CHESS Replacement Project

Software Provider Readiness Working Group

18 May 2022

ASX

Important Information – Competition Law Policy

Working group members are reminded to have regard to their obligations under competition law. In particular, please note changes to the Competition and Consumer Act to prohibit a corporation from engaging with one or more persons in a concerted practice that has the purpose, effect or likely effect of substantially lessening competition.

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Agenda

- ITE1 Update

- Failover Testing

- Accreditation Exemption

- Q&A

- Forward Schedule

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ITE1 Update

ITE1 Releases

ITE1 will be updated next with v1.3 - ahead of the Accreditation phase

ITE1 latest updates

- All CDEs now decommissioned, all software providers are now testing in ITE1

- ITE1 known issues, limitations and observed behaviours updated <u>here</u>, 18 May (relating to v1.2)

Data update in ITE1 (v1.2.2)

- Planning for an environment <u>reset</u> on Friday 28 May to allow for environment maintenance and corporate action data refresh

- Code base will remain as v1.2 (no functional change)

Next code release (v1.3) to ITE1

- v1.3 will now be deployed into ITE1 weekend 30 July

- Accreditation can start after software providers have completed their own development and testing to v1.3 (from end Aug)

- Performance testing can be scheduled following v1.3

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Software release 1.3
Scope

Functions re-instated:

- Class mergers

- Change of controlling participant

Defect fixes affecting connectivity and/or message accreditation:

- All 'known issues' and 'defects', as published in Technical Documentation targeted to be resolved

- Additional ASX assisted testing enabled

Performance

- Performance improvements to key application processes including trade registration, batch settlement, EOD processing etc.

Technical requirements

- Technical support requirements for increased monitoring of application queues and processes to improve response time to customer queries

- Error code and descriptions for Ledger API users

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ITE1 - Failover Testing

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ITE1 Failover Testing

- ASX will be implementing scheduled component failovers in ITE1 allowing developers;

    - to test the resiliency of their interfaces

    - support connectivity accreditation scenarios, details here

- Failover involves ASX's two data centres (Australian Liquidity Centre (ALC) & Secondary Data Centre (SDC))

Connectivity Method	Notes	Frequency
AMQP	• AMQP clients always connect to a single end point, ASX manage DC routing • ASX will fail over internal AMQ brokers at scheduled times • Failover from ALC to SDC (and then back again) • Failover should be transparent to AMQP clients outside a brief disconnect • AMQP client recommended re-connection settings can be found here	• Failover - (ALC to SDC) - every Tuesday, Thursday 2pm • Failback – (SDC to ALC) - every Tuesday, Thursday 5pm • Commencing w/c 23 May
Ledger API	• Ledger clients connect to two end points, either ALC or SDC (or concurrently) • API clients can architect their systems to switch between end points after 'N' retries (using exponential back off logic)	• Node 1 disconnects - ALC - every Wednesday, Friday 2.00 - 2.30 pm • Node 2 disconnects - SDC every Wednesday, Friday 3.00 – 3.30pm • Commencing mid June – CTS notification of exact dates
FIX Gateway	• FIX clients always connect to a single end point, ASX manage DC routing • ASX will fail over internal FIX Gateways at scheduled times • Failover from ALC to SDC (and then back again) • Failover should be transparent to FIX GW clients outside a brief disconnect • Ability to test session handling re-connects	• Failover - (ALC to SDC) - every Friday 2pm • Failback – (SDC to ALC) - every Friday > 5pm • Commencing late June - CTS notification of exact dates

Please refer to the Documentation portal – Failover & Recovery Guide, Section 03 – Failure and Recovery Testing in ITE

Technical Accreditation - Exemption Requests

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Technical Accreditation - Exemption Requests

- Technical Accreditation available from end August (subject to project timeline review)

- Software providers are required to successfully execute all scenarios prior to commencement of technical accreditation

- Software providers need to ensure systems can demonstrate the technical accreditation requirements as outlined in the technical accreditation guide, [here](#)

- Systems must demonstrate all mandatory (connectivity and messaging) scenarios can be achieved based on the supported CHESS User type (clearing and settlement, payment provider, AMO etc.)

- Optional features must also be accredited where supported

- Mandatory messaging scenarios exemptions can be requested in some specific situations;

    - A scenario can be achieved in conjunction with another software system, for example CHESS UI

    - A software provider developing a product with a specific business model where some functions may not be required

- Exemption requests more likely from those developing in-house vs a third party vendor

- It is the responsibility of CHESS Users to ensure their systems meet operational readiness, rules and regulatory requirements

- Where a software provider does not wish to develop a mandatory scenario they are required to provide an exemption request

- This information is captured as part of the technical accreditation application form

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Technical Accreditation - Exemption Requests

- ASX are requesting any software provider who is seeking exemption to provide this information *prior* to submitting their technical accreditation application form

- Email CTS@asx.com.au subject: **CHESS Replacement – Technical Accreditation exemption request** with the following details;

  - System name requesting exemption

  - CHESS User Type (i.e. Clearing and Settlement Participant, Payment Provider)

  - Function (i.e. Account Management, Collateral Management) <u>OR</u>

  - Specific Scenario (AP-ET-01)

  - Business Reason for Exemption (i.e. CHESS UI will be used for account management)

- Pre-exemption request process from now until the end of July (4 weeks prior to accreditation start)

- Process to provide ASX suitable time to review and discuss before the formalised application process

- Software providers can submit technical accreditation application forms *from* August, forms here

- Most requests are conditional and ASX to be informed where a reason for a request is no longer applicable

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ITE System Availability & Event Times

System Availability and Event Times

ITE is available on business days and the system timetable has been updated

Please refer to the Documentation portal – Implementation Phases, ITE System Availability and Event Times

Time	State
4:55am	CHESS Open
5:00am	Start FIX Session
7:00am	Trade Capture & End of Day Prices
9:15am	RTGS Open
11:30am	Scheduled Batch Settlement
	Post - Scheduled Batch Settlement Completion
6.45pm	RTGS Close
7:00pm	CHESS End of Day Begins
7:05pm	Close FIX Session

For ITE1 client testing is supported between 9am and 5pm in-line with ASX support hours, however clients may submit transactions outside of these times in line with system operating hours.

The system will process all CHESS user transactions received up until this time. CHESS user transactions received during the CHESS End of Day will be processed on the next business date.

ℹ️ AMOs may continue to provide subsequent updates to End of Day pricing details up until 7:05pm.

⚠️ The Business Date Roll occurs during the CHESS End of Day Processing.

📄 For ITE1 and ITE2 software release v1.2 and v1.3, the CHESS End of Day begins at 7:10pm.

During the CHESS End of Day, the system will run the following processes:

- Housekeeping of SRN Enquiries *(subject to housekeeping criteria)*
- Housekeeping of Suspended Settlement Instructions *(subject to housekeeping criteria)*
- Nominated Settlement Entrepot Updates
- mFund Reminder Notices
- Bulk Conversions to the Issuer Sponsored Sub-register
- Automated Security (Sub-register) State Changes
- Housekeeping of Issuer to Participant Transfer and Conversion Requests *(subject to housekeeping criteria)*
- Housekeeping of Registration Identifiers (RGID) Accounts *(subject to housekeeping criteria)*
- Scheduled Account Unlocking
- Housekeeping of Change of Controlling Participant Requests *(subject to housekeeping criteria)*
- Effecting Change of Controlling Participant Requests
- Account Cancellation
- Issuer (Registry) End of Day Reports
- Demand Reports (Generated at End of Day)
- Housekeeping of Unmatched Bilateral Demand Transfers and Bilateral Demand Settlement Instructions *(subject to housekeeping criteria)*
- Housekeeping of Bid Elections and DRP/BSP Elections *(subject to housekeeping criteria)*

ITE1 transaction are being processed after CHESS end of day ~midnight up to CHESS open (4.55am) this will move to production state at a future date to be advised.

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Customer Migration Reports

Customer Migration Reports

- As part of Market Dress Rehearsals (MDR) and go-live, ASX will make available customer migration reports to all production CHESS Users

- The 18 reports provide extracts from CHESS replacement to assist CHESS Users with data migration

    - Reports are provided by CHESS User type

    - Examples include information relating to the migration of inflight transactions, security summary and remediated accounts reports

- The report definitions along with associated samples were published end of April, details [here](#)

Settlement Instruction Details Report - Clearing and Settlement Participant

CHESS Transaction Id	CHESS DLT Obligation Id	CHESS Instruction Type	CHESS DLT Instruction Type	CHESS DLT Transaction Id	Novation Indicator	Security Code	Outstanding Unit Quantity	Outstanding Settlement Amount	Credit / Debit Indicator	Trust Amount
0111000084438300	0111000084438300	Bilateral	Bilateral	0111000084438300DELI		ZZZ	-1,143,123	7,574.23	CRDT	
0111000084438400	0111000084438400	Bilateral	Bilateral	0111000084438400RECE		ZZZDOC	37	367,343.45	DBIT	
003391J6CY9PH200	003391J6CY9PH200	Net Broker Obligation (NBO)	Novated Rescheduled Instruction (NRI)	003391J6CY9PH200		ZZZIOB	1,000,000	33,500.20	DBIT	
003391J6CY9PH201	003391J6CY9PH201	Net Broker Obligation (NBO)	Novated Rescheduled Instruction (NRI)	003391J6CY9PH201		ZZZIOB	1,000,000	2,500.20	DBIT	
910101135071X000	910101135071X000	Non-Novated Market Trade	Non-Novated Market Trade	910101135071X000	No	ZZZKCR	3,730	9,783.93	DBIT	
910100035071X000	910100035071X000DELI	Novated Market Trade	Novated Market Trade	910100035071X000DELI	Yes	ZZZDOC	-108,696	329,799.78	CRDT	
910100022071X000RECE	910100022071X000RECE	Novated Market Trade	Novated Rescheduled Instruction (NRI)	910100022071X000RECE		ZZZIOB	9,248	1,611.11	DBIT	
0111000084436800	0111000084436800	Unilateral	Unilateral	0111000084436800DELI		ZZZKCR	-142			-155.55
0111000084437900	0111000084437900	Unilateral	Unilateral	0111000084437900DELI		ZZZKCR	-19,706			0.00
0111000084439800	0111000084439800	Unilateral	Unilateral	0111000084439800DELI		ZZZKCR	-100			
0111000084538300	0111000084538300	Unilateral	Unilateral	0111000084538300DELI		ZZZKCR	-5,990			
0111000094437900	0111000094437900	Unilateral	Unilateral	0111000094437900DELI		ZZZKCR	-345			12.12

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Q&A

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Next steps

Review and feedback:

- Slides and Q&A will be published on the CHESS Replacement webpage

- Provide feedback by contacting **CHESSReplacement@asx.com.au** – use "SPR – WG" as the subject heading

Next Implementation and Transition Working Group meeting:

- Date: Monday 23 May 1pm

Next Software Provider Readiness Working Group meeting:

- June (date & time TBC)

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Thank you.

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