RJO Armor
Quick Start Guide

Armor Customer Role User Guide

Contents

I – IIQ v1 vs. Armor

The following is intended to assist users of the legacy V1. Online Inquiry (IIQ) system to transition into the new RJO Armor risk management system. Below you will find a quick guide of the various IIQ screens and their corresponding Armor counterparts. Additional details on the Armor counterparts are available in section II of this document.

V1 IIQ	RJO Armor
POSITIONS (ON BOOKS)	The **ACCOUNT SNAPSHOT** screen is accessible from the portal under the **VIEW ACCOUNT INFORMATION** search field to display a real-time snapshot of an accounts futures and options positions. For more detailed information, the **POSITION DETAILS** is accessible via the **ACCOUNT DETAILS** screen as well as the **RIGHT CLICK CONTEXT MENU ON ANY GRID VIEWS.** To view On Books positions only, uncheck the Real-time option in the bottom right hand corner of this screen to view only cleared positions.
POSITIONS (REAL TIME)	The **ACCOUNT SNAPSHOT** screen is accessible from the portal under **THE VIEW ACCOUNT INFORMATION** search field to display a real-time snapshot of an accounts futures and options positions. For more detailed information, **POSITION DETAILS (REAL-TIME)** is accessible via the **ACCOUNT DETAILS** screen as well as the **RIGHT CLICK CONTEXT MENU ON ANY GRID VIEWS**. Real-time positions are default to the Position Details screen which will utilize both execution and clearing feeds.
BALANCES	The **ACCOUNT SNAPSHOT** screen is accessible from the portal under the **VIEW ACCOUNT INFORMATION** search field to display account balances in USD. For more detailed information, **BALANCE DETAILS** is accessible via the **ACCOUNT DETAILS** screen as well as the **RIGHT CLICK CONTEXT MENU ON ANY GRID VIEWS**.
RISK ANALYZER	The **RISK ANALYZER** has its own dedicated **RISK ANALYZER** tab and is also accessible through the **ACCOUNT DETAILS** screen, and the **RIGHT CLICK CONTEXT MENU ON ANY GRID VIEWS**.
RISK SUMMARY	**RISK SUMMARY** has its own dedicated tab to provide easy access to a single line view of active accounts' intraday risk.
UPCOMING DELIVERIES	The **DELIVERIES** tab is accessible in its own screen and displays physically delivered contracts.
TODAY'S TRANSACTIONS	**TRANSACTIONS** is broken down into two tabs. Top Day will allow users to search at the office, sales code, and account level for today's transactions for both trade and cash transactions. **TOP DAY TRANSACTIONS** is also available via the **RIGHT CLICK CONTEXT MENU ON ANY GRID VIEWS** under **SHOW ACCOUNT COMBINED** data as well as an available tab in **ACCOUNT DETAILS**.
TRANSACTION HISTORY	**TRANSACTIONS** is broken down into two tabs. History will allow users to search at the office, sales code, and account level for a specified date range for both trade and cash transactions.
MARGIN REQUIREMENTS	**MARGIN REQUIREMENTS** is accessible via the **ACCOUNT DETAILS** screen to view a breakdown of margin requirements by open positions.

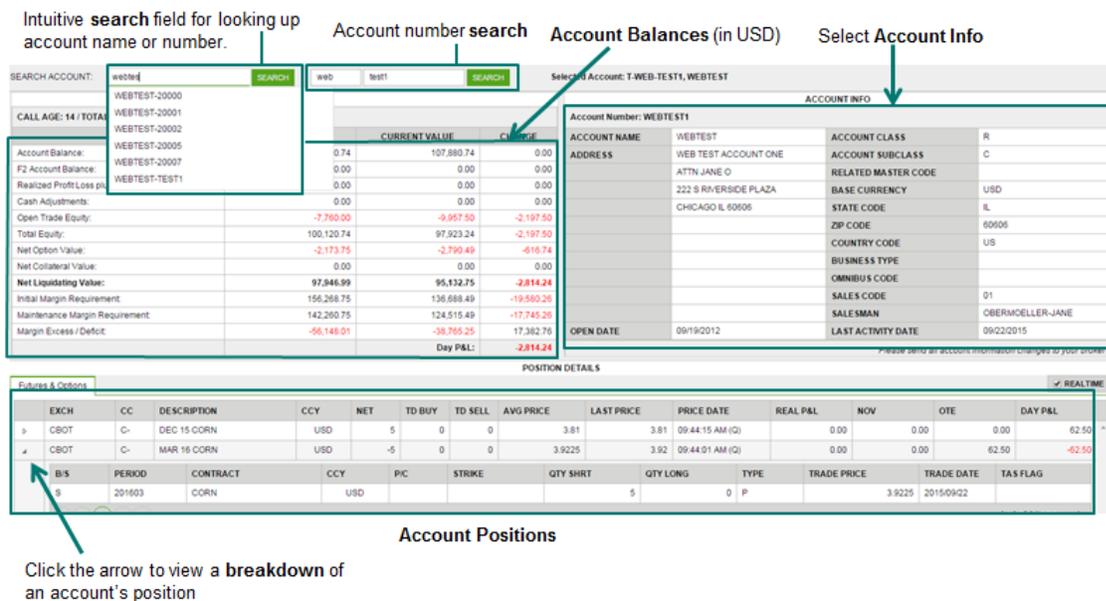|	
ACCOUNT INFO	**ACCOUNT INFO** is accessible via the <u>ACCOUNT INFO</u> tab, <u>ACCOUNT DETAILS</u> screen, the <u>RIGHT CLICK CONTEXT MENU ON ANY GRID VIEWS TO</u> display general information about the account and broker.
DOWNLOADS	**EXPORT** to CSV is available on any grid views to download customized reports depending on the user's filtered view.
PRINT	While no print option is available, all grid views are accessible to **EXPORT** to CSV and can be printed from this downloaded file.
MARGIN GUIDE	**RISK ANALYZER** will allow users to create blank profiles to add positions for determining margin requirements. A Margin Guide is also available on the *RJO website* homepage under the Quote & Charts tool menu.
EXCHANGE RATES	**BALANCE DETAILS** will display FX rates on an account in the currency breakdown tab (if applicable).
IIQ MANUAL	An intuitive **HELP GUIDE** is available in the upper right hand corner of every Armor screen.

II – Armor Screen Details

Here you will find an outline of the various Armor functions and details of their features.

To View Account Balances and Positions:

For Quick Access to Balances and Positions:

Use the Account Summary screen which will provide a real-time snapshot of an account balances and positions. This page is designed to give users quick access to a selected account without having to apply any searches or filters.

This page is the default screen for clients on RJO Armor and can be access from all entrance points to the system. Users with more than one account can change account through an intuitive search by account name and/or number field is available.

Select account info is also available on this tab. For more detailed account info, please refer to the Account Info tab. Please note balances are displayed in USD only on this screen. For more detailed account balances and positions, please refer to the Account Details tab.

For Detailed Balances and Positions:

Use the Account Details Page to view accounts level details including balance, position, margins, deficit, top day activity and general account information. Users with multiple accounts will have a split view, the summary view on top and detail by account on the bottom.

> NOTE – Single account users will see the Account Detail tabs for their account.

This screen provides views for both master and sub accounts. Details are segmented into tabbed sections including balance, position, margin and more. The Risk Analyzer tool provides a span portfolio tool where you can add or change account portfolio to test how changes will impact margin risk. This page allows you to view selected accounts details without leaving the screen. You can expand/collapse to expand report view on screen by clicking on report title bar.

> NOTE – Refresh report by clicking the circular arrow on the bottom right of the report grid.

Account Details for T-WEB-20000, WEBTEST

Balance Details | Position Details | Deficit Details | Margin Requirements | Top Day Transactions | Account Info | Risk Analyzer

Futures & Options ☑ REALTIME

SAVE CONFIGURATION   DELETE CONFIGURATION   ☐ INCLUDE DETAILS   Export F&O Position... ∨

	ACCT	EXCH	CC	CONTRACT	D PERIOD	EXP DATE	P/C	STRIKE	NET	TNET	BUY	SELL	AVG PRICE	CCY	PRICE DATE	REAL P&L	NOV	OTE	DAY P&L
▷	TWEB20000	CBOT	C-	CORN	Dec 2015	2015/12/14			5	0	0	0	3.81	USD	10:34:13 AM (Q)	0.00	0.00	125.00	187.50
▷	TWEB20000	CBOT	C-	CORN	Mar 2016	2016/03/14			-5	0	0	0	3.9225	USD	10:33:59 AM (Q)	0.00	0.00	-125.00	-250.00
▷	TWEB20000	CBOT	S-	SOYBEANS	Nov 2015	2015/11/13			-10	0	0	0	8.635	USD	10:34:13 AM (Q)	0.00	0.00	-19,750.00	-7,750.00
▷	TWEB20000	CBOT	W-	WHEAT	Dec 2015	2015/12/14			20	0	0	0	4.9525	USD	10:34:07 AM (Q)	0.00	0.00	19,750.00	8,250.00
	Total:								40	0	0	0				0.00	0.00	0.00	437.50

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Balance Details

Balances screen provides a view of account totals at three levels: summary in USD, summary in USD segregated class, and detail in currency by segregated class. The view displays the beginning of day value to the real-time current value calculate the change.

> NOTE: For illiquid markets, the last trade price used may not be representative of current market levels.

Position Details

Here users will be able to view details based on the types of positions held in the selected account in separate tabs: Futures& Options, FX, Collateral, and Other. Futures & Options positions can be expanded to see the trade detail making up net position.

Futures & Options   ✔ REALTIME   ☐ AGGREGATE TO MASTER

SAVE CONFIGURATION   DELETE CONFIGURATION   ☐ INCLUDE DETAILS   Export F&O Position... ⌄

ACCT	EXCH	CC	CONTRACT	D PERIOD	EXP DATE	P/C	STRIKE	NET	TNET	BUY	SELL	AVG PRICE	CCY	PRICE DATE	REAL P&L	NOV	OTE	DAY P&L
TWEB20000	CBOT	C-	CORN	Dec 2015	2015/12/14			5	0	0	0	3.81	USD	10:35:13 AM (Q)	0.00	0.00	125.00	187.50
TWEB20000	CBOT	C-	CORN	Mar 2016	2016/03/14			-5	0	0	0	3.9225	USD	10:35:11 AM (Q)	0.00	0.00	-62.50	-187.50
TWEB20000	CBOT	S-	SOYBEANS	Nov 2015	2015/11/13			-10	0	0	0	8.635	USD	10:35:14 AM (Q)	0.00	0.00	-20,000.00	-8,000.00
TWEB20000	CBOT	W-	WHEAT	Dec 2015	2015/12/14			20	0	0	0	4.9525	USD	10:36:13 AM (Q)	0.00	0.00	19,500.00	8,000.00

B/S	PERIOD	CONTRACT	CCY	P/C	STRIKE	QTY SHRT	QTY LONG	TYPE	TRADE PRICE	TRADE DATE	TAS FLAG
B	201512	WHEAT	USD				0	20 P		4.9525	2015/09/22	

1 - 1 of 1 items

ACCT	EXCH	CC	CONTRACT	D PERIOD	EXP DATE	P/C	STRIKE	NET	TNET	BUY	SELL	AVG PRICE	CCY	PRICE DATE	REAL P&L	NOV	OTE	DAY P&L
TWEB20005	CSCE	CY	NEW COCOA	Dec 2015	2015/12/15			1	0	0	0	33.08	USD	10:35:01 AM (Q)	0.00	0.00	-1,850.00	490.00
TWEB20002	IMM	C1	CDN DOLLAR	Dec 2015	2015/12/15			3	0	0	0	75.34	USD	10:36:13 AM (Q)	0.00	0.00	5,100.00	-180.00
TWEB20002	IMM	EC	IMM EURO FX	Dec 2015	2015/12/14			-10	0	0	0	1.1137	USD	10:36:13 AM (Q)	0.00	0.00	-31,375.00	0.00

Master accounts can view aggregated position by sub account at the master level. This screen will default to a Real-time view which uses both execution and clearing data provide up to the minute positions details. Disabling this field will pull clearing only data. Positions can be exported to your local PC with or without trade detail.

Deficit Details

Account deficit details is a static view of account margin call based on back office overnight processing, It includes aged calls and provides historical detail of aged calls by seg class.

Margin Requirement Details

This screen breaks down margin requirements by Span combined commodity and displays the possible margin variables that may be taken into account in the resulting margin. Totals are included at the bottom of the report. This report is run at regular intervals based on activity and positions.

Top Day Transactions

Displays all trade and cash transactions made in the account on the current trade date.

Account Info

This screen displays general information about the account and broker

Show Combined Account Data:

Via the right click context menu on any grid view, users can easily access an account's balances, position, deficit details, margin requirements, and account info without having to leave their the current Armor screen. This option will open a separate browser window and will display both master and sub account details if a related account.

    NOTE: This feature is only available for users with access to multiple accounts.

To Monitor Accounts Risk:

Use the Risk Summary Page to monitor accounts' risk intra-day and displays account values in USD. This screen provides single line view of the accounts total cash, risk margin, and the change in accounts value based on current day activity. This dynamic page will refresh automatically to provide a summary of account cash value and margin requirements. The screen updates account portfolios and uses current prices and intraday span to calculate risk and mark to market profit loss. Scheduled jobs update account balance information every two minutes and risk information is updated when account's position change

and at scheduled intervals throughout the day. The span risk calculation process includes updating portfolios to reflect current net position. End users will need to click the refresh icon in the lower right hand corner to update the Risk Summary page.

> NOTE – Risk Summary only shows margin master accounts with activity (Cash, Trade, and Position). Screen will also allow users to configure their on profile preferences for viewing the information (see section IV for customization and filter features).

This screen includes an account level context menu; right click in the desired account row to select from the available account specific detail views. These reports will open as separate windows allowing user to keep summary screen open while viewing specific account information.

To Review Margin Calls:

Use the account deficit details for a static view of account margin call based on back office overnight processing. It includes aged calls and provides historical detail of aged calls by seg class.

To View Transaction History:

Use the Transactions Page to review activity of your accounts trade and cash activity. Default view is top day with the ability to toggle to History. Filters allow you to select by account the total activity or by trade and cash transaction types.

To Generate What-If Risk Analysis:

Use the Risk Analyzer tool to test existing or new portfolios. Interface allows user to add, edit or delete positions and immediately see how changes could impact the accounts SPAN risk requirement.

You can access Risk Analyzer screen three ways:
> Right click to open account context menu
> Account Detail screen
> Top Menu Tab

Access Risk Analyzer via the right click context menu and account details screen will prepopulate the selected account's positions, while the Menu Tab will allow user to select any account or create a new account to analyze a what-if portfolios SPAN risk on the fly. You are able to edit and add the accounts positions within the screen to evaluate how changes impact SPAN risk.

> NOTE – Risk Analyzer is specific to calculating portfolio risk for SPAN margined products.

7

View Sub-Account Details:

Use the Account Detail page, "Left Click" the caret to the left of the master account and view the subaccounts. You can select sub-account and view the specific details (balance, position, etc…) for that individual account.

View Account Detail on Separate Screen:

You can "right click" on any account to bring up account context menu in any grid screen view including Risk Summary, Account Details, and Margin Deficit screens. This menu opens the account detail pages in a separate window including balances, positions, and margin information without leaving your current page.

To View Positions near Delivery:

Use the Deliveries page to view the current positions by contract that are at or approaching First Notice day or Last Trading Day. This report shows open positions (excluded cash settled) by contract based on proximity to first notice day (FND) and last trading day (LTD). Long positions will be listed beginning five business days prior to first notice day, short positions will be listed beginning five business days prior to last trading day. Operations group should be contacted for any questions regarding a position on the report. Users can filter to limit results by account, exchange or market. Based on filters if a contract is listed there is the ability to expand the row and see a list of the positions by account.

III – Margin Calculations

The following outlines some of the most commonly used margin calculations:

To find:	Available Tab:	Armor Codes	Calculations
Liquidating Value	Risk Summary / Account Details	LV *(Liquidating Value*	Excludes the value of collateral held in the account
		NLV *(Net Liquidating Value)*	Includes security on deposit
		BOD NVL *(Beginning of Day Liquidating Value)*	Value as of the close of business previous day which include margin value of securities on deposit
Intraday Margin Calls	Risk Summary	RMR E/D *(Risk Margin Requirement Excess/Deficit)*	Includes Option Value + Span(x margin requirement)
Profit and Loss	Risk Summary / Account Details	MTM P&L *(Mark to Mark P&L)*	Change in accounts net liquidating value from BOD NLV to current NLV which includes realized and unrealized P&L
		% P&L *(Profit & Loss Percent)*	Market Variation Percent = Percent change in profit/loss from BOD NLV
	Account Details / Position Details	Realized P&L	Total P&L of offsetting trades plus a premium paid and collected
Margin Requirements	Position Details Risk Summary / Account Details / Margin Requirements	Day P&L	Top Day P&L
		MMR *(Current Maintenance Margin Requirement)*	=Net Option Value + Maintenance Margin Requirement
		IMR *(Current Initial Margin Requirement)*	=Net Option Value + Initial Margin Value
		Margin E/D	=Total Equity + IMR Excludes Net Option Value
		RIR *(Current Risk Initial Requirement)*	Excludes Net Option Value
		RMR *(Current Risk Maintenance Requirement)*	Provides a breakdown of margin requirements by and accounts open positions.

IV - New to Armor:

Along with heightened batch processing times, the new RJO Armor has numerous new features. The Armor interface is consistent across its varying reports and screens, providing intuitive user controls to filter, sort, and view information. Additionally Armor lets users change, customize, and save profile configurations to best suit their needs.
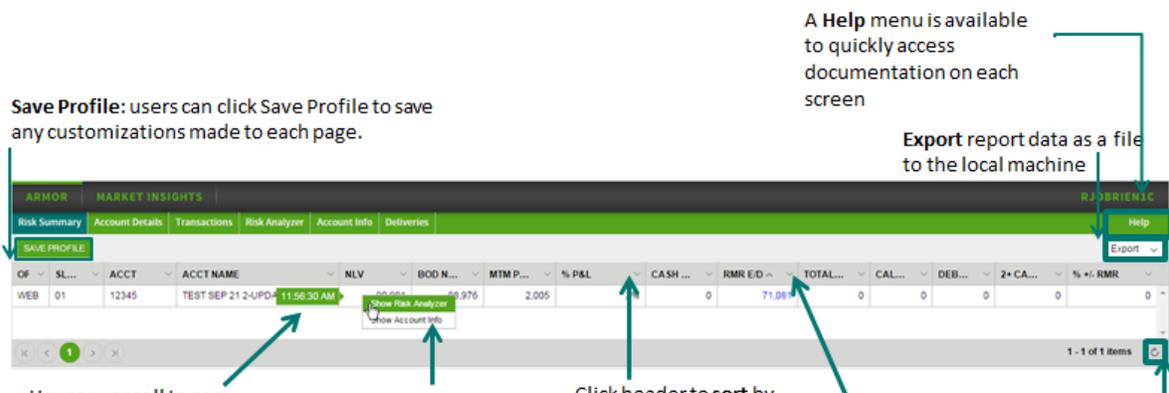
Tips for Navigating and Configuring ARMOR Screens

Armor screens allow users to customize each screen and control the data returned to tailor to each individual user's needs. Within the grid, users can use add more granular filters, sorts, and hide or view specific columns. These changes can be created on the fly or saved as personal profiles to be opened on demand. A saved profile will retain the top filter data as well as the report grid sort, order and filter options set from the grid column menu.

The below outlines these customization features:

Customizing Data Filtering and Column Selection:

Initial data is loaded with default columns, widths, and arrangement. Users can select/hide columns, set custom widths and rearrange them. Some of the filters are separated from the grid filter to improve the performance by reducing the amount of data returned to the client. User can manipulate any of these fields to filter data. Initial data is loaded with default columns, widths, and arrangement. Users can select/hide columns, set custom widths and rearrange them.

Profile Management

Once a user sets various filters and field customizations, these settings can be saved in various profiles. User profile includes data filters and column settings (including column selections, widths, and position). Client level users have the ability to save 1 profile per tab.

Context Menu

For any account row in a grid view such as the Risk Summary, users can right click on any field in that row to see a menu of functions that can be opened in a separate window.

> Note - The risk summary only displays at margin master accounts level but the right click context menu will include all sub account details as well.

Faster Cycle Times & Data Updates

Armor is equipped with faster batch processing times for real-time positions, margin calculations, and account balances. The real time transaction service prepares positions as soon as activity happens. The risk margin service generates margin requirements in the background.   All accounts with top day activity are margined real time - in less than 90 seconds of activity. Accounts with no activity, but with option positions are margined by batch process within configured interval of 15 minutes. Accounts with no activity and only future positions are margined at least once in every hour.

> NOTE - hovering the mouse over a field will show that time it was calculated.

Refresh

Risk Summary has an option to set refresh data in the bottom right hand corner of each screen.

Generating Custom Reports:

Once data is viewed and customized, users have the option of exporting or saving as CSV by selecting an option from export data dropdown.

V – FAQ

How do I access Armor?

Armor is available to all RJO IBs, brokers, and account holders through the RJO Client Portal. Once logged into the RJO Client Portal, Armor will be available in the upper left hand corner and in the view account information page. If you do not have RJO Portal access please click HERE or proceed to www.rjobrien.com and choose Get Web Access.

Are my positions real-time?

Yes, positions are automatically set to update in real-time by utilizing both execution and clearing data to provide almost instant position updates. However, you will have the option to disable real-time in the positions details screen to use clearing data only. Note users must manually refresh in the bottom right hand corner of the screen to update.

Is there any downtime when Armor does not update?

Yes, Armor does have a brief down period for next day processing while overnight markets are actively trading. Clearing also shuts down for end of day processing once overnight as well which will affect Armor updates. These nightly outage periods range from 30 to 90 minutes.

Why am I unable to view an account in Risk Summary?

The Risk Summary page will only display accounts at the master account level; please refer to the Account Details page to lookup sub accounts. In addition, the Risk Summary will only display accounts with activity or a negative balance. However, Risk Summary will not display accounts with a flat debit that has not activity traded.

How can I determine what actions are necessary to get an account off margin call?

Please refer to the Risk Analyzer page. Here you can create test scenarios to see how liquidating or adding positions would affect margin on the account including any spread and inter-commodity margin credits.

Why is the Deliveries page not displaying an open position?

The deliveries page will only display deliverable contracts; cash settled markets are not displayed. In addition, long positions are displayed 5 business days prior to first notice day. Both long and short positions are displayed 5 business days prior to last trade date.

How do I view positions for my sub accounts?

All subaccounts are available in the account details screen. Here you can use any of the filter options to search for a specific account. If the account is associated with the master, you will have to use the drop down icon to the right of the master account to filter down to the sub account. Position details are then available in the lower half of the screen. If you choose the master account on this page, you will see a breakdown of positions by sub account. You will also have the option to aggregate to master available in the upper right hand corner of this screen. If the master account appears in Risk Analyzer, you can open the positions page via the right click context menu to positions at the master level, aggregate to master, or choose subaccounts through the account selection along the top of the window.

How are TAS trades identified prior to the settlement?

TAS flags have been added to the Risk Summary and Position Details pages to identify and monitor accounts trading TAS products. Positions Details will include a TNET column indicating the total number of TAS trades executed top day. Risk Summary will also include an optional column that displays a calculated TAS Limit. TAS trades will not be included in OTE until clearing updates the traded price. Once received, these flags will drop off, and updated prices will be included in OTE calculations.

Where can I view any collateral held in my account?

The position details page will include additional tabs to display any FX positions, Collateral (such as TBills), and Other positions (such as warehouse receipts).

How do I know if I have any filters set?

Column filters are designated by a white highlight over the column drop down menu. Also any ascending / descending sort will be indicated by and arrow on the column header to designate a secondary filer. In addition, hovering your mouse over the clear button of the filtered section will display any filters you have setup both within the top search options and within the grid.

How do I save column and filter customizations?

Users have the ability to save any customizations in profiles available through the various Armor screens. Please refer to section IV of this document for further details.

When are foreign currency rate updated?

FX rates are updated daily about 3:00 pm CDT.