M4 Functional Description & Diagram

DataManager Class

Base class that contains functions for updating the application with real time data.

You may derive from this class to implement your own data provider, such as eSignal, DTN, etc.

See DDFDataManager for a working example.

Classes such as ctlChart, ctlAlert, ctlBacktest, ctlScanner and other classes are updated with the real time data from this class.

DDFDataManager Class

Inherits from DataManager (see DataManager) to login and request real time plus historic data from Barchart.com

ctlAlert Class

This class uses the TradeScript.dll COM object to process real time alerts via the TradeScript scripting language. See TradeScript.pdf for scripting language documentation. The TradeScript.dll source code compiles in VC++ 6 and can be found in the downloads section of our web site, along with documentation.

Contains an "Enable Automated Trading" checkbox and when checked, will send orders to the ctlPortfolio ExecuteOrder function. See ctlPortfolio.

Data comes from the DataManager class by way of the custom data feed wrapper (DDFDataManager by default).

ctlBacktest Class

Uses the TradeScript.dll COM object to back test trading strategies via the TradeScript scripting language. See TradeScript.pdf for scripting language documentation. The TradeScript.dll source code compiles in VC++ 6 and can be found in the downloads section of our web site, along with documentation.

Results are displayed in a new instance of ctlChart after a back test has completed. Results include buy/sell arrows, text and 24 statistical outputs including a trade log. Refer to source code comments.

Data comes from the DataManager class by way of the custom data feed wrapper (DDFDataManager by default).

ctlChart Class

Implements the StockChartX V5 ActiveX charting component. Refer to the source code, which is intuitively categorized and well commented.

Data comes from the DataManager class by way of the custom data feed wrapper (DDFDataManager by default).

ctlData Class

Polls and displays alerts from your web server via WebService calls. Alerts include instant messages, order notifications, etc.

Refer to the source code for additional information.

ctlForex Class

Displays a collection of ctlForexPair instances to form a forex quote board.

ctlForexPair Class

Used by ctlForex to create a forex quote board.

ctlPortfolio Class

This class contains a user interface for gathering order details from the user. When the Submit button is clicked, the order details are sent to the ExecuteOrder function, where you may integrate your order entry API(s).

After transmitting your order, your broker API should send a message back with order status. Simply update the appropriate DataGrid cell with the information so the user will be informed.

This class also encrypts and transmits order information to your web server via a WebService call into SQL server.

The class uses the WebService to store/retrieve information regarding portfolio settings. Refer to the source code comments.

Real time data for the portfolio screen is provided via DDFDataManager by default.

ctlScanner Class

Uses the TradeScript.dll COM object to scan a list of symbols via the TradeScript scripting language. See TradeScript.pdf for scripting language documentation. The TradeScript.dll source code compiles in VC++ 6 and can be found in the downloads section of our web site, along with documentation.

Data comes from the DataManager class by way of the custom data feed wrapper (DDFDataManager by default).

Refer to the source code for comments.

ctlWeb

Displays a web page of your choice. Loaded by frmMain.

DataGridViewTextBoxColorCell, DataGridViewTickerChartCell

Self explanatory – refer to the source code.

frmActivate

Sends a GUID string to your server via a WebService call to validate an activation key. Keys may be generated by the VB.net Admin project located in the M4 project directory.

frmColor

Self explanatory – refer to the source code.

frmDataLogin

Currently used by DDFDataManager to prompt the user for login credentials.

frmFindSymbol

Allows the user to search for a symbol by partial company name.

frmHelp

Self explanatory – refer to the source code.

frmMain

The main parent window for the M4 application. A large portion of this Windows Form is responsible for using the Nevron UI component. The source code is categorized and commented. No further explanation is necessary.

frmNewPortfiolio

Used by ctlPortfolio to allow the user to create a new portfolio by specifying a name and starting account balance.

frmPatternRecognition

A Windows Form used to display and run pre-defined pattern searches via the APR library (located on the product downloads page. Installs with complete documentation).

frmPriceStyle

Used by ctlChart to display Price Style properties for price styles such as point & figure, renko, three line break, etc. Source code is self explanatory and commented.

frmSelectChart

Called by frmMain and DDFDataManager to prompt the user for settings to load a chart. Settings currently include Symbol, Periodicity, bar Interval and Bar History (number of bars to load).

frmSymbol

Allows the user to specify a symbol. Self explanatory.

M4 Platform Functional Diagram

