

# **QUICK BACKTEST USER GUIDE**







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## 1 INTRODUCTION

The **Delphian** platform propels investors into the realm of superior traders by offering unique support for the design and back testing of individualized trading strategies. This unique software allows traders to devote their limited time and energy to the effective analysis of return on investment, thereby leading to the development of more productive trading strategies.

This user guide provides steps to execute a Quick BackTest in the Delphian platform.

The following topics are discussed in this guide:

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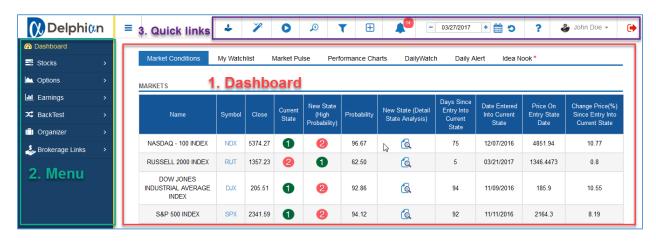


# **2 ACCESSING THE QUICK BACKTEST PAGE**

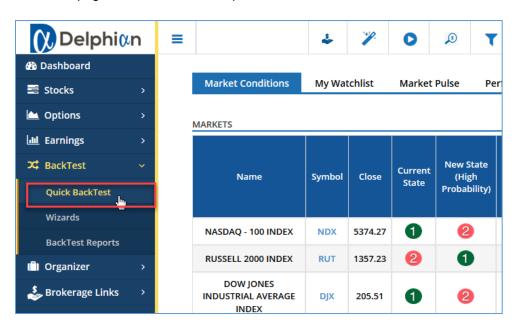
The **Delphian** application can be accessed from an internet browser on your computer system. The **Delphian** Home Page is <a href="http://www.delphiantrading.com/">http://www.delphiantrading.com/</a>. A **registered user** can access the login page from <a href="https://apps.delphiantrading.com">https://apps.delphiantrading.com</a> then enter their username and password to access the application.

## 2.1 Dashboard page

The Home Page of the Delphian application has the menu (on the left), the quick-links (on the top bar) and the dashboard to display the current market conditions.



The Quick BackTest page can be accessed as part of BackTest as shown below:



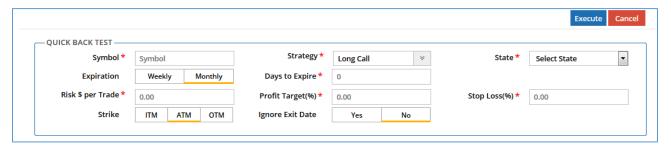


# **3 QUICK BACKTEST**

Quick BackTest offers the user the ability to perform a BackTest with ease using minimal required fields. The Quick BackTest has default settings for the time period of January 3, 2007 to current date.

## 3.1 Quick BackTest Panel

The **Quick BackTest** panel for options is shown below:



## 3.1.1 Field Descriptions

Symbol	Mandatory field.	It is a text field to input the underlying symbol. Only one symbol can be tested at a time in Quick BackTest.
Expiration	Default set to Monthly.	Provides the ability to trade weekly or monthly options.
Risk \$ per Trade	Mandatory field.	The amount the user is willing to risk per trade.
		Risk \$ per Trade default values: A minimum of 1 option or 1 option spread will be traded even if it exceeds Risk \$ per Trade amount.
Strike	Default set to ATM.	This field has 3 options:  ITM (In the Money): Delta 55-70  ATM (At the Money): Delta 47-60  OTM (Out of the Money): Delta 20-40
Strategy	Mandatory field.	This field provides the list of options strategies that can be used.
Days to Expire	Mandatory field.	This fields requires the user to manually enter the minimum number or days to expiration for the option trade.
Profit Target (%)	Mandatory field.	Exit the position based on a percent of profit made.
Ignore Exit Date	Default set to No.	When <b>No</b> is selected, the trade will close if the underlying symbol transitions into a new state. If <b>Yes</b> is selected, the trade will only close if either the profit or loss is triggered or the option expires.
State	Mandatory field.	Delphian Proprietary State Modelling™ lets you choose either a single state (1 through 8), all bullish states, all bearish states or all states.
Stop Loss (%)	Mandatory field.	Exit the position based on a loss percent made.



## 3.2 Execute a Quick BackTest

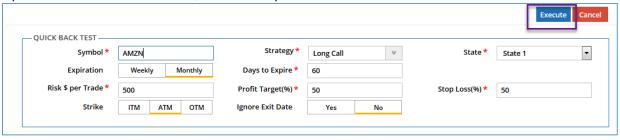
In the example below, we have used Amazon, Inc. (symbol: AMZN) in State 1 to show the Quick BackTest results.

The user can enter a symbol or the first few characters of a symbol and then select from the dropdown list

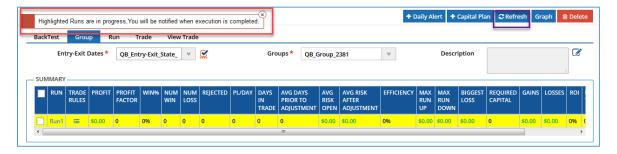
It is recommended to run multiple BackTests with various values to assist in identifying which parameters meet your individual trading and investment goals.

#### 3.2.1 Steps to execute Quick Back Test

1) Input data into each field of the Quick BackTest panel.



- 2) Click Execute to execute the BackTest.
- 3) You are then automatically directed to the results page. If the result row is highlighted, then wait for the execution to complete and click Refresh until you see the results.



4) The result is shown below. The individual trade results can be viewed by clicking the *Run* number.



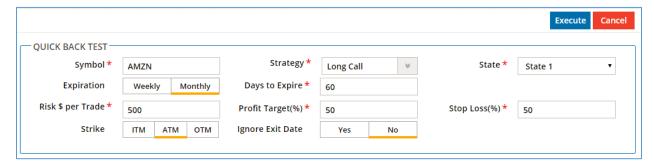


## 3.3 Group Summary

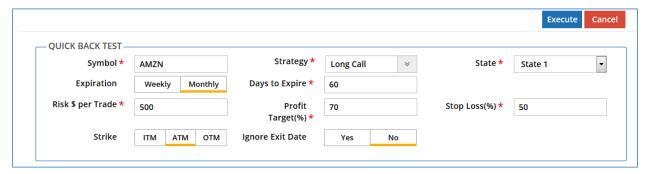
The Group Summary displays results for each run within that Group. This assists the user with the ability to visualize which run performed the most optimal according to their plan.

In the examples below, we executed three quick backtests for the same symbol with different values for Profit Target (%).

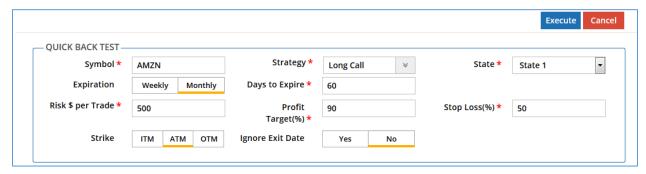
#### 3.3.1 Example 1: Profit 50%, Expiration Monthly



## 3.3.2 Example 2: Profit 70%, Expiration Monthly



## 3.3.3 Example 3: Profit 90%, Expiration Monthly





## 3.3.4 Summary

The Summary panel displays the Quick BackTest results.

SUN	ИMARY												
	RUN	TRADE RULES	PROFIT	PROFIT FACTOR		NUM WIN	NUM LOSS	REJECTED	PL/DAY	IN	AVG DAYS PRIOR TO ADJUSTMENT	AVG RISK OPEN	AVG RISK AFTER ADJUSTMENT
	Run3	⊨	\$13,723.00	1.99	40%	14	21	0	19.6	20	0	(\$1,506.00)	\$0.00
	Run2	≔	\$19,225.00	2.69	51%	18	17	0	30.52	18	0	(\$1,506.00)	\$0.00
	Run1	≔	\$13,773.00	2.26	54%	19	16	0	28.11	14	0	(\$1,506.00)	\$0.00
4	,								111				

EFFICIENCY	MAX RUN UP	MAX RUN DOWN	BIGGEST LOSS	REQUIRED CAPITAL	GAINS	LOSSES	ROI	ROI TRANS	TIED UP CAPITAL (%)
38%	\$35,953.00	(\$20,313.00)	(\$1,886.00)	9050	\$27,594.00	(\$13,871.00)	84.17%	0%	25.72
56%	\$34,074.00	(\$17,991.00)	(\$1,797.00)	8694	\$30,574.00	(\$11,349.00)	117.92%	0%	23.1
51%	\$27,087.00	(\$16,501.00)	(\$1,797.00)	8694	\$24,739.00	(\$10,966.00)	84.48%	0%	18.33
III E									

RUN	Provides the run number. Clicking on the run number directs you to the Run page summary.
TRADE RULES	Click the icon to view or change trade rules for this run. See section Trade Rules for more information.
PROFIT	Profit (or loss) amount
PROFIT FACTOR	Gains divided by losses
WIN%	Winning percentage of total trades (rejected trades are not counted)
NUM WIN	Number of winning trades out of total trades
NUM LOSS	Number of losing trades out of total trades
REJECTED	Number of trades that were rejected out of total number of trades
PL/DAY	Profit of run divided by days in trade
DAYS IN TRADE	Average number of days spent in a trade for all trades in a run

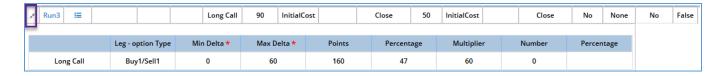


AVG DAYS PRIOR TO ADJUSTMENT	Average days spent in trade prior to conversion trade
AVG RISK OPEN	Average amount of money at risk when position was opened
AVG RISK AFTER ADJUSTMENT	Average amount of money at risk after first adjustment to initial trade
EFFICIENCY	Percentage of maximum run up that model captured as profit
MAX RUN UP	Maximum potential profit of all trades
MAX RUN DOWN	Maximum potential loss of all trades
BIGGEST LOSS	Biggest losing trade in run
REQUIRED CAPITAL	4 times biggest loss plus average risk open
GAINS	Cumulative profits of all winning trades in a run
LOSSES	Cumulative loss of all losing trades in a run
ROI	Annualized return on investment using average risk open
ROI TRANS	Annualized return on investment using average risk after adjustment to initial trade
TIED UP CAPITAL (%)	Percentage of time capital at risk within the back test time-frame

#### 3.3.5 Details-Trade Rules

The **Details-Trade Rules** panel displays the parameters used for the selected run. Clicking on the icon shows the details of the run.







## 3.3.6 Rejected Runs

This Rejected Runs panel displays the list of rejected runs and reason.



This page has the following additional options at the top:

+ Capital Plan	Clicking on <b>Capital Plan</b> adds the <b>Quick BackTest</b> result to the <b>Capital Plan</b> . This data can be used to combine 2 trading plans.
Graph	Clicking on <b>Graphs</b> directs you to the graphical summary of the <b>Quick BackTest</b> result.

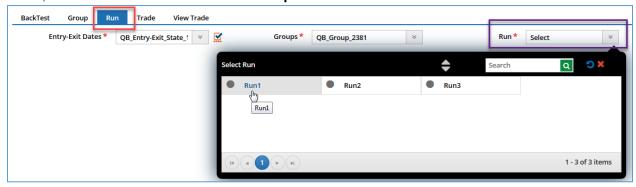


## 3.4 Run Summary

The summary results provide a brief overview of the BackTest. Three main areas to focus on initially are: Profit (\$), Profit Factor and Win%. This will tell the user if the trade is profitable over time with a probability of success.

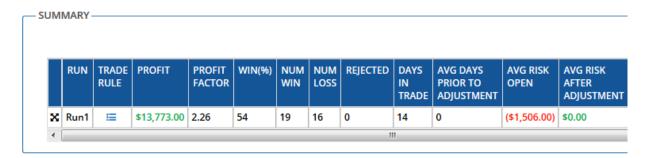
#### 3.4.1 Run Criteria

The Run Criteria panel has dropdown menus to review current or previous **Entry Exit Dates**, **Group Name**, and **Runs**. The user can enter a **Description** of the selected trade model.



#### **3.4.2 Summary**

The Summary panel displays results for a particular run. The field descriptions for Summary panel are the same as the Group Summary panel except there is an additional icon to save the summary in PDF format.







## 3.4.3 Details

The **Details-Trade Results** panel displays all of the trade summaries within a specific run.

TRADE	VIEW	SYMBOL	PROFIT	PROFIT(%)	RISK OPEN	RISK AFTER TRAN	ENTRY DATE	EXIT DATE	IN	DAYS TO ADJUST	MAX RUN UP	MAX DRAW DOWN	PRICE DIFF	STATE ON ENTRY DATE	ON ENTRY	IV RANK ON EXIT DATE	REASON
T1	View	AMZN	\$250.00	73.53	(\$340.00)	(\$340.00)	2/8/2007	2/20/2007	8	0	\$250.00	(\$40.00)	\$2.41	0	7	7	Profit Target Condition Met
T2	View	AMZN	\$155.00	52.54	(\$295.00)	(\$295.00)	3/22/2007	4/12/2007	15	0	\$155.00	(\$30.00)	\$2.78	0	35	35	Profit Target Condition Met
Т3	View	AMZN	(\$423.00)	-42.81	(\$988.00)	(\$988.00)	11/30/2007	1/10/2008	28	0	\$240.00	(\$423.00)	(\$6.30)	0	77	96	Exit Date

TRADE	Trade number
VIEW	Clicking <b>View</b> directs you to View Trade page. See section <u>View Trade</u> for description of this page.
SYMBOL	Symbol of underlying stock or index
PROFIT	Profit (or loss) amount
PROFIT (%)	Percentage of profit (or loss)
RISK OPEN	Amount of money at risk when position was opened
RISK AFTER TRAN	Amount of money at risk after trade adjustment
ENTRY DATE	Date of entry into trade
EXIT DATE	Date of exit out of trade
DAYS IN TRADE	The number of days in the trade
DAYS TO ADJUST	The number of days until an adjustment was made from initial trade.
MAX RUN UP	Maximum potential profit (paper gain)
MAX DRAW DOWN	Maximum potential loss (paper loss)
PRICE DIFF	Underlying price difference between entry date and exit date
STATE ON ENTRY DATE	State Modeling <sup>™</sup> state number on trade entry date
IV RANK ON ENTRY DATE	IV rank on entry date



IV RANK ON EXIT DATE	IV rank on exit date
REASON	Reason why trade was exited  Default value Trade will exit if one of the below criteria is met.  1) Profit Target 2) Loss Target 3) Transition to another State

## **3.4.4** Equity

The Equity panel displays an equity graph showing risk and equity profit/loss for entire run.

## **Trade Equity**



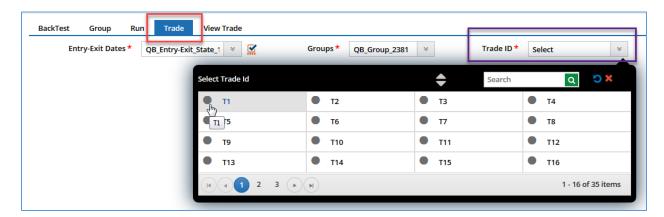
## **Daily Equity**



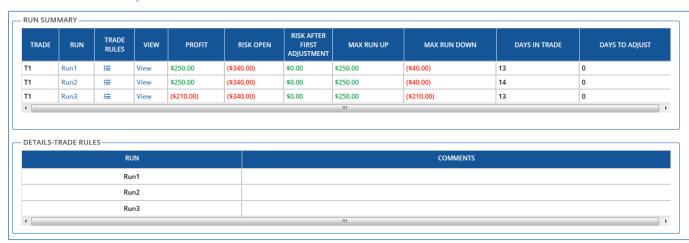


## 3.5 Trade

The Trade panel gives the user the ability to compare a specific trade from multiple runs. For example, if the user likes a specific trade (T1), the trade page assists in comparing that exact trade from multiple runs (Run 1, 2 and 3). The user can quickly compare Profit, Risk, Max Run Up, Max Run Day and Days in Trade.



#### 3.5.1 Run Summary



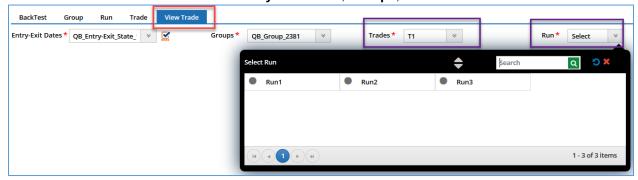


## 3.6 View Trade

The View Trade panel gives the user the ability to view a specific trade in further detail.

#### 3.6.1 Trade Criteria

The Trade Criteria lets the user select Entry Exit Dates, Groups, Trades and Runs to view.



## 3.6.2 Trade Summary

The **Trade Summary** panel displays a summary for each trade within a run.



TRADE RULES	Click the button to view or change trade rules for this run. See section <u>Trade</u> <u>Rules</u> for more information.
DATE	Trade date
POSITION	Opening trade, adjustment trade or closing trade
STRATEGY	Displays the initial or adjustment trade strategy
POSITION PROFIT	Profit (or loss) amount
NET DEBIT	Provides the debit or credit amount resulting from each trade
CURRENT RISK	Provides the current amount of risk for the trade
MAX RISK	Maximum potential loss
MAX PROFIT	Maximum potential profit



UNDERLYING PRICE	Provides the price of the underlying symbol on the day of the trade
LOWER BE	Provides the lower price where the trade will break even
UPPER BE	Provides the higher price where the trade will break even
STATE	State Modeling <sup>™</sup> state number on the date listed
CLOSE REASON	Reason trade closed

## 3.6.3 Trade Legs

Trade Legs panel displays the opening leg(s) and closing leg(s) of an option trade.



DATE	Date of trade
ТҮРЕ	Indicates an opening or closing transaction
CONTRACTS	Number of contracts
SYMBOL	Underlying symbol
EXPIRY DATE	Expiration date of option contract
STRIKE	Strike price of option contract
OPTION TYPE	Indicates if option is a call or a put
OPEN PRICE	Price when option contract was opened
CLOSE PRICE	Price when option contract was closed
DEBIT/CREDIT	Provides the amount paid or received from the trade
IV	Implied volatility %
DELTA	Current delta of option contract
GAMMA	Current gamma of option contract



VEGA	Current vega of option contract
THETA	Current theta of option contract

#### 3.6.4 Trade OHLC

Trade OHLC panel displays a chart of the open/high/low/close when trade was opened and closed.



#### 3.6.5 Details-Trade Rules

The **Details-Trade Results** panel displays all of the trade summaries within a specific run. Click to expand to view the run details.



#### 3.6.6 Daily P & L

The Daily P & L panel displays the Profit and Loss for every day from the opening of a trade to the closing of a trade.



TRADE DATE	Dates of the trades
COST	Cost of the trades



CURRENT RISK	Risk at opening of position
PROFIT	Profit (or loss) amount
DELTA	Current delta of option contract
MAX RUN UP	Maximum potential profit (paper gain)
MAX RUN DOWN	Maximum potential loss (paper loss)
UNDERLYING PRICE	Price of underlying
STATE	State Modeling <sup>™</sup> state number on the date listed
BUY STRIKE 1	Buying price of strike 1
SELL STRIKE 1	Selling price of strike 1
BUY STRIKE 2	Buying price of strike 2
SELL STRIKE 2	Selling price of strike 2
MAX PROFIT	Maximum profit
MAX RISK	Maximum risk



## 4 TRADE RULES

Trade Rules contain fields that are the main driver for how a trade is designed and executed. Some of the key fields to input are: type of option strategy, days to expiration, strike selection and profit/loss targets.

For a first-time user of this application, or a novice trader, we recommend using **Quick BackTest**. **Quick BackTest** is a simplified version of Back Testing that requires minimum parameters necessary to create a model. Parameters can be adjusted after initial run for optimal trading.

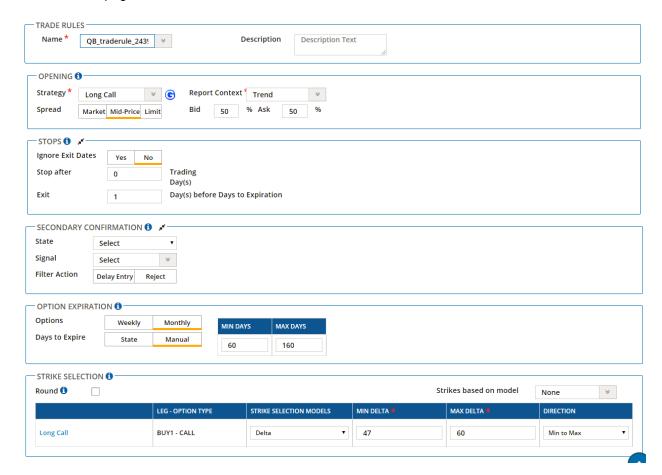
Trade Rules allows the user to create their own rules from User Defined Trade Rules option.

More experienced traders can create their own trade rules by accessing the **Create -> Trade Rules** option. Steps to create your own trade rules are provided in the *Delphian User Guide*, which provides comprehensive information about the application.

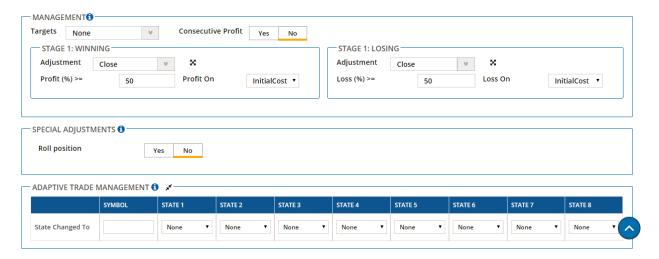
## 4.1 Viewing and Editing Trade Rules

1) Access the **Trade Rules** page from the icon from the **Quick BackTest** page, **Group** Summary page, **Run** Summary page or the **View Trade** page.

The Trade Rules page is shown below:







2) Users can change the strategy or any of the values in the available fields to refine their test results.

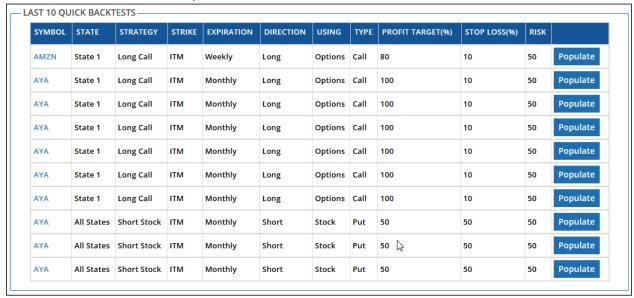
Click the Backtest button in the top right corner when you are ready to run a new BackTest. The program will automatically take you to the updated results page.



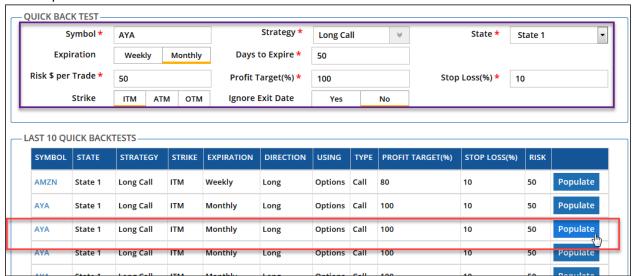
# **5 LAST 10 QUICK BACKTESTS**

As you execute more **Quick BackTests**, their values are stored and displayed in the **Last 10 Quick BackTests** panel.

The Last 10 Quick BackTests panel is shown below:



1. Click Populate to load the values from a previous Quick BackTest into the Quick BackTest panel.



2. Click Execute to run the Quick BackTest again.