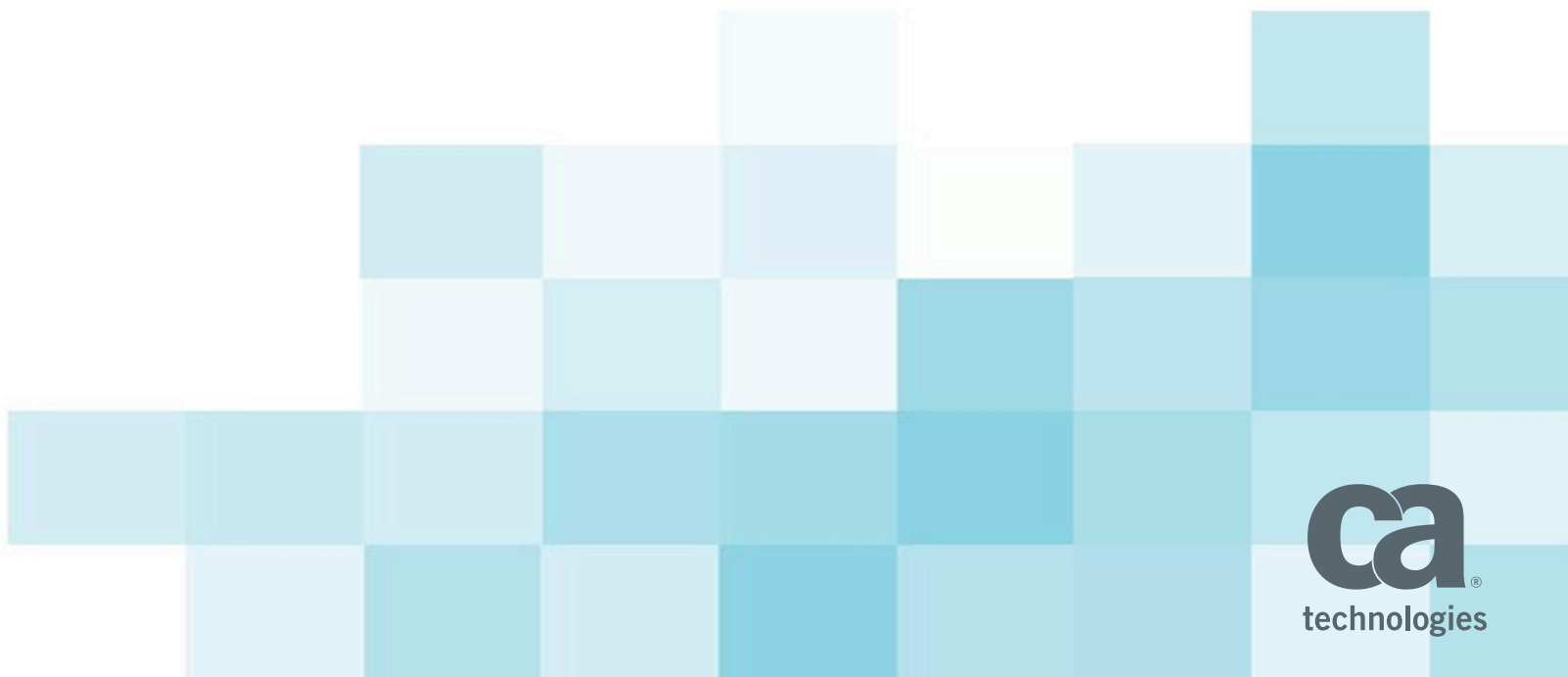


# Upgrading Your Identity Suite Version – Key Considerations

CA Communities Webcast

June 22, 2017



# Agenda

**MAKING THE UPGRADE DECISION**

**CHOOSING AN UPGRADE APPROACH**

**UPGRADING IDENTITY SUITE OBJECTS**

**DATA MIGRATION TASKS**

**WRAP UP**

# Making the Upgrade Decision

- End of Service
- Supported Platforms Upgrade Initiative
- OS, DB, App Server

The screenshot shows the CA Identity Suite website. The top navigation bar includes links for Products, Solutions, Education & Training, Services & Support, Partners, and Company. The main content area features a search bar and a 'News' section. A red box highlights a news item dated 19 Dec 2016: 'CA Identity Suite 12.6.x End Of Service (EOS) Announcement'. Below this, there is a Microsoft TechNet article titled 'Save The Date – End of Exchange 2010, Windows 7 and 2008 Mainstream Support – T Minus 6 Months' by Rhoderick Milne, dated 24 July, 2014. The article discusses support life cycle changes for various products, including Exchange 2010, Windows 7, and Windows Server 2008 R2, with a focus on the 13th of January 2015.

# End of Service

- CA Identity Suite 12.6.x
- CA Identity Manager 12.x
- CA Identity Governance 12.x
- CA Identity Portal 12.x (aka SIGMA 1.6.x)

# IT Operations Upgrade Initiatives

- Operating Systems
  - Windows, UNIX/Linux
- Databases
  - SQL Server, Oracle
- Application Servers
  - JBoss/Wildfly ... all components
  - WebLogic ... except Identity Governance
  - WebSphere ... except Identity Portal

# Choosing an Upgrade Approach

- Range of deployed versions
- Upgrade in Place?
- Parallel Upgrade Environments
- Choose reduced risk

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## Upgrade Considerations

Last update May 25, 2017

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- Supported Upgrade Paths
- Supported Migration Paths
- Upgrade Prerequisite for Managing Runtime Tasks
- Provisioning Certificate Upgrade
- Certificate Upgrade for Password Sync Agent 32-bit and 64-bit
- Upgrade Changes Starting at 12.6.6
  - WorkPoint Changes
  - Upgrade to Use WildFly in place of JBoss
- Upgrade Changes from Older Releases
  - At 12.6.4, System Manager Needs New Scope
  - At 12.6, Rename ACF2, RACF, and TSS Endpoints Before Upgrade

### Supported Upgrade Paths

You can upgrade to this release of CA Identity Manager from the following versions:

- CA Identity Manager 12.6 SP4 or higher

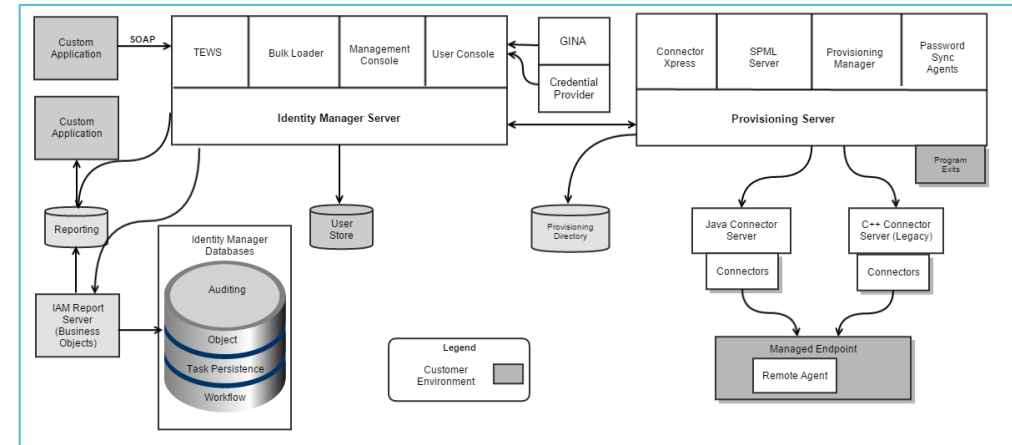
### Supported Migration Paths

You can migrate to this release of CA Identity Manager from the following versions:

- CA Identity Manager 12.5 SP17 or lower, 12.6 SP3 or lower

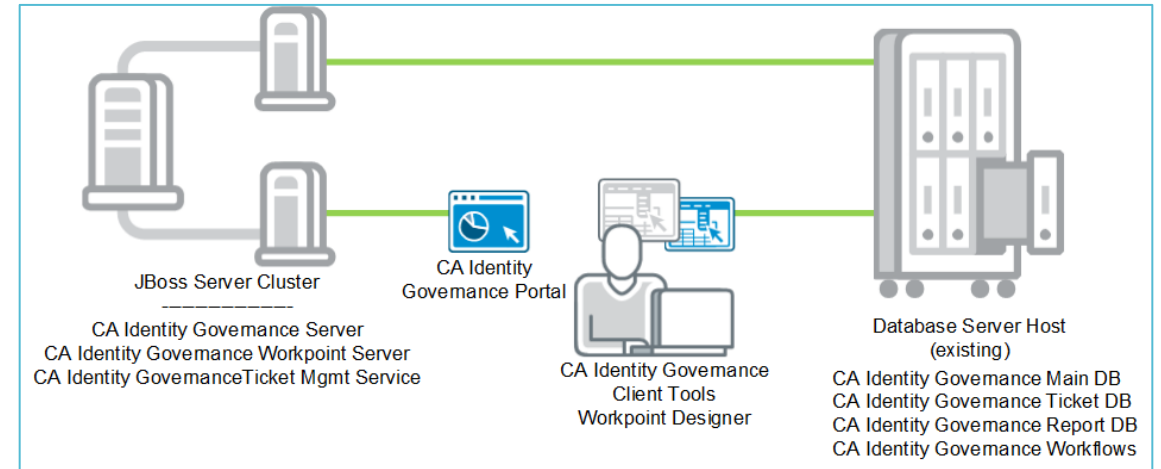
# Upgrading Identity Suite Objects

- Identity Manager
  - Directories
  - Databases
  - Connectors
  - J2EE Server
  - Configurations



# Upgrading Identity Suite Objects

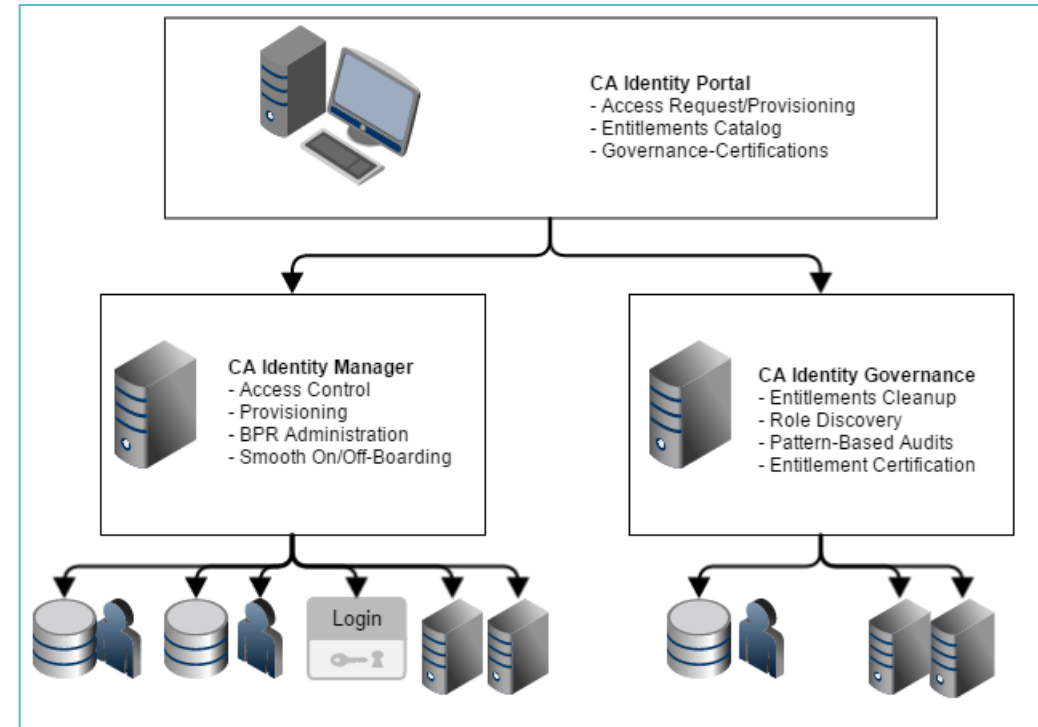
- Identity Governance
  - Directories
  - Databases
  - Connectors
  - J2EE Server
  - Configurations





# Upgrading Identity Suite Objects

- Identity Portal
  - Databases
  - Connectors
  - J2EE Server
  - Configurations



# Data Migration Tasks

- Directories
  - Corp User Store -> IM User Store
  - Provisioning Directories
- IME Configuration
  - Export/Import XML
  - Custom changes: java classes, skins
- Portal Modules, Forms, ...
  - Export/Import JSON
  - Custom changes: forms handlers, skins

## Migration Notes: **Corp User Store**

- 1 to 1 Attributes (Clear Text) – Direct copy
  - Encrypted Attributes - Must be un-encrypted if not using IM encryption, e.g. Q-n-A attributes.
  - Hash Attributes – UserPassword (validate able to use AS-IS; CA Directory is able to consume multiple versions of hashed/salted passwords, e.g. OID, Active Directory, etc.)
  - Extra Attributes – Remove during migration, as they will have no to little value.
- May be automated.

## Migration Notes: **Provisioning User Store**

Optimal Method: Prepare data via offline process; export LDIF (or db file) to a temporary, latest release of Provisioning Server with Provisioning Directory installation. Copy the LDIF (or db file) to the new installation; then re-use installation wizard tools to update the data to the latest release (Prov Dir, then Prov Server). Upon completion, export LDIF (or db file) to final location, and validate data with use-cases. May be automated.

## Migration Notes: **IME**

Automation import/export tool for the IME, that can be run on a scheduled basis.  
Location: /IdentityManager/IAM\_Suite/IdentityManager/tools/ImportExportUtility

- Alternatively, may still use Kettle (PDI), MS Powershell or Curl to auto-export.
- Use Notepad++ or similar tool to search/replace values if attributes names are changed for corporate userstore migration one-time event.
- Perform early review of IME for custom code. Use an OOTB IME (same version) to compare as a base.
  - Use XML compare tools: CA IM Config Xpress, BeyondCompare, Altova DiffDog, etc.

## Migration Notes: **Portal**

- Use Notepad++ or similar tool to search/replace values if attributes names are changed for corporate userstore migration one-time event.
- Perform early review of Portal JSON for custom code.
  - Use JSON/XML compare tools: BeyondCompare, Altova DiffDog, etc.

# Wrap Up

Example of using DevOps (Command Line Interfaces) for migration/deployment/configuration/validation  
<https://communities.ca.com/message/241915427-ca-identity-manager-ca-sso-cli-silent-response-scripts-on-centos7>

- Migration Scripts
- Test Strategy
- Automation

Item	Description	Pro	Con
Discovery (Top->Down)	Identify missing information using Business Analysts to conduct interviews with data owners and administrators. <i>Update inventory sheet.</i>	Ensures data captured meets business needs; includes business descriptions for governance & provisioning. <b>FACTORY MODEL</b>	Duration length to collect & validate. Need standardized process to collect & validate.
Discovery (Bottom->Up)	Identify missing information with direct access/"pulls" from the native repositories/userstores. <i>Update inventory sheet.</i>	Ensure data reviewed is 100% corrected. Ensure that "unknown" apps are processed rapidly. <b>Lower cost per App for higher value.</b>	Challenge if internal resources are unable to provide service IDs to the native repositories/ userstores.
Data Warehouse (May Directory or IG as DW to lower cost)	OOB collection of apps data & enrichment data into a central clearing-house. Solution will pull directly from data warehouse instead of flat-files.	Allows for rapid collection & normalization of data. Avoids dependencies on vendor solutions.	Require dedicated internal DBA (setup/maintenance) if DB is used
Dev-Ops	Streamline deployment & promotion methodology using dev-ops process	Streamline and reduce duration with automated deployment/promotion standards via CLI or tools or processes. <b>FACTORY MODEL</b>	First use of dev-ops effort is a "wash", value is gain during 2 <sup>nd</sup> + iteration of same activities.
TDM	Test Data Management (TDM) ensure that quality data is used for QA effort. Copy non-sensitive data from PROD to DEV.	Remediation effort is reduced. QA process has higher value. <b>Lower cost per App for higher value.</b>	Internal processes will need to be defined to automate, e.g. dev-ops. Or scheduled refresh.
Appliance	Move responsibility of solution & supporting components to vendor. Appliances maintain the OS, the J2EE tier, and the CA Identity Suite solution.	Consistent Value through appliance. Lower cost of maintenance, lower cost for business interruption with correctly deployed HA, lower cost for any upgrades. Lower dependence on "broad-industry" knowledge for internal resources.	Custom Code will be minimized. Current business logic will be reviewed and migrated to business user interface from current deployment.
Business Release Cycles	Staggered release drop of business logic in to production environment using a "pre-release" cycle with validation, as long as required, before "business release" cycle. Avoid "show-stopper" issues during updates.	Pre-Release cycle is business logic that is locked down for production impact, e.g. no automation, no deletion, no updated allowed, until enabled by the validation cycle. Avoids multiple outage windows.	First use of business release cycle will require training of internal/vendor resources. If process is not followed exactly, will impact production users.
Automated Use-Case Testing	Leverage automation process for Use-Cases and their # of test cases, with validation to userstore/repositories. This is NOT performance testing but Use-Case testing.	Process allows for any user (Management, PM, Architect, Consultants) to execute the use-cases and isolate any issue rapidly. Avoid using older methods with spreadsheets to track	Initial learning curve to use processes, 2-3 days,

"Every IM Task" = A Use-Case for Testing  
 Fail Early, Fail Fast, Fail Often, Fail Cheaply = Automate Use-Case testing (All Environments)



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