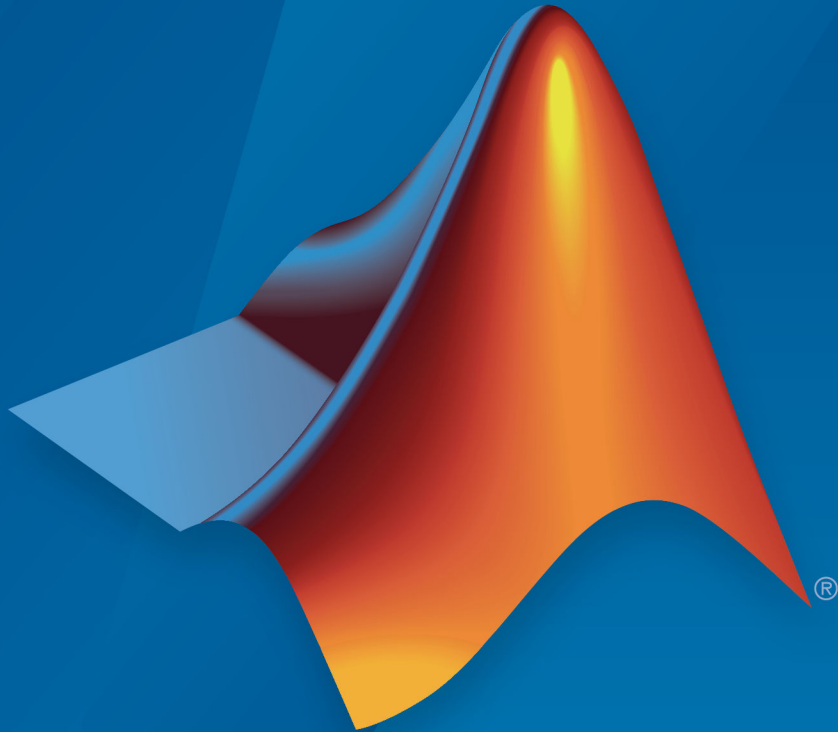


Trading Toolbox™ Release Notes



MATLAB®

How to Contact MathWorks



Latest news: www.mathworks.com
Sales and services: www.mathworks.com/sales_and_services
User community: www.mathworks.com/matlabcentral
Technical support: www.mathworks.com/support/contact_us



Phone: 508-647-7000



The MathWorks, Inc.
3 Apple Hill Drive
Natick, MA 01760-2098

Trading Toolbox™ Release Notes

© COPYRIGHT 2013–2018 by The MathWorks, Inc.

The software described in this document is furnished under a license agreement. The software may be used or copied only under the terms of the license agreement. No part of this manual may be photocopied or reproduced in any form without prior written consent from The MathWorks, Inc.

FEDERAL ACQUISITION: This provision applies to all acquisitions of the Program and Documentation by, for, or through the federal government of the United States. By accepting delivery of the Program or Documentation, the government hereby agrees that this software or documentation qualifies as commercial computer software or commercial computer software documentation as such terms are used or defined in FAR 12.212, DFARS Part 227.72, and DFARS 252.227-7014. Accordingly, the terms and conditions of this Agreement and only those rights specified in this Agreement, shall pertain to and govern the use, modification, reproduction, release, performance, display, and disclosure of the Program and Documentation by the federal government (or other entity acquiring for or through the federal government) and shall supersede any conflicting contractual terms or conditions. If this License fails to meet the government's needs or is inconsistent in any respect with federal procurement law, the government agrees to return the Program and Documentation, unused, to The MathWorks, Inc.

Trademarks

MATLAB and Simulink are registered trademarks of The MathWorks, Inc. See www.mathworks.com/trademarks for a list of additional trademarks. Other product or brand names may be trademarks or registered trademarks of their respective holders.

Patents

MathWorks products are protected by one or more U.S. patents. Please see www.mathworks.com/patents for more information.

R2018a

Wind Interface: Retrieve market data and execute trades through Wind Financial Terminal	1-2
--	------------

R2017b

No New Features or Changes

R2017a

Transaction Cost Analysis: Determine a cost index for a portfolio of stocks	3-2
--	------------

R2016b

FIX Flyer Integration: Retrieve order status and information directly from MATLAB	4-2
Transaction Cost Analysis: Perform back and stress testing, optimize a portfolio, and liquidate a dollar value from portfolio	4-2

R2016a

Transaction Cost Analysis: Conduct trading cost, sensitivity, and post-trade execution analysis	5-2
Support for 32-bit Windows removed	5-2

R2015b

FIX Flyer Integration: Send and receive financial information through FIX messages using FIX Flyer Engine	6-2
FIX Data Support: Convert between structure arrays and tables to and from FIX messages	6-2
Bloomberg multiple order routing functionality	6-2

R2015a

Interactive Brokers interface enhancements for custom event handlers and market depth, contract details, trade execution records, and portfolio data	7-2
---	------------

R2014b

Bug Fixes

R2014a

Bug Fixes

R2013b

Support for CQG API 10-2

Support for Interactive Brokers TWS API 10-2

R2013a

**Trading Toolbox contains Trading Technologies
X_TRADER** 11-2

Bloomberg EMSX support 11-2

R2018a

Version: 3.4

New Features

Wind Interface: Retrieve market data and execute trades through Wind Financial Terminal

You can create a connection to Wind Data Feed Services (WDS) and interact with the Wind Financial Terminal. With a WDS connection, you can:

- Retrieve current, historical, intraday, and real-time market data.
- Create and delete orders.
- Find order and account information.

For details about this interface, see “Wind Data Feed Services (WDS)”. For a basic workflow, see “Decide to Buy Shares Using Current and Historical WDS Data”.

R2017b

Version: 3.3

No New Features or Changes

R2017a

Version: 3.2

New Features

Bug Fixes

Transaction Cost Analysis: Determine a cost index for a portfolio of stocks

Work with a portfolio of stocks to estimate cost index and risk, rank broker performance, and optimize a trade schedule trading strategy:

- Determine Buy-Sell Imbalance Using Cost Index
- Create Basket Summary and Efficient Trading Frontier
- Rank Broker Performance
- Optimize Trade Schedule Trading Strategy for Basket

R2016b

Version: 3.1

New Features

Bug Fixes

FIX Flyer Integration: Retrieve order status and information directly from MATLAB

Retrieve order status and information about the orders in the trading system using `orderInfo`. For details about creating orders and displaying the order information, see [Create an Order Using FIX Flyer](#).

Transaction Cost Analysis: Perform back and stress testing, optimize a portfolio, and liquidate a dollar value from portfolio

Work with a portfolio of stocks to perform back testing, stress testing, optimization, and liquidation:

- Conduct Back Test on Portfolio
- Conduct Stress Test on Portfolio
- Optimize Long Portfolio
- Liquidate Dollar Value from Portfolio

R2016a

Version: 3.0

New Features

Bug Fixes

Compatibility Considerations

Transaction Cost Analysis: Conduct trading cost, sensitivity, and post-trade execution analysis

Estimate trading costs for a collection of stocks or a portfolio using Kissell Research Group transaction cost analysis. Estimate costs for liquidating a portfolio or its components. Conduct sensitivity analysis. Optimize trading strategies for a single stock. Analyze trading execution results.

Function	Purpose
krq	Create Kissell Research Group transaction-cost analysis object.
costCurves	Estimate market-impact cost of order execution.
iStar	Estimate instantaneous trading cost for order.
liquidityFactor	Estimate and compare liquidation costs across stocks.
marketImpact	Estimate price movement due to order or trade.
portfolioCostCurves	Estimate market-impact cost of order execution for a portfolio.
priceAppreciation	Estimate the trading cost due to natural price movement.
timingRisk	Estimate uncertainty of market-impact cost.

Support for 32-bit Windows removed

The Trading Toolbox no longer supports connection to a 32-bit trading system.

Compatibility Considerations

Use a 64-bit trading system.

To configure CQG® for 64-bit Windows®, see Installation.

R2015b

Version: 2.2.1

New Features

Bug Fixes

FIX Flyer Integration: Send and receive financial information through FIX messages using FIX Flyer Engine

Retrieve data and send FIX messages using FIX Flyer™.

Function	Purpose
<code>fixflyer</code>	Establish a FIX Flyer connection.
<code>addListener</code>	Add an event handling listener to a FIX Flyer connection.
<code>sendMessage</code>	Send a FIX message to the FIX Flyer Engine.
<code>close</code>	Close a FIX Flyer connection.

FIX Data Support: Convert between structure arrays and tables to and from FIX messages

Convert between FIX messages, and structure arrays or tables.

Function	Purpose
<code>fix2struct</code>	Convert a FIX message string to a structure array.
<code>fix2table</code>	Convert a FIX message string to a table.
<code>struct2fix</code>	Convert a structure array containing FIX tags as fields to a cell array of FIX message strings.
<code>table2fix</code>	Convert a table containing FIX tags as variables to a cell array of FIX message strings.

Bloomberg multiple order routing functionality

The `groupRouteOrderWithStrat` function enables multiple order routing with strategies.

R2015a

Version: 2.2

New Features

Bug Fixes

Interactive Brokers interface enhancements for custom event handlers and market depth, contract details, trade execution records, and portfolio data

Obtain Interactive Brokers® order data and information about the account, contract, and portfolio.

Function	Purpose
accounts	Retrieve Interactive Brokers account information.
contractdetails	Request Interactive Brokers contract details.
executions	Request Interactive Brokers execution data.
marketdepth	Request Interactive Brokers market depth data.
orderid	Obtain next valid order identification number.
orders	Request Interactive Brokers open order data.
portfolio	Retrieve current Interactive Brokers portfolio data.
realtime	Request Interactive Brokers real-time data.

Define custom event handler functions to process various events. For details, see [Writing and Running Custom Event Handler Functions with Interactive Brokers](#).

R2014b

Version: 2.1.1

Bug Fixes

R2014a

Version: 2.1

Bug Fixes

R2013b

Version: 2.0

New Features

Support for CQG API

Create and maintain orders, routes, and strategies using CQG.

Function	Purpose
cqg	Open CQG connection.
close	Close CQG connection.
createOrder	Create CQG order.
history	Request CQG historical data.
realtime	Subscribe to CQG instrument.
shutDown	Close CQG connection.
startUp	Start CQG Connection.
timeseries	Request CQG intraday tick data.

Support for Interactive Brokers TWS API

Create and maintain orders, routes, and strategies using Interactive Brokers.

Function	Purpose
ibtws	Open IB Trader Workstation(SM) connection.
close	Close IB Trader Workstation connection.
createOrder	Create IB Trader Workstation order.
getdata	Get current Interactive Brokers data.
history	Request Interactive Brokers historical data.
timeseries	Request Interactive Brokers aggregated intraday data.

R2013a

Version: 1.0

New Features

Compatibility Considerations

Trading Toolbox contains Trading Technologies X_TRADER

X_TRADER® support has migrated from Datafeed Toolbox™ to Trading Toolbox. Use Trading Technologies® X_TRADER to access market data and submit orders.

Function	Purpose
xtrdr	Create an X_TRADER connection.
close	Terminate an X_TRADER connection.
createInstrument	Create instruments for X_TRADER.
createNotifier	Create an instrument notifier for X_TRADER.
createOrderProfile	Create order profiles for X_TRADER.
createOrderSet	Create an order set for X_TRADER.
getData	Obtain current X_TRADER data.

Compatibility Considerations

If you used Trading Technologies X_TRADER with a previous release of Datafeed Toolbox, you must have a license for Trading Toolbox for R2013a.

Bloomberg EMSX support

Create and maintain orders, routes, and strategies using Bloomberg® EMSX.

Function	Purpose
emsx	Create a Bloomberg EMSX connection.
close	Close a Bloomberg EMSX connection.
createOrder	Create a Bloomberg EMSX order.
createOrderAndRoute	Create and route a Bloomberg EMSX order.
createOrderAndRouteWithStrat	Create and route a Bloomberg EMSX order with strategies.
deleteOrder	Delete a Bloomberg EMSX order.
deleteRoute	Delete a Bloomberg EMSX route.

Function	Purpose
getAllFieldMetadata	Obtain Bloomberg EMSX field information.
getBrokerInfo	Obtain Bloomberg EMSX broker and strategy information.
getOrderInfo	Obtain Bloomberg EMSX order information.
getRouteInfo	Obtain Bloomberg EMSX route information.
modifyOrder	Modify a Bloomberg EMSX order.
modifyRoute	Modify a Bloomberg EMSX route.
modifyRouteWithStrategy	Modify a Bloomberg EMSX route with strategies.
orders	Obtain Bloomberg order subscriptions.
emsxOrderBlotter	Bloomberg EMSX example order blotter.
processEvent	Sample of a Bloomberg EMSX event handler.
routeOrder	Route a Bloomberg EMSX order.
routeOrderWithStrategy	Route a Bloomberg EMSX order with strategies.
routes	Obtain Bloomberg EMSX route subscriptions.

