

ASX DCS MCM 1.5.0 Technical Description Overview

Technical Description Overview 1.5.0

3 March 2025





Contents

1.	Changes in MCM 1.5.0	3
1.1.	Function Enhancements	3
1.2.	Security Enhancements	3
1.3.	Minor Changes and bug fixes	3
1.4.	Database Table Changes	4
1.5.	Message Changes	
2.	Additional details on changes	4
2.1.	MCM Reports and TLS1.2	4
2.2.	Change the MCMAUTOUSER password	9
2.3.	Ability to update Account Equity Clearer via MCM 10	0
2.4.	MCMAutoUser no longer requires sysadmin privileges	1
2.5.	DCS (MCM EIF) - Allow position transfers/give-ups on Trade Date (T) for	•
RIOT	accounts1	1
2.6.	Removal of Microsoft XML Core Services (MSXML 4.0)1	1
2.7.	Introducing Delta and Vega columns in the TradedEntityPrices table 1	1
2.8.	Fix for inconsistency in Taken flag MCM GUI and EIF1	
2.9.	DCS Interest Rate display updates1	1
2.10.	Limit give up trade commission to 2 decimal places	1
2.11.	Price column is truncated in Open Position statement report	1
2.12.	Overflow error reported by MCM when trying to price average trades 12	1
2.13.	Insufficient server-side validation of user login and access1	1
2.14.	Hardcoded SQL Admin Credentials visible in plain text	1
3.	List of executables 12	2



Derivatives Clearing System Open Interface

Technical Description Overview

3 March 2025

Introduction

This document describes the changes to the Member Clearing Module (MCM)/Derivatives Clearing System (DCS) and database schema required to support MCM/DCS v1.5.0.

The ASX supplied **MCM 1.5.0** will be made available to Clearing Participants (CP) at no additional charge.

The changes can be categorised and summarised as follows.

1. Changes in MCM 1.5.0

1.1. Function Enhancements

- MCM now supports later versions of TLS than 1.0. However, CPs who choose to disable TLS 1.0 will no longer be able to print in MCM. They will need to use the new facility to request reports to be produced by the Clearing House overnight
- A new Archived Reports facility has been added that works in conjunction with the report request facility which is available to all MCM users whether they have TLS 1.0 disabled or not
- Allow trades in a RIOT (a type of Market Maker) account to be given-up to another RIOT account of the same name associated with a different CP on trade date (T)
- Allow maintenance of an account's Equity Clearer via MCM GUI

1.2. Security Enhancements

- The password for the MCM Service account (MCMAutoUser) can now be changed
- Passwords are no longer visible in executables
- The ability to launch MCM GUI from the command line has been removed to prevent starting the GUI by impersonating another user

1.3. Minor Changes and bug fixes

- Add Delta and Vega to MCM database (TradedEntityPrices table)
- Remove Redundant Tender Advice related menu items to remove the dependency on MSXML4.dll
- Change taken flag on EIF trade Retrieval to 'W' when a give-up is initiated in MCM GUI so that it is consistent with give-ups initiated via EIF
- Ensure commissions amount on give-ups are limited to 2 decimal places (of \$)
- Ensure the price on Open Position Statement is not trimmed
- Prevent overflow error when price averaging trades with large quantities and/or price
- Ensure interest rate is displayed to 4 decimal places on Interest Rate parameter view, Accrued Interest view, Interest Statements, Accrued Interest Listing and Interest Rate Listing



- Fix EIF issue that causes reconciliation error if a give-up trade is price averaged without taking it up first. This is a valid action
- Add a view of Reconciliation Details to MCM GUI

1.4. Database Table Changes

Further details in "ASX DCS MCM DatabasesV1.5.0.pdf"

- DerivProd: new Column ListingFrequency
- TradedEntityPrices: new Columns Delta, Vega
- SODRepCH: new table for Clearing House printing request

1.5. Message Changes

Further details in "ASX DCS MCS MessagesV1.5.0.pdf"

• SendEODRepRequest_V1, used for sending print requests to the Clearing House

2. Additional details on changes

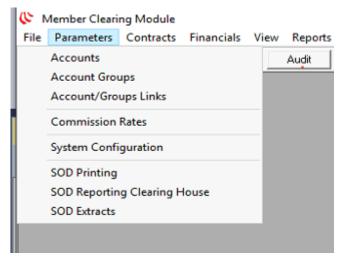
2.1. MCM Reports and TLS1.2

MCM 1.4.8 requires TLS 1.0 to generate reports. To provide support for CP's who wish to turn off TLS 1.0, a new form is available in the MCM GUI that will allow CP's to send DCS the requirements for the reports they need. DCS will then generate the reports and be delivered after MCM SOD has completed.

MCM does not support printing if TLS 1.0 is disabled. The work-around is to print the reports at the central site (Clearing House). The reports will then be archived in MCM and made available for viewing/printing as required.

How it works:

Using MCM GUI, select SOD Reporting Clearing House in the Parameters submenu

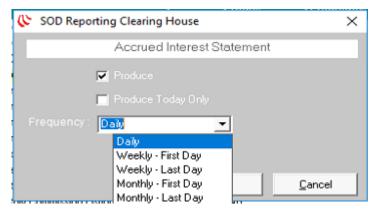


A list of available reports and statements will be listed



Report Name	Produce	Produce Today	Produce Frequency
Daily Financial Statement	Yes	No	Daily
aily Position Activity	No	No	
CA Collateral Statement	No	No	
Accrued Interest Statement	No	No	
Commission Due Listing	No	No	
Commission Due Summary	No	No	
Commission Earned Listing	No	No	
Commission Earned Summary	No	No	
xercise Activity Statement	No	No	
nterest Statement - Previous Month	No	No	
Aonthly Commission Listing - Current	No	No	
Aonthly Commission Listing - Previou	s No	No	

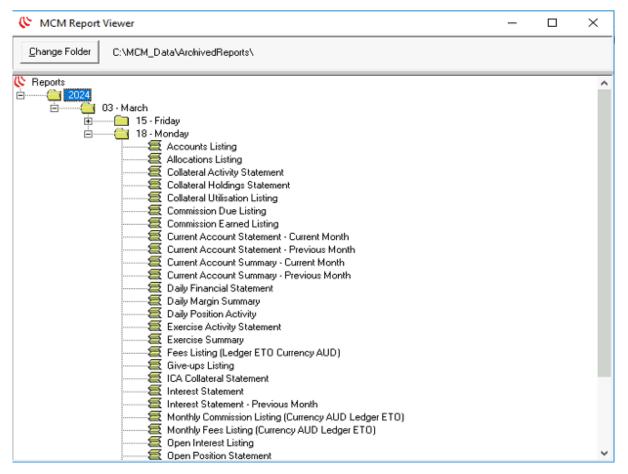
By selecting a report and clicking amend, the instructions for reporting can be amended as required



When Ok is clicked, the instructions will be sent to the Clearing house (CCC). After CCC EOD, the report will be generated and sent to MCM where it will be stored (archived) in the applicable folder under the Archive Reports as defined by the MCM registry setting, **General->RepArchDir**.



Users can view and/or print reports via MCM Report Viewer (new):



NOTE: It will be the responsibility of the CP to manage the archived reports space requirements and clean out old reports as required



The Reconciliation report **cannot** be printed centrally as the data is not available at the Clearing House. Instead, a new view will be provided in the MCM GUI. Select **Reconciliation** from the **View** Submenu

	conciliation for 17/03/	20					
	Description	Comm	ent				
	Arccount Groups	Recond	iled	recor	ds:	5)	
_	Account/Group Links	Recond					
_	Accounts	Recond		-		-	
	Allocations	Recond					
	Commission Rates	Recond					
	Trades	Recond	iled	recor	ds:	0)	
	Transfers	Recond	iled	[recor	ds:	0)	
	Row 1 of 7						
	per Clearing Module						
Para	ameters Contracts Financi Trading	als View	Rep Audi				
	Transfers		Audi				
	Trading Activity Transfers	>					
	Undo Match Out Request						
	Account Confirmations						
	Open Interest						
	Position Explorer						
	Open Position Summary						
	Deliveries						
	Expiring Contracts						
	Expiring Contracts Exercise Activity						
	Expiring Contracts Exercise Activity Exercise Summary						
	Expiring Contracts Exercise Activity Exercise Summary Financials	>					
	Expiring Contracts Exercise Activity Exercise Summary Financials Collateral						
	Expiring Contracts Exercise Activity Exercise Summary Financials	>					
	Expiring Contracts Exercise Activity Exercise Summary Financials Collateral Depository	>					
	Expiring Contracts Exercise Activity Exercise Summary Financials Collateral Depository Margin Details	>					
	Expiring Contracts Exercise Activity Exercise Summary Financials Collateral Depository Margin Details Parameters	>					
	Expiring Contracts Exercise Activity Exercise Summary Financials Collateral Depository Margin Details Parameters Clearing House Parameters	>					
	Expiring Contracts Exercise Activity Exercise Summary Financials Collateral Depository Margin Details Parameters Clearing House Parameters Reconciliation	>					
	Expiring Contracts Exercise Activity Exercise Summary Financials Collateral Depository Margin Details Parameters Clearing House Parameters Reconciliation Status Check Messages Audit Trail	>					
	Expiring Contracts Exercise Activity Exercise Summary Financials Collateral Depository Margin Details Parameters Clearing House Parameters Reconciliation Status Check Messages	>					



2.1.1 Statements and Reports

The full list of statements and reports available through this functionality are:

Daily Financial Statement **Daily Position Activity** ICA Collateral Statement **Commission Due Listing Commission Earned Listing Exercise Activity Statement Interest Statement** Interest Statement - Previous Month Monthly Commission Listing - Current Month Monthly Commission Listing - Previous Month Monthly Fees Listing - Current Month Monthly Fees Listing - Previous Month **Open Position Statement** Daily Margin Summary Current Account Statement - Current Month Current Account Statement - Previous Month **Collateral Activity Statement Collateral Holdings Statement Allocations Listing Collateral Utilisation Listing Give-ups Listing Open Interest Listing Open Position Summary Price Averaging Listing Trades Listing** Trading Activity Transfers Listing Undo Match Out Requests Listing Accounts Listing Current Account Summary - Current Month Current Account Summary - Previous Month **Exercise Summary Fees Listing Transfers Listing**



2.2. Change the MCMAUTOUSER password

CP's will be able to change the password to meet their internal security policies for the MCMAutoUser account.

This new facility allows the MCM service account user password to be changed.

In order to change the password the following steps need to be performed before changing the password

 All users of MCM including the log-in for MCM services must have execute access to the stored procedure, pa_sp_CheckUser, in PA_MCMS database

a. INSERT SQL COMMAND TO grant access

- 2. The MCM services must run under a LDAP service account (not Local System Account)
- 3. The user making the change must be authorized to use Edit functions in MCM Security Administration
- 4. All users should be logged out of MCM
- 5. All Services must be stopped (Launch_MCMTaskMgr and Launch_MCMReceiveMsgHand and Launch_MCMSendMsgHand)

Instructions:

Run MCMServiceAccount.exe either from the windows command window or directly from file explorer.

🔇 Amend MCM Service Acc –	- 🗆 ×
Exit	
MCMAutoUser	
Password :	
New Password :	
Verify Password :	
<u>R</u> eset <u>C</u> ancel	<u>0</u> K

Enter the existing password, the new password and repeat the new password to verify the password. Click OK.

The sql server account password will be changed if it complies with your installation of SQL Server's password policy. A message will be displayed to indicate success or otherwise.

Click Reset to reset the password back to the original value as installed.

If you do not know the current **MCMAutoUser** password you will need to contact DCS Support (<u>DCS_Support@asx.com.au</u>) who will be able to provide you with further instructions on how to reset the password, along with an ASX generated password that will be valid only for that calendar date.



2.3. Ability to update Account Equity Clearer via MCM

Third Party Clearers will now have the ability to update the Equity Clearer for each individual account. Previously this could only be changed by the Clearing House.

This functionality has been added to the account maintenance form:

This field cannot be blank, if it is not changed the default Clearer for the CP will be used.

Examples:

This shows an account that uses the default clearer

🔇 Accounts		×
Code :	0007	
Name :	Jimmy Bond	0
Status :	Active 🔽 🕼 Begregated 🔽 Auto Exercise **	
Account Type:	Private 🔽 🔽 Auto Match Out 🔲 Specific Cover	
Equity Clearer	0 Default:	
Address :	1 Twomey Avenue	
	Tenterfield	
Member Info :		
	Note:- The "Auto Exercise" indicator is only OK	icel

This shows an account that uses another clearer

🔇 Accounts		×
Code :	0007	
Name :	Jimmy Bond	0
Status :	Active 🔽 🔽 Segregated 🔽 Auto Exercise **	
Account Type:	Private 🔽 🖌 Auto Match Out 📄 Specific Cover	
Equity Clearer	Bond	
Address :	1 Twomey Avenue	
	Tenterfield	
Member Info :		
	More si The TAuto Evernise" indicator is only	
	epolicable to ETO's. QK	<u>C</u> ancel

The ability to change an account's equity clearer will also be available through EIF (Extended Interface Functionality). Using EIF helps clearers integrate ASX DCS with their own systems providing straight through processing.



2.4. MCMAutoUser no longer requires sysadmin privileges.

The SQL server account MCMAutoUser no longer requires sysadmin privileges after initial installation. They can be lowered to db_owner.

2.5. DCS (MCM EIF) - Allow position transfers/give-ups on Trade Date (T) for RIOT accounts

Currently RIOT accounts in DCS have the restriction in place whereby the transfer/give-up can't occur on T. Other account types within DCS do allow the transfer to occur on T.

This will now allow Market Makers who use more than one Clearer to perform position transfers/give-ups on T for their RIOT accounts with MCM 1.5.0

Give-up can also be done through EIF (External Interface). Using EIF helps clearers integrate ASX DCS with their own systems providing straight through processing. This enhancement will also be available via EIF.

2.6. Removal of Microsoft XML Core Services (MSXML 4.0)

Microsoft XML Core Services (MSXML 4.0) is no longer required in MCM 1.5.0.

2.7. Introducing Delta and Vega columns in the TradedEntityPrices table

Delta and Vega values are currently only available in the SPAN file. Delta and Vega columns will be available in the TradedEntityPrices table from MCM1.5.0.

2.8. Fix for inconsistency in Taken flag MCM GUI and EIF

MCM GUI has been updated to display Taken flag as 'W' (stands for waiting) instead of empty when a give-up is performed, this is to bring it in line with the EIF AL transaction.

2.9. DCS Interest Rate display updates

DCS calculates interest rates to four decimal place, the views and reports in MCM are currently truncated to two decimal places.

2.10. Limit give up trade commission to 2 decimal places

Updated EIF procedure to limit the trade commission to 2 decimal places.

2.11. Price column is truncated in Open Position statement report

Price column in the Open Position statement report is no longer truncated.

2.12. Overflow error reported by MCM when trying to price average trades

Fix in price averaging request when the price is high for large quantities.

2.13. Insufficient server-side validation of user login and access

Additional checks added to ensure MCM application can only be started by an authenticated user.

2.14. Hardcoded SQL Admin Credentials visible in plain text

SQL Admin Credentials are no longer visible in plain text.



3. List of executables

The following is a list of executables changed as part of this release

Client

•	MCM.exe	MCM GUI
•	MCMRptViewer.exe (*)	MCM Report Viewer GUI

- SecAdminMaint.exe Security Administration GUI •
- StartMenu.exe Start Menu for accessing the above GUIs

Server

•

•

- MCMCreateUser.exe To create the initial security administrator user •
- MCMMsgView.exe To assist support staff to view and debug message flow •
 - MCMRefresh.exe Refresh MCM database from pre or post MCMSOD backups

MCM task Manager for processing messages

- MCMSendMsgHand.exe MCM Send Message Handler service •
- MCMSOD.exe MCM Start of Day process •
- MCMTaskMgr.exe
- MCMTransfer.exe
 - Used to process position transfers MCMServiceAccount.exe (*) Change Service

* denotes new in this release