Create an Order Using IB Trader Workstation

Create a connection to the IB Trader Workstation℠ and create a market order based on historical and current data for a security. You can also create orders for a different instrument, such as a futures contract.

Before creating the connection, you must enter your credentials and run the IB Trader Workstation℠ application.

To run this example, you must have the Financial Toolbox™ installed.

Run IB Trader Workstation℠ Application

Ensure the IB Trader Workstation℠ application is running, and that API connections are enabled. Follow these steps in IB Trader Workstation℠.

1. To open the Trader Workstation Configuration (Simulated Trading) dialog box, select **File** > **Global Configuration**.
2. Select **API** > **Settings**.
3. Ensure that the **Enable ActiveX and Socket Clients** check box is selected.

Connect to IB Trader Workstation℠

Connect to the IB Trader Workstation℠ and create connection `ib` using the local host and default port number `7496`.

```
ib = ibtws('',7496);
```

When the `Accept incoming connection attempt` message appears in the IB Trader Workstation℠, click **Yes**.

Retrieve Historical and Current Data

Create the IB Trader Workstation℠ `IContract` object `ibContract`. This object specifies the security. Retrieve data for Microsoft® stock. Specifying `SMART` as the exchange lets Interactive Brokers® determine which venue to use for data retrieval. To clarify any ambiguity, set the primary exchange for the destination to `NASDAQ`. To retrieve dollar-denominated stock, set the currency type to `USD`. Setting currency type is useful when stocks are dual-listed or multi-listed across different jurisdictions.

```
ibContract = ib.Handle.createContract;
ibContract.symbol = 'MSFT';
ibContract.secType = 'STK';
ibContract.exchange = 'SMART';
ibContract.primaryExchange = 'NASDAQ';
ibContract.currency = 'USD';
```

Define the date range for the last 20 business days, excluding today. To calculate the appropriate start and end dates, this code uses the `daysadd` function from Financial Toolbox™.

```
bizDayConvention = 13; % i.e. BUS/252
```

```
currentdate = today;
startDate = daysadd(currentdate,-20,bizDayConvention);
endDate = daysadd(currentdate,-1,bizDayConvention);
```

Retrieve historical data for the last 20 business days.

```
histTradeData = history(ib,ibContract,startDate,endDate);
```

The `history` function accepts additional parameters that let you obtain other historical data such as option-implied volatility, historical volatility, bid prices, ask prices, or midpoints. If you do not specify anything, last traded prices return by default.

Retrieve current price data from the contract.

```
currentData = getdata(ib,ibContract)
```

Create Trade Market Order

The IB Trader Workstation℠ supports various order types, including basic types such as limit orders, stop orders, and market orders.

Create the IB Trader Workstation℠ `Iorder` object `ibMktOrder`. This object specifies the order. To buy shares, specify the action `BUY`. To specify buying 100 shares, set `totalQuantity` to 100. To create a market order, specify the order type as `MKT`.

```
ibMktOrder = ib.Handle.createOrder;
ibMktOrder.action = 'BUY';
ibMktOrder.totalQuantity = 100;
ibMktOrder.orderType = 'MKT';
```

Set a unique order identifier and send the order to Interactive Brokers®.

```
id = orderid(ib);

result = createOrder(ib,ibContract,ibMktOrder,id)
```

Specify Different Instrument

You can trade various instruments using the IB Trader Workstation℠ API, including equities, futures, options, futures options, and foreign currencies.

`ibFutures` is the E-mini Standard and Poor's 500 futures contract on the CME Globex with a December 2013 expiry. Specify the symbol as `ES`, the security type as a futures contract `FUT`, the expiry as a `YYYYMM` date format, the exchange as `GLOBEX`, and the currency as `USD`.

```
ibFutures = ib.Handle.createContract;
ibFutures.symbol = 'ES';
```

```
ibFutures.secType = 'FUT';
ibFutures.expiry = '201312'; % Dec 2013
ibFutures.exchange = 'GLOBEX';
ibFutures.currency = 'USD';
```

Retrieve futures data and send orders using the `getdata` and `createOrder` functions.

Close IB Trader Workstation℠ Connection

```
close(ib)
```