Common Securitization Platform

Overview and Development Approach

Single Security and CSP Industry Advisory Group

July 2015

CSP – Current Focus

- **Execute single-family securitization functions of the Enterprises**
  - Critical to ensuring a vibrant and liquid housing finance market in the near term
  - Manage the risk of launching this highly complex, large-scale system development project
    - Focus is on the well-understood current processes of the Enterprises, rather than undefined processes related to an unknown potential future state of the housing finance system

- **Ensure that the CSP uses industry standard software, systems and data requirements to allow for use by other market participants in the future**
  - Design so that additional scope and functionality can be added in later phases

CSS Mantra / Mission / Strategic Themes

The CSS Mantra

✦ Common Securitization Solutions (CSS) is partnering with Freddie Mac and Fannie Mae to define a single or common approach to securitization to improve market liquidity and reduce long-term operating costs.

✦ The secondary marketing road map CSS is building could be used by multiple parties to strengthen housing finance.

RUN COMMON

The CSS Mission

CSS and its partners/customers are **One Team with One Mission:**

To build the housing industry's leading platform for the issuance and management of securities.

CSS will accomplish this by deploying innovative processes and technology to improve access to residential mortgage credit.

Strategic Themes

✦ Build a low-cost and industry leading security issuance and administration engine.

✦ Design best in class business continuity practices

✦ Provide premier customer service—never miss a service level agreement— while looking for innovative ways to improve client and market efficiency

✦ Strive to improve our internal costs, efficiency and controls to drive regular client enhancements.

✦ Put the right people in the right places

Current CSS Organization – Structure / Background

- **Ownership**

  - CSS, LLC was capitalized in November 2014, and is jointly owned by Fannie Mae and Freddie Mac

- **Governance**

  - The CSS Board of Managers has two representatives from both Fannie Mae and Freddie Mac; FHFA participates in an observer capacity

  - Committee structure to assist CSS Board and Management with CSP build is in place (including representatives from FHFA, Fannie Mae, Freddie Mac and CSS)

- **CSS Organization Structure**

  - CSS is based in Bethesda, MD with a staff of approximately 350 associates and vendors. All assigned Enterprise employees are fully dedicated to CSS activities.

  - CSS has developed plans to offer employment with CSS to assigned Enterprise employees
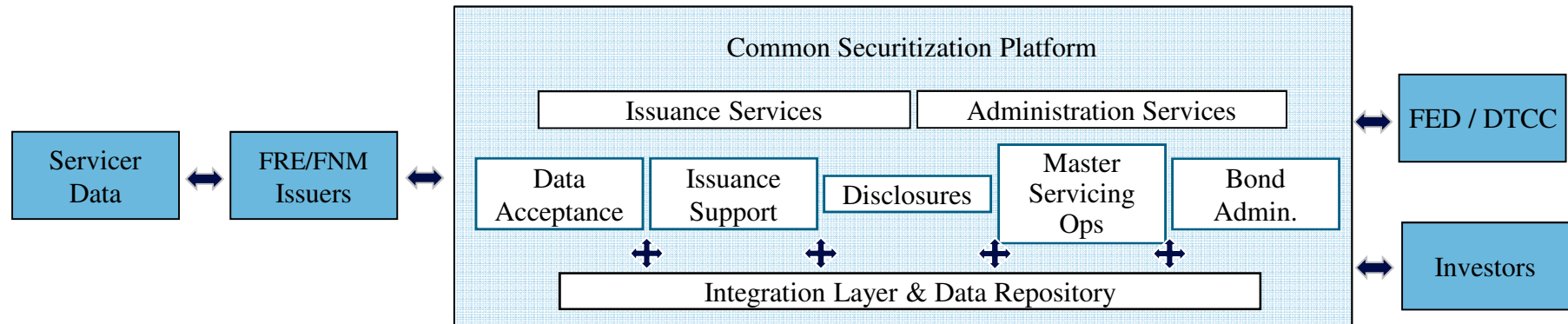
CSS' Single Security Role and CSP Build Design

- **Single Security**
  - CSS is building the securitization tools to support current and new security standards
  - CSS will be acting as an agent for the Enterprises
  - The Enterprises will continue to interact directly with originators, servicers and investors

- **CSP System Build**
  - The CSP design is modular and based on an Event-Driven Service Oriented Architecture (ED SOA), with multiple standard interfaces (MISMO-based) to enable efficient connectivity with clients offering the following advantages:
    - Real time reporting back to the Enterprises
    - Simplifies adding new business capabilities by isolating interfaces and associated discrete services
  - Independent parties have reviewed and support the application development logic being used (Agile Delivery Processes) and the system's architecture
  - CSP is designed to meet the specific needs of the Enterprises, but the architecture is flexible and can be modified to meet evolving industry needs

Current System Functionality and Architecture

Common Securitization Platform

| Issuance Services | Administration Services |

Data Acceptance · Issuance Support · Disclosures · Master Servicing Ops · Bond Admin.

Integration Layer & Data Repository

Servicer Data → FRE/FNM Issuers → (Common Securitization Platform) → FED / DTCC, Investors

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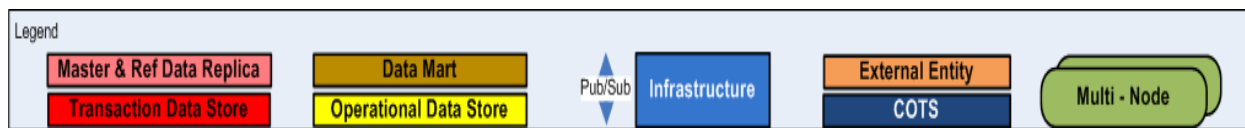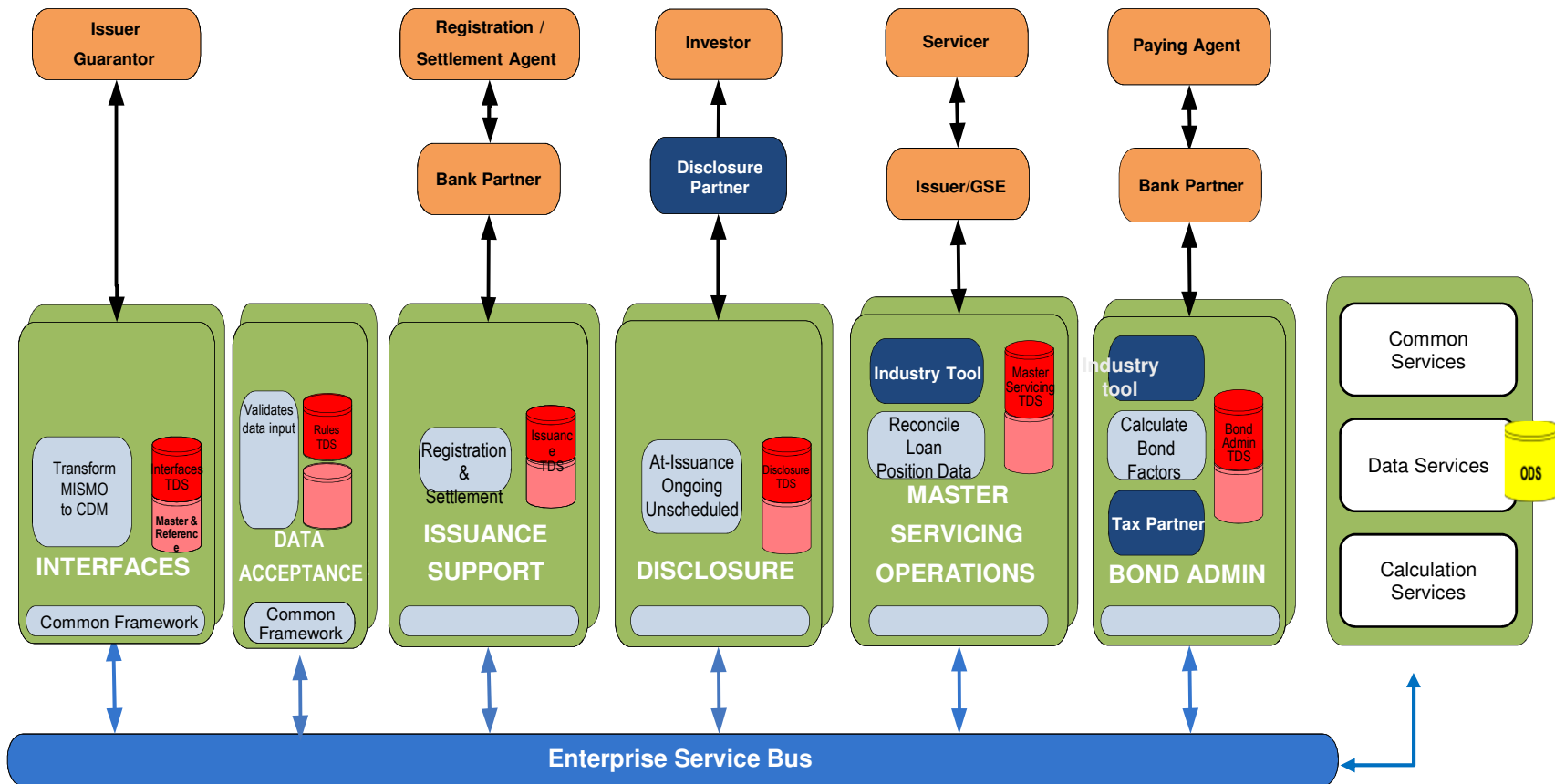|	
Issuance Services	✈ Support issuance of securities into the marketplace and publication of disclosures to investors
Administration Services	✈ Provide security information, including monthly principal and interest factors to the Federal Reserve Bank of New York for payment processing, and disclosures to investors
Counterparties	✈ CSP supports interaction with counterparties through standard interfaces

Current System Functionality and Architecture

CSS is optimized for flexibility through its modular and event-based architecture

CSP Technical Overview

CSS is Transitioning From an Application Development Focus to a Broader Production Ready/Client Driven Organization

- **Application Development:** Deliver client required functionality to support the Single Security single class and multi-class operations, including platform and integration testing and defect resolution
  - CSS is building functionality on an incremental basis linked to a master schedule
  - Development takes place in Versions started every three months; Version functionality is tested by CSS during the build and then tested by the Enterprises at the completion of the Version; defects are prioritized and resolved
  - The Enterprises and CSS are targeting various end-to-end (E2E) testing, as well as Tri-party E2E and Parallel testing
  - Development includes the need to support complex cash flow and tax forecasting and reporting

- **Securitization/Business Operations:** Build the staff, process and internal systems required to support daily security activities
  - Workflow, policies / procedures and service level agreements are in place or being designed to ensure proper support of the Enterprises' needs
  - CSS is building a second site (location TBD) to ensure strong business continuity

CSS is Transitioning From an Application Development Focus to a Broader Production Ready/Client Driven Organization

- **Technical Operations:** Build the technical backbone to stand up the application and business processes
  - CSS is currently building standalone infrastructure for development and testing, and designing plans for long-term production infrastructure
  - Command center and dashboards are being built to monitor system and operations performance
  - Scalable data bases are being constructed to manage significant data flow, data retention and reporting needs
  - Information security is a high priority

- **Operations Services/Administration:** Ensure robust financial and operational controls, proper human resources support, vendor management, project management, change management and detailed budgeting
  - Enterprise Risk Management team is partnering with business and technical operations to create a strong internal control structure, which will also be tested and certified by third parties

CSP – Current Project Summary

- CSP is a complex project with a multi-year time horizon

- CSS is focused on the needs of Fannie Mae and Freddie Mac

- CSS and the Enterprises are designing and developing applications to support the Single Security single class and multi-class requirements

- CSS is working with the Single Security team to support their needs

- CSS is building standalone development/testing and production infrastructure

- CSS is building / designing all business operations and technical operations

- Multi-year timelines are continually being aligned with the Enterprises and FHFA