

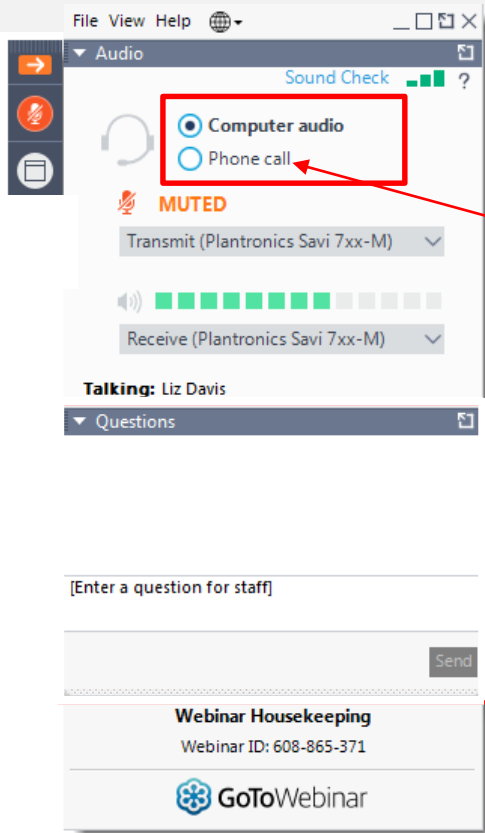


# CHES Replacement Project

**Webinar 1 – Connectivity  
and Integration –  
Connectivity Overview**

3 October 2018

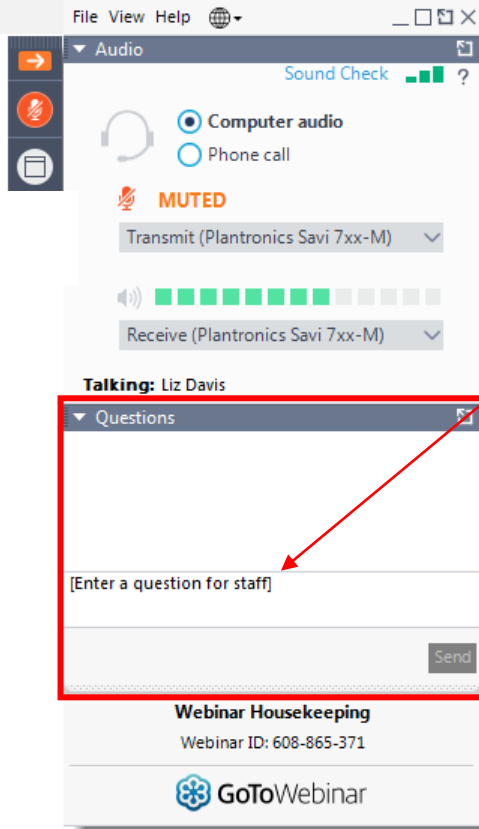
# Housekeeping: Audio Trouble Shooting



## Your Participation

- Having trouble hearing via Computer Audio? Switch to Phone call!
- Refer to your registration and / or reminder email for dial in details

# Housekeeping: How to submit questions



## Your Participation

- To submit your text questions and comments use the Questions panel
- Note that your questions will not be seen by other attendees

For more information - refer to the webinar tips published on the ASX [CHESS Replacement web page](#)

# Presenters and introductions



**Cliff Richards**

Executive General  
Manager,  
Equity Post Trade



**Fraser Moodie**

Manager,  
Integration and  
Connectivity,  
Equity Post Trade



**Russell Eyre**

Enterprise Architect,  
Technology

# Agenda

## > Introduction

- Project Update
- Overview of technical documentation
- Purpose of Connectivity & Integration Webinar

## > Connectivity options

- Direct integration (node)
- Message based
- Browser based

## > Reporting

## > Q&A

# Project update

- > Response Paper to the consultation on CHES Replacement business requirements
  - 41 responses from a broad cross section of the industry
  - Narrowed the go-live date to March or April 2021
  - Revised new scope items including deferring the implementation of 7 new features to post Day 1.
- > Connectivity & Integration working groups and focus groups to commence end October
- > Delivery of the first tranche of technical documentation remains on track for December 2018
- > Software development continues to build and test the solution in readiness for CDE in April 2019

# Overview of Technical Documentation

## Technical Documentation Release Tranche Package



### Release Overview

- CHES Replacement Synopsis
- Release Notes
- APG Replacement
  - APG Synopsis
  - APG Sections



### ISO 20022 Messaging

- Messaging Catalogue
  - MyStandards Usage Guidelines
  - MyStandards User Guide
- Technical Manual
  - CHES Cross Reference Guide
  - ASX Proprietary Code List
  - ASX Error Code List

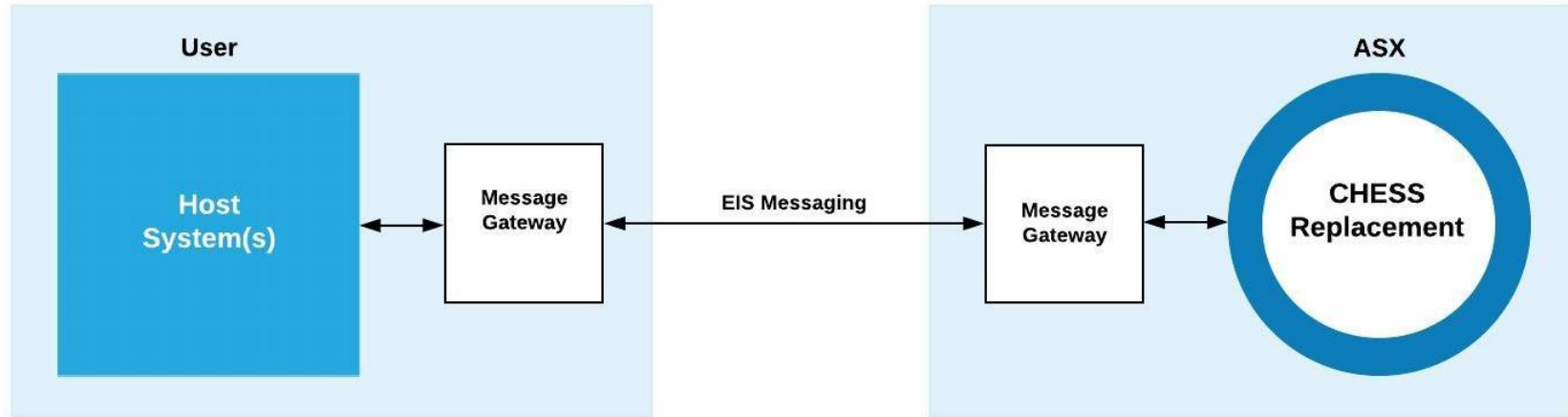
# Purpose of Connectivity & Integration Webinar

- > To provide information to a wide audience regarding connectivity and integration prior to commencement of working group
- > To assist participants and vendors define their connectivity option(s)
- > To address questions received via submissions to the Consultation Paper
- > All documentation relating to the CHESSE Replacement project available <https://www.asx.com.au/services/chess-replacement.htm>



# Existing CHESS Connectivity

# Connectivity – Current CHES Flow (all users)

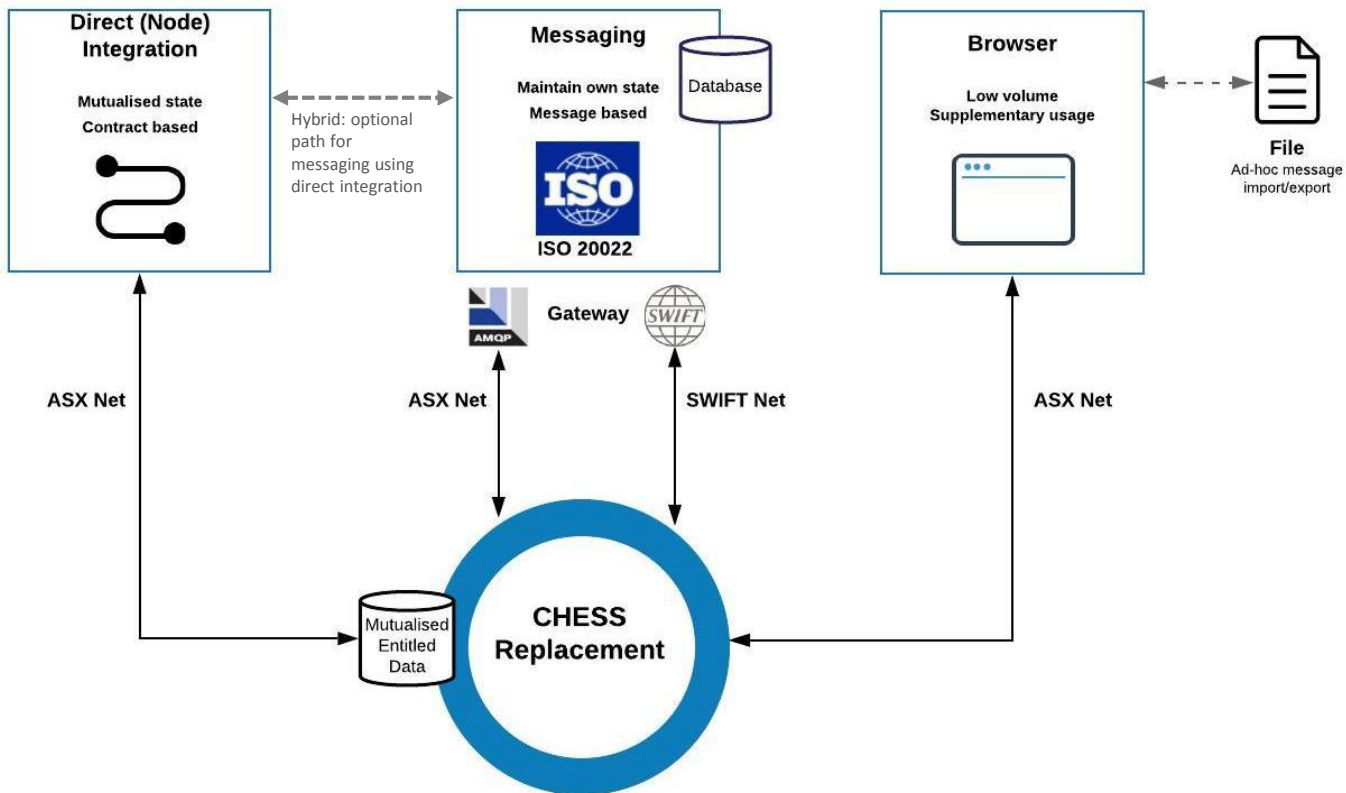


Today users all connect to CHES using the CHES proprietary EIS messaging over ASX Net, iVPN or other providers.

In the future the ASX are implementing industry recognised standards in terms of message protocols, security and providing users multiple connectivity options to the new solution.

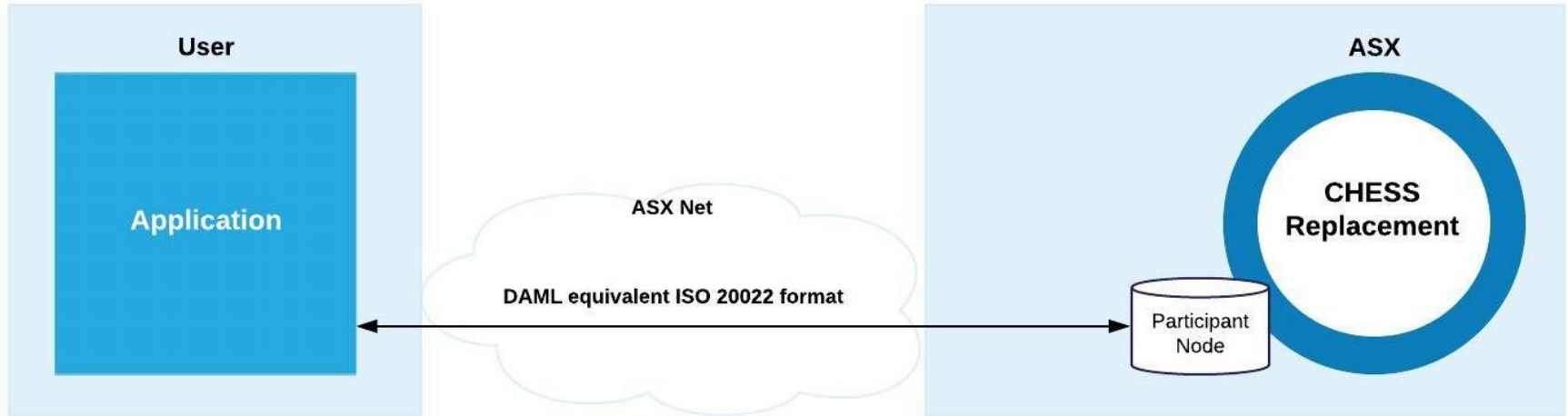
# CHES Replacement Connectivity Options

# Connectivity Options



# Direct Integration (Node)

# Direct Integration (Node)



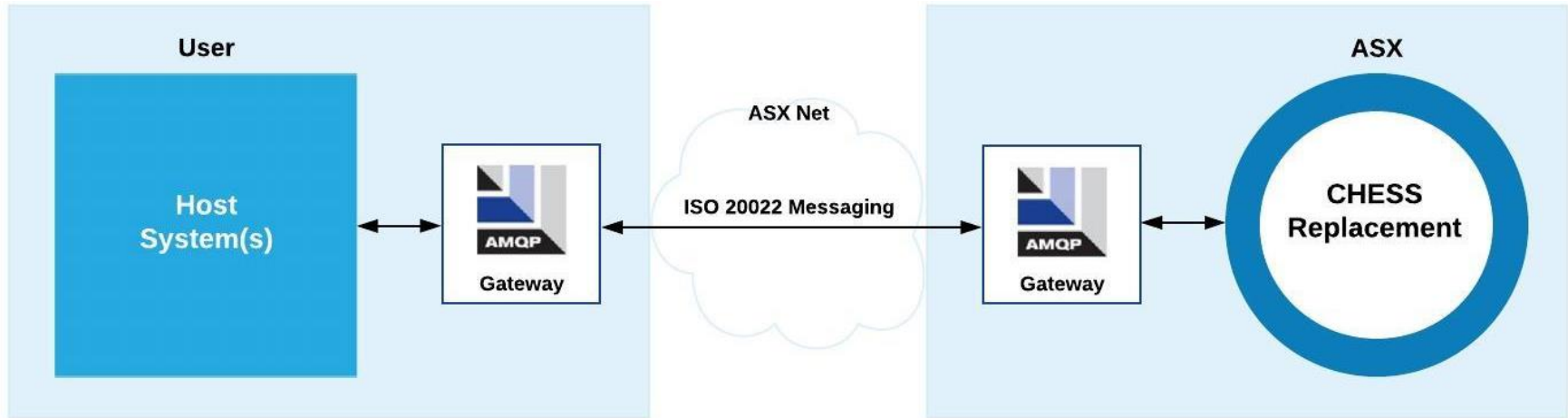
- Transaction Format: **DAML equivalent ISO 20022 format**
- Network: **ASX Net**

- Direct connectivity means no need for separate message infrastructures
- Mutualised data maintains current state
- Applications can access mutualised data and provide workflow through using DAML
- Interaction through Ledger API

# Message Based Connectivity

# Messaging Based Connectivity

## Message Queuing (AMQP – Advanced Message Queuing Protocol)



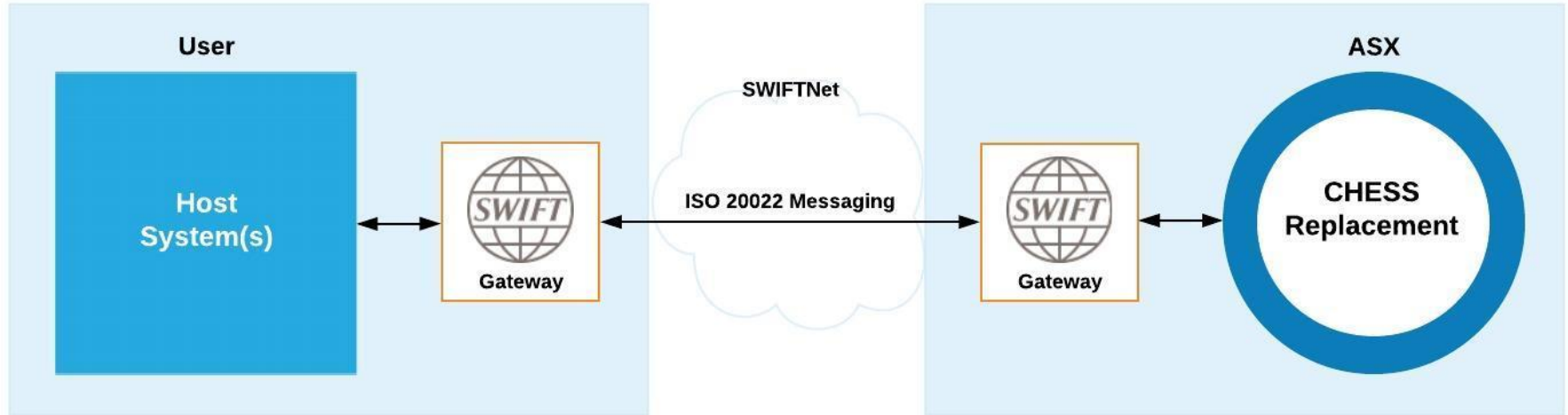
- Message Format: ISO 2022
- Message Transport: AMQP
- Network: ASX Net

- Secure guaranteed store and forward delivery
- Designed for financial markets
- Adopted by other clearing houses, e.g. Eurex Clearing
- Open standards messaging protocol
- Expected minimal infrastructure requirements
- ASX developing implementation model and user experience



# Messaging Based Connectivity

## SWIFT



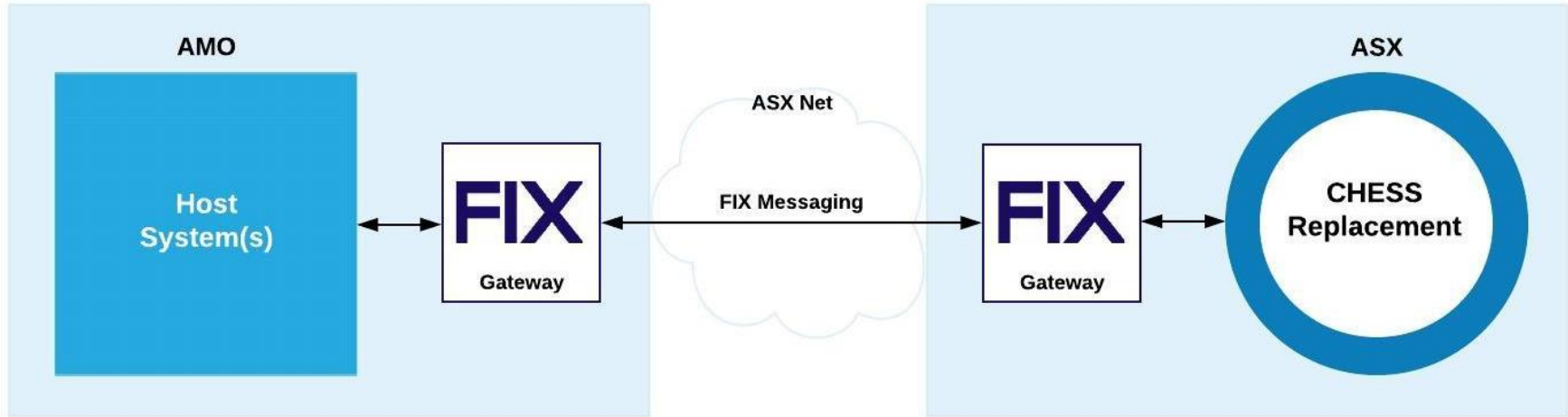
- Message Format: [ISO 20022](#)
- Message Transport: [InterAct](#)
- Network: [SWIFTNet](#)

- Secure guaranteed store and forward delivery via SWIFT Gateway
- Users will need to be a SWIFT member
- Messages are routed using SWIFT Distinguished Name (DN)

- Access is controlled through the ASX administered CUG (Closed User Group)
- Messages are MX (not MT FIN messages)
- Messages are sent to / from CHES (not between other SWIFT users)

# Message Based Connectivity

## Trading Venue Specific (AMO)

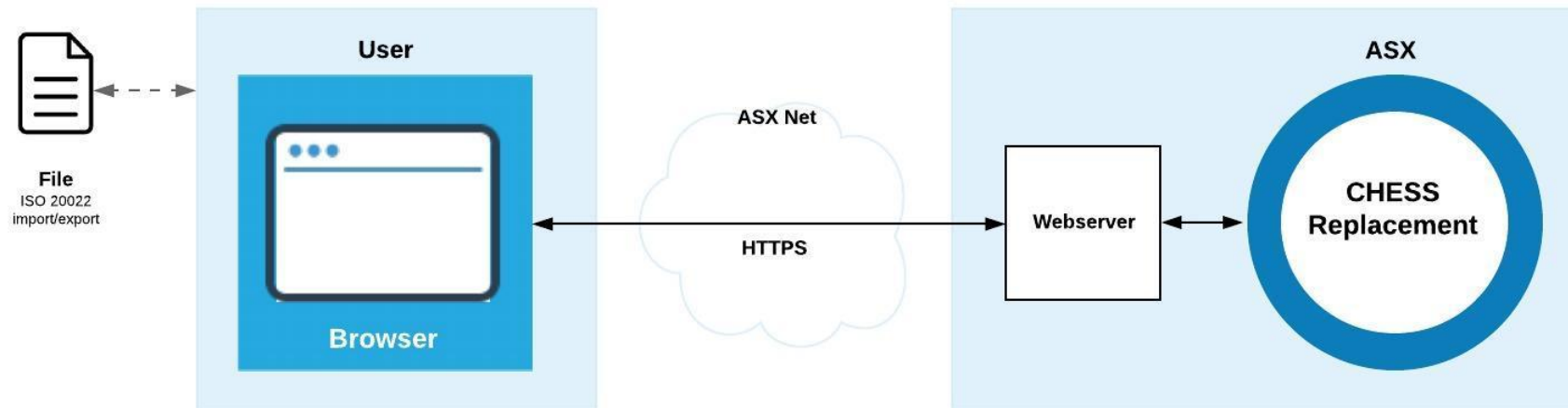


- Message Format: FIX 5.0
- Message Transport: FIX 5.0
- Network: ASX Net

- Secure guaranteed delivery
- Global standard for trade reporting
- For notification of the trade executions and end of day prices

# Browser Based Access

# Browser Based Access



- Network: ASX Net

- Suitable for low volume users
- Support manual entry of all ISO 2022 messages
- Secure browser
- Capability to upload/download files containing ISO 2022 content
- Supplementary use with other connectivity options

# Browser Based Access

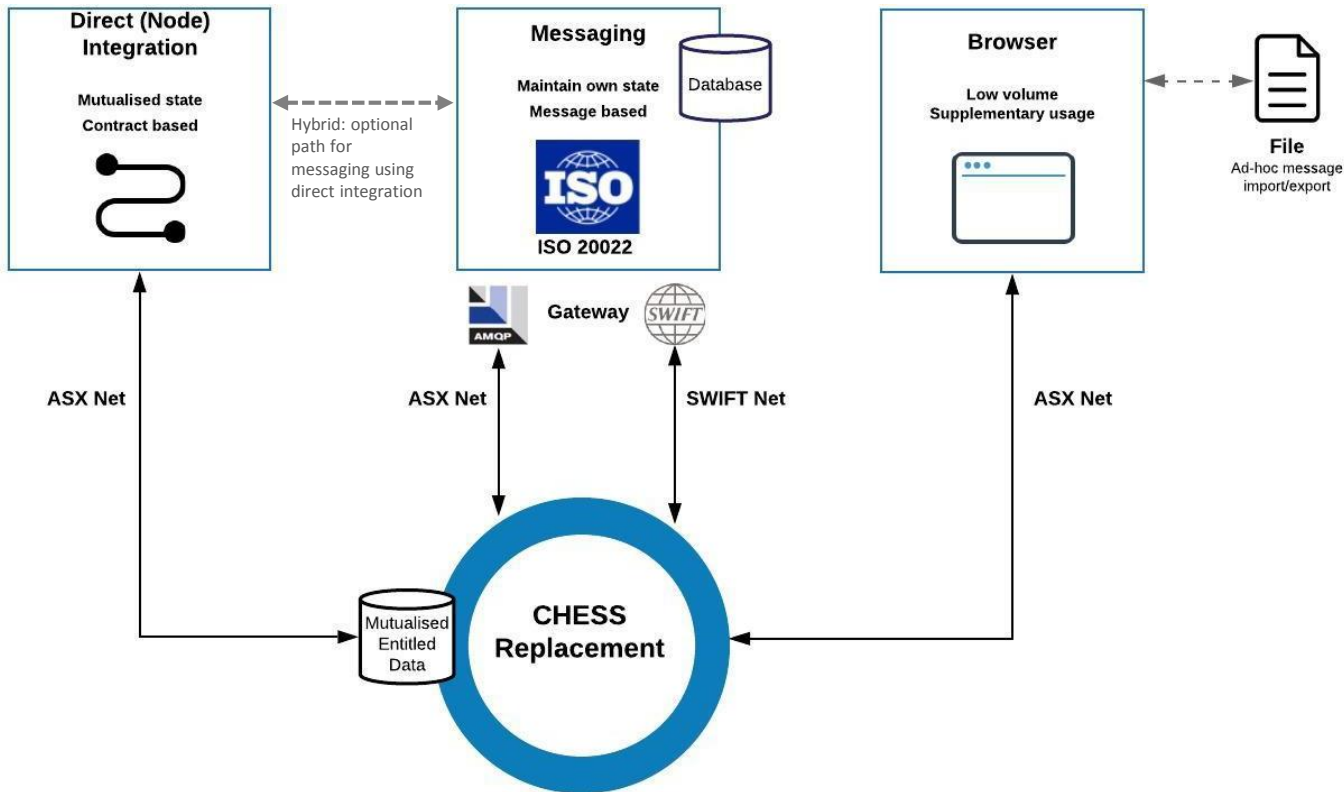
## CHESS ACCESS and CHESS PC

- > The ASX currently provide two solutions to support CHESS connectivity, CHESS Access and CHESS PC, both these solutions will be decommissioned. Users of these products will need to select one of the previously described connectivity options
- > For low volume users the new browser solution will provide equivalent functionality to that supported by CHESS PC today



# Connectivity Options

Not mutually exclusive



# Reporting

## Direct Integration (Node)



Direct (node) event based data streaming:  
**customisable,**  
**flexible**

## Data API



The Data API allows data requests using a web service call:  
**pre-defined reports**

## Messaging



Message based reporting allows users to request reports using ISO 20022 over either AMQP or SWIFT: **on demand reporting**



# Recap

- > Users have a number of connectivity options – including direct, message based and browser-based
- > Connectivity options are not mutually exclusive, and indeed users may change their connectivity model over time
- > ASX recommends users consider their transaction and reporting requirements – bearing in mind that they do not need to use the same connectivity option

Q&A

Thank you.

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