

Strategy Studio: KDBAdapter (Backtesting / Live Market Data)

KDBAdapter is Strategy Studio's back testing reader and live data adapter for data available from Kx's kdb time series database platform. More information about Kx and kdb is available at:

<http://kx.com/software.php>

The backtest adapter is currently configured to read from order, trade, and imbalance tables organized according to NYSE's TAQ database schema. More information about the TAQ schema is available at:

www.nyxdata.com/doc/224904

KDB may be selected as a backtesting strategy server's data source by setting the following variable in backtester_config.txt:

- > **BACKTEST_SOURCE=KDBAdapter**

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

- > **PRIMARY_ADAPTER=KDBAdapter**

The following variables may be added to the configuration file to set options in the KDBAdapter:

- > **KDB_HOST=host**
 - (Required) The ip address of the kdb server
- > **KDB_PORT=port**
 - (Required) The port of the kdb server
- > **KDB_USER=user_name**
 - (Required) User name for accessing the kdb database server.
 - This will be provided by your database administrator.
- > **KDB_PASSWORD=password**
 - (Required) Password for accessing the kdb database server.
 - This will be provided by your database administrator.
- > **KDB_BLOCK_SIZE=integer <default = 1000>**
 - (Optional, backtest mode) The adapter requests blocks of streaming data be sent from the server, in chunks of this size.
 - Various server connection and/or database server configuration scenarios may benefit from adjusting this setting.
- > **KDB_TIME_STEP=integer <default = 180>**
 - (Optional, backtest mode) The adapter queries the database in steps of this size, in minutes.
- > **KDB_LIVE_CONNECTIONS=<connectionSpec>[:<connectionSpec>[:...]]**
 - Live mode
 - connectionSpec = <host>,<port>,<user;password>,<table>

Exchange mapping

The adapter may be configured with an exchange mapping file to translate KDB_EXG values into Strategy Studio MarketCenterIDs. The mappings should be placed in kdb_exchange_mapping.csv inside the server directory and contain entries of the form:

- > **#KDB_EXG,MCID**
 - E.g., CME,CME_GLOBEX

Reconnect logic

The Live adapter automatically attempts to asynchronously reconnect failed connections on a 1-second loop.