

# **ASX Administration and Risk Terminal for Clearing Participants User Guide**

Version 1.0 | August 2017

INFORMATION CLASSIFICATION - CONFIDENTIAL



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## 1. Introduction

The Australian Securities Exchange (ASX) provides clearing participants with an independent terminal interface for access to the New Trading Platform for the ASX 24 market. The ASX Administration and Risk Terminal for Clearing participants (ART-C) is designed to provide participants with a greater level of administration and help with minimising risk exposure for their members. This service is available on an opt-in basis for clearing participants who have guarantor clearing arrangements with ASX 24 trading participants. Clearing participants wishing to take greater control of pre-trade risk controls over their guarantor trading participants should contact their ASX account manager. Default limits will continue to apply to trading participants with no assigned clearing participants in NTP.

ART-C provides participants these abilities:

- Setup and administration of member limits
- Ability to view exposure at individual member level at any time
- Member management – ability to disable a member

### 1.1. Document information

This document describes:

- The functionality provided to manage various risk elements
- How to use the ART-C terminal to apply the functionality

#### 1.1.1. Terms and Acronyms

Term / Acronym	Description
ART-C	Administration and Risk Terminal for Clearing participants
PTRM	Pre-trade risk management

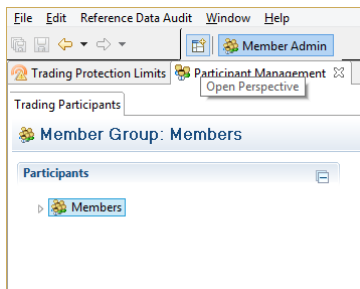
### 1.2. Before Starting

To logon to ART-C, participants need to use the logon details provided by Trading Operations.

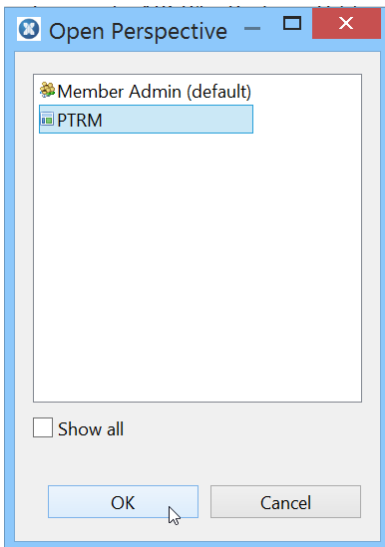
When ART-C is first opened the Member Admin perspective is displayed. To maintain *Pre Trade Risk Management* (PTRM) features such Member Limits, the PTRM perspective is used. If the PTRM perspective label is not shown, it can be shown as follows:

1. Click the *Open Perspective* icon.  
This opens the *Open Perspective* screen.

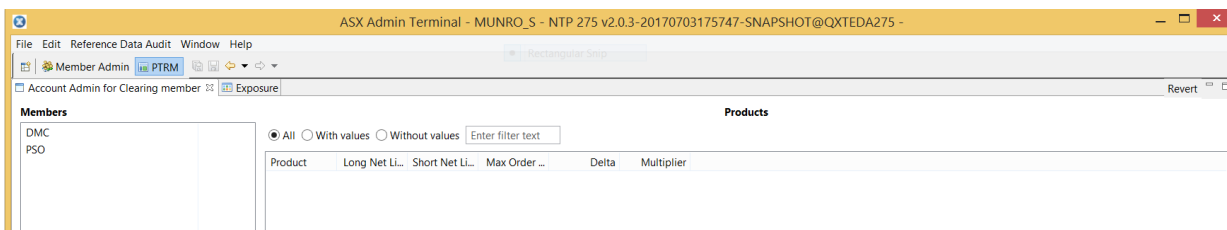




2. Select **PTRM** and click **OK**.



This opens the *PTRM* frame with the *Exposure* and *Account Admin for Clearing member* views.



### 1.3. Version History

This document has been revised according to the table below:


Version	Date	Comment
V1.0	Aug 2017	Initial version



## 2. Accounts and Limits

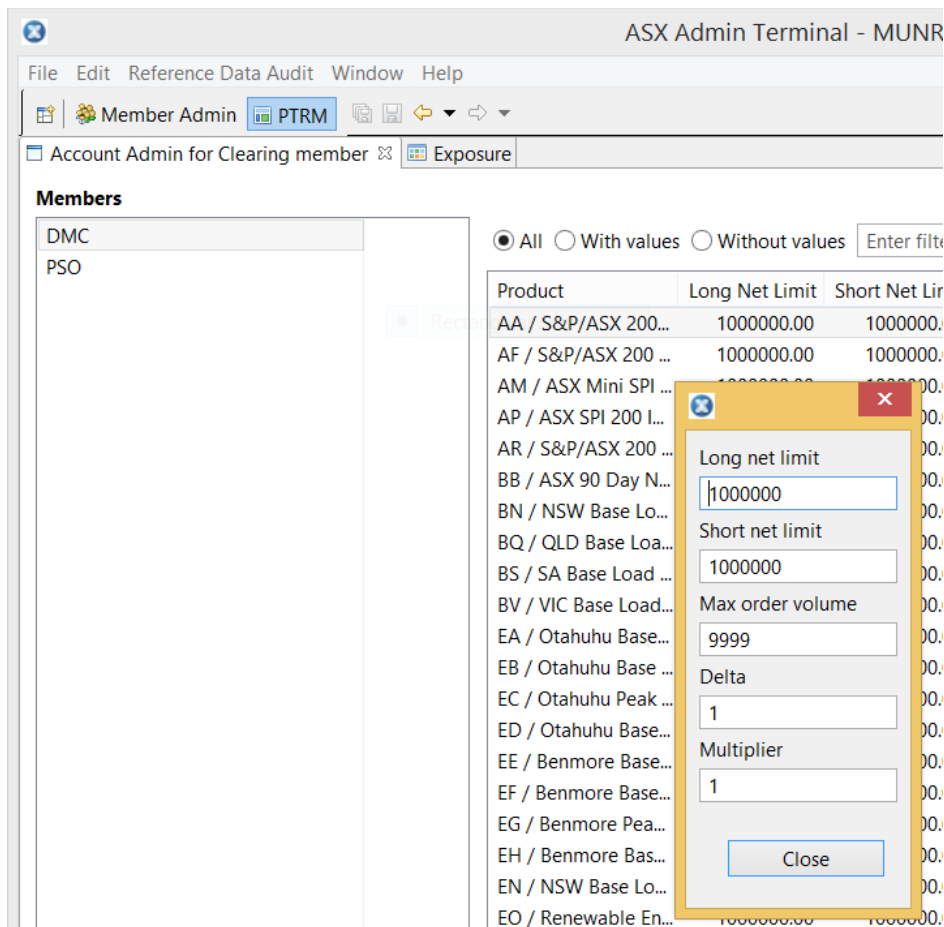
Exposure in products can be limited for a member using position related settings called limits. Product limits are **mandatory**.

Limits can be set at a product level for example on the ASX 90 Day Bank Bills (IR) contracts. Selected products can also have limits set at the future level, in addition to, or instead of at the product level. For example, limits could be set on IR and/or IRHO. Limits set must be applied to a member to be effective. It is mandatory to set limits on products to be able to trade them, but it is not mandatory to set limits for individual futures. As product-level limits are netted across all contract expiries, the purpose of setting limits for outright futures is to manage exposure to the futures curve.

 **Note:** Initial upload by file of future level limits is required for the limits to display in the terminal

Position limits are reset to zero at the end of each trading date.

An example of the Account Admin for Clearing member page is shown below.



The screenshot shows the ASX Admin Terminal interface. The main window title is "ASX Admin Terminal - MUNR". The menu bar includes "File", "Edit", "Reference Data Audit", "Window", and "Help". The toolbar contains icons for "Member Admin" and "PTRM". The main content area is titled "Account Admin for Clearing member" and includes a sub-tab for "Exposure".

On the left, there is a "Members" section with a list containing "DMC" and "PSO".

The main table displays product limits:

Product	Long Net Limit	Short Net Limit
AA / S&P/ASX 200...	1000000.00	1000000.00
AF / S&P/ASX 200 ...	1000000.00	1000000.00
AM / ASX Mini SPI ...	1000000.00	1000000.00
AP / ASX SPI 200 I...	1000000.00	1000000.00
AR / S&P/ASX 200 ...	1000000.00	1000000.00
BB / ASX 90 Day N...	1000000.00	1000000.00
BN / NSW Base Lo...	1000000.00	1000000.00
BQ / QLD Base Loa...	1000000.00	1000000.00
BS / SA Base Load ...	1000000.00	1000000.00
BV / VIC Base Load...	1000000.00	1000000.00
EA / Otahuhu Base...	9999	1000000.00
EB / Otahuhu Base ...	1	1000000.00
EC / Otahuhu Peak ...	1	1000000.00
ED / Otahuhu Base...	1	1000000.00
EE / Benmore Base...	1	1000000.00
EF / Benmore Base...	1	1000000.00
EG / Benmore Pea...		1000000.00
EH / Benmore Bas...		1000000.00
EN / NSW Base Lo...		1000000.00
EO / Renewable En...	1000000.00	1000000.00

A modal dialog box is open, allowing the user to set limits for a selected product. The dialog box contains the following fields:

- Long net limit: 1000000
- Short net limit: 1000000
- Max order volume: 9999
- Delta: 1
- Multiplier: 1

A "Close" button is visible at the bottom of the dialog box.



## 2.1. Member Modifications with Active Orders

The following behaviour applies:

- Modification of any member parameter will not apply to any active orders.
- It is not recommended to add or delete PTRM limits on individual futures for members with existing positions during the trading session. Exposure may not reflect the actual position until the next trading business date.

## 2.2. Member Position Limit Breach Notifications

A notification will be sent to the sessions who are hitting their 75% and 90% member position limits via the PartyRiskLimitsReport (CM) FIX message.

A lower limit warning message will be sent for orders which are within the 75-90% limit range and a higher limit warning message will be sent for orders within the 90-100% range. A warning message will be sent to the session placing the order for every order placed within those thresholds (75-100% range), not just the initial order that moves the member position limit over 75 or 90%.

If an order simultaneously breaches multiple thresholds, only one notification will be sent. Examples of this are breaching the lower and upper thresholds, or a spread order breaching both long and short limits.

Any order which would breach the member position limit will be rejected.

## 2.3. Interaction of member and account limits

Member and account limits are assessed independently of each other and an order can be rejected by exceeding limits set on either level. Although it is possible for the trading member to create account limits that would in aggregate be higher than the limits set for the trading member by their clearer, it will not be possible to exceed the exposure set by the clearer. Product limits are **mandatory** on both trading member and account levels.

## 2.4. Interaction of product and individual contract limits

Long net, short net and max order volume limits can be set at the product level and also at the future level. The logic for calculating the position is the same in both cases. In the case where limits are set for both a product and an individual tradeable instrument, the interaction is as follows:

- Orders in a future are validated only against the limits set for the outright. They will not affect position set at the product level



- If an outright contract in a spread has a limit set, the system will validate that leg. Any breach of a position will cause the order to be rejected

Consider the following scenario where limits are set at both the product and outright contract level:

### IR Product

Limit	Value
Long Net	10000
Short Net	10000
Max Order Volume	50
Delta	0.1
Multiplier	0.5

### IRH7

Limit	Value
Long Net	100
Short Net	100
Max Order Volume	75

### IRM7

Limit	Value
Long Net	100
Short Net	100
Max Order Volume	75

### The following orders will be validated solely against product limits

- Order in IRH70095000C - Options are validated against product, so even though there is limit for the underlying (IRH7) this will not be used. One tenth (0.1) of the order volume will be counted against the relevant long/short limit.
- Order in IRH8 - No limits for this outright contract, therefore the product limit is applied
- Order in IRH8U8 - no limits for either of the outright legs, therefore the product limit is applied



## The following orders will be affected by outright contract limits

- Order in IRH7 - validated against IRH7 limits. The maximum long and short position is 100, lower than the product level. Maximum order value is higher, at 75
- Order in IRH7M7 - validated against IRH7 and IRM7 limits
- Order in IRH7H8 - IRH7 is validated against contract level. IRH8 is validated against IR product limits, as no limits defined for IRH8

### 2.5. Limit Types

A number of different limits can be set. Long net limit, short net limit and max order volume can be set at both product and future level. Delta and Multiplier only apply to product level. These limits are described in the following sections.

#### 2.5.1. Long Net Limit

The aggregate sum of quantities on working buy orders and the long position of traded quantity so far at the current point in time. The traded position is calculated by netting against the sell trades, but the working buy orders are not netted against working sell orders.

**Example:** The Long Net Limit is 50. The user has completed 5 buy trades at quantities 2, 25, 14, 5, 7, sum of 53, and 2 sell trades of 10 and 25, sum of 35. The long position is 18 (53-35). There are 2 buy orders at quantity of 5 each, so the current Long Net Limit calculation is 28. The user can therefore place a further aggregate quantity of 22 in buy orders. Note that any working sell orders were ignored.

#### 2.5.2. Short Net Limit

The aggregate sum of quantities on working sell orders and the short position of traded quantity so far at the current point in time. The traded position is calculated by netting against the buy trades, but the working sell orders are not netted against working buy orders.

#### 2.5.3. Max Order Volume

The limit on quantity for a single order, with a system-enforced maximum of 9999.

#### 2.5.4. Delta

The Delta option is a factor that can be applied to reduce the position weighting of option positions. They reflect the weighting they have on the overall product position. Acceptable values are between 0 and 1 with a default of 1.

Delta can only be applied to a product, not a future. Any value other than 1 will not be saved.



**Example:** With a Delta of 0.2 an option order of 100 will add 20 to the position ( $100 \times 0.2 = 20$ ).

### 2.5.5. Multiplier

The multiplier is a factor that can be applied to overall product positions in 1:1 intra-commodity spreads. Acceptable values are between 0 and 1, with a default of 1.

Multiplier can only be applied to a product, not a future. Any value other than 1 will not be saved.

**Example:** With a multiplier of 0.5 an intra-spread order of 10 will add 5 to the position ( $10 \times 0.5 = 5$ ).

 **Note:** Positions are calculated taking into account the working orders and the executed trades.

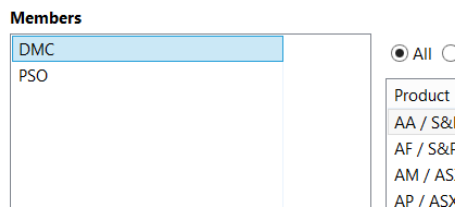
## 2.6. Limit Maintenance

Limits can be applied by using the relevant screens within the terminal. They can also be applied by uploading a file.

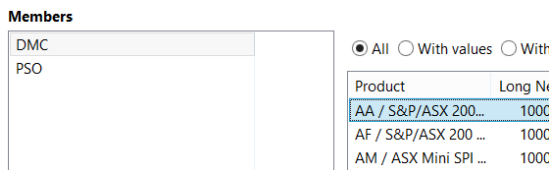
### 2.6.1. Applying Limits to a Member

To apply a limit to a member:

1. Select the required member.



2. Double-click the required product from the product column.



3. If there are existing limits, these will be displayed and can be modified. If limits have not been set long net, short net and max order values will be empty. Enter the required values. See 2.5 Limit Types for information on each parameter

Long net limit  
10000

Short net limit  
10000

Max order volume  
1000

Delta  
1

Multiplier  
1

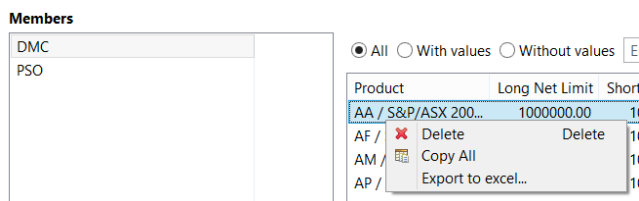
Close

4. If setting limits for a product, enter the required values in the Delta and Multiplier fields. For limits at future level, leave the values as 1. Click on **Close**.
5. Click **Save**.  
The member is deselected when saved. Clicking back on it shows the current values.

### 2.6.2. Deleting Limits on Members

To delete limits on members:

1. Select the required member.
2. Right-click on the required product and select **Delete**.  
Alternatively, select **Delete** on your keyboard.

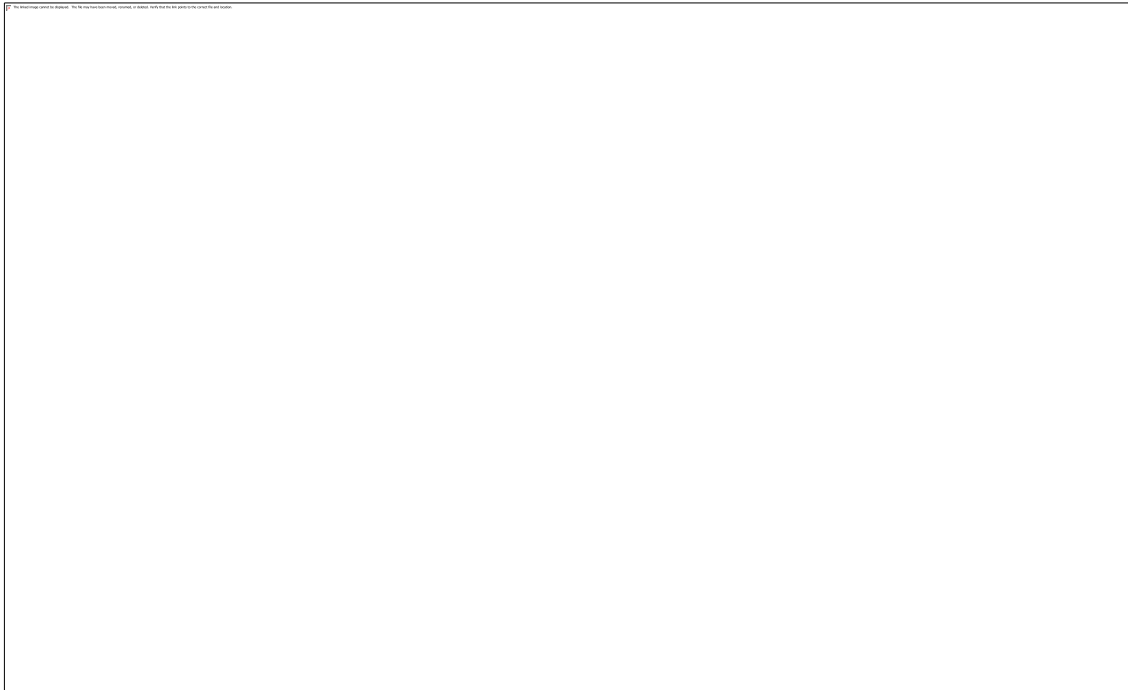


3. Click **Save**.
4. Click the updated member.  
Once the updated member has been selected again, the product limit values are removed.

## 2.7. Bulk Account and Limit Maintenance

### 2.7.1. Overview

PTRM provides users with the option of importing and exporting member limits data using a simple file format. A sample import file is:



#### **Lines 1-5**

Adding limits to Member DMC for products AA,AF,AM,AP & AR with 50000 long net limit, 50000 short net limit, 2000 Max Order Volume, 1 Delta, 1 Multiplier

#### **Line 6-10**

Update limits for Member PSO for products, AA,AF,AM,AP&AR to 1000 long net limit, 1000 short net limit, 100 Max Order Volume, 1 Delta, 1 Multiplier

#### **Lines 11-14**

Update Limits for Member DMC for Products BN,BQ,BS & BV to 0 for long and short net limit, 9999 Max Order Volume, 1 Delta, 1 Multiplier. NOTE – This completely stops order entry for these products.

#### **Lines 15-18**

Updating Limits for Member PSO for products BN,BQ,BS & BV to 0.01 for Long and Short net limit, 9999 Max Order Volume, 1 Delta, 1 Multiplier. NOTE – This allows the Member to close any current positions in these products but not create any additional positions

#### **2.7.2. File format**

The Administration and Risk Terminal for Clearing participants accepts and produces Comma Separated Value (CSV) files. The same format is used for both import and export of account data. A line describes a single member limit.

Import files specify an action to take - add, update or delete.



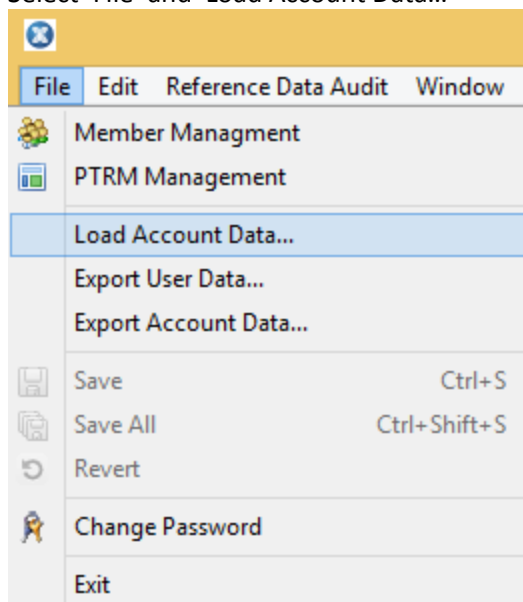
The first three columns for both line types are as follows:

Column No	Description	Valid values	Comments
1	Type of instruction	MEMLIMITS	
2	Action to take	A – Addition U – Update X – Delete	The action column must be supplied on imported files. It is blank on exported files.
3	Member name		Member name/s
4	Segment name		E.g. AP-S, IB-S
5	Long Net Limit		
6	Short Net Limit		
7	Max Order Volume		
8	Delta		
9	Multiplier		

### 2.7.3. Bulk Upload Accounts (Members) and Limits Steps

Here are the steps to bulk upload accounts (Members) and limits via PTRM:

1. Select 'File' and 'Load Account Data...'



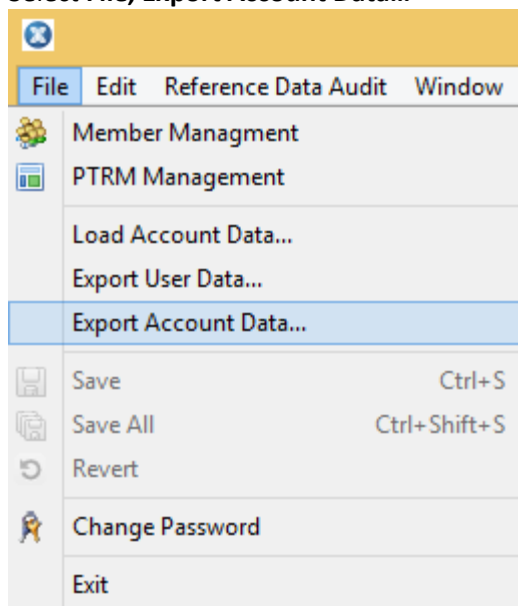
2. Select where the .csv file is located on your local PC and click 'Open'.
3. If errors are contained in the file, a popup will appear with 'Errors in file, do you want to proceed anyway?'. Click 'Yes' or 'No' as appropriate.

4. A 'Result from updating PTRM data' window will appear showing all the successful and rejected uploads via the bulk file.

#### 2.7.4. Bulk Export of Member Data

To export member data:

1. Select **File, Export Account Data...**



2. Select a location and name for the file and press **OK**



**Note:**

All members are exported. It is not possible to export a single member.

### 3. Member Exposure

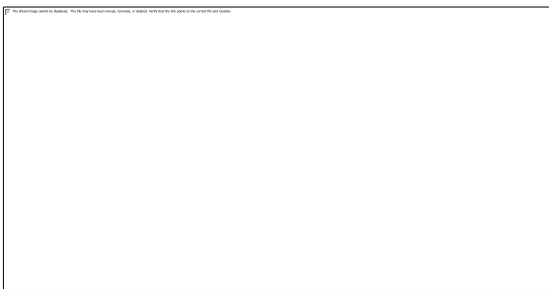
ART-C allows clearing participants to send requests to see their exposures at a Member level at any time. This allows clearing participants to work out exactly what exposure they have across a member.

#### 3.1. Open Order and Position Summary Queries

To query one or more members:

1. Open the *PTRM* perspective in the *Exposure* view.
2. Click the required search criteria option.

Select **Member** and click **Send**. This displays the overall product positions for the member position limits.



#### Notes:

- This does not continuously update. To update, click **Send**.
- Position *limits* are reset to zero at the end of each Trading Date

## 4. Member Management

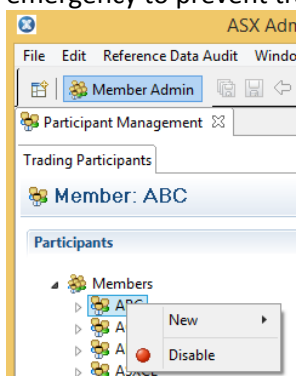
The Administration and Risk Terminal for Clearing participants provides functionality for managing members.

### 4.1. Disabling a member or member unit

Clearing participant members can disable a member or member unit that they are responsible for. This will disconnect any users of that member/member unit that are logged in, and remove all active orders for that member/member unit from the market.

To disable a member

1. Right-click the member/member unit in the Member perspective
2. Select Disable from the menu. Disabling a member/member unit will remove all active orders, disconnect all users if logged on and prevent them from logging on. This action can be useful in an emergency to prevent trading by unauthorised parties.



#### Notes:

- This functionality is **only** available to clearing participant members
- Enabling a member/member unit can only be done by ASX.

### 4.2. Export of user data

Administration and Risk Terminal for Clearing participants provides functionality to export the list of users assigned to the clearer in the system.

#### 4.2.1. File format

User data is exported in Comma Separated Value (CSV) files. The format is as follows:

Column No	Column name	Comments
1	User	User id
2	First name	First name of the user



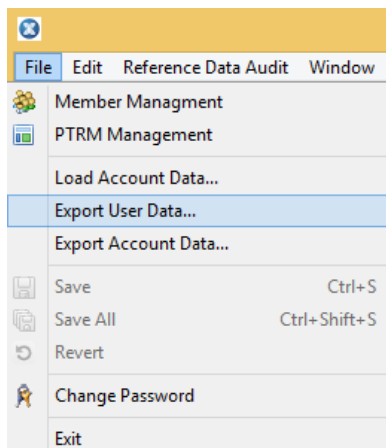
Column No	Column name	Comments
3	Last name	Last name of the user
4	E-Mail	E-mail address of the user
5	Phone Number	Phone number of the user
6	Member Firm	Id of the member firm the user belongs to
7	Member Unit	Id of the member unit the user belongs to. Same as the member firm if the user does not belong to a member unit
8	SOG Group(s)	Comma separated list of SOG group names
9	TAP List	Trading access profiles assigned to the user
10	SAP List	Subscription access profiles assigned to the user
11	Throttling Limit	Number of transactions the user can place in one second
12	User Type	Type of service user has access to. ART-C users are shown as GUI.

The first line of the file is a header line containing the names of each column.

#### 4.2.2. Exporting user data

To export all user data:

- 1 Select **File, Export User Data...**

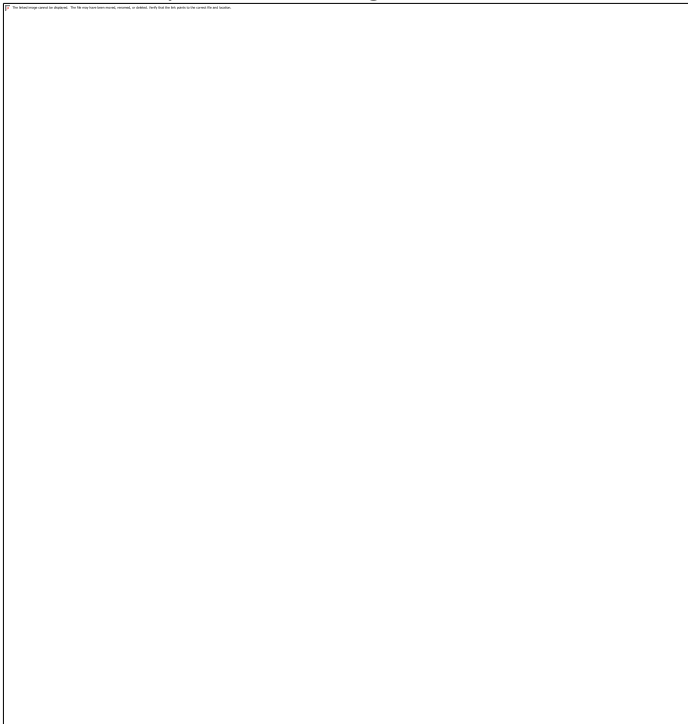


- 2 Select a location and name for the file and press **OK**

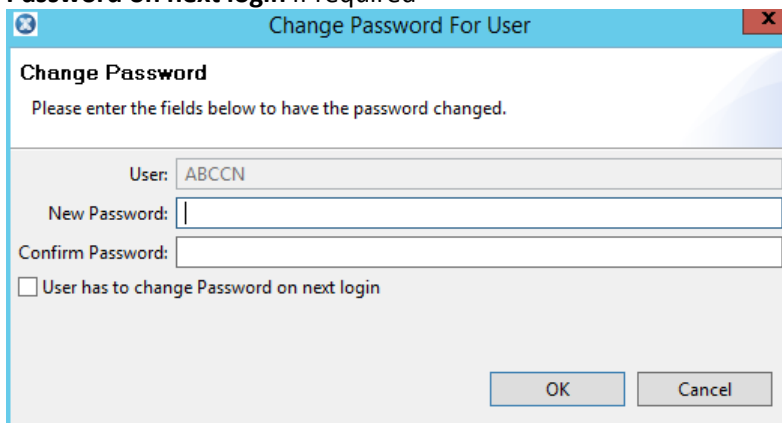
### 4.3. Changing a user's password

Passwords can be updated for all users under the Member. This function can be used to unlock users who have entered their password incorrectly too many times and for those with expired passwords. To change a user's password:

1. Open the *Member Admin* perspective.
2. Select **Members > [Member]** to expand the tree structure in the *Trading Participants* frame.
3. Locate the required user and right-click on it



4. Select **Change Password For User**
5. Enter the new password in the **New Password** and **Confirm Password** boxes. Select **User has to change Password on next login** if required



6. Press OK.



**Notes:**

The new password must meet at least three of the following criteria:

- Contain an English upper case character (A-Z)
- Contain an English lower case character (a-z)
- Contain a Hindu Arabic numeral (0-9)
- Contain one or more of the following non-alphanumeric, special characters:  
!@#\$%^&\*()\_+|~=-\`{}[]:~<>?,./)
- Contain any character that is categorized as an alphabetic character but is not uppercase or lowercase; this includes characters from Asian languages.

Passwords must be a minimum of 8 characters in length.

Passwords are valid for 90 Days, and when reset must be different to the previous 12 passwords used.

The account will lock after 6 failed attempts.



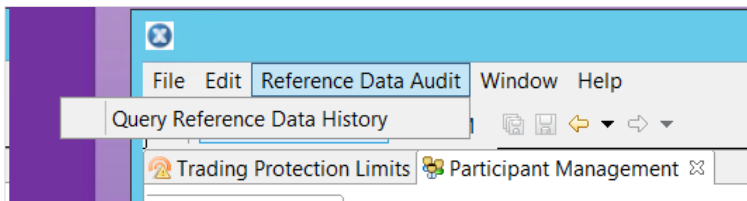
## 5. Reference Data Audit

### 5.1. Reference Data Audit Queries

A Reference Data Audit query provides an audit trail of all changes made to members' limits.

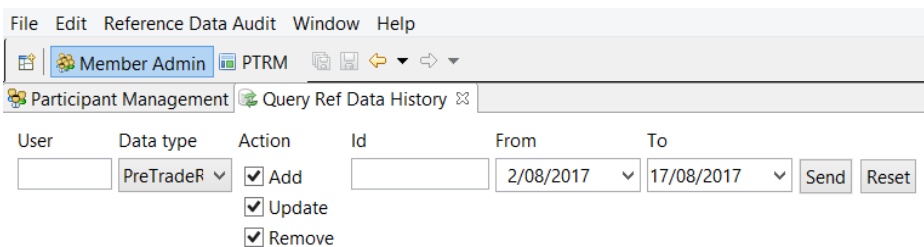
To query data history:

1. Open **Reference Data Audit > Query Reference Data History** perspective



2. Enter search criteria for these fields at the top of the screen:

- **User** – Risk Terminal User to be queried, e.g. DMCR2
- **Data type** – PreTradeRisk
- **Action** – Select individual checkboxes or select all for a blanket search, e.g. Add, Update, Remove
- **ID** – Member ID
- **From** – Query from date
- **To** – Query to date
- **Send** – Click **Send** to query the history



The queried information appears in the middle section of the screen.



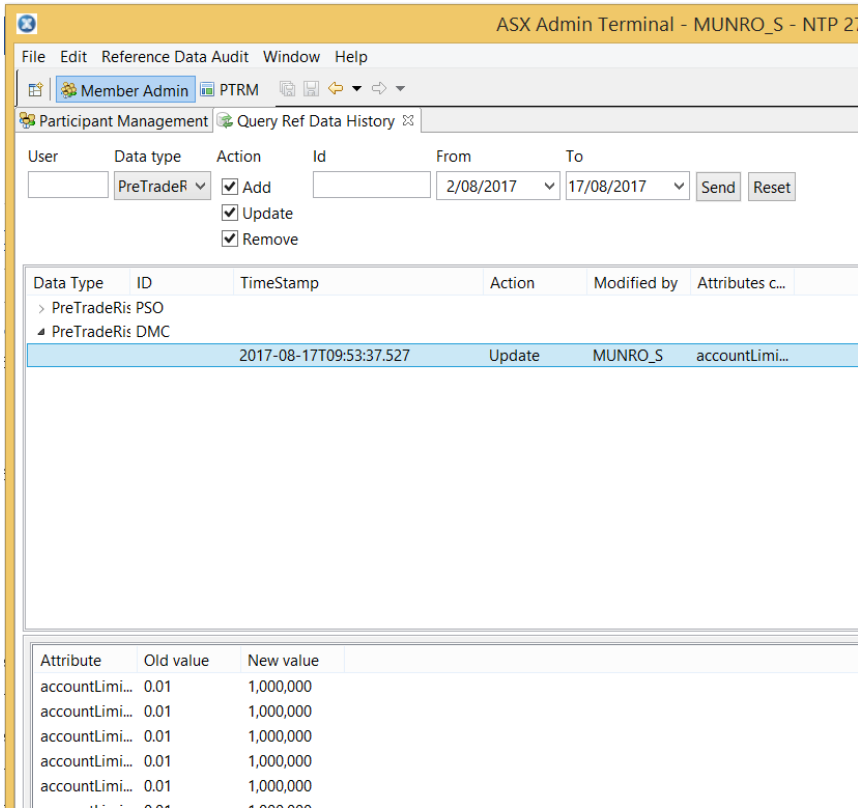
#### Note:

This does not continuously update. To update, click **Send**.

Drill down on the Data Type to expand information for that Member ID, e.g. DMC. This displays details, including TimeStamp, Action, Modified by, and Attributes changed for the selected member, e.g DMC

Data Type	ID	TimeStamp	Action	Modified by	Attributes c...
> PreTradeRis	PSO				
▲ PreTradeRis	DMC				
		2017-08-17T09:53:37.527	Update	MUNRO_S	accountLimi...

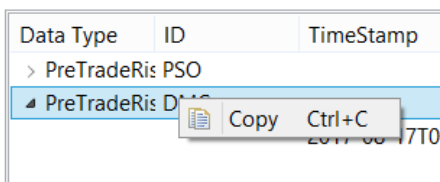
To view additional information about each item returned from the above query, select a row in the list. Details of the change are displayed in the lower section of the screen.



In the above Query, the New Value is 1,000,000, meaning that the member, DMC has modified the limit from 0.01 to 1,000,000.

## 5.2. Exporting Query Data

To export query data, right-click in the top section to select, copy, and paste the content into Excel.



Note: Only content visible in the top half of the screen is copied to Excel.

To export all sections, take a print screen of the entire page.

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