Ft. Lee Tech Day

Take Control of your Assets
Hardware and Software Asset Management

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What is ServiceNow?

- A unified workflow and service automation platform…
- that defines, structures and automates the flow of business processes and tasks…
- for every department and division across the enterprise – IT, Cyber, Human Resources, Operations, Project Management, Finance, Legal, Facilities, Field Service…
- and more.
- Siloed, Disparate Systems
- Multiple Touchpoints
- Multiple Code Bases
- Multiple Data Models
- Multiple Integrations
- Multiple Databases and Infrastructure Needs
- Multiple Workflow Engines

- Single System of Engagement
- Single System of Action
- Single Code Base
- Single Data Model
- Single Integrated System
- Single Tiered Infrastructure
- Single, Consolidated Workflow Engine
Platform to Enable Service Orientation
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To realize our DoD customer’s high level strategic objectives, it is recommended that the ITAM Program be built against a framework that incorporates elements from the following standards, guidance and industry-leading best practices.

*ServiceNow’s ITIL v3-based SACM Process Management Applications and CMS functions support this best practice framework*

<table>
<thead>
<tr>
<th>Industry Leading Practices</th>
<th>Best Practice ITAM Framework</th>
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<tbody>
<tr>
<td>IITL v3</td>
<td>Element</td>
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<tr>
<td>ISO 19770-1</td>
<td>Organization, Vision &amp; Strategy</td>
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<tr>
<td>ISO 20000</td>
<td>Policies and Standards</td>
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<td>Leading Practices</td>
<td>Compliance</td>
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<td>Risk and Security</td>
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<td>Training and Awareness</td>
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<td>Reporting and Metrics</td>
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<td>Governance</td>
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<td></td>
<td>IT Asset Lifecycle Processes</td>
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<tr>
<td></td>
<td>Request</td>
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<td></td>
<td>Procurement</td>
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<td>Deployment</td>
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<td>Maintenance &amp; Change Control</td>
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<td>Retirement/Removal/Disposal</td>
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<tr>
<td></td>
<td>Technology</td>
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<td>ServiceNow SACM Process Management Apps</td>
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<tr>
<td></td>
<td>ServiceNow Configuration Management System (CMS)</td>
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<tr>
<td></td>
<td>Integrations to existing technologies &amp; data sources</td>
</tr>
</tbody>
</table>
Enterprise SACM Process Definition and Agreement

Active Cross-Functional Participation is Key
ITIL v3 based Service Asset & Configuration Management (SACM)

**SACM Process Model**

- **Change Management**
- **Change Evaluation**
- **Service Asset & Configuration Management**
- **Release & Deployment Management**
- **Knowledge Management**
- **Service Validation and Testing**

**IT Asset Management**

- **Hardware Assets**
- **Software Assets**

**CMDB**

**CMDB**

**Collaboration Service**

**Planning**
- Identify
- Control
- Account
- Verify & Audit

**Finance**
- • Price
- • Quantity
- • Expense Type

**Contracts**
- • Entitlements
- • Warranties

**Tracking**
- Deployed State
  - Available
  - Reserved
  - Deployed
  - Disposed

**Service Models**
- • Baselines
- • Relationships
- • Criticality

**Discovery**

**Supported By**

**Connected To**

**Has**
ServiceNow’s SACM Process and Functional Flow

Accelerating time-to-value

Asset Life-Cycle
- Planning
- Manage Catalog
- Procurement
- Receiving
- Inventory
- Work Orders
- Depreciation
- Charge Back
- Retirement

Configuration Management Life-Cycle
- Release Control
- Certify
- Monitor
- Deploy
- Build out
- Test Control
- Change Control
- Discover
- Configure
- Build out

(servicenow logo)
ServiceNow Asset Management Application

Designed to Enable an Enterprise IT Asset Management Program

- Dedicated Asset Tables – Configurable for corporate asset needs
- Lifecycle Asset Scope
  - Procurement -> Disposal
- Detailed Model Structure
- Software Asset Management (SAM)
- Enhanced Inventory / Stock Management
- Integrated with ServiceNow Discovery
ServiceNow Configuration & Asset Management

As defined by ITIL v3, Configuration Items (CIs) are about managing service events such as Incidents and Changes.

Fully Integrated:
Single point of input for Discovery that informs both the CMDB and the Asset Management Repository.

Assets manage business functionality such as cost management, legal rights & obligations, software compliance and the management of spare parts.

ServiceNow has a complete architecture to support ITAM functionality.

Unique in the industry.
Start with populating your Asset Inventory for an initial Asset Tracking capability and then begin enabling and configuring the additional ServiceNow Asset Management processes and functions when you are ready to support and manage an Enterprise IT Asset Management Program.

### ServiceNow Asset Tracking vs. Asset Management

<table>
<thead>
<tr>
<th>Asset Inventory / Tracking Management</th>
<th>Asset Management as a Practice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus on IT Asset Quantities and Counts</td>
<td>Focus on DoD Asset Financials/TCO, Contracts, Software License Entitlements</td>
</tr>
<tr>
<td>Adheres to DoD Asset Policies</td>
<td>Defines DoD Asset Policies and Standards</td>
</tr>
<tr>
<td>Follows Asset Lifecycle and Changes (i.e. IMAC)</td>
<td>Defines Lifecycle Management of assets from Acquisition through Retirement/Disposal</td>
</tr>
<tr>
<td>✓ Procurement through Receiving Processes</td>
<td>✓ Request Management</td>
</tr>
<tr>
<td>✓ Movement against locations</td>
<td>✓ IT Asset Portfolio Management</td>
</tr>
<tr>
<td>✓ Changes to ownership or assignment of responsibility</td>
<td>✓ Deployment Management</td>
</tr>
<tr>
<td>✓ Audit and Verification</td>
<td>✓ Inventory Management</td>
</tr>
<tr>
<td>✓ (May include Asset Utilization)</td>
<td>✓ Refresh Management</td>
</tr>
<tr>
<td>Looks at DoD Assets as individual items</td>
<td>✓ Decommission Management</td>
</tr>
<tr>
<td></td>
<td>Looks at DoD Assets as a Portfolio</td>
</tr>
</tbody>
</table>
## Sample Requirements for Asset Tracking

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asset Tracking</strong> – All assets can be accounted for or located upon request</td>
<td>All assets can be location and identified upon request with minimal effort (including giving detailed total counts)</td>
</tr>
<tr>
<td><strong>Asset Tracking</strong> – Asset attribute information is maintained</td>
<td>Asset status, location, configurations, utilization, owner/user, etc. are maintained in real time</td>
</tr>
<tr>
<td><strong>Asset Tracking</strong> – There are standard Inventory Management (auto-discovery) tools defined for each Asset Type</td>
<td>Standardized tools are defined for the auto-discovery of asset attribute information for every in scope Asset Type</td>
</tr>
<tr>
<td><strong>Asset Tracking</strong> – There are dedicated resources assigned to manage Inventory Management tools and their agents on an ongoing basis</td>
<td>Inventory Management agents are managed ongoing to ensure they are accurately collecting and reporting information back to the Asset Management Database</td>
</tr>
<tr>
<td><strong>Asset Tracking</strong> – All assets are uniquely identified and tracked by that identifier</td>
<td>All assets are tracked via a unique identified such as serial number, asset tag, service number, etc.</td>
</tr>
<tr>
<td><strong>Asset Tracking</strong> – Utilization information is collected for all assets</td>
<td>Asset utilization information is collected at all times and used for Contract Negotiations, Procurement and redistribution decisions, and asset refresh planning</td>
</tr>
</tbody>
</table>
End-to End Asset Lifecycle Management
Procurement managers can use the ServiceNow Procurement application to create purchase orders and to obtain items for fulfilling service catalog requests. Purchase orders are documents specifying the items, quantities, and prices for products to be purchased.

**PROCUREMENT APPLICATION FEATURES INCLUDE:**

- Service Catalog Request Tacking
- Purchase order creation & management
- Transfer order creation & management
- Asset receiving
Asset Identification Process

The Asset Identification Key Process Area encompasses the activities that uniquely identify and validate the physical presence of IT (hardware or software assets)

THE ASSET ID AREA INCLUDES PROCESS DEFINITION FOR:

- Receiving and Acceptance including policies and business rules for asset identification, acceptance, de-duplication, rejection, asset record creation and/or updates
- Coordinating a Physical Inventory Process
- IT Provisioning and the automated discovery of deployed hardware and software
- Tracking of lifecycle updates through Install/Move/Add/Change and Reclaim/Recycle/Retire stages of the asset’s lifecycle
Third-Party Discovery Solution Integration (i.e. BigFix (TEM), BMC ADDM, HP Universal Discovery, SCCM, Altiris etc.)

ServiceNow Discovery – Enterprise Classification

- Agentless
- Windows, UNIX, Linux
- Printers, Network, Equipment, Servers, UPS
- Virtualization
What is ServiceNow Discovery?

ServiceNow Discovery is an agentless method of populating your CMDB with all in-scope physical hardware, software and virtual assets.

Utilizing a specific step or phased process, ServiceNow will remotely discover your Windows and Unix computers/servers, network devices, powering and printing equipment.

With ServiceNow Discovery, you can map very specific Application to Host and Application to Application dependencies.
ServiceNow Discovery Technology

The ServiceNow automated discovery solution utilizes industry established ports and protocols to identify and record all in-scope service assets within your enterprise.

Capture an extensive level of Asset/CI attribute information using the most common of communication protocols:

- DNS/WINS Resolution per IP Address
- SNMP for Network, printers and powering devices
- SSH for Unix & Linux based Computers
- WMI for Windows Systems including PowerShell Discovery
- CIM for Storage Servers

No secret protocols, no agents to deploy...just as your system admins manage your infrastructure assets today, is how ServiceNow Discovers them.
To gather your important data and providing for industry standard security requirements a MIDServer application will be deployed within your infrastructure for the agent less, behind the firewall “look” into your secure environment.

Secure **outbound only** 128bit SSL communication to your specific ServiceNow applications, complying with strict Corporate and Regulatory standards.
ServiceNow SACM Solution Applications and Functions

ITIL v3 Configuration Management System (CMS)

- Service Orientated Portfolios based on mature SACM processes and functions
- A Single and Combined Production Asset Inventory and CMDB
- One Workflow & Orchestration engine for SACM process automation
- A single integration point for all approved asset data sources and CMDB Federation support
- Discovery that directly updates Asset and CI records in the CMDB for real-time views
- Asset and CMDB life-cycles are married together
- Actionable Self-Service Portal and Service Catalog function integrated with Asset Request Fulfillment
- All your data is already cross related and in one place
Software Licensing Complexity Drives Higher Risk and Cost

- Uncertain Compliance Position
- Underutilized License Capacity
- Missed Opportunities with Traditional Tools
Regulatory Compliance / Vendor Audits Disrupt Federal Resources and Funding for Other Projects

Denver Company Agrees to Pay Over $114,000 to Settle Claims of Unlicensed Software Use

UK firm fined £250,000 over unlicensed software

BSA achieves record payment from a firm in the 'infrastructure and public-services sector' which used multiple copies of illegal software

"The likelihood of an organization experiencing two or more audits annually is as high as 68%.”
Are you positively impacting software spend?

“Software licenses represent 21% of IT budgets. By 2018, 35% of organizations will have implemented a SAM optimization tool, up from 5% in 2014”
Traditional SAM Methods Leave Opportunities Untapped
Why is SAM so difficult?

<table>
<thead>
<tr>
<th>SIMPLE LICENSE</th>
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<tbody>
<tr>
<td>Buy One, Install One</td>
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</table>

<table>
<thead>
<tr>
<th>COMPLEX LICENSE</th>
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</thead>
<tbody>
<tr>
<td>Processor Value Unit (PVU)</td>
</tr>
<tr>
<td>Client Access License (CAL)</td>
</tr>
<tr>
<td>Core Based</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LICENSE VARIANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi Use License</td>
</tr>
<tr>
<td>Multi Version License</td>
</tr>
<tr>
<td>Downgrade Rights</td>
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<tr>
<td>Downgrade Path</td>
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</table>
Customer Instances

Local Library and Normalization

Central Data Service

Central Software Library

Library Updates

Unrecognized Discovery Data

Updates

Content Curation Team

Central Software Library
Software Entitlements – Define what you own

PO Data

PPN Library

PPN
H30-05613

Software Model
Microsoft
Project
2016
Professional

Step 1- Consolidate Sources of Truth

Procurement System
SAP Ariba
ORACLE

Vendor Statements
Adobe
Microsoft
ORACLE

Resellers
CDW
shi
softwareONE

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Identify Software that is in use

Step 2 - Automated Discovery / Normalized Inventory

<table>
<thead>
<tr>
<th>Discovery Data</th>
<th>Normalized Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Corporation</td>
<td>Microsoft</td>
</tr>
<tr>
<td>Visio</td>
<td>Visio</td>
</tr>
<tr>
<td>15.0.4841.1000</td>
<td>2013</td>
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</tbody>
</table>

Introduced in SAM Professional

- 9,500+ Publishers
- 95,000+ Software Models
- 1 million+ Normalization Rules
- Crowdsourcing model for continuous improvement

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Compliance Position

- PO Data
- Vendor Statements
- Procurement System
- Resellers

Entitlements → Software Models → Normalized Inventory

Compliance Position

- Potential Savings: $76,007.16
- Annual Savings: $177,737.34
Realize Savings from Underutilized Licenses

Software Usage

Approvals

Orchestration

Reclamations Rules

Reclaim Licenses

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Software Usage Optimization using SCCM

- Import discovered Inventory data from SCCM (2012 | 2016) for software compliance and optimization.
- Built in workflow automation to support software reclamation for unused software's.
Why SAM with ServiceNow?

• Expand the Power of the Platform - Simplification
• SIGNIFICANT Hard $ Savings

$1B Rev 70M $20M $1M
IT 7-10% of Revenue SW 25-30% SW Savings – 5% Annually

• Reduction in Risk, Fines, Unplanned Spend, Time Spent
• Business Agility
Kingston Enhancements
Always Audit Ready. Optimize License Utilization. Single System of Action

Tony Funkhouser
Advisory Solution Consultant
March 2018
Software Asset Management Dashboard

License Overview

Total True-up Cost: $633.36k
Publishers Out of Compliance: 6
Products Out of Compliance: 12
Potential Savings: $57.10k
Software Asset Management Dashboard
Publisher Packs

Bootstrap Software Asset Management project with ready to use License metric support for major software publishers.
Microsoft Publisher Pack

License Metric Coverage

- Device CAL
- Per Core (Physical Core)
- Per Core (Virtual OSE)
- Per Core (with CAL)
- Per processor
- Server (Per Instance)
- Server (Per Server)
- User CAL

Optimize
Reconcille
Normalize
Discovery & Inventory
Entitlement

- Discover SQL Servers, Exchange Servers, Windows Servers
- Create entitlements with Microsoft-specific license metrics
- Reduce compliance risk with continuous reconciliation and dedicated Microsoft dashboard and alerts
Office 365 Subscription Management

Discover Office 365 subscriptions & Optimize Subscriptions based on Usage

Subscriptions via REST APIs
Oracle Publisher Pack

Discover Oracle database, options, and management packs in use

Reconcile your software inventory accurately with built-in Oracle licensing policies Like Named User Plus, Per Processor

- Minimum licensing requirements, pre-multiplexing user counts, processor factors, etc.
- Licensing calculation for virtual and physical servers
IBM Publisher Pack

Integrate ILMT 9.x to ServiceNow and reconcile peak PVU utilization with IBM entitlements.

**Discovery**
- 30 min discovery data

**Sub Capacity - ELP**
- PVU/RVU License Usage / Server
- Peak Usage over time
- Normalized IBM Software Inventory
- Effective License Position for IBM
- Report & Dashboard
VMWare Publisher Pack

License Compliance for VMWare products. Reconciliation support for major VMWare license types like per processor, per app instance, per OSI & so on.

Vcenter Topology, ESX, VM

VMWare license keys

Mid Server

VCenter

ESX

VMs

License Compliance Analysis
Thank You!
Questions?