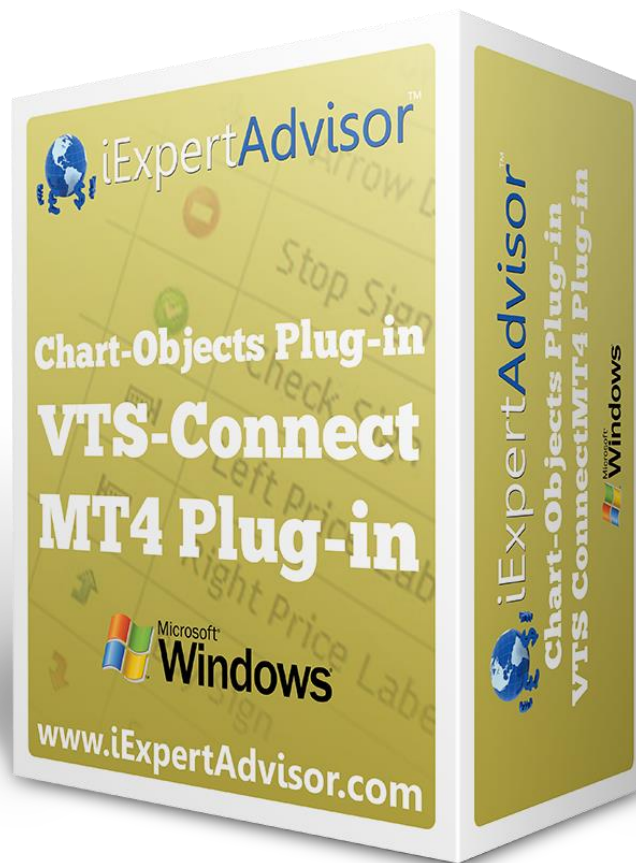# Chart Objects Plug-in

Chart Objects Plug-in

Requires VTS-Connect minimum version 4.0.0.65

The **Chart Objects** Plug-in allows you to easily add objects to any MetaTrader price chart. Chart objects include: horizontal lines, vertical lines, arrows, thumbs, labels, any text, check marks and stops signs. The chart object functions are available from the VTS Toolbox and are dragged, dropped and connected just like any other function.

What is a Plug-in?

VTS stands for Visual Traders Studio.

The VTS Expert Advisor Builder is a Windows graphical application that enables non-programmers to build complex Expert Advisors by dragging, dropping and connecting logical elements.

The VTS application contains basic functionality to build almost any Expert Advisor.

A VTS Plug-in allows traders to easily implement advanced trading techniques using an add-on user interface.

Contents

Enable the Chart Objects Plug-in

You must enter your License key to enable the *Chart Objects Plug-in*.   Your license key for all of your VTS products can be found in the Members Area.

License keys are entered in Visual Traders Studio (VTS) from the License entry tab.

- The **email** address is the email address used to purchase VTS.
- The **License Key** is the key listed in the Members Area.
- The **Update** button is used to verify the email address and license key.
- The **edit key** button is used edit the key value.

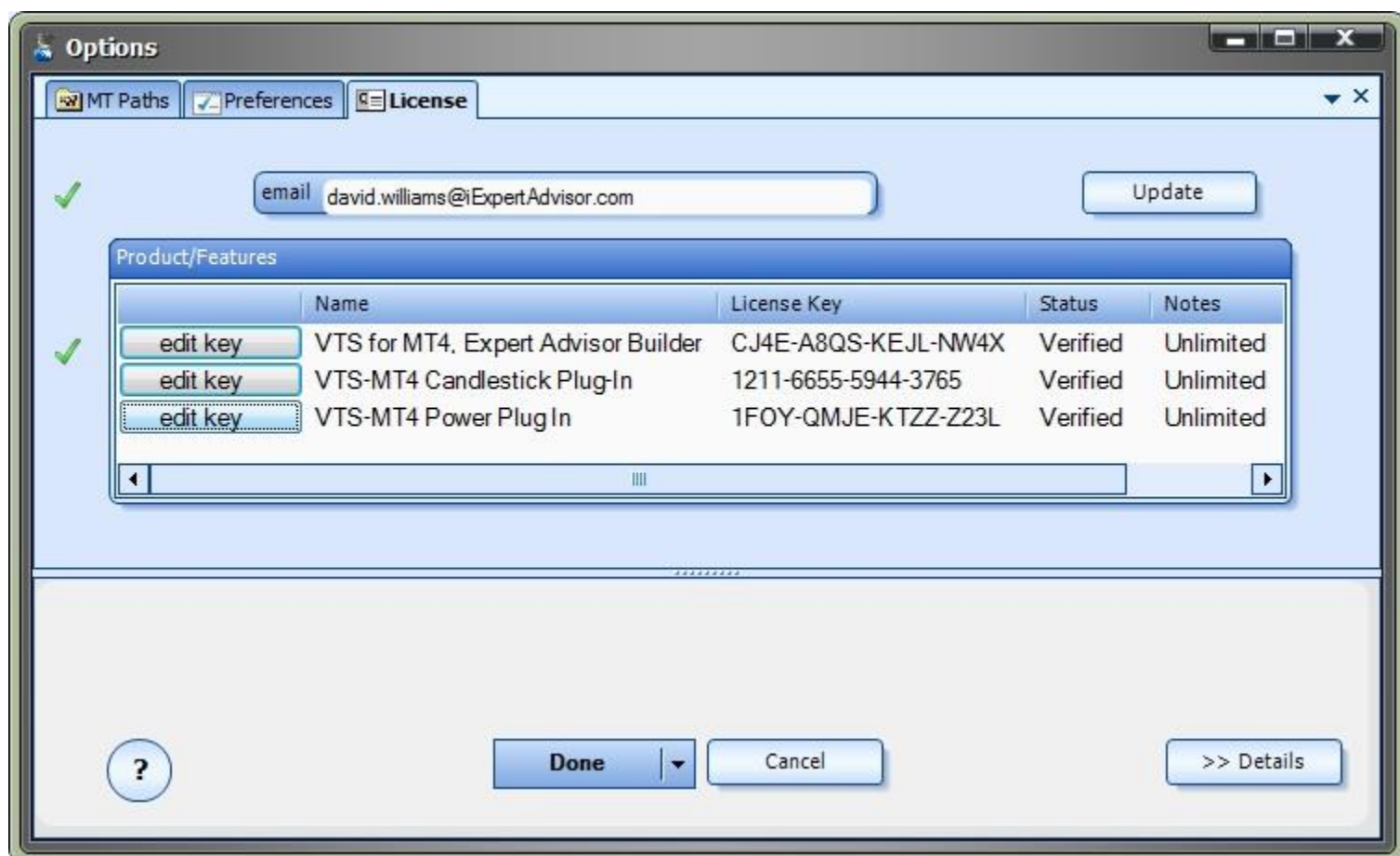# Chart Object Functions in the Toolbox

Once enabled, the *Chart Object* functions are available in the Toolbox Function tab under the *ChartObjects* menu.

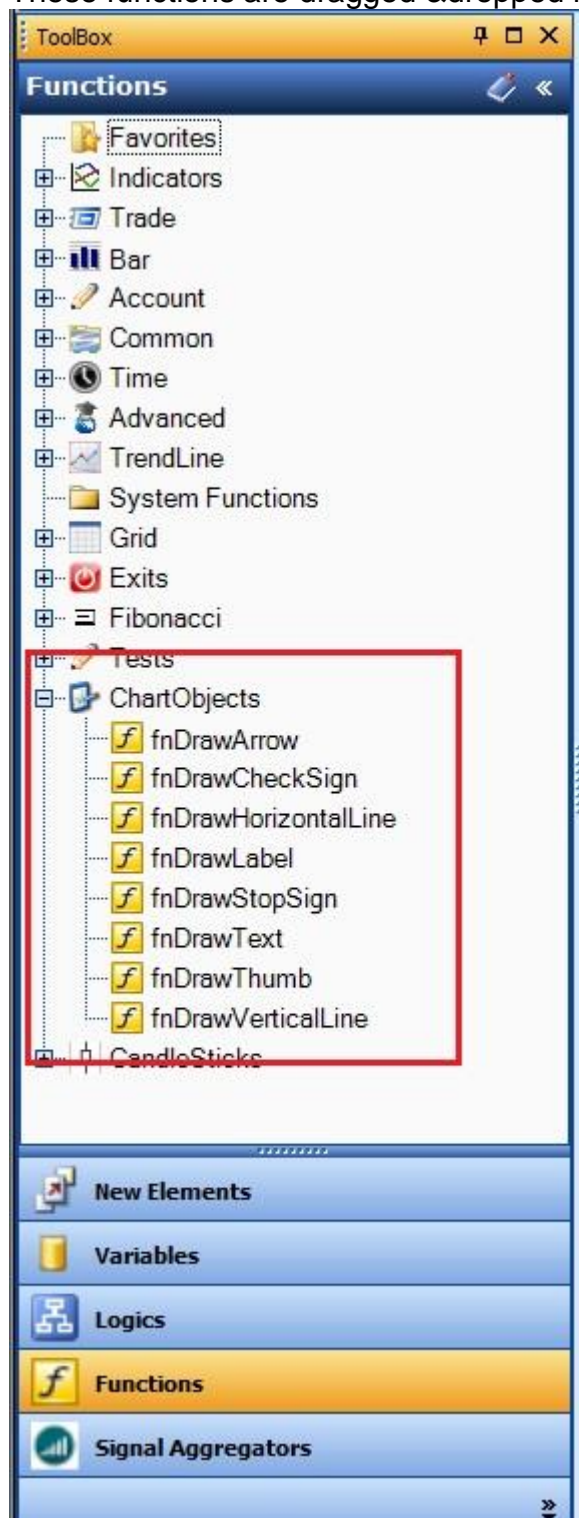These functions are dragged &dropped from the Toolbox onto the Drawing Pad like other function.

Chart Objects Functions

The Chart Objects function library include these functions:

- fnDrawHorizontalLine
  - o Used to draw a horizontal line. Positioned by price.
- fnDrawVerticalLine
  - o Used to draw a vertical line. Positioned by candle.
- fnDrawArrow
  - o Used to draw an up or down arrow. Positioned by price and candle.
- fnDrawThumb
  - o Used to draw an up or down thumb. Positioned by price and candle.
- fnDrawLabel
  - o Used to draw an label containing text. Positioned by price and candle.
- fnDrawText
  - o Used to draw text. Positioned by x and y coordinates.
- fnDrawCheckSign
  - o Used to draw a check mark. Positioned by price and candle.
- fnDrawStopSign
  - o Used to draw a stop sign. Positioned by price and candle.

fnDrawHorizontalLine

The *fnDrawHorizontalLine* is used to draw a horizontal line on a price chart. It is positioned by price.

After the *fnDrawHorizontalLine* function has been added to a Drawing, it is configured by clicking the (+) button along the bottom of the Element.

The Function Configuration window allows you to select values for each parameter.

Each Chart Object function offers a number of parameters on the *Configuration* Tab, and also a number of parameters on the *Advanced* Tab.

- Parameters on the *Configuration* Tab should be inspected and set each time the function is added to a drawing.
- Parameters on the *Advanced* Tab usually do not need to be changed from their default values.

Parameters on the *Configuration* Tab

Parameter Name	Data type	Description
name	String	The name of the object. Each object on a chart must have a unique name. Note: String parameters require enclosing quotes. Objects names can viewed from the MetaTrader platform by going to: Charts->Objects->Object List
price	Double	The price value used to position the object's horizontal location on the price chart.
lineColor	Color	The color of the object.

Parameters on the *Advanced* Tab

Parameter Name	Data type	Description
redraw	Integer	The interval when to redraw the object. The pull-down menu offers these choices: **REDRAW_ONCE**: draw the object once only. **REDRAW_BAR**: redraw the object on each new bar. **REDRAW_TICK**: redraw the object on each new tick. Note: The object function must be connected on the drawing so that it executes on each tick for the redraw options to work correctly. Objects that use the shift parameter will move on the chart as new candles are formed.
lineWidth	Integer	The width of the line. Note: Styles only work when the lineWidth is 1.
lineStyle	Integer	The line style. The pull-down menu offers these choices: **STYLE_SOLID** **STYLE_DASH** **STYLE_DOT** **STYLE_DASHDOT** **STYLE_DASHDOTDOT** Note: Styles only work when the lineWidth is 1.
chartID	Integer	The chart identifier. Use 0 for the current chart.
windowID	Integer	The window identifier. Use 0 for the current window.

fnDrawVerticalLine

The *fnDrawVerticalLine* is used to draw a vertical line on a price chart. It is positioned by a [shift](#) value.

After the *fnDrawVerticalLine* function has been added to a [Drawing](#), it is configured by clicking the (+) button along the bottom of the [Element](#).

The [Function Configuration](#) window allows you to select values for each parameter.

Each Chart Object function offers a number of parameters on the *Configuration* Tab, and also a number of parameters on the *Advanced* Tab.

- Parameters on the *Configuration* Tab should be inspected and set each time the function is added to a drawing.
- Parameters on the *Advanced* Tab usually do not need to be changed from their default values.

Parameters on the *Configuration* Tab

Parameter Name	Data type	Description
name	String	The name of the object. Each object on a chart must have a unique name. Note: String parameters require enclosing quotes. Objects names can viewed from the MetaTrader platform by going to: Charts->Objects->Object List
shift	Integer	The candle [shift](#) used to position the object's vertical location on the price chart.
lineColor	Color	The color of the object.

Parameters on the *Advanced* Tab

Parameter Name	Data type	Description
redraw	Integer	The interval when to redraw the object. The pull-down menu offers these choices: **REDRAW_ONCE**: draw the object once only. **REDRAW_BAR**: redraw the object on each new bar. **REDRAW_TICK**: redraw the object on each new tick. Note: The object function must be connected on the drawing so that it executes on each tick for the redraw options to work correctly. Objects that use the shift parameter will move on the chart as new candles are formed.
lineWidth	Integer	The width of the line. Note: Styles only work when the lineWidth is 1.
lineStyle	Integer	The line style. The pull-down menu offers these choices: **STYLE_SOLID** **STYLE_DASH** **STYLE_DOT** **STYLE_DASHDOT** **STYLE_DASHDOTDOT** Note: Styles only work when the lineWidth is 1.
chartID	Integer	The chart identifier. Use 0 for the current chart.
windowID	Integer	The window identifier. Use 0 for the current window.

fnDrawArrow

The *fnDrawArrow* is used to draw an up or down arrow on a price chart. It is positioned by price and shift value.

After the *fnDrawArrow* function has been added to a Drawing, it is configured by clicking the (+) button along the bottom of the Element.

The Function Configuration window allows you to select values for each parameter.

Each Chart Object function offers a number of parameters on the *Configuration* Tab, and also a number of parameters on the *Advanced* Tab.

- Parameters on the *Configuration* Tab should be inspected and set each time the function is added to a drawing.
- Parameters on the *Advanced* Tab usually do not need to be changed from their default values.

Parameters on the *Configuration* Tab

Parameter Name	Data type	Description
type	Integer	Type of arrow. The pull-down menu offers these choices: **OBJ_ARROW_UP** **OBJ_ARROW_DOWN**
name	String	The name of the object. Each object on a chart must have a unique name. Note: String parameters require enclosing quotes. Objects names can viewed from the MetaTrader platform by going to: Charts->Objects->Object List
shift	Integer	The candle shift used to position the object's vertical location on the price chart.
price	Double	The price value used to position the object's horizontal location on the price chart.
lineColor	Color	The color of the object.

Parameters on the *Advanced* Tab

Parameter Name	Data type	Description
redraw	Integer	The interval when to redraw the object. The pull-down menu offers these choices: **REDRAW_ONCE**: draw the object once only. **REDRAW_BAR**: redraw the object on each new bar. **REDRAW_TICK**: redraw the object on each new tick. Note: The object function must be connected on the drawing so that it executes on each tick for the redraw options to work correctly. Objects that use the shift parameter will move on the chart as new candles are formed.
size	Integer	The size of the object.
lineStyle	Integer	The line style. The pull-down menu offers these choices: **STYLE_SOLID** **STYLE_DASH** **STYLE_DOT** **STYLE_DASHDOT** **STYLE_DASHDOTDOT** Note: Styles only work when the size is 1.
chartID	Integer	The chart identifier. Use 0 for the current chart.
windowID	Integer	The window identifier. Use 0 for the current window.

fnDrawThumb

The *fnDrawThumb* is used to draw an up or down thumb on a price chart. It is positioned by price and shift value.

After the *fnDrawThumb* function has been added to a [Drawing](), it is configured by clicking the (+) button along the bottom of the [Element]().
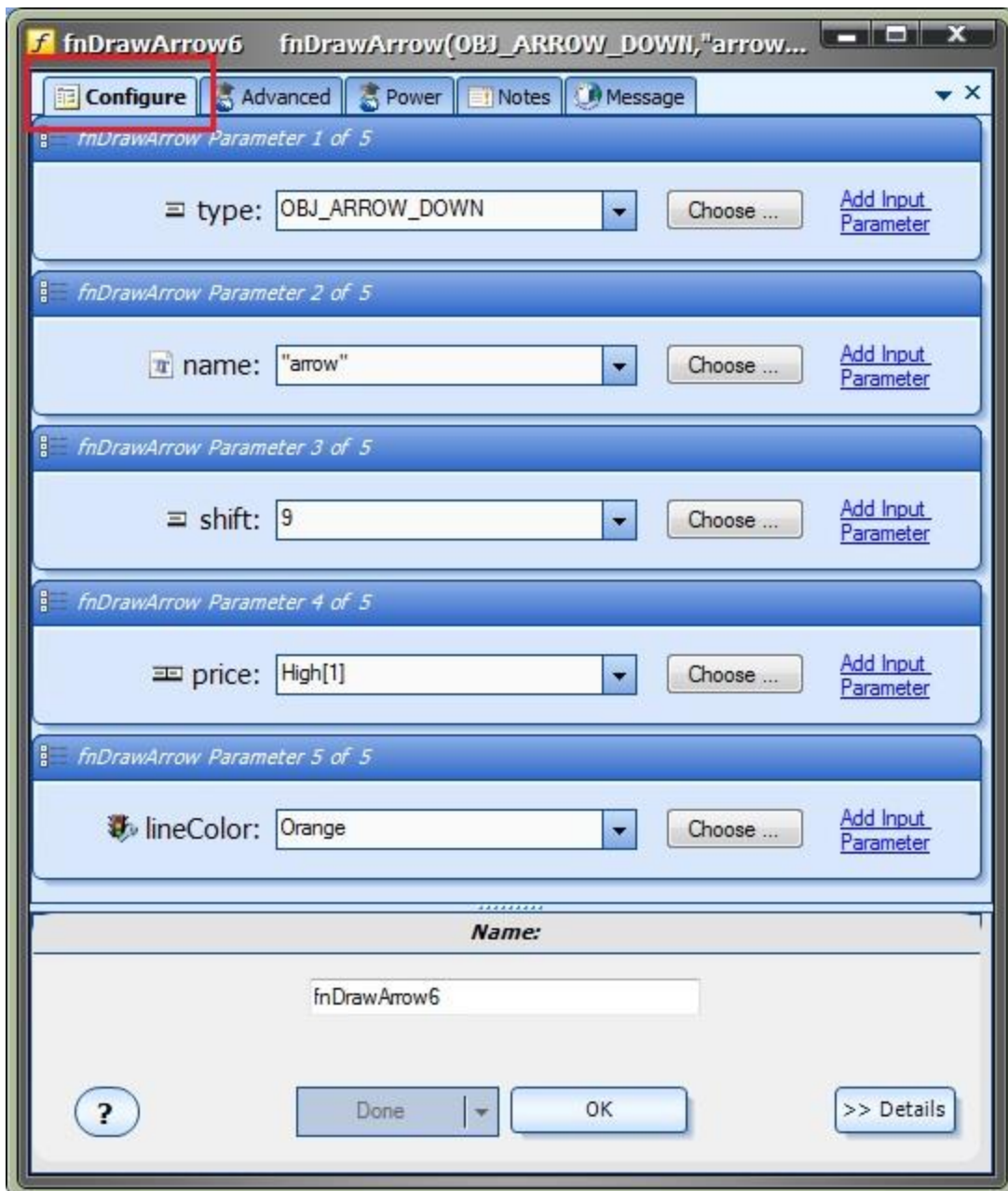
The [Function Configuration]() window allows you to select values for each parameter.

Each Chart Object function offers a number of parameters on the **Configuration** Tab, and also a number of parameters on the **Advanced** Tab.

- Parameters on the **Configuration** Tab should be inspected and set each time the function is added to a drawing.
- Parameters on the **Advanced** Tab usually do not need to be changed from their default values.

Parameters on the *Configuration* Tab

Parameter Name	Data type	Description
type	Integer	Type of thumb. The pull-down menu offers these choices: **OBJ_ARROW_THUMB_UP** **OBJ_ARROW_THUMB_DOWN**
name	String	The name of the object. Each object on a chart must have a unique name. Note: String parameters require enclosing quotes. Objects names can viewed from the MetaTrader platform by going to: Charts->Objects->Object List
shift	Integer	The candle [shift]() used to position the object's vertical location on the price chart.
price	Double	The price value used to position the object's horizontal location on the price chart.
lineColor	Color	The color of the object.

Parameters on the *Advanced* Tab

Parameter Name	Data type	Description
redraw	Integer	The interval when to redraw the object. The pull-down menu offers these choices: **REDRAW_ONCE**: draw the object once only. **REDRAW_BAR**: redraw the object on each new bar. **REDRAW_TICK**: redraw the object on each new tick. Note: The object function must be connected on the drawing so that it executes on each tick for the redraw options to work correctly. Objects that use the shift parameter will move on the chart as new candles are formed.
size	Integer	The size of the object.
lineStyle	Integer	The line style. The pull-down menu offers these choices: **STYLE_SOLID** **STYLE_DASH** **STYLE_DOT** **STYLE_DASHDOT** **STYLE_DASHDOTDOT** Note: Styles only work when the size is 1.
chartID	Integer	The chart identifier. Use 0 for the current chart.
windowID	Integer	The window identifier. Use 0 for the current window.

fnDrawLabel

The *fnDrawLabel* is used to draw a label containing text on a price chart. It is positioned by absolute x and y values.

After the *fnDrawLabel* function has been added to a Drawing, it is configured by clicking the (+) button along the bottom of the Element.

The Function Configuration window allows you to select values for each parameter.

Each Chart Object function offers a number of parameters on the *Configuration* Tab, and also a number of parameters on the *Advanced* Tab.

- Parameters on the *Configuration* Tab should be inspected and set each time the function is added to a drawing.
- Parameters on the *Advanced* Tab usually do not need to be changed from their default values.

Parameters on the *Configuration* Tab

Parameter Name	Data type	Description
name	String	The name of the object. Each object on a chart must have a unique name. Note: String parameters require enclosing quotes. Objects names can viewed from the MetaTrader platform by going to: Charts->Objects->Object List
text	String	The text to be written on the chart. Note: String parameters require enclosing quotes
x	Integer	The x coordinate value used to position the object's horizontal location on the price chart. Note: The chart position where x and y are 0 is the bottom left corner of the chart.
y	Integer	The y coordinate value used to position the object's vertical location on the price chart. Note: The chart position where x and y are 0 is the bottom left corner of the chart.
fontColor	Color	The color of the font.
font	String	The name of the font.

Parameters on the *Advanced* Tab

Parameter Name	Data type	Description
redraw	Integer	The interval when to redraw the object. The pull-down menu offers these choices: **REDRAW_ONCE**: draw the object once only. **REDRAW_BAR**: redraw the object on each new bar. **REDRAW_TICK**: redraw the object on each new tick. Note: The object function must be connected on the drawing so that it executes on each tick for the redraw options to work correctly. Objects that use the shift parameter will move on the chart as new candles are formed.
fontSize	Integer	The size of the font.
chartID	Integer	The chart identifier. Use 0 for the current chart.
windowID	Integer	The window identifier. Use 0 for the current window.

fnDrawLabel2   fnDrawLabel("label","hello world" + Symbol(...

Configure   **Advanced**   Notes   Message

fnDrawLabel Parameter 1 of 4

≡ redraw: `REDRAW_ONCE`   ▼   Choose ...   Add Input Parameter

fnDrawLabel Parameter 2 of 4

≡ fontSize: `18`   ▼   Choose ...   Add Input Parameter

fnDrawLabel Parameter 3 of 4

≡ chartId: `0`   ▼   Choose ...   Add Input Parameter

fnDrawLabel Parameter 4 of 4

≡ windowId: `0`   ▼   Choose ...   Add Input Parameter

Name:

`fnDrawLabel2`

?   Done |▼   OK   >> Details

fnDrawText

The *fnDrawText* is used to draw a label containing text on a price chart. It is positioned by price and candle.

After the *fnDrawText* function has been added to a Drawing, it is configured by clicking the (+) button along the bottom of the Element.
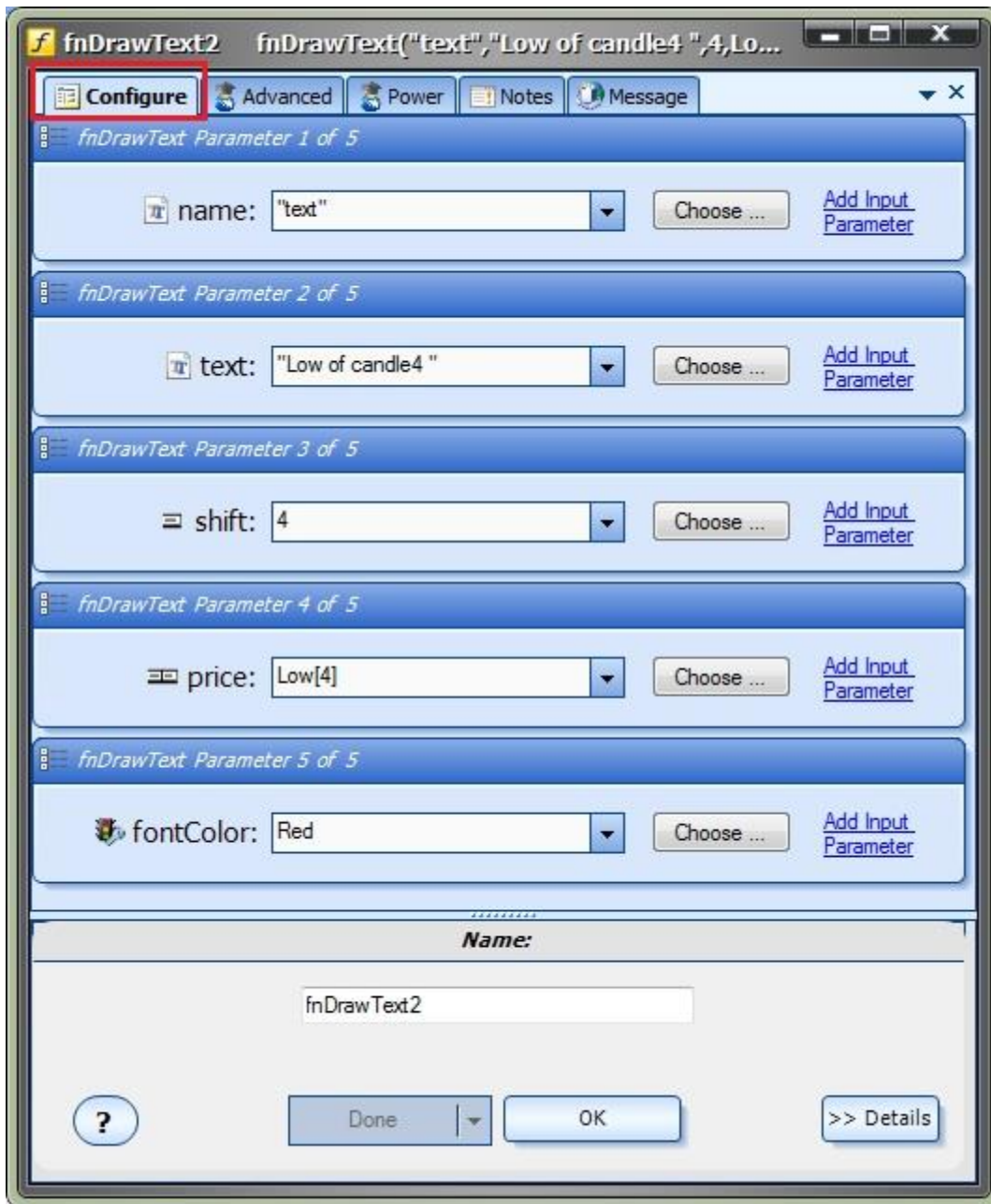
The Function Configuration window allows you to select values for each parameter.

Each Chart Object function offers a number of parameters on the **Configuration** Tab, and also a number of parameters on the **Advanced** Tab.

- Parameters on the **Configuration** Tab should be inspected and set each time the function is added to a drawing.
- Parameters on the **Advanced** Tab usually do not need to be changed from their default values.

Parameters on the *Configuration* Tab

Parameter Name	Data type	Description
name	String	The name of the object. Each object on a chart must have a unique name. Note: String parameters require enclosing quotes. Objects names can viewed from the MetaTrader platform by going to: Charts->Objects->Object List
text	String	The text to be written on the chart. Note: String parameters require enclosing quotes
shift	Integer	The candle shift used to position the object's vertical location on the price chart.
price	Double	The price value used to position the object's horizontal location on the price chart.
fontColor	Color	The color of the font.

Parameters on the *Advanced* Tab

Parameter Name	Data type	Description
redraw	Integer	The interval when to redraw the object. The pull-down menu offers these choices: **REDRAW_ONCE**: draw the object once only. **REDRAW_BAR**: redraw the object on each new bar. **REDRAW_TICK**: redraw the object on each new tick. Note: The object function must be connected on the drawing so that it executes on each tick for the redraw options to work correctly. Objects that use the shift parameter will move on the chart as new candles are formed.
fontSize	Integer	The size of the font.
font	String	The name of the font.
chartID	Integer	The chart identifier. Use 0 for the current chart.
windowID	Integer	The window identifier. Use 0 for the current window.

fnDrawText2   fnDrawText("text","Low of candle4 ",4,Lo...

Configure   Advanced   Power   Notes   Message

fnDrawText Parameter 1 of 5

redraw: REDRAW_TICK   ▼   Choose ...   Add Input Parameter

fnDrawText Parameter 2 of 5

fontSize: 12   ▼   Choose ...   Add Input Parameter

fnDrawText Parameter 3 of 5

font: "Arial"   ▼   Choose ...   Add Input Parameter

fnDrawText Parameter 4 of 5

chartId: 0   ▼   Choose ...   Add Input Parameter

fnDrawText Parameter 5 of 5

windowId: 0   ▼   Choose ...   Add Input Parameter

Name:

fnDrawText2

?   Done   ▼   OK   >> Details

fnDrawCheckSign

The ***fnDrawCheckSign*** is used to draw a check mark on a price chart. It is positioned by price and candle.

After the ***fnDrawCheckSign*** function has been added to a <u>Drawing</u>, it is configured by clicking the (+) button along the bottom of the <u>Element</u>.

The <u>Function Configuration</u> window allows you to select values for each parameter.

Each Chart Object function offers a number of parameters on the ***Configuration*** Tab, and also a number of parameters on the ***Advanced*** Tab.

- Parameters on the ***Configuration*** Tab should be inspected and set each time the function is added to a drawing.
- Parameters on the ***Advanced*** Tab usually do not need to be changed from their default values.
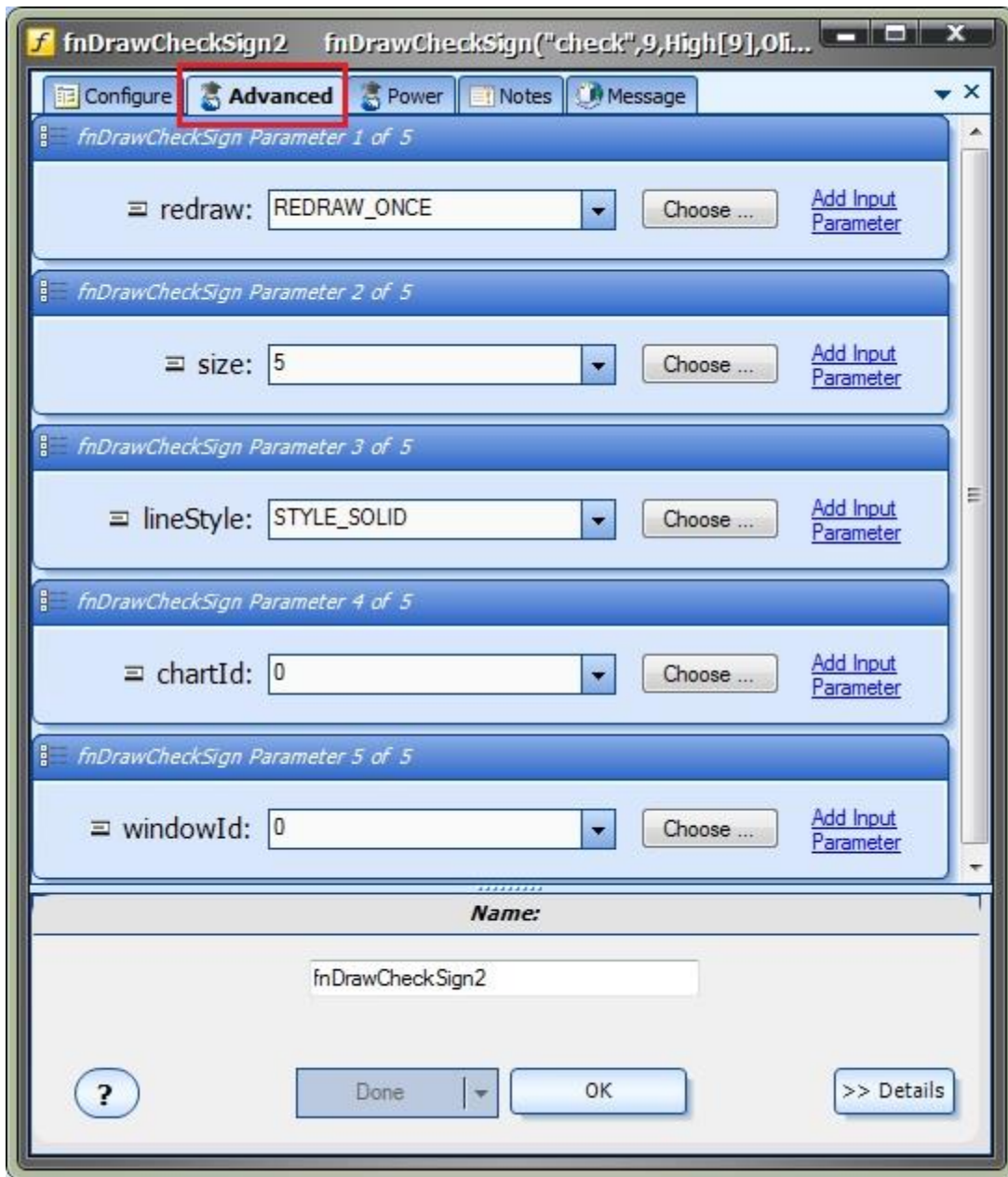
Parameters on the *Configuration* Tab

Parameter Name	Data type	Description
name	String	The name of the object. Each object on a chart must have a unique name. Note: String parameters require enclosing quotes. Objects names can viewed from the MetaTrader platform by going to: Charts->Objects->Object List
shift	Integer	The candle <u>shift</u> used to position the object's vertical location on the price chart.
price	Double	The price value used to position the object's horizontal location on the price chart.
lineColor	Color	The color of the object.

Parameters on the *Advanced* Tab

Parameter Name	Data type	Description
redraw	Integer	The interval when to redraw the object. The pull-down menu offers these choices: **REDRAW_ONCE**: draw the object once only. **REDRAW_BAR**: redraw the object on each new bar. **REDRAW_TICK**: redraw the object on each new tick. Note: The object function must be connected on the drawing so that it executes on each tick for the redraw options to work correctly. Objects that use the shift parameter will move on the chart as new candles are formed.
size	Integer	The size of the object.
lineStyle	Integer	The line style. The pull-down menu offers these choices: **STYLE_SOLID** **STYLE_DASH** **STYLE_DOT** **STYLE_DASHDOT** **STYLE_DASHDOTDOT** Note: Styles only work when the size is 1.
chartID	Integer	The chart identifier. Use 0 for the current chart.
windowID	Integer	The window identifier. Use 0 for the current window.

fnDrawStopSign

The *fnDrawStopSign* is used to draw a stop sign on a price chart. It is positioned by price and candle.

After the *fnDrawStopSign* function has been added to a Drawing, it is configured by clicking the (+) button along the bottom of the Element.
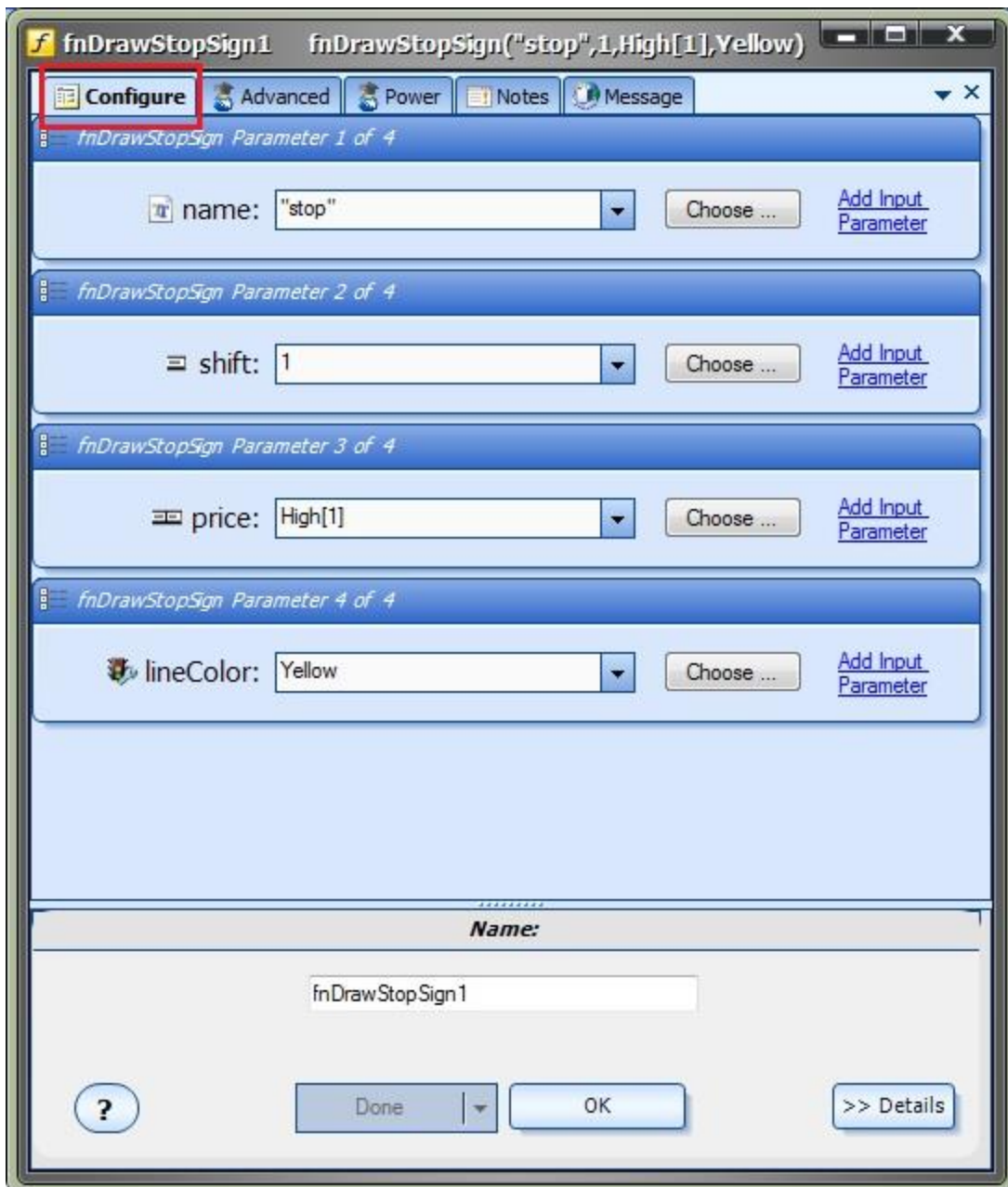
The Function Configuration window allows you to select values for each parameter.

Each Chart Object function offers a number of parameters on the *Configuration* Tab, and also a number of parameters on the *Advanced* Tab.

- Parameters on the *Configuration* Tab should be inspected and set each time the function is added to a drawing.
- Parameters on the *Advanced* Tab usually do not need to be changed from their default values.

Parameters on the *Configuration* Tab

Parameter Name	Data type	Description
name	String	The name of the object. Each object on a chart must have a unique name. Note: String parameters require enclosing quotes. Objects names can viewed from the MetaTrader platform by going to: Charts->Objects->Object List
shift	Integer	The candle shift used to position the object's vertical location on the price chart.
price	Double	The price value used to position the object's horizontal location on the price chart.
lineColor	Color	The color of the object.

Parameters on the *Advanced* Tab

Parameter Name	Data type	Description
redraw	Integer	The interval when to redraw the object. The pull-down menu offers these choices: **REDRAW_ONCE**: draw the object once only. **REDRAW_BAR**: redraw the object on each new bar. **REDRAW_TICK**: redraw the object on each new tick. Note: The object function must be connected on the drawing so that it executes on each tick for the redraw options to work correctly. Objects that use the shift parameter will move on the chart as new candles are formed.
size	Integer	The size of the object.
lineStyle	Integer	The line style. The pull-down menu offers these choices: **STYLE_SOLID** **STYLE_DASH** **STYLE_DOT** **STYLE_DASHDOT** **STYLE_DASHDOTDOT** Note: Styles only work when the size is 1.
chartID	Integer	The chart identifier. Use 0 for the current chart.
windowID	Integer	The window identifier. Use 0 for the current window.

Chart Objects on the Drawing Pad

The Chart Object functions are dragged, dropped and connected from the Toolbox onto the Drawing Pad just like any other function in VTS.
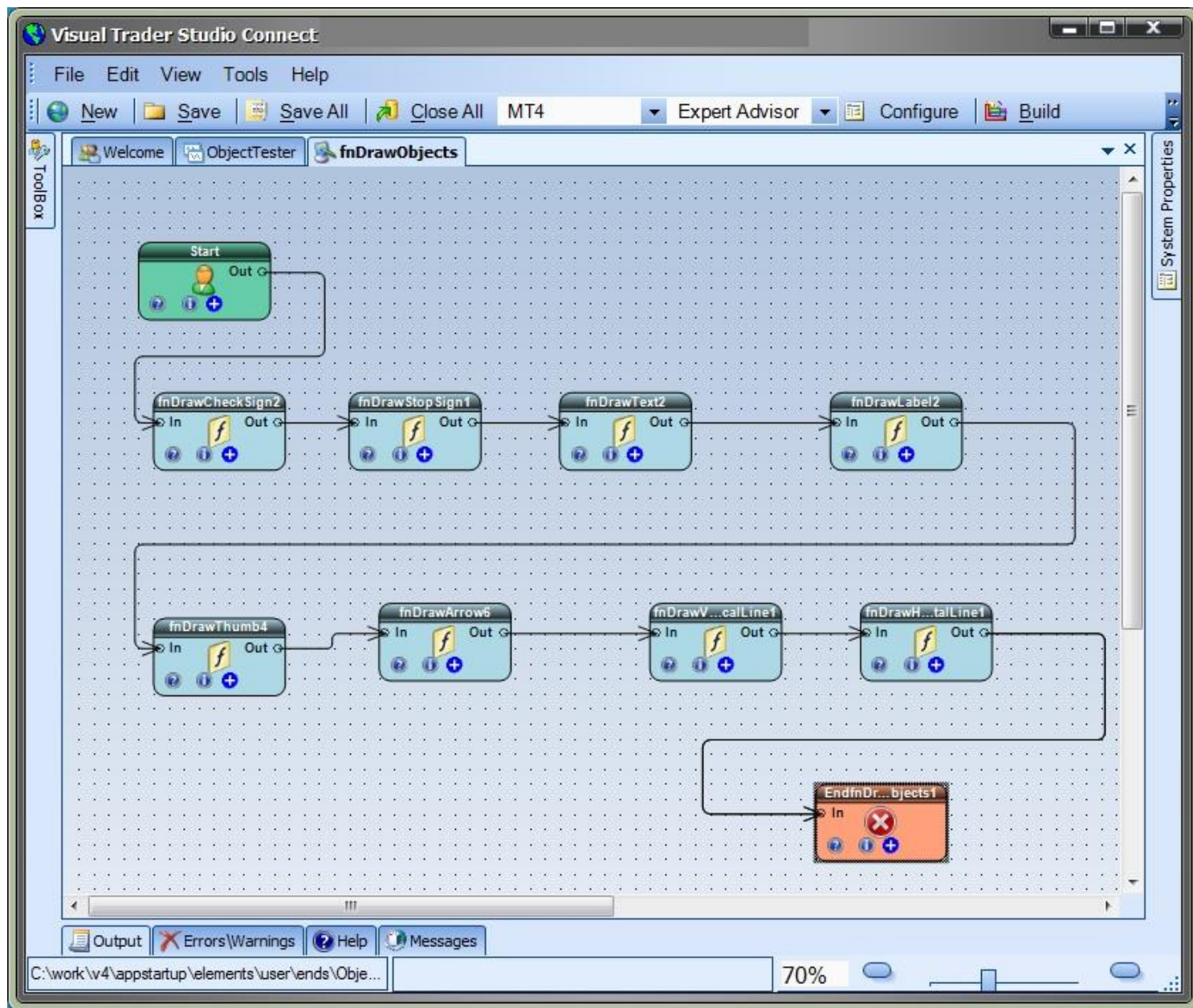
Chart Objects on a MetaTrader Price Chart

This price chart shows each of the Chart Object types.