





# Strategy - Hedging

Hedging section has two tab: Settings e Charts which will be analyzed.

## Video Tutorial

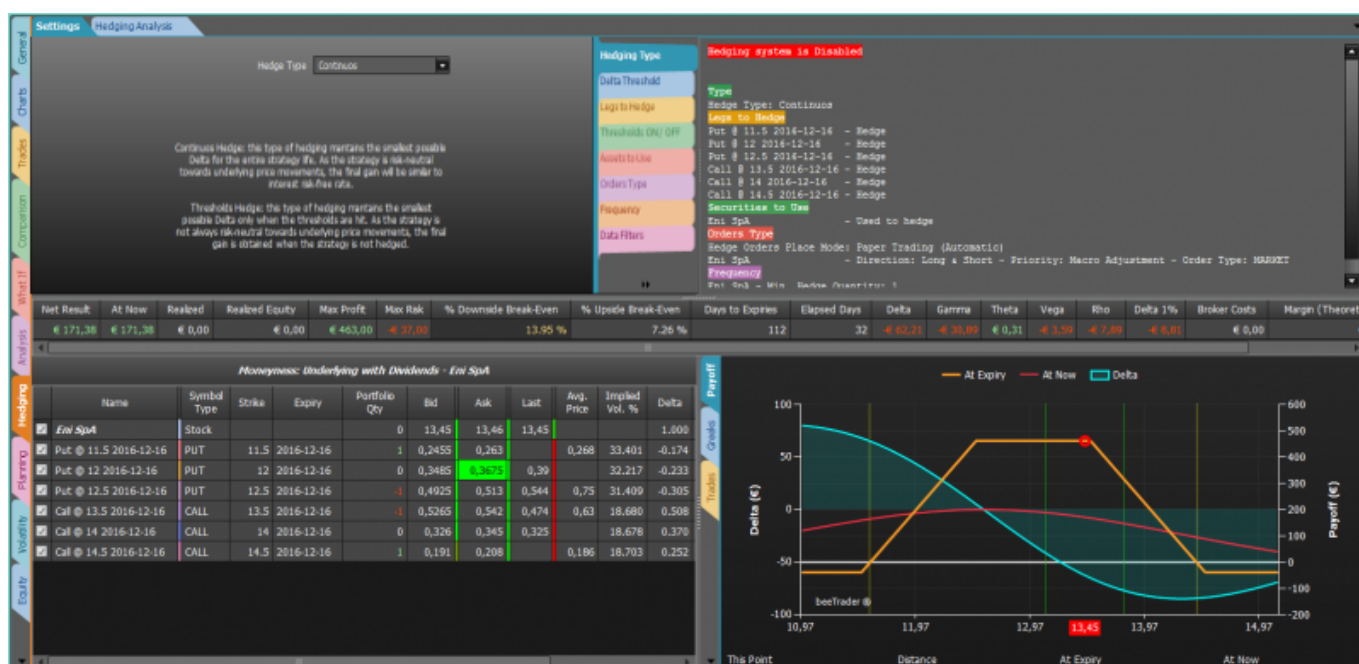
	24/03/2016	<a href="#">Hedging - Cos'è l'hedging - Didattico</a>	11:42	
	24/03/2016	<a href="#">Hedging - Impostazioni</a>	18:44	
	24/03/2016	<a href="#">Hedging - Analisi</a>	12:52	

Click [here](#) to watch other video **Video di Iceberg**

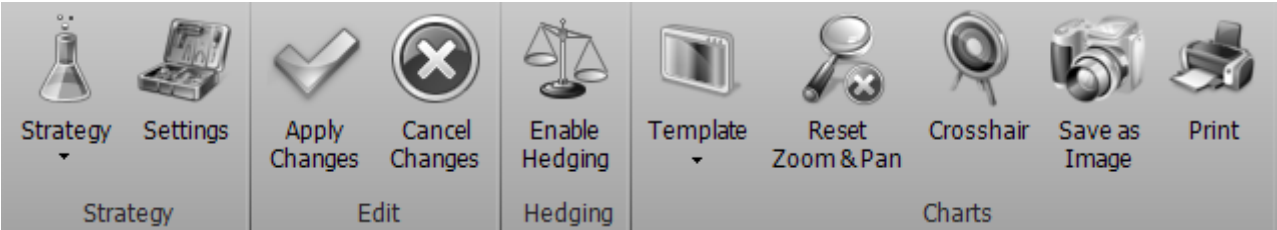
## Settings

In "Settings" is present the Wizard which allows the user to choose a hedging typology. On the right, the panel summarizes the settings .


The low section summarizes the strategy with leg, the payoff, the greeks course and the trades.





## II menu - Settings




Strategy

 Strategy	open the sub-menu Strategy
 New Strategy	it allows to create a new strategy
 Open Strategy	it allows to open a previous saved strategy
 Save Strategy	it allows to save the strategy in use
 Settings	open the window <a href="#">Strategy Settings</a> for strategy settings






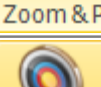
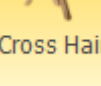

Edit

 Apply Changes	it confirm changes in Hedging settings
 Cancel Changes	it delete changes in Hedging settings

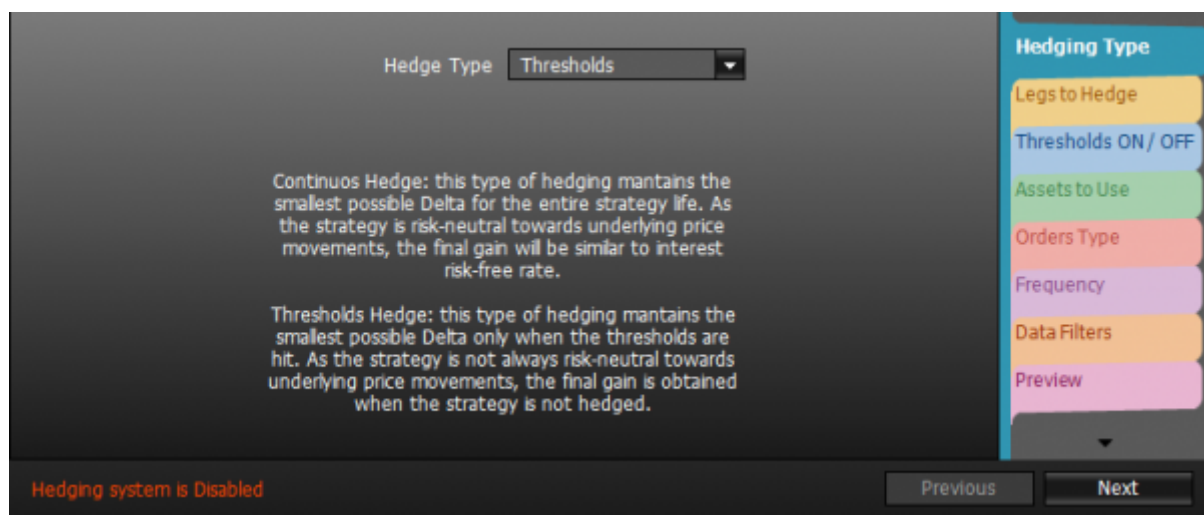
Hedging

 Enable Hedging	enable or disable Hedging
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Charts

 Template	open the sub-menu "Template"
 Load Template	it allows to save the template of the payoff in use. If template is the configuration of the Payoff
 Save Template	it allows to load template previously saved and apply them to the payoff in use
 Save as Default	it allows to save template in use as default for the next payoff
 Reset Zoom & Pan	it allows to reset the zoom
 Cross Hair	it allows to enable or disable the Crosshair for the payoff
 Save as Image	it allows to save the payoff of the strategy in image format (*.png). The image will be saved to the Pictures folder of beeTrader, in the user's Documents
 Print	it allows to print the Payoff of Strategy currently in use. Feature available on the PC in use if there is a printer

## Hedging Type



In “Hedging Type” the user can choose the hedging typology: Continuous or Threshold.

- Continuous: This type of hedging starts neutralizing Delta immediately and it buy/sell the instrument to maintain delta-zero for every price fluctuation. The advantage is that delta will be always next to zero. The disadvantage is that a huge amount of operations will be needed to maintain delta next to zero so we will have high costs of transactions and spreads. Continuous Hedging is usually used when the profit target is the free risk rate.
- Threshold: This type of hedging starts neutralizing Delta when underlying price reach to a threshold which is a price established by the user.

## Delta Threshold

Delta 0 with tolerance = 2,00 €

Current strategy's Delta 1.13 €

Note: Set the minimum strategy's Delta value to automatically enable/disable hedging system.

If you set a value of 0, the hedging system is never automatically disabled.

Any value greater than 0 implies disabling hedging system whenever strategy's Delta is less than specified value, and enabling when the strategy's Delta is greater than the specified value.

Hedging system is Disabled

Previous Next

Delta 0 with tolerance-: allows you to set a threshold for the value of the delta to be protected, so not delta to 0, but for example +/- 2 €. The system will keep the strategy delta within the set threshold. As soon as the delta exceeds the threshold (positive or negative), the delta will be brought to 0 and the set thresholds will revert to +/- 2 € in the example.

## Legs to Hedge

Name	Threshold (ON Level)	Threshold (OFF Level)
Put @ 12 2016-06-17	11.99	12.01
Call @ 14 2016-06-17	14.01	13.99

Thresholds: underlying price levels that activate or deactivate hedging for each option.

Hedging system is Disabled

Previous Next

In the section “Legs to Hedge” you can choose the legs that you want to include in the calculation of the delta to protect.

## Thresholds ON / OFF

Name	Protect
Put @ 11 2016-06-17	<input type="checkbox"/>
Put @ 12 2016-06-17	<input checked="" type="checkbox"/>
Call @ 14 2016-06-17	<input checked="" type="checkbox"/>
Call @ 15 2016-06-17	<input type="checkbox"/>

Select the legs you want to be hedged (one or more)

Hedging system is Disabled

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In the section “Hedging Type” is selected Threshold mode, in Thresholds ON / OFF you can set the thresholds, for every legs, in which the hedging will be enabled(ON Level) or disabled (OFF Level).

## Assets to Use

Name	Used to Hedge
Eni SpA	<input checked="" type="checkbox"/>
STOCK FUTURE Eni 17/06/2016	<input checked="" type="checkbox"/>

Choose the assets that will be used to hedge the strategy.

Hedging system is Disabled

Previous Next

In this section you can add the instrument (stocks, futures, options, ETF, etc.) to be used to neutralize delta.

**Note:** If you use an ETF as an hedging instrument you need to set the “ETF ratio” of that ETF. You set this parameter in [Symbol Manager](#). It denote the ratio between the underlying and the ETF. Take an example: The underlying is the dj Euro Stoxx 50 and it quote 2800 points, the ETF quote 28, the ETF ratio that you have to set is 100. This rule is valid for long ETF, whether the ETF is short you have to set a negative value.

## Orders Type

Hedge Order Direction	Contract Delta	Hedge Priority	Hedge Price Type	Hedge Use Smart Move	Hedge Smart Move Amount	Hedge Smart Move
Long & Short	1.000	Macro Adjustment	MARKET	<input type="checkbox"/>	0	
Long & Short	500.000	Macro Adjustment	MARKET	<input type="checkbox"/>	0	

Orders Placement Mode: Paper Trading (Au...)

Smart Move: this function changes the order prices automatically. You can choose time period and price

Hedging system is Disabled

Navigation: Previous Next

Sidebar:

- Hedging Type
- Legs to Hedge
- Thresholds ON / OFF
- Assets to Use
- Orders Type**
- Frequency
- Data Filters
- Preview

- Name: it displays the instrument used for delta hedging and its settings;
- Hedge Order Direction: the user can choose the direction of order used to hedge the delta: Long, Short e Long & Short. This think is useful when options are used to hedge ;
- Contract Delta: it represents the delta value expressed in euro of one contract;
- Hedge Priority: The user can choose between Macro Adjustment and Fine Adjustment. Depending on the choice made by the user in the system will give priority to instruments indicated by Macro Adjustment to neutralize much of the delta and then use the instrument marked with Fine Adjustment to refine the delta hedging. If multiple instruments is associated with the same priority (Macro Adjustment and Fine Adjustment) the system will balance the delta dividing it evenly among the instruments. The most common use is to use futures as Macro Adjustment and stocks as Fine Adjustment;
- Hedge Price Type: the user can choose the type of order to use between Market, Join, Improve, Split, Shave, Hit & Take, Hit & Take +. For the description of [Orders Type](#), click [qui](#);
- Hedge Use Smart Move: the Smart Move system allows the sending of an order and the automatic change pf the price if it is not executed;
- Hedge Smart Move Step (Ticks):it represents the price change between an order and the subsequent expressed in ticks. User needs to write the ticks quantity, conversion to currency or points be automatically carried out based on security ticks settings in [Symbol Manager](#). For more informations on [Smart Move](#), click [here](#);
- Hedge Smart Move Interval (Secs): It represents the interval of time between an order and the next. For more informations on [Smart Move](#), click [here](#);
- Order Placement Mode: Here you choose how Iceberg must manage the delta hedging orders. Suggest Only: in this case the generation of an order in Iceberg is reported on the General tab, and the pending order is finalized in [Real Market](#) o [Paper Trading](#). Paper Trading (Automatic): In this case the generation of an order it is automatically finalized Paper Trading. Real Market (Manual): in this case the generation of an order appears the book corresponding to sending the order in Real Market. Real Market (Automatic): In this case the generation of an order is automatically sent to the broker with the price of the type previously set. **For any order, generation is conditioned to Date Filters.**

## Frequency

Name	Hedge Min. Qty	Contract Delta	Contract Gamma	Contract Theta	Contract Vega	Contract Rho
Eni SpA	1	€ 1,00	€ 0,00	€ 0,00	€ 0,00	€ 0,00
STOCK FUTURE Eni 15/12/2017	1	€ 500,00	€ 0,00	€ 0,00	€ 0,00	€ 0,00

Delta 0 with tolerance ± Not Applicable

Setup the hedge frequency to avoid useless or too close corrections.

Hedging system is Disabled

Previous Next

This section allows to set the control frequency of the strategy's delta, or the system will calculate delta.

Mode:

- **Contracts:** the system hedge the delta only after the specify number of contract definite in Hedge Min. Quantity is reached. It is possible to choose the minimum amount for every instrument;
- **Time Interval:** the system checks whether is necessary hedge the delta every Time Interval (minutes);
- **Time of Day:** The system checks whether is necessary hedge the delta in a determined hour of the day;
- **Price Change:** The system checks whether is necessary hedge the delta after a % underlying price change.

The “Contracts” mode is equivalent to using the “Delta 0 with tolerance” that can be set on the Delta Thresholds tab. Each contract has its own delta value therefore, in the example, setting a minimum quantity of 2 shares (with a delta 1 €) is equivalent to having set 2 € in the Delta Threshold value. For all other modes (Time Interval, Time of Day, Price Change) the Delta Threshold acts as primary filter, so until you have exceeded the set value the hedging system will not make corrections independently of any other setting frequency.

## Data Filters



Max Bid/Ask Spread (Options) ☐ 25 %

Tick is not Zero ☐

Max Tick Interval ☐ 60 secs

Check Bid/Ask (Underlyings) ☐ NOTE: Last is always checked

Check Last (Options) ☐ NOTE: Bid/Ask are always checked

Options presents different prices peculiarities, for example very high Bid/Ask spreads. You can select how to check for prices correctness and thus determine when to automatically calculate hedge orders.

Hedging system is Disabled

Previous Next

There are available price filter in order to avoid problem with price exposed by the market maker .

- Max Bid/Ask Spread (Options): it verify that spread between bid and ask of the options in the strategy do not exceed a setted %;
- Tick is not Zero: It verify that last tick for every instrument of the strategy is not zero;
- Max. Tick Interval: it verify that time between a tick and the subsequent occurs within a certain time-range, for every strategy instrument;
- Check Bid/Ask (Underlyings):
- Check Last (Options):

**As indicated a check on bid-ask option price price and on the last of the underlying is always effectuate in order to ensure the correct data flow between the broker and iceberg**

## Preview

Name	Contract Delta	Hedge Order Direction	Hedge Priority	Hedge Min. Qty	Qty	Hedge Qty
Eni SpA	1.000	Long & Short	Macro Adjustment	1	0	66
STOCK FUTURE Eni 17/0...	500.000	Long & Short	Macro Adjustment	1	0	0

Data Filters Results  
No Errors

Hedging system is Disabled

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A preview of the instrumets used to hedge the delta and related quantity at market (Qty) and the quantity that should be used to neutralize the delta (Hedge Qty).





Charts


Iceberg records every hedging operation in order to premise the user to analyze the settings and to optimize the hedging strategy.



II menu - Charts

  
Strategy

  
Settings

  
Enable Hedging

TimeFrame1 Min

LegPut @ 9550 2016-06-17

OptionPut @ 9550 2016-06-17

TimeFrameDaily





Bars Count500

Delta Strategy Chart

Hedge Chart


Thresholds Analysis Chart

Strategy

 Strategy	Open the submenu strategy
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 Settings	Open the window <a href="#">Strategy Settings</a> for the strategy settings
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## Hedging

 Enable Hedging	enable or disable Hedging
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## Delta Strategy Chart

Timeframe	it is possible to choose the timeframe of the graph which represents the Delta
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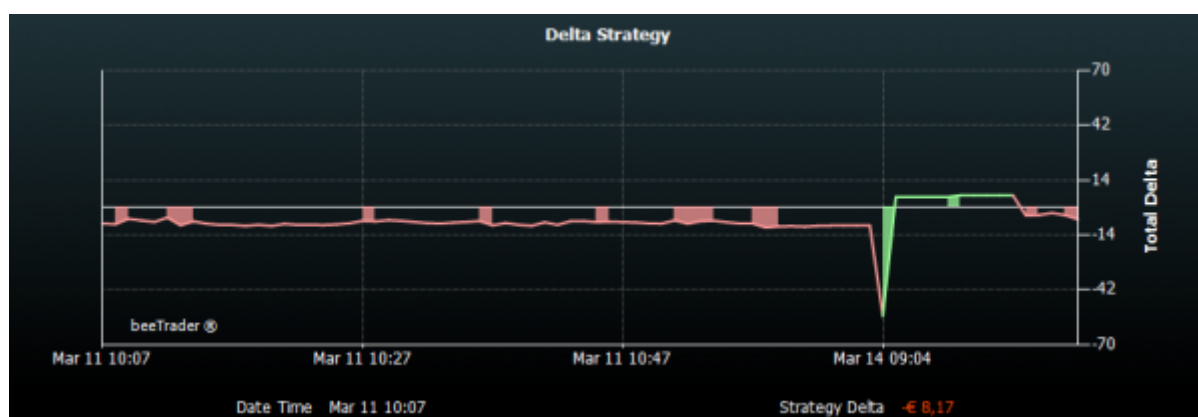
## Hedge Chart

Leg	It is possible to choose the instrument for delta hedging, see the graph with profit/loss and the number of contract of delta hedging
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## Thresholds Analysis

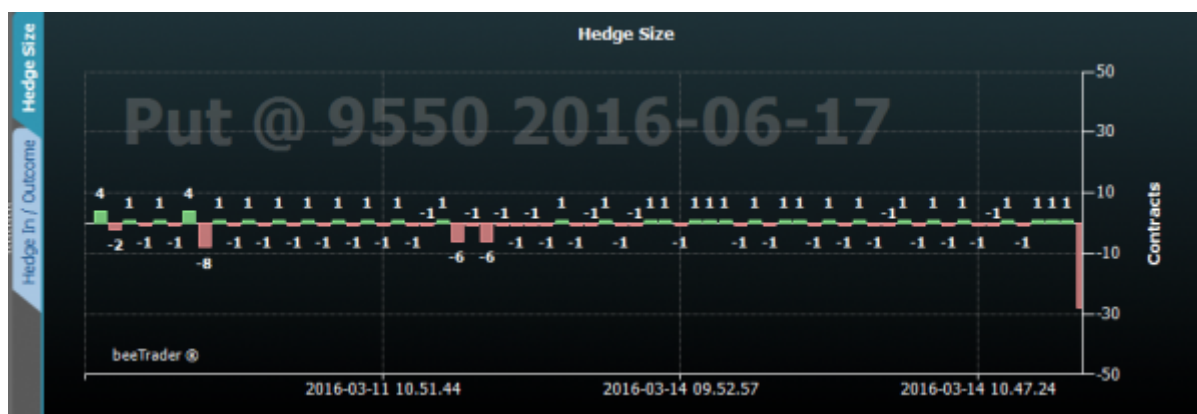
Option	It is possible to choose which option of the strategy the threshold are showed on the underlying graph
Timeframe	It is possible to choose which timeframe of the underlying graph the threshold are showed
Bars Count	It is possible to choose how many bars are showed in the underlying graph

## Delta Strategy



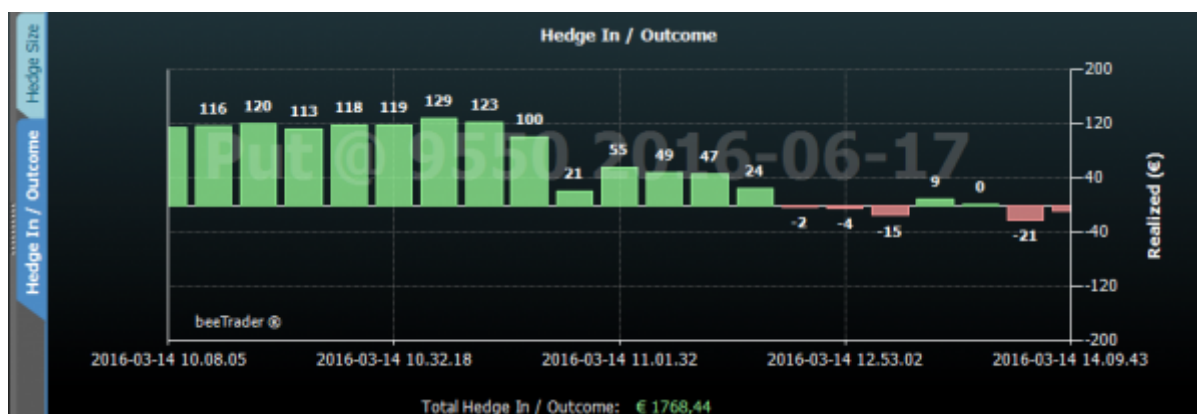
In this graph is visualized the delta value of the hedging strategy since it was activated. From the menu you can choose the time frame of the graph.

## Hedge Size



This graph shows the number of contracts used in every operations of hedging since hedging was activated. From the menu Hedge chart it is possible to choose, which instrument used to hedge is displayed .

## Hedge In / Outcome



With reference to the chosen instrument in hedge Chart, in this graph are represented all profit / loss related to delta hedging operations.

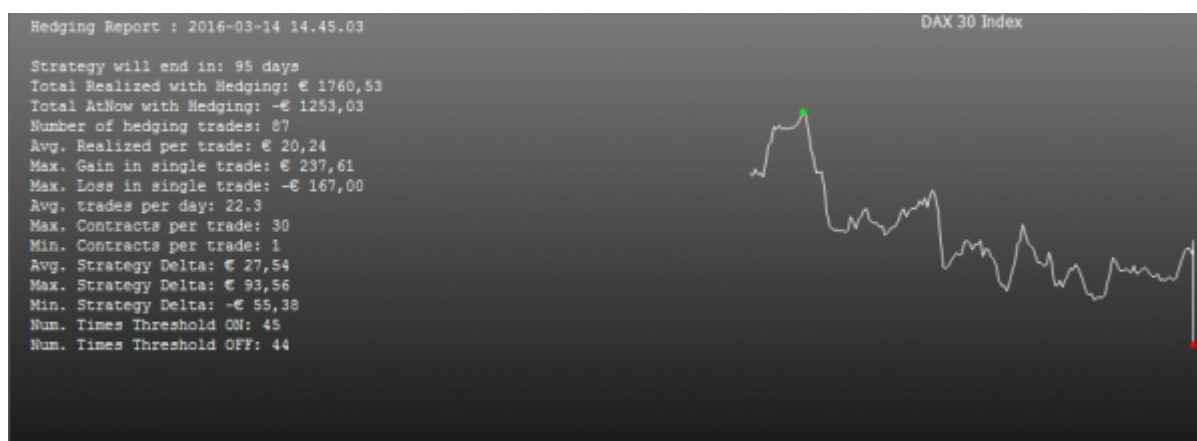
## Thresholds Analysis



In the graph is displayed Thresholds Analysis of the historical graph of the underlying (timeframe and bars count can be selected dal menù Thresholds Analysis Chart) with the threshold set for the selected option in the menù Thresholds Analysis Chart.

This chart is very useful to analyze the position of the thresholds setted in relation to the number of times that have been touched.

## Report



A useful report, accompanied by the underlying tick chart, it provides the user a clear view on the performance of its delta hedging settings.

From:

[http://manuals.playoptions.it/Iceberg\\_old/](http://manuals.playoptions.it/Iceberg_old/) - Iceberg Options Solutions

Permanent link:

[http://manuals.playoptions.it/Iceberg\\_old/en/hedging](http://manuals.playoptions.it/Iceberg_old/en/hedging)

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