Strategy Studio: BAMLExecutionHandler

BAMLExecutionHandler is Strategy Studio's FIX interface to Bank of America Merrill Lynch (BAML) trading system and exchange connectivity. 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=BAMLExecutionHandler**

Session Level Settings

Session-level settings are specified in the file execution_handler-conf/baml_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 BAML to identify the firm sending message.
> **TargetCompID=*targetcompid***
>   • Required; issued by BAML to identify receiving firm.
> **UseDataDictionary=Y**
> **DataDictionary= execution_handler-conf/baml_FIX42.xml**
>   • Required.
> **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.
> **LocateBroker=*locate_broker***
>   • Optional. If set, the adapter will populate tag 114 LocateReqd='N' and tag 5700 LocateBrkr = *locate_broker*. This should be used for sessions to BAML's DSA_Equities gateway, but not for Express DMA sessions.

Note that baml_FIX42.xml should include ExDestination as a valid field in ExecutionReport.

Route Level Settings

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

#MarketCenter,ExDest,ExecInst,RoutingInst,RouteDeliveryMethod,RoutStrategy,SecurityExchange
> **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.
> **ExDest** corresponds to FIX tag 100, the destination of the exchange to where you'd like to direct the message. Must be one of: INET, AMEX, PHLX, BX, ARCA, CHX, EDGA, EDGX, BYX, BATS, NYSE, NSX

- > **ExecInst** corresponds to FIX tag 18; multiple values may be set with a space delimiter using the target exchange's spec document.
- > **RoutingInst** corresponds to custom tag 9487 for NYSE and tag 9303 for BATS; please consult target exchange's spec document for valid values. Leave empty for other exchanges.
- > **RouteDeliveryMethod** corresponds to BATS custom tag 9350; please consult BATS spec document for valid values. Leave empty for other exchanges.
- > **RoutStrategy** corresponds to BATS custom tag 9400; please consult BATS spec document for valid values. Leave empty for other exchanges.
- > **SecurityExchange** corresponds to FIX tag 207; only used with NYSE, leave empty for other exchanges. Valid values are N (NYSE), A (AMEX)

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 BAML and target exchange's FIX spec documents.

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.