ServiceNow CMDB Care & Feeding

Ongoing CMDB Maintenance: Feed It, Fix It, Love It

Chris Padmore & Christine Morris | January 29, 2025

Agenda

Welcome & Introduction

1. Key Strategies for a Healthy CMDB

2. Best Practices for Ongoing Maintenance

3. Case Study: Success in CMDB Maintenance

4. Q&A

Cask

Cask NX is with clients for what comes next – on the platform and in their business.
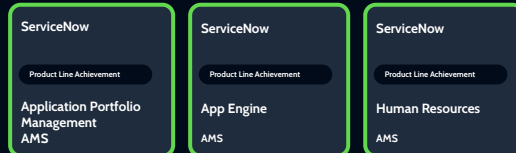
4.6 Customer Satisfaction Rating

5.4K+ Certifications & Accreditations

servicenow ELITE Partner — Consulting & Implementation

servicenow ADVANCED PLATFORM Partner — Build

servicenow ELITE Partner — Reseller

servicenow	servicenow	servicenow	servicenow	servicenow	servicenow	servicenow	servicenow
Validated Practice ✓	Validated Practice ✓	Validated Practice ✓	Validated Practice ✓	Validated Practice ✓	Validated Practice ✓	Validated Practice ✓	Validated Practice ✓
IT Service Management AMS	**Customer Service Mgmt** AMS	**Hardware Asset Mgmt** AMS	**Software Asset Mgmt** AMS	**ITOM Visibility** AMS	**Vulnerability Response** AMS	**Integrated Risk Management** AMS	**Hybrid Project Mgmt** AMS

ServiceNow	ServiceNow	ServiceNow
Product Line Achievement	Product Line Achievement	Product Line Achievement
Application Portfolio Management AMS	App Engine AMS	Human Resources AMS

8 VALIDATED PRACTICES (Most of any Pure-Play Partner in AMS)

+3 PRODUCT LINE ACHIEVEMENTS

Cask NX is the only pure play ServiceNow partner with dedicated, fully certified practices across the platform.

IT SERVICE MANAGEMENT

IT OPERATIONS MANAGEMENT

IT ASSET MANAGEMENT

STRATEGIC PORTFOLIO MANAGEMENT

EMPLOYEE WORKFLOW

CUSTOMER WORKFLOW

SECURITY & RISK

APP ENGINE

STRATEGY

Strategic Roadmapping

Advisory Consulting

Platform Strategy & Governance

Demand Management

TRANSFORMATION

App Modernization

UX & UI Design

Product Management

Org Change Management

Testing & Quality Engineering

Program & Project Management

Agile Transformation w/SAFe

IMPLEMENTATION & APP DEVELOPMENT

Product Implementation

Platform Engineering

Data Management & Integrations

App Development

OPERATIONS & ENHANCEMENT

Continuous Cloud Innovation

Platform Architecture & Engineering

Functional Process Execution

Cask Reserve

Cask

Introductions

Christine Morris
Director, Platform & Service
Management
Cask

Chris Padmore
Solutions Architect,
ITOM Practice Lead
Cask

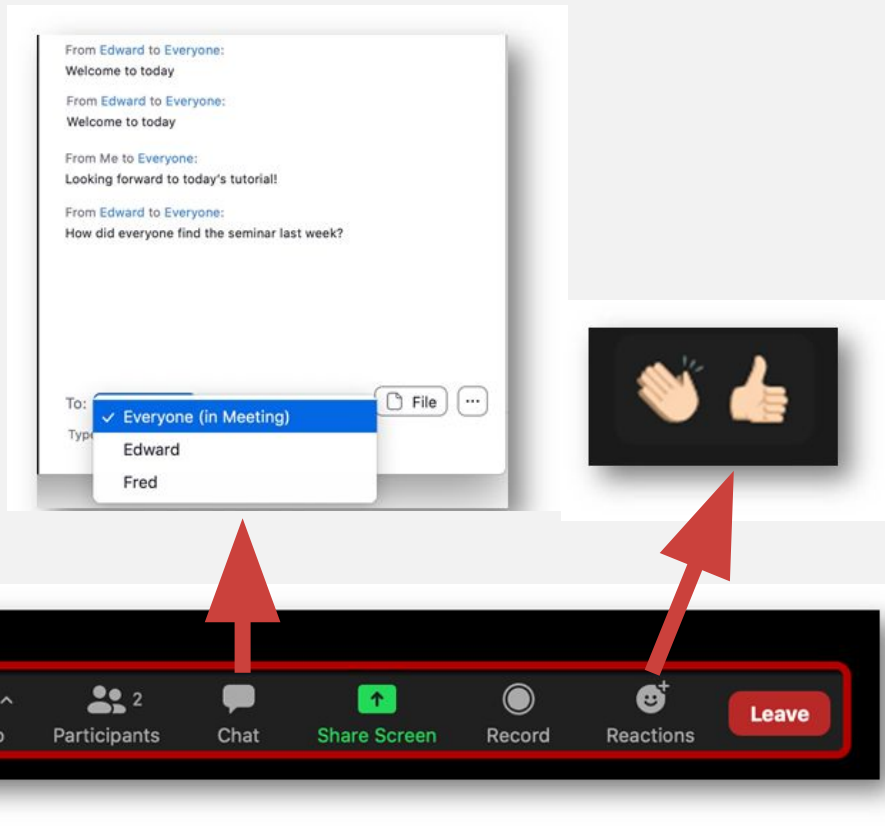**Madan Raja**
Director, Delivery
Cask

Cask

Join the Conversation: Using Zoom

Turn on Video – Let's get interactive and enjoy ourselves

Unmute – Click the microphone icon to unmute and participate

Chat – Message everyone or just one person

Get Help – Use Chat

Cask

Catch Up with Parts 1-5 of our CMDB MasterClass Series!

CMDB MASTERCLASS: PART 1

Unlock the Power of Your Platform with a Strong CMDB Foundation

Join us to understand why a well-structured, well-governed CMDB is essential for leveraging the full potential of your platform and how you can create, remediate and maintain your own CMDB as a source of trusted data.

CMDB MASTERCLASS: PART 2

Maximize Your Platform's Potential with Effective CMDB Data Loading and IRE Strategies

Join us to explore why efficient data loading and the Identification and Reconciliation Engine (IRE) are crucial for harnessing the full capabilities of your platform.
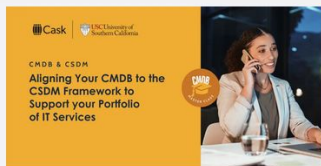
CMDB MASTERCLASS: PART 3

Aligning Your CMDB to the CSDM Framework to Support Your Portfolio of IT Services

Join us for part 3 of our CMDB MasterClass Series, an insightful webinar where we will introduce the Common Service Data Model (CSDM) and demonstrate its crucial role in managing IT services more effectively.

CMDB MASTERCLASS: PART 4

Maximize Your IT Potential: Discovery Meets CMDB

In this electrifying webinar, we'll take you through the ins and outs of ServiceNow Discovery, revealing how it works like a backstage crew—quietly, but masterfully —bringing the power of the platform into full view.

CMDB MASTERCLASS: PART 5

A Strategic Approach to Visibility and Value

Join us to discover how integrating Asset Management with ServiceNow CMDB can create a unified source of truth, drive cost savings, enhance compliance, and transform your asset lifecycle management.

Find recordings, resources & more here! https://casknx.com/cmdb-masterclass-intro/

Cask

CMDB Common Misconceptions

CMDB accuracy only matters for ITSM

Duplicate CIs don't cause major issues

CMDB maintenance is ITSM's responsibility alone
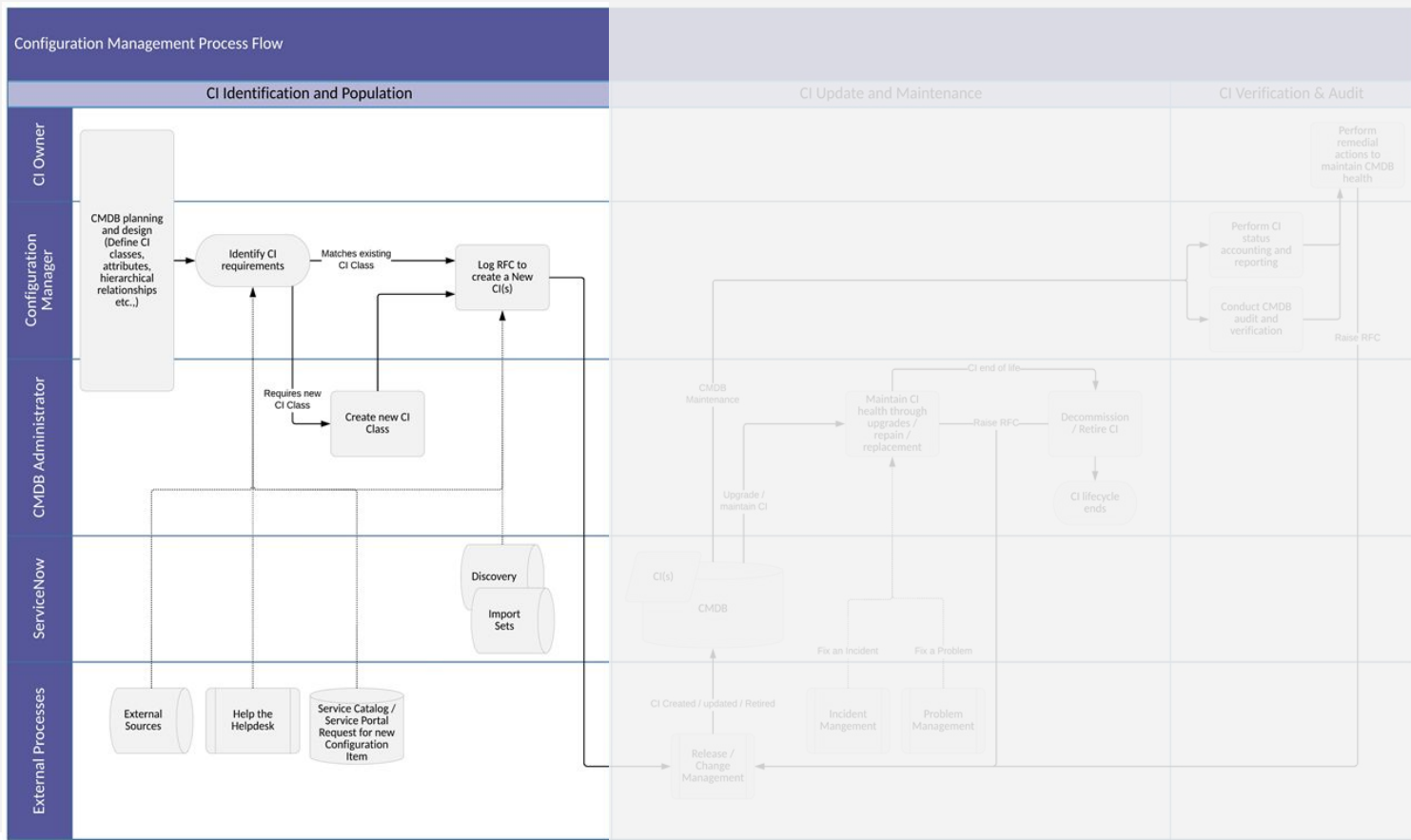
The CMDB can be set up and forgotten

Discovery tools will handle everything automatically
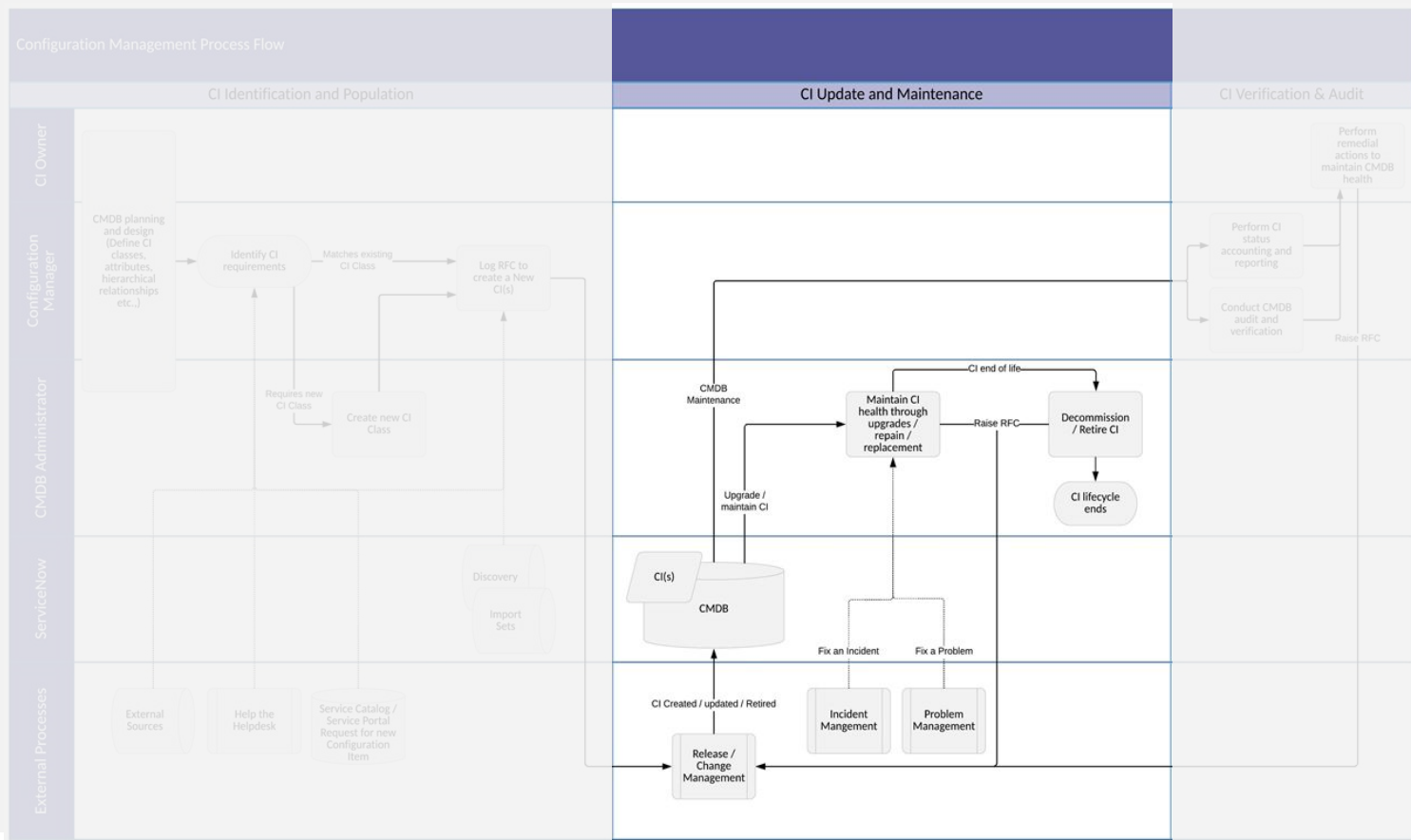
Governance is unnecessary once the CMDB is set up
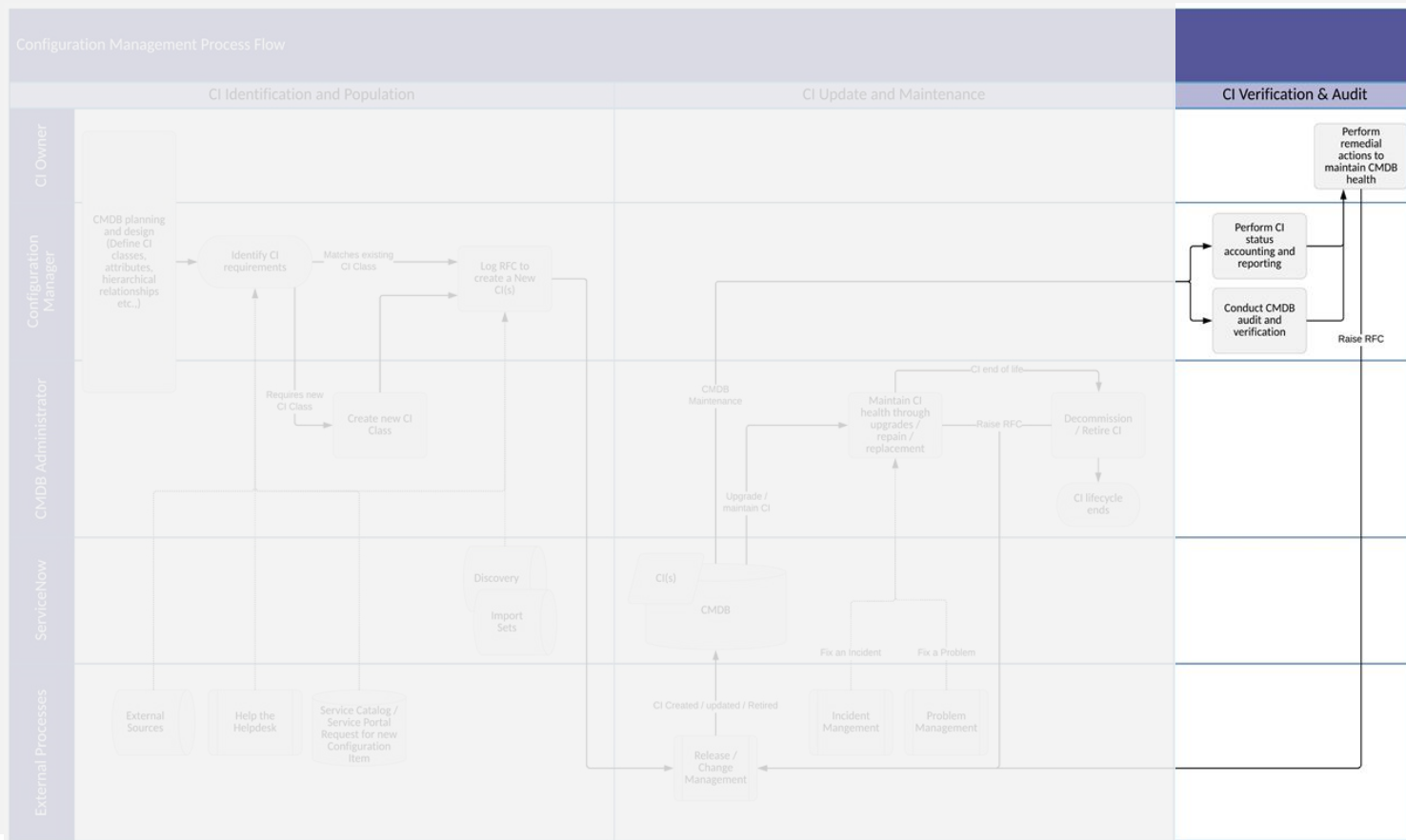
Cask

Key Strategies for a Healthy CMDB

Configuration Management Process

Configuration Management Process Flow

	CI Identification and Population	CI Update and Maintenance	CI Verification & Audit

CI Owner — Perform remedial actions to maintain CMDB health

Configuration Manager:
- CMDB planning and design (Define CI classes, attributes, hierarchical relationships etc.,)
- Identify CI requirements
- Matches existing CI Class
- Log RFC to create a New CI(s)
- Perform CI status accounting and reporting
- Conduct CMDB audit and verification
- Raise RFC

CMDB Administrator:
- Requires new CI Class
- Create new CI Class
- CMDB Maintenance
- Maintain CI health through upgrades / repair / replacement
- CI end of life
- Raise RFC
- Decommission / Retire CI
- Upgrade / maintain CI
- CI lifecycle ends

ServiceNow:
- Discovery
- Import Sets
- CI(s)
- CMDB
- Fix an Incident
- Fix a Problem

External Processes:
- External Sources
- Help the Helpdesk
- Service Catalog / Service Portal Request for new Configuration Item
- CI Created / updated / Retired
- Incident Management
- Problem Management
- Release / Change Management

Cask

Configuration Management Process

Configuration Management Process
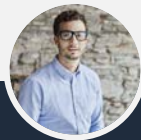
Configuration Management Organization

CM Process Sponsor

- Establishes CSFs
- Provides budget
- Promotes adoption

Configuration Manager

- Responsible for operational management of CM
- Health / Integrity of CMDB
- Policy / process definition
- Identification of metrics & KPIs
- Oversight of Configuration Analysts
- Interface with Change and other ITSM managers

Configuration Analyst / Librarian

- Custodian of Cis and related data
- Identification / remediation of unauthorized CI creation / update
- Performing authorized updates per policy / process
- Generation of custom reports
- Assist in audits
- Liaison with Application Process trams, Admin for Service mapping
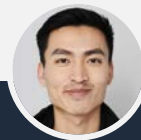
Tools Admin

- Owns systems interfaces
- Responsible for configuration updates

Stakeholders

CI Owners

- Stewards of owned hardware and software
- Accountable for integrity of CI attributes and relationships for owned Cis
- Perform routine audits as required

IT Security

- Identifies security classifications for Cis
- Provides CMDB requirements to support policy and processes
- Consumes CMDB data
- Provides lifecycle management process requirements
- Reviews / approves new product requests
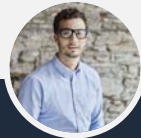
IT Architecture

- Maintains architecture policy – compatibility, product lifecycle
- Reviews / approves new product requests

Release & Deployment

- Tests application configuration prior to release
- Provides new CI- classes and attributes
- Provides details on how to detect Cis and capture attribute updates
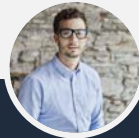
Cask

Stakeholders

Change Manager

- Provide CMDB requirements
- Ensure all RfC's include affected CI
- Ensure Assess phase identifies CI attributes / Asset fields that will change
- Ensure identified attributes and fields are updated during post implementation review

Change CABS

- Consume CMDB data for RfCs
- Provide CMDB improvement requirements

Service Desk

- Relies on current accurate CMDB
- Ensures Service tickets include affected CI(s)
- Provide CMDB improvement requirements

Service Technicians

- Rely on instant visibility into CMDB
- Provide CI attribute & Asset field updates before closing fulfillment tasks

Three Pillars of Governance

Data Compliance

- Complete

- Correct

- Current

- Free from duplicates and orphans

- CI records

- CI Relationships

- Linkage with Asset

Process Compliance

- All CI changes subject to Change Control

- All CIs routinely examined by CI Owner for correctness, especially of non-discoverable attributes

- Holistic Asset / CI Lifecycle Management (ALM) processes trigger Change Control which in turn provides authorized updates

Proactive Oversight

- Configuration Management team routine activities ensure CMDB is monitored and remediated as necessary via Change Control

- Configuration Control Board (CCB) meets regularly to review CMDB Health and recommend improvements

Best Practices for Ongoing Maintenance

Routine CMDB Routine Maintenance Activities

Performed Daily, Weekly by the Configuration Management Team

Monitor the CMDB Health Dashboard

- Research and resolve anomalies via Change Control
  - Remove orphans
 - De-duplicate to consolidate duplicate records

Monitor the Discovery Dashboards

- Research and resolve anomalies
  - IP ranges not getting discovered
  - Device types not getting discovered
  - IRE not populating CMDB as expected

Monitor Data Certification process

- Identify CI owners (by class) responsible for the data in their CIs
  - Stay on top of new CI classes
- Identify CI attributes subject to certification
- Define CI Certification schedules
- Monitor resolution of anomalies

CMDB Health Dashboard - Overview
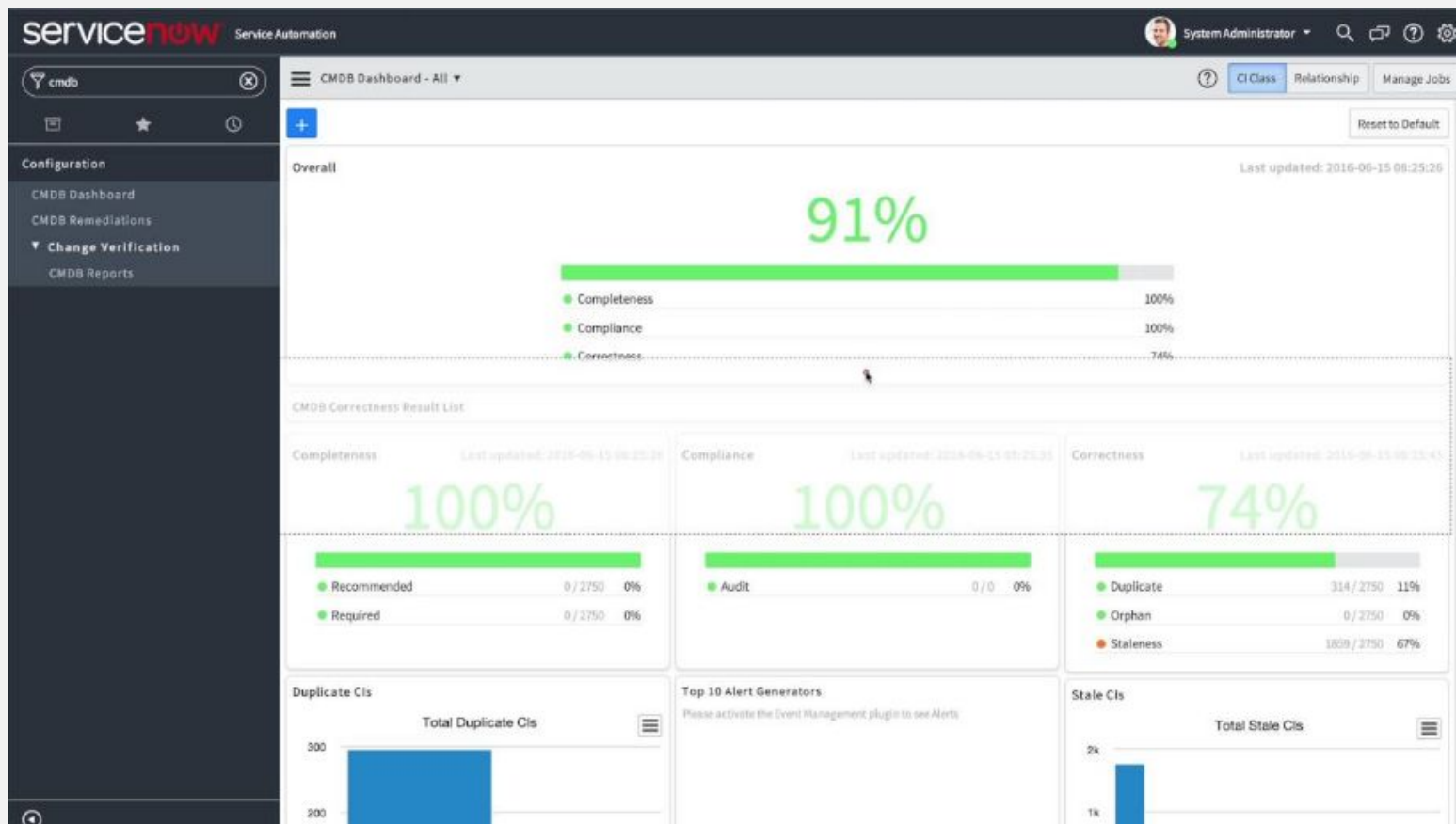
Compliance

HEALTH DASHBOARD ATTRIBUTES

- Based on the results of actual CMDB audit runs.

- Audit compares actual values of specified fields, against expected values defined in template and scripted audits.

- Based on the **Last run date** of audits, CMDB Health identifies the set of the most recent complete audit run, and uses those audit results.

- To pass the CMDB Health audit test, a CI must be in compliance with all audits for that CI.

- Create a compliance-type audit, for which the results are calculated into the CMDB Health compliance KPI.

- When running scripted audits, the **Last run date** is not populated. Therefore, for the compliance KPI to include the results of a scripted audit, update the script in the audit to record the audit run time.

Cask

Completeness

HEALTH DASHBOARD ATTRIBUTES

A KPI which is an aggregation of the following metrics, according to the completeness scorecard weight settings.

Required
Measures the percentage of CIs in which fields that are defined as mandatory, are not populated. Missing fields are tagged as incomplete noting that for this CI some information is missing. Required fields are equivalent to the fields that are [specified as mandatory](#) in the system dictionary.

Recommended
Measures the percentage of CIs in which fields that are [set as recommended](#), are not populated. Out-of-box, no recommended fields are specified.

Correctness

HEALTH DASHBOARD ATTRIBUTES

A KPI which is an aggregation of the following metrics, according to the correctness scorecard weight settings.

Orphan
Measures the percentage of orphan CIs in the CMDB. A CI can become orphan if it was unintentionally left in the CMDB when it is no longer needed.

Staleness
Measures the percentage of stale CIs in the CMDB. A CI is stale if it was not updated within the **Effective Duration** time period that is specified in the staleness rule that applies to the class.

Duplicate
Measures the percentage of duplicate CIs in the CMDB using identification rules. Only independent CIs are evaluated for duplication. In a set of duplicate CIs, the count of duplicate CIs is the total number of CIs in the set, minus one. The detailed graphs for a duplicate set of CIs display all the CIs in the set.

CMDB DATA MANAGER IS...

...a policy-driven framework for bulk management of CI life cycle operations such as deletion and archival. The CMDB Data Manager is a comprehensive and integrated solution which scales to large CMDBs and copes with rapid changes in a cloud-based world.

Cask

Data Manager
in the CMDB Workspace

- Create and track policies, and to manage exclusion lists and retirement definitions

- Access data attestation and life cycle approval tasks such as reassignment requests and unassigned overdue tasks

- Access all open tasks, which are assigned to you, or to the group assigned in the Managed by Group attribute and which you're a member of

- Review and process attestation tasks by checking the physical existence of IT infrastructure or applications

- Review publish, draft, deactivated and policies failing evaluation
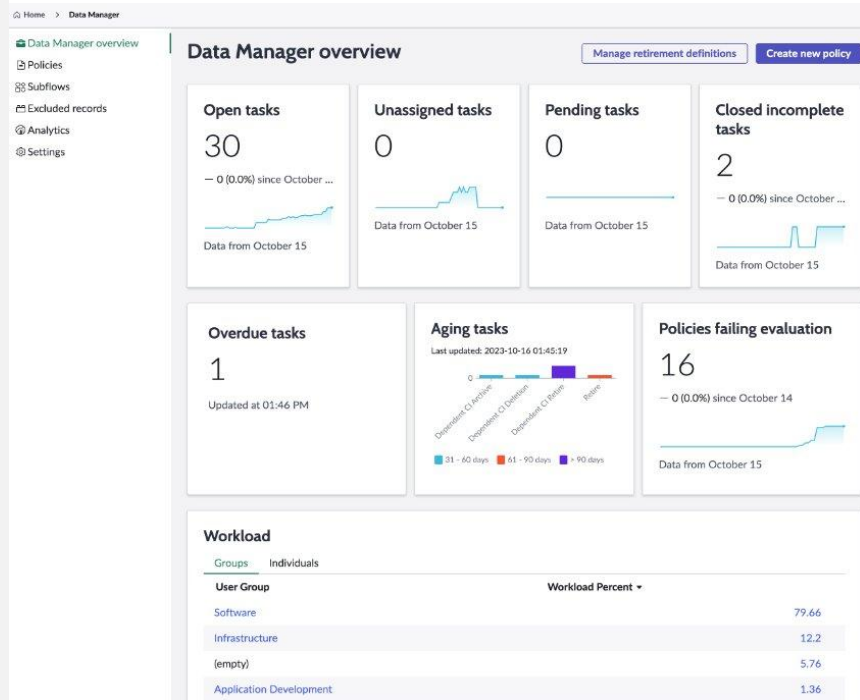
Archive vs Deletion vs Retire

Stale CIs – Check why they are stale. Is this a Discovery or ingestion failure? Are they managed manually?

Deletion **of CIs can cause issues with Incident, Problems and Changes that are associated with the CI.** The ITSM record will no longer have a CI related.

Archiving **may be an option for** **Retired Assets** **when enough time has passed**

When Stale CIs are no longer viable – **Retire**, this will set the Lifecycle Stage field to "End of Life"

Is there a high number of Duplicates that are not tied to ITSM Records? Using the de-duplication tool will resolve and merge the data into one CI. In some cases, this process may not be sufficient.
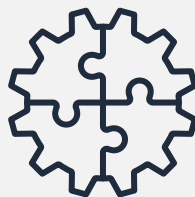
Is the CI in a dependent CI Class? Some CIs need to have a prescribed relationship to exist meaningfully in the CMDB. If so, and it has been orphaned, this could be deleted through the "Dependent CI Deletion Policy"

Verify the existence of actual IT infrastructure and applications that you own, systematically and in bulk

- Create a policy specifying CIs that need to be attested and the attestation frequency

Remove any stale CIs that are associated with IT infrastructure or applications that no longer exists

AUDIT
Attestation

More information

Assign Attestation tasks to users that are familiar with or that manage the CIs, and who can attest or reject the IT infrastructure or applications that those CIs represent

Users can see their assigned attestation tasks in the Governance view when they log in to the CMDB Workspace.

In CMDB Workspace, users can then review and process attestation tasks.

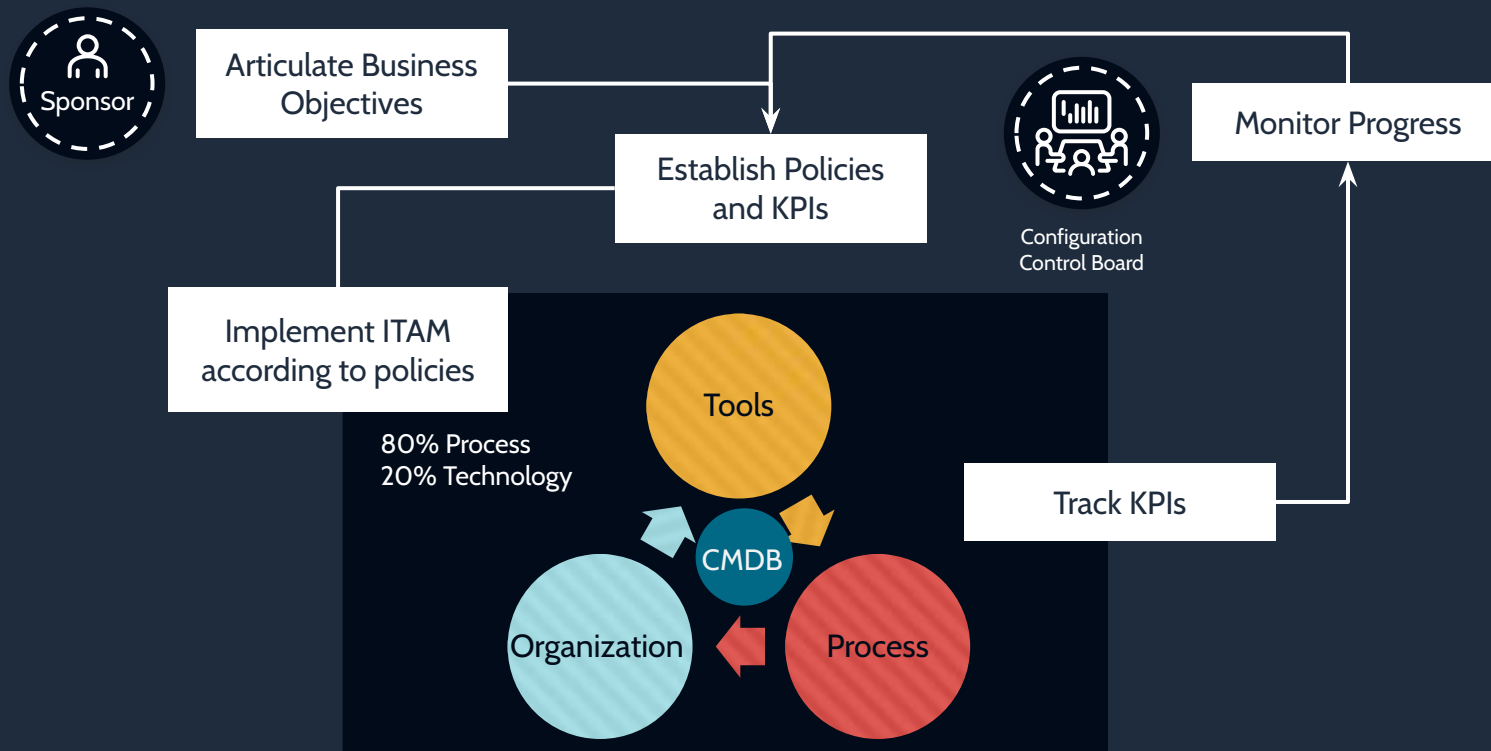**DATA CERTIFICATION...**

...manages scheduled and on-demand validations of the configuration management database (CMDB) data.

Cask

Configuration Control Board (CCB)

## Organizing ITAM / SAM Leadership for CMDB Governance

Sponsor

Articulate Business Objectives

Establish Policies and KPIs

Monitor Progress

Configuration Control Board

Implement ITAM according to policies

80% Process
20% Technology

Tools

CMDB

Track KPIs

Organization

Process

Cask

Establishing Governance

The Governance Charter

1 Purpose

- Requirements input

- Policy adherence

- Inter-organizational communication and issue resolution

- Benefits and Success stories promotion

2 Membership

Leadership of Stakeholder organizations – IT Service Management, Change Management

Non-voting: IT Finance, IT Procurement

IT Security – Elect: Chair, Secretary

3 Scope

- Data & process policy and logistics approval

- Implementation of policy driven practices within owned organization – Champion of Organizational Change

- Data and Process policy compliance monitoring and enforcement

- Recommendations for program improvement

4 CCB meetings

Monthly at first, quarterly once steady state reached

- Pre-meeting notice and invitation to submit agenda items

- Review progress – successes, gaps

- Entertain recommendations for improvement – vote to approve or decline

- Publish minutes and approved recommendations for implementation

Configuration Control Board

Roles and Responsibilities
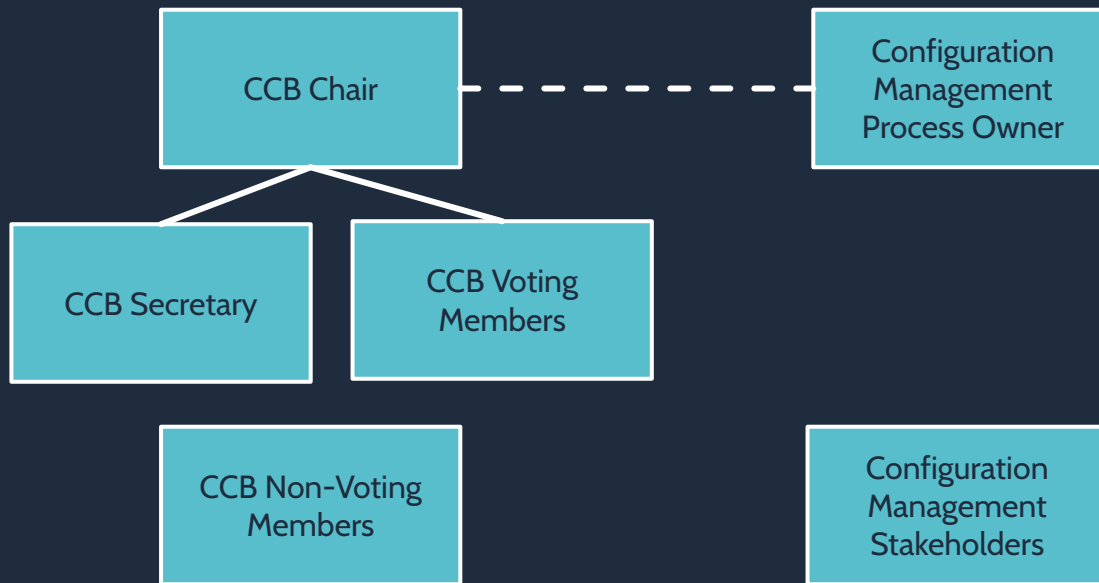
Case Studies in CMDB Maintenance

Use Case | Day 2 CMDB
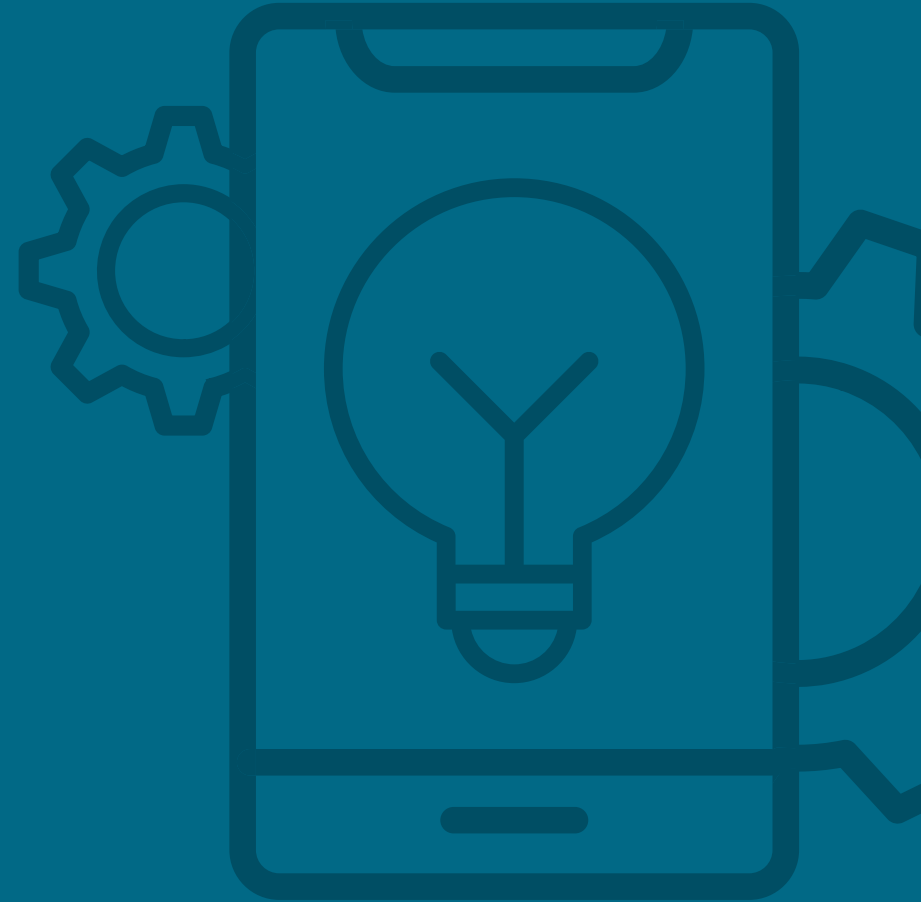
BACKGROUND

- Customer has been running discovery for over a year

- Discovery has not been reviewed since initial setup

- Health Dashboard is Green across Compliance, Correctness and Completeness

- Change Management and Incident Management has not experienced reduced incidents caused by Change requests

Cask

Use Case | Day 2 CMDB

Main Issue

- No dedicated CMDB team

- Platform admin was managing CMDB, but as other modules were added their priorities shifted

- Discovery errors had been steadily increasing

Remediation Efforts

- Reviewed and reworked discovery schedules

- Worked with SMEs to update credentials for undiscovered devices

- Migrated from Probes and Sensors to patterns

- Updated platform with latest Discovery patterns

- Enabled Cloud Discover

- Recommended hiring two FTEs to build out their Configuration Management Team

    - Process Owner / CMDB Admin

    - Discovery Admin/CMDB Analyst

Use Case | Process Adjustments

BACKGROUND

- Customer performed CMDB remediation focused on data quality

- Change management is still reporting issues with CMDB data

- Audits, Certifications and KPIs are reporting 98% compliance

Cask

Use Case | Process Adjustments

Main Issue

- Other teams and processes had developed their own tools to consume CMDB data

- They were using spreadsheets and sharepoint to handle data lookups and impact analysis

Remediation Efforts

- Provided guidance to leverage CSDM model within Change and Incident

- Re-educated stakeholders around CMDB best practices

- Enabled out of the box reports, change impact analysis and dependency views

Cask

Use Case | Oversized CMDB

BACKGROUND

- Customer had many starts and stops with their CMDB

- Tried using 3rd party tools, but finally settled on Discovery

- Although getting consistent results, end users are complaining about slowness when search for configuration items and generating reports

Cask

Use Case | Oversized CMDB

Main Issue

- CMDB contained over 20 million records

- Only 2 million were considered necessary records

Remediation Efforts

- Because Discovery was running effectively, decision was made to purge entire CMDB

- All manually maintained records were exported

- All CMDB records were removed with table cleaner

- Imported manual records and re-ran frequent discovery over a two week period

Cask

Summary

Getting Started Is Easy!

Cask meets you where your CMDB is today

Need a quick CMDB assessment and rapid remediation? ▶ **CMDB LAUNCHPAD**

Need help managing your CMDB on an ongoing basis? ▶ **CMDB EXPERT ASSIST**

Need to get your CMDB ready to support asset management? ▶ **SAM-READY CMDB**

Need to implement CMDB and see value fast? ▶ **CMDB ESSENTIALS**

Tell us what CMDB topics you want to learn more about!

Look for a survey following this session!

Cask

Questions?

Cask

Thank you!

Questions?

Email: Madan Raja, madan.raja@caskinc.com