EZE SOFTWARE GROUP™

Eze EMS

Internal Release   **Released on: May 17, 2017**

Build version: 11.7.2.1

This document contains information about the new features included in version 11.7.2 of Eze EMS (RealTick®).

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Eze Software Group

http://www.ezesoft.com/

New Features

EMS Integration with POSIT for Additional Liquidity

JIRA #: AW-202

Beginning in this release, Eze EMS now integrates with ITG's POSIT system, which allows you to send uncommitted order quantities to POSIT for improved access to liquidity, as well as to receive invites to cross committed unfilled order quantity.

Key new features include:

- Ability to send uncommitted staged order quantities and committed unfilled order quantities to POSIT.
- Ability to cancel reserve orders via the ITG interface.
- Ability to receive soft invites to cross committed order quantities.
- Improvements for sending orders to multiple crossing networks.

The following sections provide more information.

Sending staged order quantities to POSIT

If your firm uses POSIT, your system can be configured so that orders you stage in the EMS are automatically sent to POSIT for execution as Day (conditional) orders. Simultaneously, you can keep same order live and available for commitment to other brokers on the Eze EMS blotter.

Additionally, if you route a portion of a staged order to a broker, the EMS automatically sends an update to POSIT to decrease the quantity of the Day order by the amount that you route to the broker.

> The EMS automatically sends GTC orders marked as cross eligible to POSIT on a recurring basis (as Day orders).
>
> Orders you send to POSIT can be Market or Limit orders, and can have a **Side** of **Buy**, **Sell**, and **Sell Short**.

Confirming (Firming up) child order executions in POSIT

If POSIT identifies liquidity for a live order and you firm up in the POSIT interface, POSIT sends a placement request to the EMS. If the EMS accepts the placement request, a child order is automatically created.

When the child order is executed, information for the executed order is automatically updated in the EMS.

> If your system is configured so that Eze OMS and EMS are integrated, you can also stage orders from the OMS to the EMS that can then be sent to POSIT.

> If your system is configured to use Eze Compliance, the system does not re-run compliance checks for child orders you firm up with POSIT.

Workflow

To support this functionality, you can now configure POSIT as a default external cross network via the **Default External Cross Networks** area on the **Miscellaneous** tab of the Order Entry Properties window, shown below.

Default External Cross Networks
☑ BIDS   ☑ LiquidNet   ☑ POSIT

When **POSIT** is selected in the Order Entry Properties window, the **POSIT** check box is available and selected in the **Ext. Networks** field of the Submit Staged Order window, shown below.


Default external crossing networks are automatically selected when you open the Submit Staged Order window.

If you stage an order and **POSIT** is not selected, you can mark the order as cross eligible by clicking **Select External Crossing Networks...** on the shortcut (right-click) menu, shown below.
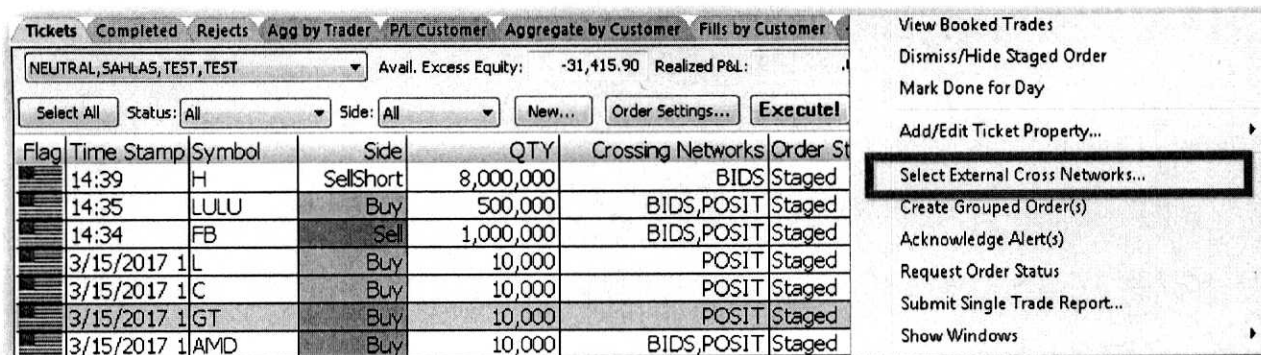
When selected, the Select External Cross window appears, shown below, and you can select the **External Cross Networks** to which you want to send the orders.
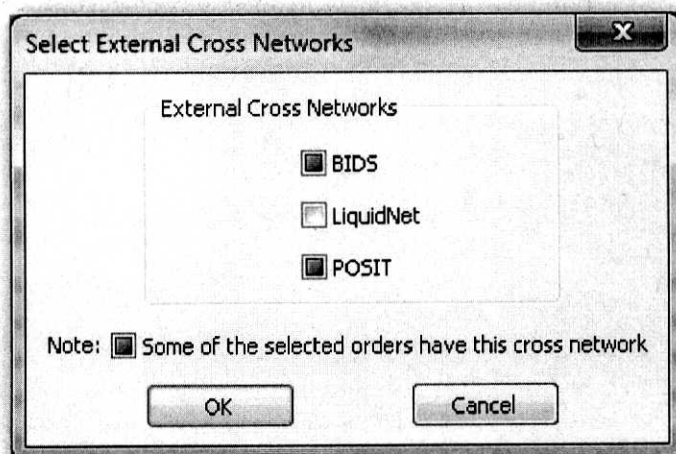
A filled check box denotes that one or more of the selected orders are currently with the network for crossing. A check mark denotes that all of the selected orders are sent to the external crossing network.

Additionally, you can now multi-select staged orders and mark them as cross eligible.

Uncommitted Crossing workflow

If a potential block of liquidity is available in POSIT, a POSIT negotiation window appears in the ITG interface.

To support this functionality, the **Crossing Networks** column displays a comma-separated list of external crossing networks to which each order has been sent.

Committed Unfilled order Crossing workflow

If you route a portion of a staged order to a destination, Eze EMS automatically sends updates to POSIT to decrease the quantity of the POSIT conditional order as the committed order is executed.

If potential liquidity is identified by POSIT for committed unfilled orders, POSIT sends a non-actionable alert via the ITG POSIT Alert system. EMS users can then manually select the order quantity to send to POSIT for crossing.

If you want to cross a committed unfilled order quantity via POSIT, you need to cancel the committed quantity of the corresponding order in the EMS to allow the quantity to become eligible to cross in the POSIT interface.

When the order quantity becomes eligible for crossing, the EMS updates the existing quantity for the corresponding order and a POSIT negotiation window appears in the ITG interface.

You cannot cancel reserve orders from Eze EMS. If you want to cancel an order that has been firmed up with POSIT, you must cancel the order from the ITG interface.
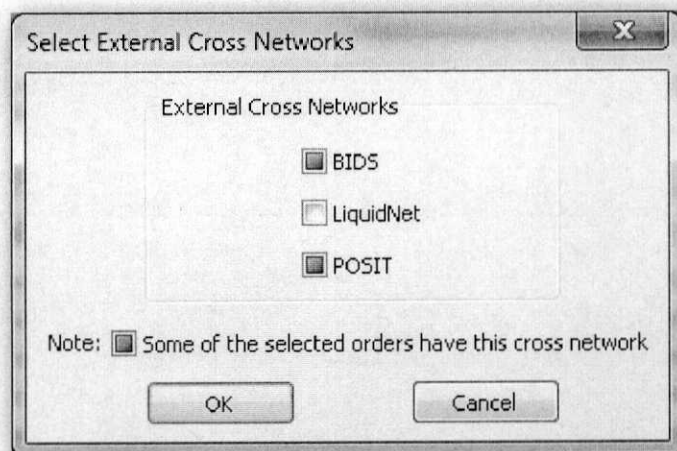
Managing Crossing Networks for Multiple Orders

You can also multi-select staged orders and configure the external crossing networks to which the orders are sent. To mark multiple orders as cross eligible, select the **Select External Crossing Networks** option on the shortcut (right-click) menu for orders you select in **TicketMinder**, shown below.

Tickets	Completed	Rejects	Agg by Trader	P/L Customer	Aggregate by Customer	Fills by Customer

NEUTRAL,SAHLAS,TEST,TEST ▼ Avail. Excess Equity: -31,415.90 Realized P&L:

[Select All] Status: All ▼ Side: All ▼ [New...] [Order Settings...] [**Execute!**]

Flag	Time Stamp	Symbol	Side	QTY	Crossing Networks	Order St
	14:39	H	SellShort	8,000,000	BIDS	Staged
	14:35	LULU	Buy	500,000	BIDS,POSIT	Staged
	14:34	FB	Sell	1,000,000	BIDS,POSIT	Staged
	3/15/2017 1	L	Buy	10,000	POSIT	Staged
	3/15/2017 1	C	Buy	10,000	POSIT	Staged
	3/15/2017 1	GT	Buy	10,000	POSIT	Staged
	3/15/2017 1	AMD	Buy	10,000	BIDS,POSIT	Staged

Right-click menu:
- View Booked Trades
- Dismiss/Hide Staged Order
- Mark Done for Day
- Add/Edit Ticket Property... ▶
- **Select External Cross Networks...**
- Create Grouped Order(s)
- Acknowledge Alert(s)
- Request Order Status
- Submit Single Trade Report...
- Show Windows ▶

When selected, the Select External Cross window appears, shown below, and you can select the **External Cross Networks** to which you want to send the orders.

Select External Cross Networks ✕

External Cross Networks

☑ BIDS

☐ LiquidNet

☑ POSIT

Note: ☑ Some of the selected orders have this cross network

[OK]   [Cancel]

A filled check box denotes that one or more of the selected orders are currently with the network for crossing.

A check mark denotes that all of the selected orders are sent to the external crossing network.

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List Trader

When this functionality is enabled, external crossing networks are also available via the **Ext. Cross** drop-down list in List Creation Manager, shown below.
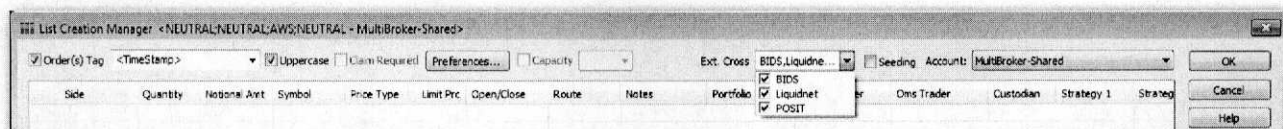
Consultant Information

In RealTick Account Management Portal (AMP), users must be configured with a broker account entitled to send orders to the POSIT route.

Additionally, the User Neutral Account BBCD needs to have the **AllowCrossingNetwork** trading perm enabled in AMP.

The User Neutral Account BBCD needs to have the **AllowPOSIT_SendCommittedShares** trading perm enabled in order to notify POSIT of committed unfilled shares.

For more information on POSIT configuration, see the following information on Confluence: https://confluence.ezesoft.net/display/QA/POSIT+Configuration

This functionality is supported for the following versions:

- RealTick 11.7.2
- HAN 4.3.1
- TSRV 4.3

Enhanced Support for Multi-Leg Orders for Integrated Systems

JIRA #s: EINT-144; EINT-142

If your system is configured so that RealTick EMS and Eze OMS are integrated, this release introduces the following enhancements for creating and sending multi-leg trades using EMS workflows:
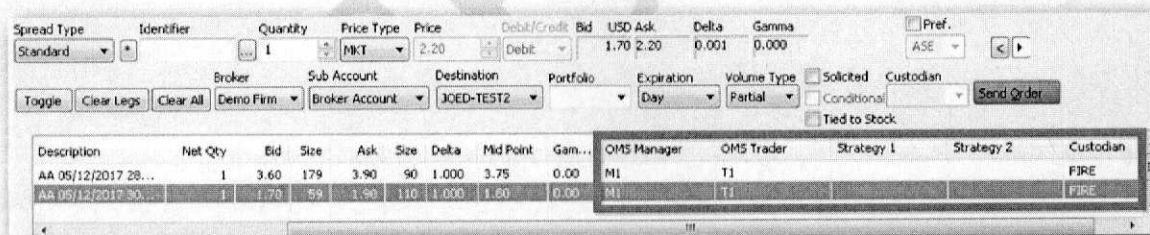
- Ability to create drop-copy spread orders
- Ability to create spread orders from Submit Staged Spreads window
- Functionality available in future releases

The sections on the following pages provide more information.

Spreads drop-copy order creation

Beginning in this release, you can create option or future option spread orders in TurboOptions without first creating a staged order. When the spread order is created, the system automatically runs compliance and position checks on the legs of the spread. If each of the legs of the spread passes compliance, a parent order is automatically created and placed in the neutral account (BBCD) that is connected with the user's TurboOptions® window. If any of the individual spread legs fails compliance, the entire spread fails the compliance check and the user will be prompted with a compliance violation.
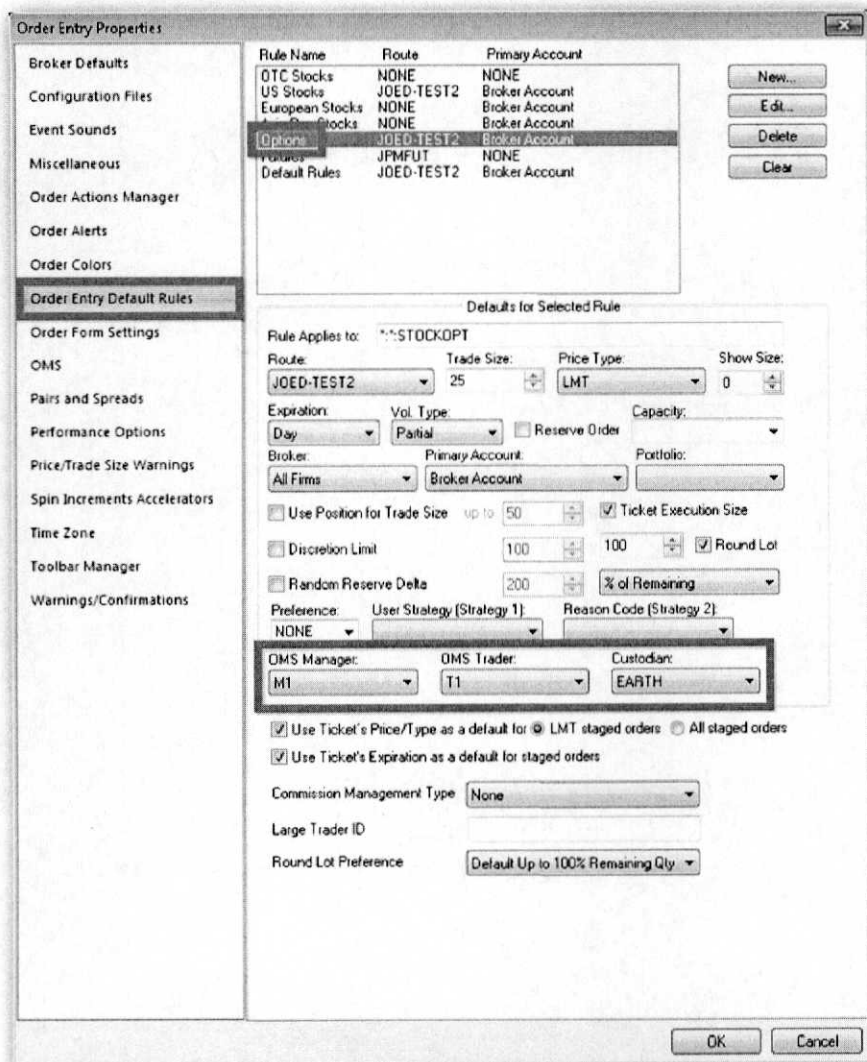
Additionally, your system can be configured so that you can view OMS reference data fields in spreads order forms, shown below.

To support this functionality, you can configure the OMS reference data fields that are automatically populated according to the user's order entry defaults (configured via the **Order Entry Default Rules** tab of the Order Entry Properties window, shown below).

The XPerm **AllowEzeCompliance** must be enabled to view OMS reference data fields in Eze EMS.

Workflow

Drop copy spreads are created in the TurboOptions window by dragging and dropping option symbols from the grid into spreads order forms.

When you drag an option symbol into a spreads order form, a security seeding message is sent via API to the OMS Security Master that includes option symbol data from the EMS. Additionally, the API sends a simultaneous seeding message to the OMS Security Master for underliers that have not yet been seeded.

In order to use the drop copy spreads workflow, the TurboOptions window must be configured to the neutral account (BBCD) and the order form must be configured to use a broker account (BBCD), shown below.

If you update a spread order at the broker level (e.g., **Quantity**, **Price**, etc.), compliance and position checks are automatically run for the order.

Additionally, updates you apply to option spread orders automatically update the parent order as well.

> This functionality is not available for delta hedging workflows.

Ability to create spreads via the Submit Staged Spreads window

You can now use Eze OMS reference data, allocations, and you can run compliance and position checks when you create staged spread orders via the Submit Staged Spreads window.

Workflow

Staged spreads are created by dragging and dropping option symbols from the TurboOptions® grid into the Staged Spreads order form in the TurboOptions window.

When you drag an option symbol into a spreads order form, a security seeding message is sent via API to the OMS Security Master that includes option symbol data from the EMS. Additionally, the API sends a simultaneous seeding message to the OMS Security Master for underliers that have not yet been seeded.

When the staged spread order is created, the system automatically runs compliance and position checks on the legs of the spread. If each of the legs of the spread passes compliance, a parent order is automatically created and placed in the neutral account (BBCD) that is associated with the user's TurboOptions window. If any of the individual spread legs does not pass compliance, the entire spread fails the compliance check and the compliance alerts window appears.

If you create a child order from a previously staged spread, compliance checks are automatically re-run on each of the legs of the spread. If each of the legs of the spread passes compliance, the spread order is immediately routed to the destination. If any of the individual spread legs fails compliance, the entire spread fails the compliance check and the compliance alerts window appears.

If you update the spread order at the broker level (e.g., **Quantity**, **Price**, etc.), compliance and position checks are automatically run for the order.

To support this functionality, the following features are available when **Run RealTick in OMS Mode** is selected in the Order Entry Properties (OEP) window:

- OMS reference data is available in Submit Staged Spreads window fields.
- OEP field default settings apply to fields that include OMS reference data in Submit Staged Spreads window fields.
- Order Form settings (i.e., **Default Custodian Using Top-Down Priority Rules**) apply to fields that include OMS reference data in the Submit Staged Spreads window.

Additionally, compliance, position, and allocation checks are run for spread orders you create in the Submit Staged Pairs window.

> Spreads orders can have a maximum of 5 legs.

The XPerm **AllowEzeCompliance** must be enabled to use this functionality.

Functionality available in future releases

The following table lists and describes multi-leg order functionality that is anticipated for future releases.

Order Type	Workflow Origin	Staged Workflow
Pairs from EMS Staged Pairs Creation Manager orders	EMS	Staged Pairs Creation Manager
Spreads from OMS staged orders	OMS	Multi-broker staging
Spreads from EMS individual staged orders	EMS	Individual orders entered separately
Spreads from EMS Staged Spreads Creation Manager orders	EMS	Staged Spreads Creation Manager

Setup Requirements

This functionality is available for the following Eze OMS and RealTick EMS versions:

- RealTick EMS — 11.7.2
- EMS Trade Server — 4.3
- Eze OMS — 5.7 SR9 P9 HF81; 5.7 SR10 P12