

## Strategy Studio: SprywareAdapter (Market Data)

SprywareAdapter is Strategy Studio's market data adapter for Spryware's MIS market data servers. Feeds the adapter currently normalizes include US consolidated equity feeds, OPRA, US Equity Imbalance, and BBO Globex data. More information about Spryware is available at

<http://www.spryware.com/>

To set SprywareAdapter as the Strategy Studio server's primary market data adapter, add the following parameter value to the server's main config file:

- **PRIMARY\_ADAPTER=SprywareAdapter**

The Spryware adapter connects to streaming MIS channels via Spryware's TickerTableMP base class. The main config file variable can be used to customize the channel configuration:

- **SPRYWARE\_CHANNEL=channelList**
  - A comma separated list of the MIS channels to connect to. Default value is *EquityPriceChannel*. An asterisk (\*) may be used to connect to all channels present on the MIS server.
- **or, SPRYWARE\_CHANNEL=[ConnectionSpec;ConnectionSpec;...]**
  - Each *ConnectionSpec* creates an instance of TickerTableMP and is in the form *ChannelList:EventList:HostList:Username:Password*, where each list is comma separated and everything following *ChannelList* is optional. The *EventList* can be used to limit subscribed event types on a connection; defaults to all event types. An asterisk (\*) means all event types. *HostList* overrides the MIS.xml host and allows for backups. For example:
    - **SPRYWARE\_CHANNEL=[EquityPriceChannel,ProcessedFuturePrice:Trade,Quote;ProcessedImbalanceChannel:OrderImbalance;EquityOptionPriceChannel]**
- **SPRYWARE\_EQUITY\_TRADE\_STATS\_CONFIG=Host:Username:Password**
  - Alternate connection information to use when querying equity trade stats initialization data. Only the Host is required. Futures and Options trade stats connections can be overridden via **SPRYWARE\_FUTURES\_TRADE\_STATS\_CONFIG** and **SPRYWARE\_OPTIONS\_TRADE\_STATS\_CONFIG**.

Within a few seconds of instrument subscription, the adapter will also attempt to poll the appropriate static MIS table (eg EquityPrice/EquityOptionPrice/FuturePrice) to initialize the instrument's TradeStats (e.g., high, low, open, prior\_close, prior\_close\_date, and consolidated volume).

Spryware server information and credentials are specified by Spryware's standard MIS.xml file. By default Spryware looks for this file in *C:\Windows* on Windows or the local app dir on linux. This location can be customized by specifying the MIS\_CONFIG environment variable on either platform. Note by default Spryware requires their MisGiver app to be running in order to connect to a streaming channel; the utility autostarts on Windows but must be manually launched on linux. This dependency can be eliminated by specifying `<MisGiver><Daemon>No</Daemon></MisGiver>` in MIS.xml.

The adapter's default behavior is to subscribe by root symbol, which is usually the correct policy. However, occasionally Spryware MIS servers are configured to require subscription to exchange specific symbols. If this is the case, a file "exchanges.txt" can be added to the Strategy Studio server directory, containing lines such as "NYSE=ON", where the exchange string is based on the Strategy Studio MarketCenterID enum values. This will instruct the adapter to subscribe to, for example, both "GE" and "GE.N".

When using Spryware's OPRA or CME data, contract specifications (including expiry and multiplier) can be loaded into Strategy Studio's db/reference.db by running the SprywareReferenceDBPopulator utility (available from the Strategy Studio FTP site) from the Strategy Server's root directory daily prior to launching the server process. Note Strategy Studio normalizes US Options symbols into conventional OSI symbols, e.g., "GE141122C00027000", and for Futures symbols Strategy Studio uses Spryware's symbol convention, e.g., "/ES 14Z".