

Sierra Chart System Architecture

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This section explains the different available client and server and connectivity methods and the connectivity architecture of Sierra Chart.

On the client-side, the side of the user, Sierra Chart consists of a desktop trading and charting program that can be used on desktop, laptop/notebook computers, or any computer that is capable of running the standard windows operating system. Support for other operating systems is planned.

For historical and real-time market data, and trading functionality, Sierra Chart supports and can connect to multiple supported Data and Trading services. Some of which are external, and some of which are internally provided by Sierra Chart.

Sierra Chart has the ability to connect to an external data feed service in a server environment, and supports maintaining historical data from that data feed and supports the transmission of real-time and historical market data to Sierra Chart users from that data feed.

For market data, symbol and exchange level authorizations is supported through a web-based control panel for each user, if necessary.

Sierra Chart has high-performance 64-bit real-time and historical data server software which can be used to provide a reliable and unified real-time and historical data feed to the Sierra Chart desktop program used by the clients. Delayed historical data serving is supported.

For trading functionality the Sierra Chart desktop/client program can connect directly to an external service trading server. Or the Sierra Chart desktop/client program can connect to a Sierra Chart server or a hosted server for Sierra Chart and have orders routed through a common connection using the FIX or DTC protocol which connect to a trading service from the broker or other trading services provider. At a future point, omnibus trading accounts will be supported and Sierra Chart will maintain the individual subaccounts and balances along with risk management.

Sierra Chart supports full order fill logging both on the client-side and server-side and can generate various trade performance and statistics reports.

For market data and trading, there are multiple configurations supported. Within the Sierra Chart desktop/client program, a single connection or separate connections is supported for market data and trading.

Historical and streaming real-time market data can be provided through a Sierra Chart server or direct from an external data feed service. Historical data can be provided by a Sierra Chart server and the real-time market data can be direct to the external data feed service. Trading can be a separate connection

or on the same connection as market data. Various communication protocols are supported in each case.

All Sierra Chart software is fully developed by Sierra Chart. We do not use any external components other than for compression/decompression and encryption. For these we use open source libraries in source code format. All of the Sierra Chart code is well engineered native high-performance C++ code.

*Last modified Tuesday, 13th December, 2022.