Strategy Studio: SterlingExecutionHandler

SterlingExecutionHandler is Strategy Studio's FIX interface to Sterling Trader Trading Engine system. The adapter is currently certified for execution of equity instruments.

This execution handler is enabled by adding the following setting to the server's main configuration file:

> **EXECUTION_HANDLER_MODE=SterlingExecutionHandler**

Session Level Settings

Session-level settings are specified in the file execution_handler-conf/sterling_fix.config. Notable settings include:

> **StartTime=*HH:MM:SS***
> **EndTime= *HH:MM:SS***
> - Required. Sets the window of time (in UTC) that the execution handler will attempt a connection and send orders.
> **SocketConnectHost=*host***
> - Required. Target host IP.
> **SocketConnectPort=*port***
> - Required. Target host port.
> **ReconnectInterval=*seconds***
> - Reconnect wait period for a disconnected session. This should not be set lower than 60.
> **SenderCompID=*sendercompid***
> - Required; issued by Sterling to identify the firm sending message.
> **TargetCompID=*targetcompid***
> - Required; issued by Sterling to identify receiving firm.
> **UseDataDictionary=Y**
> **DataDictionary= execution_handler-conf/Sterling_FIX42.xml**
> - Required.
> **ClientID=*tag109value***
> - Required. The value will be passed through tag 109, typically the clients MPID.
> **Rule80A=*orderCapacity***
> - Optional. Order capacity for outgoing orders, defaults to A ('Agency Single Order')
> **StrategyStudioAccount=*tag1value***
> - Required. Sets the Strategy Studio account that will be associated with this session. The value will also be passed through tag 1 on each order.
> **StrategyStudioFirm=*firm***
> - Required. Sets the firm this session will be associated with for auto-marking purposes.
> **AutoMarkSide=*true/false***
> - Optional. Determines whether new sell orders will automatically have their side marked based on the firm's position. The default value is false.

Note that Sterling_FIX42.xml should include ExDestination as a valid field in ExecutionReport.

Route Level Settings

Route level settings are specified in execution_handler-conf/sterling_route.config with format:

#MarketCenter,RouteString,ExecInst
> - **MarketCenter** is a string value that represents the Strategy Studio MarketCenterID, and the rest of the settings specify settings for orders routed to this MarketCenterID. A value of DEFAULT defines a catch-all route.
> - **RouteString** corresponds to Sterling tag 100, and should be a value from the Exchange Destinations tables in their FIX spec document.
> - **ExecInst** corresponds to Sterling tag 18; multiple values may be set with a space delimiter.

Custom Order Parameters

Most order properties are set using OrderParams's fields. Order properties that are not included in OrderParams can be set via OrderParams's custom_params member, which is a std::vector<boost::any>. The values are expected to be of type std::pair<int, std::string>, with the first specifying the FIX tag number and the second specifying the string value for the FIX field. A full description of supported FIX tags is available in Sterling Trading Engine FIX spec document.

OrderParams's custom_params may be used on both new orders and replaces. Note that custom_params are not automatically cleared after submission of a new order; thus, care should be taken that the desired values are present in custom_params if the OrderParams is copied from an existing object.