor</u> where you can create your own customized market filters

The editor allows you to define one or more Filter Sets; the market tree to be displayed will be built from the aggregated results of those sets. Each set supports filtering by: Market Start Time, Event Type, Text matching (supporting AND OR NOT), Country code of the Event, Market Types (dynamically downloaded from betfair), Traded Volume at the Market or the Event level, In-play status, and whether the market will turn In-play or not. The 'Preview' page shows the results of your current filtering criteria before you save it to a named profile. That named profile will then be available in the filter picklists throughout Bet Angel.

The default is to apply the filters to betfair's full market tree, but you can create your own tree design if you wish by using the 'Display' page of the editor. You can specify three levels of grouping, various sorting options and have the ability to supplement the market name with various prefix/suffix options.

It's best seen in action, so open Bet Angel and work through the examples in the filter picklists to understand the capabilities.

Notes:

- The Display page of the editor contains the 'Hide this market filter' option that will allow you to keep the picklists tidy... hiding any of our examples that you may not require, or hiding your own filters that are out of season.
- We've also added the ability to import and export filters, so you'll be able to share your favourite filters on this forum for the rest of the community.
- Most of the market information used for filtration is included in the standard market data downloaded from Betfair, but certain tests such as volume and in-play status will need to be requested on demand. If you use those filters, you'll need to allow a few extra seconds for the filter to process.

Coupons:

<u>Coupons</u> combine the Market Filtering with enhancements of the Watch Lists to allow you to easily select a group of markets that you wish to trade, add them to Guardian, and display them in a Watch List in your preferred format. Once defined your coupon can be used again and again to quickly setup a day's trading. They are perfect for multi-market trading and are especially useful for Soccer traders that need to monitor multiple matches (and their various markets) concurrently, leaping on opportunities as they arise.

These enhancements to Watch Lists can be used in isolation, but have contributed to the overall Coupon design:

- An Event Filtering picklist has been added to the top of the Watch List the default is to show all events that have been added to the Watch List, but you can use it to focus on the markets of a single event/match.
- Market price refresh has been optimised with the option to refresh all markets currently visible on the Watch List at the 'Background market prices' refresh rate used in conjunction with streaming you can refresh **every** market of an event many times each second
- For some time, extra one-click & ladder windows have been available to launch via the Watch Lists using a right-click menu, but now there's the option to launch by just clicking one of the market prices, getting you to the market even quicker.

In a similar way to the new Market Filters, example Coupons are available in a picklist (in the Watch List menu or on the new Coupon page of Guardian). The Coupon Editor can be launched to modify those examples or create your own Coupons from scratch.

In the <u>Coupon Editor</u>, the 'Filter' page is the same as used by the Market Filter editor and allows you to specify Filter Sets to zone in on the markets that you wish to add to the Coupon.

The 'Panel' page allows you to add as many vertical display panels as you wish; they'll be displayed side-by-side in a Watch List. Each one can be customised to control which columns are displayed, the sort used and whether to restrict the panel to only showing specific market types. Each vertical panel has its own scroll bar, but if required the scroll bar usage can be linked together so that having scrolled one panel, the rest will realign to match. That feature is useful if you are grouping the markets on the Watch List by the Event. e.g. Showing a football match across multiple panels or perhaps showing Place markets for horse races alongside their Win Only counterparts.

The 'Settings' page controls: how markets will be grouped together, if the scrolling should be linked, whether to show the Event picklist, refresh options, how frequently the coupon filter should be reapplied to the Watch List's markets, and how the results of the filters should be displayed in Guardian.

In Guardian you'll find the new 'Coupon' page on the left sidebar. In its simplest form, you use it to select a named Coupon and with a single click: run its filter against the current betfair markets, replace Guardian's markets with the results, and apply them all to a Watch List showing them in the Coupon's panel layout. If you wish, you can be more selective in this page and choose just some of the markets found, appending them to markets already loaded into Guardian. A Watch List can, as before, Synchronise with the entire list of markets in Guardian or can just be given a subset. We realise that there are a lot of options and configuration points in this version that might be a bit daunting at first, but we've tried to cater for every style rather than prescribing a specific type of usage.

Automation Rules Editor changes:

On the Parameters page, bets can now be staked using an amount held in a Stored Value

On the <u>Stored Values</u> page, more price options are available to now store the SP, Projected SP, High & Low traded prices. Also you can now store monetary values rather than just prices; this includes storing your Balance, the Net Stake, or the stake used when starting a Servant.

The main addition to Stored Values is they can now look up and store the **money available** to back/lay at a price or the **volume traded** at a price. The price to be used can be an entered value, one of the best three markets prices, or can itself be defined by another Stored Value.

All of these options have also been added to the 'Stored Value condition' for use when deciding whether to trigger a rule or not.

Keyboard Shortcuts:

New keystrokes have been added to the keyboard shortcut editor to do the following:

- set the Market Filter on the 'Select' page of Market Selection screen
- set the Market Filter on the 'Search' page of Market Selection screen

- set the Market Filter on the 'Select' page of Guardian
- set the Market Filter on the 'Search' page of Guardian
- set the Coupon used to filter markets on the 'Coupon' page of Guardian
- 'Add & Apply' the current selected Coupon in Guardian
- Select markets in Guardian's list of markets this includes the ability to select based on specific market types
- Apply an Automation Rule to the selected markets in Guardian's list of markets

Other changes:

Import & Export options have been added to the <u>Ladder Settings editor</u>, making it easy to upload your favourite ladder layouts to this community to share with others.

The Quick Picks page in Guardian renamed as 'Racing'

The title of Guardian's 'Odds' pane now shows the number of selections in the market.

The 'Market' column header in Guardian's list of markets, now shows the number of Markets in total in the list. This is useful when streaming as Betfair enforce a limit of subscribing to a maximum of 1000 markets on the stream.

New options have been added to the <u>Behaviour tab</u> of Bet Angel Settings to allow the chosen filter/coupon/search criteria to be saved with the settings profile.

The 'Background market prices' refresh rate has been updated in the <u>Communications</u> area to include refresh rates as fast as the foreground rate

v1.53 Overview

Bet Angel Professional v1.53 contains the following new features and updates

Quick Bet tickets – launch directly from Market Selection, Guardian or Watch List to quickly place a single bet (or green-up) without opening the full market

<u>Unmatched Bets window</u> – spawn extra windows to help manage your bets – can sync to the market under the mouse if required

<u>Drag and Drop</u> support to reuse Ladder/One-click/Quick Bet screens already placed on the screen or to switch the main screen's market.

Extra options for the <u>Event Filtering Picklist</u> in the Watch List – makes it more context sensitive, allowing the list to dynamically filter as the mouse moves. E.g. showing related markets to the selected soccer match.

A new <u>Tennis Completed Set Score Condition</u> for Automation

A new Automation rule type to Checkpoint VWAP

Additional Keyboard Shortcuts

An update to the Soccer Mystic model to handle the recent liquidity shift in betfair's goals markets

A few small changes based on customer requests

Quick Bet tickets

The concept of a Quick Bet ticket is that it's a small window that's quick to launch that contains the essentials for placing and managing a single bet on any market/selection. Once placed, the bet will be tracked and if it is unmatched, the bet can be adjusted from the same window. When launched from a screen containing a price (e.g. Watch List or Guardian odds pane), the price of the bet and the back/lay type will be pre-filled in the ticket.

Note: Global settings & Servants do not apply to a Quick Bet ticket, but you can spawn the market in full via the toolbar if required.

Some options to configure the Quick Bet ticket have been added to the Behaviour tab of Bet Angel Settings

Unmatched Bets window

The unmatched bets window from the main screen has been replicated in a <u>spawned unmatched bets</u> window so that you can manage bets in any market without switching the main screen. You can launch this tool from: the Watch List, the Market Selection trees, Guardian's market list, Quick Bet tickets and via a new keystroke.

Drag and Drop

For many years Guardian has been able to accept markets dragged on to it from market selection, but we've now significantly increased the support for Drag & Drop. Pick any market from a market selection tree, from Guardian's market list or from a Watch List and drop them on any of the trading screens to switch to that market. In the case of spawned tools such as ladder, one-click or quick bet windows, then dropping on a market will reuse that screen with the new market – much easier than having to close the window and respawn it. From Guardian's Odds pane or the Watch List, drag from the selection's name and drop it on to a ladder column to switch to the market and change the ladder to that specific selection.

If you drop a market onto the toolbar buttons for Tennis Trader, Soccer Mystic, Market Overview or In-play Trader, then that tool will be launched as part of the market switch.

If you don't wish to use Drag & Drop, it can be disabled via the Bet Angel Settings (Behaviour tab).

Watch Lists' Event Filtering Picklist

The <u>filtering picklist</u> at the top of the Watch List now contains the following options:

Show only the event selected in Guardian
Show only the event that is on the main trading screen
Show only the event under the mouse cursor
Show only the market selected in Guardian
Show only the market that is on the main trading screen

Show only the market under the mouse cursor

We envisage that these will be used to have a dynamic Watch List alongside your normal trading (or alongside

Automation Rules Editor changes

The new 'Tennis Completed Set Score' Automation Condition has been added to allow you to test how many games one of the completed sets has been won or lost by.

Following customer requests, a new <u>Automation Rule</u> Type to 'Checkpoint VWAP' has been added – when triggered all VWAP calculations will be reset and will be re-calculated using new volume at prices from this point onwards.

Keyboard Shortcuts

other Watch Lists).

Up / Down arrows have now been added to the <u>keyboard shortcuts editor</u>, not only for the cosmetic reason of keeping your shortcuts organised, but also to control the order of processing when multiple actions have been assigned to the same keystroke. In that situation, they are processed from the top of the list downwards.

The following new keyboard shortcuts have all been added to the keyboard shortcuts editor:

Select All' and 'Press Add' on the 'Select' & 'Search' pages of Guardian. When combined its now possible to assign a key to search, select and add all found markets to Guardian with a single keypress. Display a new Quick Bet ticket

Display a new Unmatched Bets window

Other Enhancements

Betfair charts & Advanced charts now remember which screen launched them, so when syncing by 'Market' or 'Ladder x', the chart will correctly switch markets when the launch screen is given a new market. i.e. These windows have always synced properly with the main trading screen, but now a chart can be linked to a spawned one-click/ladder and update with whatever market is assigned to them. Particularly useful with the drag & drop screen reuse changes.

A 'Starting Price' option has been added to the Guardian Automation Favouritism Sort (in the <u>Automation</u> area of Bet Angel Settings)

VWAP has been added as a Preset Additional Information item for the <u>Ladder</u> & <u>One-click</u> custom columns. Selections First name has also been added to these sections.

V1.53.1 Overview

Automation

Enhancement to Automation Stored values:

Ability to set a stored value with information about the latest Matched Bet on a selection or the whole market Information available is: Matched Price, Matched Amount, Bet Reference

Added a 'Not Equal' comparison option to the Stored Value condition

Automation's Favouritism sort (defined in Bet Angel Settings) can now sort by descending volume

New <u>Automation Rule</u> Types and <u>Parameters</u> have been added to Take SP or Keep Unmatched bets based on their price rather than applying to all unmatched bets

Up/Down arrows have been added to the rules editor's Automation Conditions list

Conditions and Stored Values lists will increase in width as the editor is make wider, to make descriptions more readable without need to scroll

The width of the columns of the grid at top of rules editor can now be resized

Keyboard Short Cuts

New <u>Keyboard Shortcuts</u> to allow the order of the Ladder selections to be reordered by Betfair row index and switch on/off the display of virtual bets

Market Overview (added new menu items)

Market Overview chart can now sync the market being displayed with the main trading screen (as previous versions), plus tracking the market under the mouse cursor, and syncing with the selected market in Guardian.

Option to layout the screen into tab pages rather than an arrangement of panes

Option to auto-select the selections to be displayed on the <u>chart</u> by price or by quantity (e.g. only show runners from 1.01 to 20.0, or only show first five shortest priced runners)

v1.54 Overview

Bet Angel Professional v1.54 contains the following new features and updates

Ladder

Configurable <u>Auto-centring</u> with centre point adjustment. When centring, you can choose to centre on the Back price, the Lay price or the Last Traded Price. You can also adjust that centre point up or down a defined number of ticks. Those options apply to both auto-centring and manual centring using a shortcut key.

Auto-centring can be switched off, be always on, or be applied only pre-off or only in-play. It can be triggered either by a price moving outside of the visible ladder or at a regular time interval. Note: To prevent the risk of a mispriced bet, a ladder will not auto centre whilst the mouse cursor is hovering over it.

- # More control over <u>price colours</u> with available money and <u>column background colours</u>. The Back & Lay column background options apply to the columns on the ladder that show money available to back or lay. The options will allow the best three prices to be distinguished from the rest of the prices and from prices with no money on offer.
- # Ability to 'swap' runners between ladders to prevent duplication

Automation

Conditions can now be wrapped in groups. <u>Groups</u> can be nested if required, every group must have a start and an end. A group is started or ended using the special condition types at the top of the picklist. Each group can be configured to control how the conditions are tested (whether they ALL need to be true or just one of them etc). This effectively adds AND/OR/NAND/NOR logic to Automation Conditions.

As in previous versions, any conditions not contained in a group must all test 'True' for the rule to trigger.

- # Close Trade and Green All conditions can reference a Stored Value
- # New 'Stop this Servant' rule type. Allows a Servant to stop itself once certain Automation Conditions are met.
- # <u>Stored Values</u> can now store and compare the Profit & Loss value displayed against a selection. Stored Value comparisons now also support <= and >=

Excel

- # Added the ability to send Stored Values to Excel (defined in the 'Additional columns' section of Settings->Excel)
- # New commands to assign/clear an Automation Rules file to/from a market via Excel
- # New commands to set/clear named Automation Shared Stored Values from inside Excel
- # New commands to assign/clear Guardian's Nominated Selections from Excel

The following new 'advanced commands can now be added to the Instruction Field

New global commands (cell L6)

To assign an Automation rules file: SET AUTO <automation rule name>

To clear it: CLEAR AUTO

To assign a stored value: SET_SV FOR:<MARKET|EVENT> NAME:<name> VALUE:<value>

To clear a stored value: CLEAR SV FOR:<MARKET|EVENT> NAME:<name>

New selection commands (cells L9, L11, L13 etc)

To set this selection as the first Nominated selection in Guardian: SET NOMINATED1

To clear it: CLEAR NOMINATED1

To set this selection as the second Nominated selection in Guardian: SET NOMINATED2

To clear it: CLEAR NOMINATED2

To assign a stored value: SET SV FOR: < SELECTION|MARKET|EVENT> NAME: <name> VALUE: <value>

To clear a stored value: CLEAR_SV FOR:< SELECTION|MARKET|EVENT> NAME:<name>

Both Global and Selection commands will be processed when the Status cell in column O for the selection is clear and will show OK / ERROR when processing is complete.

Notes when setting & clearing stored values

The FOR command is optional and defaults to MARKET when used as a global command and SELECTION when used as a selection command. The commands can be chained together to set multiple values in one go, for example;

SET_SV FOR:SELECTION NAME:Test1 VALUE:42 NAME:Test2 Value:99 NAME:Test3 Value:200 or CLEAR_SV FOR:SELECTION NAME:Test1 NAME:Test2 NAME:Test3

v1.55 Overview

Bet Angel Professional v1.55 contains the following new features and updates

Automation

- The concept of **Historical Stored Values** has been added to Automation. Each market and each selection can now maintain up to ten '<u>History Lists</u>' that can be used to store values over time. You can think of them in terms of a price history that stores your own values.
 - Those values can then be extracted for use in other Automation rules (by looking up the what the value was in the history a certain number of seconds ago)
 - They can be displayed in <u>Custom Columns</u> on the one-click screen or in the <u>Additional Information</u> area of the ladder.
 - They can also be plotted on an <u>Advanced Chart</u>. E.g. You could store and plot VWAP on a chart, or store a value to act as an indicator on the chart.
 - On the <u>Stored Values tab</u>, use the actions 'Store a value in a history list' and 'Clear the current value in a history list' to modify the contents of a history list
- New options have been added to the General tab:
 - A rule can now apply to **EVERY** selection in the market.
 - A rule can be configured to trigger an unlimited number of times
 - A rule can be configured to rearm on every refresh
 - Note: These three features are particularly useful when populating the <u>Historical Stored Values</u>.
- A new Rule Type to 'Cancel Unmatched Bets On All Other Selections (Price Dependent)' has been added. i.e. Cancel bets on all the other selections in the market other than the one that the rule is applying to.
- A new Rule Type has been added to 'Export All Stored Values' to a CSV file. When this rule is used there is a new 'Parameters' tab to configure the options you wish to export, these include only Shared SVs / only non-Shared / with or without the latest value in each History List.
- A new 'Stored Value Changed condition' has been added to compare when the value held by a Stored Value was last changed
- A new '<u>Text Comparison condition</u>' has been added to compare text in the market name against a list of entered text. This can be used with condition grouping to construct more complex AND/OR/NOR text matching conditions
- A new 'Current Selection Condition' has been added to compare if the current selection 'Is' or 'Is Not' the one specified in the rule condition. The condition is particularly useful when applied to a rule using the new 'EVERY' selection choice

- The following two options have been added to the <u>Stored Value</u> page list and the <u>Stored Value condition</u> tab
 - The ability to Store the Value of 'Last Traded Price Book % of a selection'
 - The ability to store the 'Number of Selections in the market'
- Extra <u>parameters</u> are available for 'Close Trade on a selection (with or without greening)' to allow closing at a specific price rather than just current & reverse prices.
- A <u>Stored Value</u> can now be set with the following values: Close Trade Profit at a price, Close Trade Profit with greening at a price, the market's Green All Profit (current market price), the market's Green All Profit (reverse market price). These values are also available in the <u>Stored Value condition</u>.
- The <u>Historic Relative Odds condition</u> has been upgraded to also allow comparison of a selection's volume in addition to its prices. Comparison options have also been enhanced and adjustments now include multiply/divide and adjustment by fixed amount & percentage.
- 'Projected SP' has been added as an option to the <u>Place At</u> parameter for appropriate rules such as when placing Back & Lay bets
- A new <u>Staking</u> option 'By liability using Stored Value Stake' has been added. This uses the same calculation as 'By Liability' but the stake used for the calculation is provided by a Stored Value rather than defined in the rule itself.

Ladder

- A new <u>Markers</u> feature has been added to the Ladder Settings that allow coloured markers to be placed on chosen ladder columns, either at a fixed price or at a price determined by a shared Stored Value. Markers can be in the form of horizontal or vertical bars, cell borders or a whole cell highlight.
- What-if profit and Current profit values can now be shown in the Additional Information area
- The traded amount displayed in the traded volume column can now be modified to display the amount as a percentage of selection's volume, or as a percentage of market's volume. The setting is found on the General page of the Ladder Settings.

One-click Custom columns

- The Custom Column button used to start a Servant can now display the value from a shared stored value
- Extra bet cancellation options have been added you can now cancel back and/or lay bets on the other selections in the market rather than just on the selection itself

General

• Bet Angel Settings ('Excel' tab) – new option to 'Note processed commands in the market's Log'. *Useful for keeping track of Stored Values set by Excel*

- <u>Advanced Chart Settings</u> new buttons have been added to import/export a chart setting from/to a file. Useful when sharing chart settings with the forum or between your own PCs.
- New <u>Keyboard shortcuts</u> 'Close the One-click window under the mouse' in the One-click category & 'Close the ladder window under the mouse' in the Ladder category
- The <u>Log</u> tabs on the Bet Angel main screen and in Guardian now have the concept of paging. You can also now choose the number of lines displayed on each page. This gives a performance improvement when writing a lot of information to the log and makes navigating through the log easier when it is being updated in the background. This new implementation also uses disk paging to use less memory.
- Chart price histories are now paged to disk so that Bet Angel uses less memory and can display advanced charts history spanning two days (when using longer time intervals) assuming Guardian has been refreshing the market for those two days.
 - This feature also allows the Historical Stored Values to span the same timeframe as the charts.
 - The <u>Chart</u> page of Bet Angel Settings has a picklist to control the usage of disk paging. The setting defaults to 'Full' which will page all types of chart histories to the disk to conserve as much memory as possible.
- Added support for the extra currencies that Betfair recently added

Other Changes

In addition to everything above we have also enhanced the internal memory management of Bet Angel to page certain data to disk. This has allowed us to increase the amount of chart history available, improve the overall performance of logging and create the new type of Stored Value for Automation detailed above.

Release Note Text

Ladder Settings Area

8) Automation - added the concept of Historical Stored Values. History Lists (1 to 10) can be used to store values over time.

The value can later be extracted a defined number of seconds or minutes ago for use elsewhere.

On the Stored Values tab, use the actions 'Store a value in a history list' and 'Clear the current value in a history list' to modify the contents of a history list

e.g. For display in an Advanced Chart, or on the one-click screen (custom column), or on the ladder (Additional Information or Marker features)

You can also use the Stored Value condition to test a value against one held in the history.

11) Chart price histories are now cached to disk so that Bet Angel uses less memory and can display advanced charts history spanning two days (when using longer time intervals) - assuming Guardian has been refresh the market for those two days

(the feature also allows the Historical Stored Values to span the same timeframe as the charts)

- 14) Automation New Rule Type to 'Export All Stored Values' with options to export: only Shared SVs / only non-Shared / with or without the latest value in each History List etc. Exported as a CSV file with each export placed on a new row in the file. Output order is in sections: Event SVs, then Market, then each Selection. For each section the SV are output as Name, Value pairs and the count of how many pairs are in the section is output after the section type. In each section, the SVs are output in alphabetical order of their name. Note: If it is required to keep the values aligned in the same column from start to finish of a series of Exports, then all SVs should be initialised with a value before the first Export.
- 15) Advanced Chart Settings new buttons added to import/export a chart setting from/to a file.
- 16) Added the concept of paging to the Log pages on the Bet Angel main screen and to Guardian. The gives a performance improvement when writing a lot of information to the log (e.g. when logging during Automation)
- 17) New combo added to Charts page of Bet Angel Settings to control the usage of disk paging. Defaults to 'Full' which will page all types of chart histories to the disk to coserve as much memory as possible. 'Partial' will store data for candle charts, but not tick charts. When using 'None', if memory runs low the amount of price history stored in memory will be truncated (the same as previous versions of Bet Angel), but that change is now not permanent for the session and will be reset if the user chooses Partial/Full paging again.
- 18) Automation Editor bug fix price parameter when using close trade rules. Current Best price now chosen by default

new rule to 'Cancel Unmatched Bets On All Other Selections (Price Dependent)'. Note: on the parameters page, best price, best reverse price etc relates to the chosen selection of the rule and not the 'other' selection being cancelled. I would assume the rule will mostly be used with a fixed price, such as 'cancel all other unmatched Back bets >= 1.01'

(forum request) new Staking option 'By liability using Stored Value Stake', where the normal By Liability calculation is used, but the stake it is based upon is held in an SV

v1.56 Overview

Bet Angel Professional v1.56 contains the following new features and updates

Guardian

- A new '<u>List</u>' tab page can be found in Guardian's ribbon and its contents are used to configure the Markets List display.
- New columns can be added to the Markets List using the column chooser (similar method to the One-Click screen)
- The Markets List now supports up to 5 Automation Rules and 5 Nominated Selections per market
 - Note: Keyboard shortcuts have been updated to support each of the five Automation columns in Guardian (assigning and clearing rules from column)
- <u>Custom columns</u> can be added to the Markets List to display information about the Market, a chosen Selection, a Stored Value or Historical Stored Value
 - e.g. Number of selections in the market, current in-play betting delay, book%, name and price of the favourite in the market, Market Name (last word), Race Distance, Jockey claim, Runner's Age, Runner's Weight, Runner's Wearing, Runner's Day since last run, Runner's Dam name, Runner's Sire name
 - As with the One-Click screen, custom columns are defined as a named profile. The custom columns profile can be changed using the picklist at the top of Guardian
- Other columns that can be added to the list are:
 - 'Alert' columns (1 to 5) which work in the same way as the Watch List alerts (set by Automation)
 - Watch List Alert columns (1st & 2nd header rows) to show the same alert in Guardian as shown on the Watch List
 - Green All Selections Predicted Profit
 - Highest / Lowest profit values in market (and 'if Lose' columns for Place markets)
- New options allow the assigned Automation Rules and Nominated Selections to be <u>saved</u> when using the Save Markets button
- Custom column profiles and Markets List layout profiles can be <u>imported/exported</u> for easy sharing between PCs and/or the forum
- Extra right-mouse click menu options have been added to the Markets List to help with clearing Automation rules, Nominated selections, and Alerts
- The 'Search' group adds the ability to search for a piece of entered text in the Markets List.
 - The row is selected when a match is found and the Next/Previous buttons can be used to search again
- New Right-mouse menu option to 'Export the contents of the markets list' to a CSV file
- New free format Notes column in Guardian's Markets list which will be saved when 'Save Markets' is used

Automation

- Custom Ranking adds the ability to rank selections based on your own weighting/score (using Stored Values)
 - New 'Update Custom Ranking Of Selections' <u>rule type</u> with parameters to assign one of five custom rankings per market.
 - Each time the rule is triggered, the ranking will be updated based on your selected options
 - Options to Rank selections by the Back price, Lay Price, LTP, SP, or Volume or based on the value of a <u>Stored Value</u> or <u>Historical Stored Value</u> (at chosen point in time).
 - Ascending or Descending order.

- All <u>conditions</u> that allow a specific selection to be chosen (by name, by position etc) have been updated so that a new 'by rank' option is available.
 - When choosing by rank, you specify the Custom Ranking (1-5) that you have previously updated and enter the actual rank position that you require.
- When setting a <u>Stored Value</u> there is a new option to use 'A selection's rank in a Custom Ranking' if you want to copy the rank at that time to a Stored Value or a Historical Stored Value
- The ability to compare ranks has also been added to the Stored Value condition.
- The new action on the Stored Values page '<u>Store a value calculated from a range of values</u>', has four calculation options:
 - the Sum of a set of values
 - the Maximum of a set of values
 - the Minimum of a set of values
 - the Average of a set of values
 - The 'set of values' can be:
 - named Stored Values: different names but all on the same selection
 - range of values in a History List : time based range from a history list sampling the data at a defined rate
 - named Stored Value (across all selections): builds the set by looking for the same named value stored against each selection in the market.
 - value from a History List (across all selections): builds the set by looking for a value at a specific point in time in a history list stored against each selection in the market.
- New 'Stored Value Set' condition allows you to test if a Stored Value has been set with a value (or not)
- useful for deciding whether to initialise a Stored Value.
- <u>Stored Values</u> can now be set with 'Selection Id' and 'Betting Delay' values, 'Unmatched Bet information of a selection' lookup either number of bets or total value (back only/lay only/any bet) (at any price or above/below a specified price), 'The number of seconds until the Event Start Time' effectively the countdown timer used elsewhere in Bet Angel. Value is stored as 'seconds.milliseconds', 'The In-play Time in seconds' The amount of time since Bet Angel was notified that the market turned in-play. Value is stored as 'seconds.milliseconds'
- 'Notes' page has been added to the Automation Editor so that notes can be made and saved with each rule in the rules file
- New rule type '<u>Set Stored Values using a file</u>' reads a chosen CSV file and assigns values to Stored Values as required (either shared or local to that automation instance) to selections/markets/events
 - The rule matches [market name/time/selection name/selection row] against the market running the Automation rule type to determine which Stored Values to set
 - An example CSV file can be found in the templates folder of Bet Angel
 - Changes to the <u>Parameter</u> tab for the 'Alert' rule type to allow Alerts to be sent to Guardian's Markets List
 - the 'Format' picklist replaces the 'timestamp' checkbox and offers more choices
 - Guardian Alert columns have been added to 'Location' picklist that previously only contained Watch List alerts

Ladder

- The <u>Reorder</u> Selections button can now be configured to sort by Price, Volume, Row index, Saddle cloth or Stall number
- <u>Markers</u> extension to the Horizontal Bar / Vertical Bar markers to allow just a single bar to be drawn on left / right / top / bottom of the ladder cell

• More 'Additional Info' choices: In-Play Delay, Jockey claim, Runner's Age, Runner's Weight, Runner's Wearing, Runner's Day since last run, Runner's Dam name, Runner's Sire name

Excel

- TAKE_SP, TAKE_SP_ALL, KEEP, KEEP_ALL now supported as a commands for individual selections
 - for TAKE_SP_ALL / KEEP_ALL only the unmatched bets on that selection will be marked Take SP / Keep
 - for TAKE_SP / KEEP only the bet matching the reference in column R will be marked Take SP / Keep
- <u>Commands</u> enhanced to support the extra Nominated Selections e.g. SET_NOMINATED3 / SET_NOMINATED4 / SET_NOMINATED5 / CLEAR_NOMINATED3 / CLEAR_NOMINATED4 / CLEAR_NOMINATED5
- <u>Commands</u> enhanced to support the extra Automation columns e.g. SET_AUTO2 rulefile / SET_AUTO3 rulefile / CLEAR AUTO2 / CLEAR AUTO3 etc
- More 'Additional Info' choices in settings area: Jockey claim, Runner's Form, Runner's Age, Runner's Weight, Runner's Wearing, Runner's Day since last run, Runner's Dam name, Runner's Sire name, Inplay Delay

One-click Screen

- New toolbar buttons to Import/Export grid layout profiles from the one-click screen
- Import/Export buttons added to the Custom Columns editor
- More 'Additional Info' choices for custom columns: In-Play Delay, Jockey claim, Runner's Age, Runner's Weight, Runner's Wearing, Runner's Day since last run, Runner's Dam name, Runner's Sire name
- <u>Custom columns</u> editor now has the ability to allow the editing of a Shared Stored Value on the one-click screen. Useful when testing an automation file to seed a specific value into a SV, or to manually push values into a column to force a particular sort order

Matched Bet Screen

• 'SP Bet' column added to the <u>Matched Bets</u> tab to indicate if the bet was matched at the Starting Price. Column widths of the matched bets lists are now saved in the layout profile.

Keyboard shortcuts

- In the <u>keyboard shortcut editor</u> the 'Market Navigation' has new shortcuts to change the market in the current trading screen:
 - Select the next/previous market from Guardian or a Watch List
 - Select the next/previous event from Guardian or a Watch List
 - Note: With the options available, you can configure the shortcut to prevent a change of market type when navigating. So if you had a number of soccer matches loaded into Guardian (with Match Odds and Over/Under markets) and were currently showing Over/Under 2.5 on a ladder, you could use a shortcut to navigate to the next match's Over/Under 2.5 market skipping the other market types in between.

v1.57 Overview

Bet Angel Professional v1.57 contains the following new features and updates

Automation

- 'Store a value as 'text' has been added to the Stored Values tab.
 - Values can be entered text, formatted from existing numeric Stored Values, or sourced from various known text about the market/event/selection (e.g. jockey name). Any combination of up to 3 of these can be concatenated into one value and prefix/suffix text can also be added.
 - Various formatting, rounding, extraction, truncation options are available.
 - A Text SV can be tagged with a numeric value that, when present, will be used by the One-click screen when sorting the column. It will also be used to control the display colour when used in conjunction with <u>Value Based Colouring</u>.
- The Automation Editor now supports right-click copy & paste for Stored Values and Conditions
- The <u>Text Comparison</u> condition has been enhanced to allow comparison against a Selection Name and Text held in a Stored Value, 'Starts With' and 'Exact Match' options have also been added
- The <u>Fill or Kill Bet Time</u> condition has been enhanced to allow the time parameter to be specified as a Stored Value
- 'The <u>Set Stored Values using a file</u>' now supports the setting of a Text SV (put the value in quotes to denote that the value is text rather than a number)
 - Also Market Id & Selection Id can be used instead of Market Name and Selection Name in the file. See example CSV in the templates folder
- Set <u>Stored Value</u> and <u>Stored Value condition</u> has new options for getting 'Matched Bet information of a selection' and 'Matched Bet information of the market':
 - - 'The average price' of all your matched bets / all your matched Back bets / all your matched Lay bets
 - - 'The total amount' of all your matched bets / all your matched Back bets / all your matched Lay bets
 - - 'The total liability (for the layer)' of all your matched bets / all your matched Back bets / all your matched Lay bets
- The Alert rule type has new <u>Parameters</u> to allow the contents of a Stored Value (either numeric or text) to be displayed as an Alert in the log/in a message/in Guardian/on a Watch List
- New <u>Rule Types</u> to 'Place a Back SP Bet' and 'Place a Lay SP Bet' with support for price limits on the <u>Parameters</u> page. Note: SP bets are considered by betfair to be matched as soon as they are placed and cannot be cancelled, so you should be familiar with their behaviour on the web site before using them.

Value Based Colouring

- <u>Custom Columns</u> and Ladder <u>Additional Info</u> items now allow both text and background colours to be specified (previously just one colour was allowed) and both colours have the option to select a <u>Value Based Colour</u> profile.
 - A few example colour profiles have been provided, but the concept is that you define your own named profile with the editor provided.
 - Up to ten different colours can be assigned per profile with different value thresholds.
 - Colour gradients are also supported so you could gradually intensify the colour as the price changes.
 - e.g. Outsiders could be grey, and then runners could be coloured from yellow through orange and red as they become stronger favourites.
 - As you can define your own thresholds, you can assign values appropriate to your own Stored Value based weightings or percentages

Excel

- Added support for the new Text Stored Values
 - when using the command to assign a value just provide the value in quotes and it'll store the value as text rather than a number

- New commands to place betfair SP bets: BACK SP / LAY SP / BACK SP LIMIT / LAY SP LIMIT
 - Note: the odds cell is only applicable to the _LIMIT commands and is used to specify the minimum/maximum price for Back/Lay respectively

Watch List

- Watch Lists now support custom columns for information display configured via <u>Coupon editor</u> and offer similar options to the custom columns in Guardian
 - Each of the two Header cells in a column, and the block of Selection cells, can be defined separately and used to display different information
 - The order and width of the columns is configurable and can be placed on either side of the inbuilt Alerts column.
 - When using multiple panels in the coupon, the choice of which of the defined custom columns to display can be made on a panel by panel basis.

In-play Trader

- New option to Reverse the x-Axis scale and also support reverse mouse clicks e.g. 'Left-click Lay, Right-click Back'
- New sort options to Sort by Stall Draw & Sort by Saddle Cloth Number

Other changes

- The browser embedded into Bet Angel will now use Microsoft Edge if the Edge runtime is detected on the PC and the PC is running at least .NET 4.7.1
 - Note: Bet Angel as a whole requires at least .NET 4.6.2
- Keyboard Shortcut editor Added new options to sort ladders by Custom Rankings
- One-click <u>Custom Columns</u> when allowing a Stored Value to be edited, now given the choice of 'Edit as a number' or 'Edit as text'

v1.58 Overview

Bet Angel Professional v1.58 contains the following new features and updates

Total Performance Data (TPD)

Bet Angel can now use Total Performance Data as a source of Live GPS for horse racing*

Overview

- # A new <u>Total Performance Data</u> page has been added to the Bet Angel Settings area to show the current state of your TPD connection (and allows entry of your TPD subscription Key)
- # Total Performance Data information for the market/selection is available in Automation Stored Values for use throughout Bet Angel
- # The Total Performance Data condition will allow Automation to test if TPD is supported at race course, if stride and speed par data is available in a race and if the live race information itself has recently been updated.
- # Bet Angel can be configured to auto-connect a race to TPD a certain number of seconds before the race, but there are also options to connect manually via the settings editor itself, via a new keyboard shortcut added to the Keyboard Short Cut Editor, and via a new Automation rule type (which could be triggered by a Servant if required).

New Features

Automation

- # New 'Race Distance' options have been added to <u>Stored Values</u>, (these are derived from betfair's market name) and can be set in furlongs or metres
- # New 'Total Performance Data' options for the market and selections have also been added to <u>Stored Values</u> and the <u>Stored Value Condition</u>
- # A new 'Total Performance Data' Condition has been added to the conditions area
- # A new Rule Type to 'Connect to Total Performance Data' has been added to the rules editor in Advanced Automation

Race Progress Meter

A new Race Progress Meter can be shown above the One-click, Manual bet, Ladder, and In-play Trader screens, a Race Meter settings page has been added to the Bet Angel Settings area to configure the race meter.

There are three options available when populating the meter:

- 1. Progress of the leading horse using the TPD GPS data
- 2. Time the race has been in-play compared to an expected race duration that you provide as a Shared Stored Value
 - 3. Time the race has been in-play compared to Bet Angel's estimate of the total race duration

^{*}For more information on how Total Performance Data has been integrated with Bet Angel and the ways it can help with your in-running trading please see this <u>blog</u>

v1.59 Overview

Bet Angel Professional v1.59 contains the following new features and updates

In-Play Trader

- # In-play Trader now supports Markers where you can overlay extra custom indicators on to the selection's row.
 - # Markers can be placed on the x-axis by price or percentage (either entered directly or via Stored Value)
- # Marker styles can be bars, lines, circles, squares, or jockey silks. Sizes, colours and relative position to the centre line can be adjusted as required.
- # As with other screens, customisation will be saved to a named profile and the new <u>in-play trader profile editor</u> can be accessed via the Settings menu or by right clicking on the toolbar.
- # As well as defining markers, the profile also provides <u>override options</u> for the standard toolbar items. So you can quickly switch from one in-play style to another
 - # Note: Some toolbar items have been moved into the Settings menu to save space.
- # Options to sort selections using Custom Rankings 1-5 passed from a rules file and to 'skip price gaps' when using custom ticks to set the betting price for a mouse click have have been added

Sound Alerts (via Bet Angel Settings)

- # New sound alerts for partial matching and complete matching of a bet
- # In-play / Suspended / Countdown / Bet Matched alerts now have options to monitor all trading screens and Guardian markets if you want to extend the alerts beyond the main trading screen

Market Overview Chart

- # New settings to support the plotting of a chosen History List rather than just the back / lay price
- # By using Automation to populate a History List you can now use the overview chart to give a view of your own custom indicator across the whole field.
- # Various new menu item options have been added to support the display of History Lists and to define a fixed y-axis scale if required.

Total Performance Data

- # TPD Information category has been added to the One-click <u>custom columns</u> and the Ladder's <u>Additional</u> Information area
- # Allows some of the standard TPD information to be displayed on those screens without having to use Stored Values. Stored Values should still be used if you wish to calculate averages or derive your own complex indicators from TPD values
- # The TPD ratings Velocity Fluctuation, Velocity Error & Cadence Error have been added to the Stored Value list.
- # In each case the ratings are relative to the field as a whole and the lower the value the better for a runner. TPD recommend that the values should be used in the early and middle stages of the race (perhaps to lay a runner that has high ratings) rather than during the final sprint to the finish. Velocity Fluctuation measures the consistency of the velocity of the horse. Velocity Error (also known as 'Off Par') measures how well a horse a running to the par of the course. Cadence Error measures the regularity of the horse's rhythm.

Win Status

- # The Win Status of a selection will be set by betfair as the market is closed and this can now be displayed on a one-click <u>Custom Column</u>, in the Ladder's <u>Additional Info</u> area, on the <u>Guardian markets list</u> & in a <u>Coupon</u> (both as custom columns). It can also be sent to <u>Excel</u> and used in Automation.
- # The Win Status will also be appended to the Profit and Loss Report generated by Guardian on Market Closure

Automation

- # New 'Bet Angel' level of Stored Values the named Stored Value will be shared across every market used in this instance of Bet Angel
- # 'Stored Value' & 'Stored Value Condition' pages of the Automation Rules Editor: a 'Price of a selection' subcategory has been created to tidy-up the picklist and allow 2nd & 3rd best prices to be offered as price options
- # 'A selection's Win Status' and 'The market type' have been added as value types for the Store a value as text page.
- # Two new conditions in the Automation Rules Editor;
- # 'Market Type' used to test the type of market running the rules (WIN, MATCH_ODDS, OVER_UNDER_xx etc)
 - # 'Market Status' used to test if the market is open, suspended or closed. **Note the new tick box below!**
- # A new tick box has been added to the <u>General</u> page of the Automation Rules Editor: 'Allow trigger when market suspended' normally automation rules do not trigger when the market is suspended or when the market is closed (settled), but now that you can use the Win Status of a selection with Stored values and have the Market Status condition, this is a necessary addition.
- # The 'Switch to This Market' <u>rule type</u> has been renamed as 'Display a Market on a Trading screen' with many new <u>Parameters</u> to display market (or another market type from the same Event from Guardian) in a specific window. Also includes options to start a Servant on the new window, move the mouse cursor into the window and trigger a keyboard shortcut at that location.

Ladder

- # A new setting 'Bet Placement In-play Delay Countdown' on the <u>Unmatched Bets</u> page of Ladder Settings allows the placing bet countdown to be shown directly on the ladder when an in-play delay is active
- # A new 'Mouse cursor mode for bet placement' picklist has been added to the General page of Ladder Settings it optionally allows the mouse to change price cells between down & up clicks during bet placement
- # 'Suspended Indicator' and 'Jockey Silk' have now been added to the preset items in the Ladder's <u>Additional</u> <u>Information</u> area settings.

Note: Although 'suspended is displayed as text, the item has a value of 1 when suspended so that Value Based Colouring can be used

Other Changes

- # Saddle cloth colours added as silks for Greyhounds and US Racing
- # Support for coupled saddle cloth numbers in US Racing (1A, 2B etc), also works with TPD so that each runner is paired with the correct race data
- # GBP minimum currency limit reduced to £1, so that the multi-step bet placement process won't need to occur for stakes between £1 & £2
- # Suspended indicator on One-click & Ladder screens now show 'Closed' text when the market is closed and settled
- # Additional optimisations applied to Guardian to reduce CPU usage when holding hundreds of markets
- # In the <u>Guardian Markets List</u> custom columns and the <u>Coupon</u> custom columns editors, the sort to be used when choosing a selection 'by position' is now an option. This means the display isn't forced to be using the same sort as used by Automation
- # Spawned One-click and Ladder screens are now numbered in the title bar to help keep track of which window is which
- # The colour of the Bet Placement indicator can be changed on the Display settings page

v1.60 Overview

Bet Angel Professional v1.60 contains the following new features and updates

Total Performance Data

- # Map of race course with real time tracking of runners configurable via <u>Total Performance Data</u> settings page.
 - · Requires subscription to Total Performance Data
 - The map is configured via the Total Performance Data settings page and can be shown in a floating window or embedded into In-play Trader
 - The number of runners shown can be filtered by their position in the race or by their market price
 - The saddle cloth number of each runner is shown on the map and its colour can be customised to match the Market Overview screen, the standard US colours, or use a custom Value Based Colour scheme (based on saddle cloth number or a named Stored Value). e.g. Using a stored value you could dynamically change the colour of the runner on the map based on its speed.

The runners on the map can be used as a Selection Context for a Servant, so you could hover over a runner and start a Servant with a keystroke to place a bet on it

- # Race par charts configurable via <u>Total Performance Data</u> settings page.
 - Requires subscription to Total Performance Data
 - The chart is configured via the Total Performance Data settings page and can be shown in a floating window, embedded into In-play Trader, or positioned next to the Map
 - Like the Map, the colours of a runner can be customised. In a similar way to the Market Overview, a runner's chart line will be highlighted when the mouse tracks over it, and its name will be displayed.
 - Other configuration options are available to choose which of the race's predicted speed lines will be displayed and how they should appear.

Bet Angel API

- # Activate the API on a specific port via the Bet Angel API Settings page.
- # An example HTML / JavaScript test page is linked from the settings page that will show the endpoints and JSON data format used by the API, for all Bet Angel API references please see this dedicated section of the <u>user guide</u> documentation
- # The API works in a similar way to the Betfair API, in that you POST JSON messages to an endpoint and Bet Angel will respond with a JSON message containing the requested data, a status and/or a list of errors.
- # In time the capabilities of the API will be further expanded but for now it can currently do the following;
 - Get details of Markets currently loaded into Bet Angel (without or without selection names)
 - · Add markets to Guardian by market id
 - Add markets to Guardian using a predefined Coupon
 - Remove all or specific market ids from Guardian
 - Apply a Rules file to all/specific markets in Guardian (choosing a Rules column 1-5)
 - Remove a Rules file from all/specific markets in Guardian (choosing a Rules column 1-5)
 - Get details of Automation Instances currently running (or already stopped) either Guardian and/or Servants
 - Get Stored Values at any of Bet Angel/Event/Market/Selection level, choosing Shared or Instance values (or both), and limited to specific SV names if you wish
 - Set Stored Values at any of those levels, text or numeric values, and even allows values to be pushed into a specific automation instance (Servant or Guardian) even if the values aren't Shared.
 - Clear Stored Values (supports the same criteria as the Get Stored Values operation)

Ladder

- # Each ladder can now display up to two <u>Bet Information Areas</u> their relative position can be set using the existing <u>Display Order</u> page.
- # These new Bet Information areas can be configured to show Matched and/or Unmatched bet information about the selection as well as font / sort order / bet alignment etc

Optimizations

- # Each year resources are allocated to improving Bet Angel's internal architecture, this time targeted the main trading screen
- # When using Exchange Streaming you'll now find a new option of 'Update' in the 'Refresh every' picklist, so rather than using a specific refresh rate you can now pick 'Update' and that will cause the screen to be updated as soon as new information arrives on the data stream from betfair. (NB, If you are on a less active market and no data arrives in 500ms then the market is refreshed anyway to keep charts and Servants ticking over). It will also save a few milliseconds over the 20ms rate on an active market and save some CPU load on a less active market.
- # By modifying the internal storage of Bet Angel then number of <u>History Lists</u> has now been doubled from 10 to 20 lists per selection.

Other Changes

- # <u>Tennis Trader</u> new check box to 'Reverse Server in feed' for a market which allows for manual correction of first to serve errors* in the data feed from the court side.
- # Automation 'Store a value calculated from a range of values' now has the ability to calculate the 2nd & 3rd highest values and the 2nd & 3rd lowest values

*Please be aware that the data feed provided from the court side (which we have no control over) may be corrected at anytime during the match, if they do you will need to untick this option so that the correct sever is still shown

v1.61 Overview

Bet Angel Professional v1.61 contains the following new features and updates

Bet Angel API

- # The Markets component now supports the retrieval of market prices and bet information from Bet Angel.
- # New Betting component has been created which provides methods for bet placement, modification, cancellation, trade closure and greening all selections.
- # Each method in the Betting component can be marked 'asynchronous' so that the call to the Bet Angel API returns immediately while Bet Angel makes a call to betfair in the background. Asynchronous calls return a 'pending result Id' which can be used later to check with the Betting component how the betting operation is progressing
- # Extra settings for Bet Angel API so that remote calls can be supported rather than just using localhost.

Please see this dedicated section of the <u>User Guide</u> documentation for more information relating to the Bet Angel API

Bet Angel Automation Editor

- # New checkbox on the General tab to 'Add market's betting delay' to trigger time to easily adapt to markets with variable in-play betting delays.
- # When using 'Export All Stored Values' there is now an option to 'Limit export to specific Stored Value Names'
 - # Also when exporting, there's a new Filename option to 'Append Date'
- # The 'Tennis Fixed Score' Automation condition now has a tie-break mode to allow it to be used to compare points scored during a tie-break.
- # Automation Stored Values (and Stored Value condition):
- # 'Unmatched Bet information of the market' has been added to offer similar functionality as 'Unmatched Bet information of the selection', but looking at the unmatched bets of ALL selections in the market.
- # 'Number of bets' has been added as an information type for both 'Matched Bet information of the market' and 'Matched Bet information of a selection'
 - # Davs Since Last Run of a selection has been added
 - # 'Predicted Goals for the Match' has been added
- # Options have been added to the Adjustment pick list which cause the value to be 'Converted from Price to Ticks' and 'Converted from Ticks to Price'
 - # Note: Ticks count up in ladder increments from 1.01

Other New Features

- # New keyboard shortcut option so that the Global Settings Profile can be changed with a shortcut
- # The values used by a <u>Watch List</u> when sorting the markets and/or the selections can now be taken from a specified Stored Value. This can be directly specified in the Watch List menu or via the Coupon editor
- # The second picklist on the <u>Coupon</u> page in the Guardian sidebar has new options to '(select in Guardian)' the markets that are added to Guardian using this feature.
- # Command line option added to Bet Angel to set login page to Live mode or Practice mode. e.g. 'BetAngel.exe / MODE:LIVE' or 'BetAngel.exe / MODE:PRACTICE'

Betdaq Version

The Betdaq version of the software has many, but not all, of the features discussed in this guide.

Features not included:

- Practice mode
- Bookmaking
- Soccer Mystic
- Tennis Trader
- Servants
- Enhanced Ladder Settings (ie, Markers, Additional Information, Display Ordering)
- Quick Bet Tickets
- Coupons
- Market Filter Editor

Bet Angel Basic

This starter edition of Bet Angel Professional features only the one-click screen. Refer to the one click section for usage instructions. Note that many features are only available in the full professional edition.

Terminology

Here are some explanations of the terminology used throughout the guide:

Event - A match or competition that will occur at some point in the future. The uncertainty of the outcome allows the betting exchange to offer betting markets for the event. e.g. A soccer match, a horse race, a tennis match. The event will have an advertised start time that Bet Angel can use calculate the countdown timer or schedule automation. Note: An event rarely starts exactly on time!

Market - A place where the users of the exchange can bet on the outcome of a particular aspect of the event. It contains a collection of selections which should cover every possible outcome (subject to the rules of the market). The price of each possible outcome being determined by the supply and demand of bets in the market. e.g. The winner of a horse race, the score in a football match at full-time, the winner of Wimbledon etc.

Selection - One of many possible outcomes of a market. Back bets placed on a winning selection in a market will be paid by the exchange from the money that was placed as Lay bets upon it. Likewise, Lay bets placed on a losing selection in a market will be paid by the exchange from the money that was placed as Back bets upon it. In a liquid market, a selection will have many back and lay bets on offer at various prices which are available for other exchange users to match their bets against.

Back Bet - A bet placed on a selection that will pay out if the selection is the winner (or one of the winners) of the market. The pay out will be the matched price of the bet multiplied by the stake less stake itself. If the selection is not a winner then the stake will be lost.

Lay Bet - A bet placed on a selection that will pay out if the selection is **not** the winner (or **not** one of the winners) of the market. The pay out will be the stake used when placing the bet. If the selection is a winner, then the lay bet has lost, and the loss (also known as the liability) from the bet will be the matched price of the bet multiplied by the stake less stake itself.

Matched Bet - A bet that has been placed into a market that has been successfully paired against one or more opposing bets in the market at a set price. A Back bet will be matched against one or more Lay bets on offer in the market. A Lay bet will be matched against one or more Back bets in the market.

Unmatched Bet - A bet that is currently on offer on a selection, in the market at a specific price, that is waiting for another exchange user to match against. If it does not get matched before the market is settled then it will have no impact on your Profit & Loss.

Partially Matched Bet - Some but not all of the amount staked when placing the bet has been matched. The bet reference will appear in both the Matched bets and Unmatched bets displays of Bet Angel.

Best Back Price -The highest odds of a bet currently on offer, for a specific selection in the market, that you can Back against.

Best Lay Price - The lowest odds of a bet currently on offer, for a specific selection in the market, that you can Lay against.

Current Price - If you are looking to place a back bet then the Current Price will be the Best Back Price for the selection. If you are looking to place a lay bet then the Current Price will be the Best Lay Price for the selection. In both cases you should be matched as soon as bet placement completes (assuming the price on offer doesn't change during placement).

Reverse Price - If you are looking to place a back bet then the Reverse Price will be the Best Lay Price for the selection. If you are looking to place a lay bet then the Current Price will be the Best Back Price for the selection. In both cases you will be offering you bet to the market and should expect the bet to be unmatched when bet placement completes; it will remain unmatched until another exchange user's bet is matched against it.

Trade - To have both a back and lay bet, of the same stake size, matched on a selection in the market. For the trade to be profitable, the back price must be higher than the lay price.

Open Position - One or more 'open trades' on a selection resulting in an imbalance in the amount of money staked (in terms of your matched bets) on the back side of the selection compared to the lay side.

Closed Position - All 'open trades' on a selection have been closed. The amount of money staked (in terms of your matched bets) on the back side of the selection is the same as the amount of money on the lay side.

Net Stake - The size of open position on a selection. i.e. amount of money staked (in terms of your matched bets) on the back side of the selection minus the amount of money staked on the lay side.

Net Trading Position - The profit or loss on a selection with all trades closed (if a position is still open it is calculated as if it will be closed at the current best market price).

Greening / Cash Out / Hedging - The process of spreading the profit or loss from trades on one selection across the rest of the market. Repeating the process for all selections will give the same P&L value for each selection regardless of which one wins the event.

Book % of a selection - Based on the selection's price, what percentage of the overall market does it represent? Calculated as 100% divided by the selection's price. e.g. A selection priced at 2.0 would be 50%. A selection priced at 5.0 would be 20%

Book % of the market - The total Book % of every selection in the market added together. e.g. In a four selection market with prices at 2.0, 4.0, 5.0 & 20.0, the individual book percentages are 50%, 25%, 20% & 5% respectively. Added together gives a Book % for the market of 100%.

Book Over-round / Under-round - A market with one winner should have a Book % of 100% if it is perfectly priced. Any amount above 100% is called the over-round. Any amount under 100% is called the under-round.

Incomplete Book - When dutching / bookmaking, bets are placed on every selection with the stakes proportioned based on their Book %. The aim being to get every bet matched to profit from the under-round / over-round in the market. An incomplete book is when some of the bets remain unmatched.