



ASX Clearing Gateway Uplift Technical Guide

Genium Clearing Workstations (CWS)

July 2022

Version History

Version	Date	Comment
1.0	June 2022	Initial release
1.1	July 2022	Adjusted CW1 installation kit availability date

1 Background and Audience

ASX is undertaking a technology refresh to upgrade ASX Genium Clearing Workstation (CWS) servers running the Windows 2008 operating system. The roll-out will occur in the second half of 2022. CWS servers will be upgraded at ASX Net customer sites and in ALC customer cabinets.

CWS gateways are part of the connectivity layer between the Clearing Participant (CP) and the Genium Clearing system for the ASX 24 market. CWS enables users to perform functional activities in Genium Clearing using Clearing Workstation user interface software ("CW1"). ASX manages the CWS gateways, including patching requirements, according to ASX security governance standards.

The target audience for this document is IT staff at Participant companies, including network and data centre personnel.

2 Technical Specifications

2.1 Hardware and Operating System

	Current	Target
Hardware	Dell R320	Dell R350
Operating System	Windows 2008 Server R2	Windows 2019 Server

2.2 Other

- Depth: 512mm Height: 42.8mm Width: 482mm
- Weight: 13.6kg Rack Space: 1 RU
- Power: Dual, hot-plug, redundant power supply (1+1), 600W
- Typical power: 98 - 159W (approximate guide)
- NIC Teaming: Yes

3 Deployment

Participants will be contacted by the upgrade team to arrange ALC cabinet access and/or ASX Net site access. An ASX engineer will visit the site and upgrade each ASX CWS gateway on a swap-out basis. There are no configuration changes required from the customer, given:

- Each new gateway will be a clone of the existing gateway it is replacing.
- The IP address and available TCP ports of each gateway will remain the same.

Secondary CWS Server

For secondary CWS servers, ASX will upgrade the server on trading days after 16:30 AEST/AEDT. After the installation, customers will have the opportunity to:

- Run telnet to the ports 2121 and 2122 from their desktop machines that run the CW1 application; and
- Login to the new CWS server using their standard production credentials using the CW1 application.

Primary CWS Server

For primary CWS servers, ASX will upgrade the server on a Saturday after 09:00 AEST/AEDT.

After the installation, customers will have the opportunity to:

- Run telnet to the ports 2121 and 2122 from their desktop machines that run the CW1 application, expecting “*Connection refused*” as a successful test result.

Test CWS Server

Test CWS servers will be upgraded on the same day as the primary or secondary server upgrade, depending on where they are hosted. The test plan will therefore follow what is documented above. For example, if the test server is located on the primary site, then the Saturday plan referenced above will apply.

Pre-requisites

Prior to the deployment of the new CWS servers, Participants are required to update their CW1 client software to version r143631.

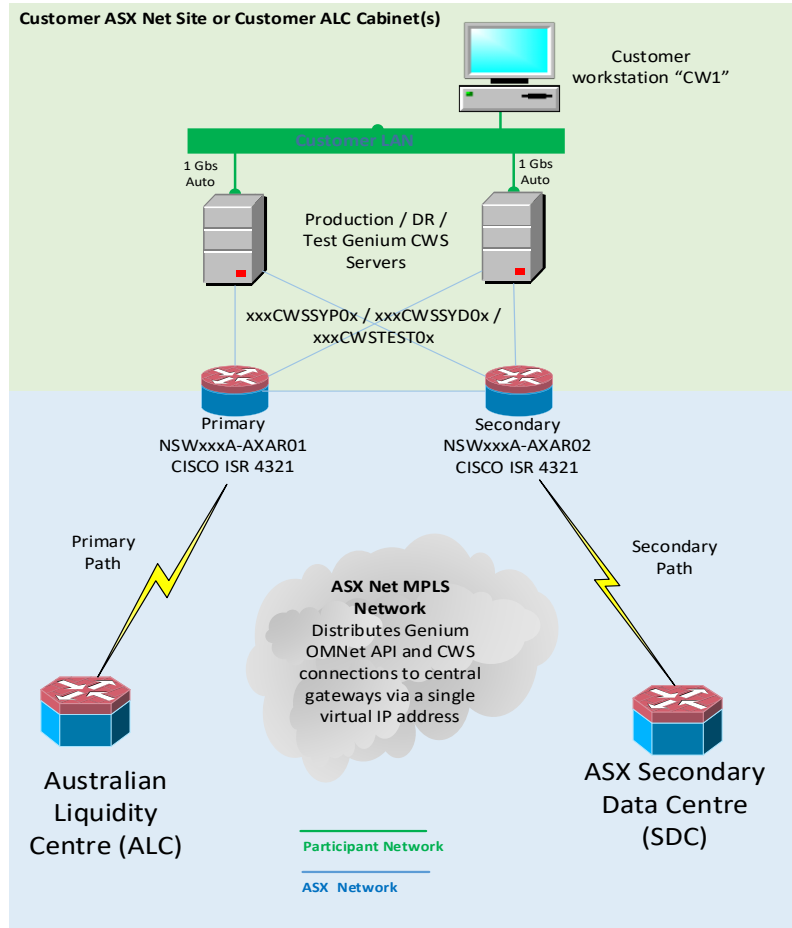
- The CW1 installation kit requires Windows 10 or above.
- The kit will be made available via the ASX SFTP service in the second half of July 2022. Please contact CTS@asx.com.au for instructions.

Participants must upgrade their CW1 client software in advance of their CWS server upgrades. CW1 r143631 is backwards-compatible with the existing CWS server versions.

4 Logical Diagram

ASX Genium CWS Server Upgrade

The diagram below outlines the standard Genium CWS connectivity for ASX Net sites and customer cabinets at the ALC.

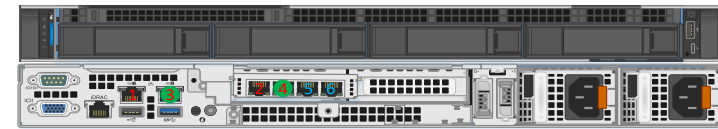


Participant provides:

Clearing Participants will provide the same items as the existing CWS service:

- Rack space - 1 RU per CWS gateway
- 2x power outlets per CWS gateway
- Existing configuration: IP addresses, default gateways, NIC speeds.

Physical connections: New Genium CWS gateway Dell Poweredge R350



- CWS Customer LAN – Primary – Auto 1 Gig
- CWS Customer LAN – Backup – Auto 1 Gig

ASX provides:

- Genium CWS server(s) - Dell PowerEdge R350
- Rackmounts
- 2x power cables per gateway
- On-site deployment and configuration based on customer existing IP addresses and NIC speeds
- Interface allocations for customer LAN

5 CWS Configuration

Existing CWS configuration will not change, therefore customers are requested to maintain their existing configuration in their CW1 application deployments. The broker IP of the CWS server and the ports for the various services remain the same, as displayed in the table.

CWS Service	Market	Port
Production	Sydney market	2121
Production	New Zealand market	2122
CDE	Sydney market	2131
CDE	New Zealand market	2132
CDE+	Sydney market	2121
CDE+	New Zealand market	2122

6 FAQ

Q: Are there any functional changes to the CWS as part of this upgrade?

A: There are no functional or operational changes related to this work. Access, user accounts and passwords will not change.

Q: Will there be any changes to the ASX Net infrastructure as part of this upgrade?

A: There will be no changes to the ASX Net environment.

Q: What are the testing arrangements?

A: ASX is not mandating any customer testing. Test opportunities are documented in section 3.

Q: Will there be any network configuration changes required on the customer LAN?

A: The TCP/IP configuration of each gateway device will remain the same, therefore there are no changes to IPs or ports that customers should target to logon to their CWS device. The upgrade is designed to be a hot swap.

Q: Will there be any changes to the physical hand-off from the CWS server?

A: There will be no changes, the customer connection will be presented as two NICS teamed on the back of the server(s) and NICs will be set to auto-auto.

Q: When will I be contacted?

A: The ASX Connectivity Support team will contact your network personnel to arrange a site visit and to gain access to your ALC cabinet, whichever is appropriate.

Q: What are the risks?

A: This work has a low risk profile, due to:

- The extensive testing performed by the ASX in preparing the new CWS server configuration and deployment procedure.
- There are no changes to Genium Clearing functionality or to TCP/IP configuration.
- The work will require physical cabling and testing resources from ASX customers to ensure a smooth transition.

Q: Is there a deadline to have the upgrade completed?

A: ASX aims to complete the roll-out by mid December 2022. If customers have any other deadlines which may impact this work, they are encouraged to contact their ASX Technical Account Manager who will arrange a suitable date.



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