A modern ITAM solution allows organizations to consolidate legacy systems into one system of record and automate the asset lifecycle.

MODERN IT ASSET MANAGEMENT

Traditionally, IT Asset Management (ITAM) systems have seldom lived up to their potential. This has not stopped organizations from pursuing the dream of having a centralized system to house all the data and provide functionality to support the entire IT asset lifecycle. There is simply too much to gain by controlling inventory, avoiding massive unplanned expenses, increasing productivity and having easy access to information to make strategic decisions.

When done properly, ITAM can also reward organizations with stronger vendor discounts that have a direct impact in lowering both hardware and software spend. Having better control of the IT asset lifecycle also helps drive standards into organizations, which will improve efficiency and reliability.

The reason ITAM systems rarely deliver on their potential is not a functional one – most solutions offer more bells and whistles than many organizations would care to deploy. The main reason for not delivering success can be blamed on the difficulties of integrating them into the overall IT ecosystem.

For one, they are typically a collection of many disjointed asset applications often with incompatible technologies. Secondly, they often rely on canned adaptors and bulk loaders that limit the number of touch points they can access. Lastly, and most important, the workflow components included in these systems do not tie into other workflow systems used by IT. This effectively limits the possibilities of process automation to just a handful of simple use cases. Organizations cannot advance in maturity due to the inability to tie together processes that cross multiple disciplines.

Complete IT asset management lifecycle with functions and activities
One of the most exciting aspects of having ITAM on the ServiceNow platform is being able to use the graphical workflow editor with other ITSM processes.

If all of this sounds familiar, it is. This is the exact challenge IT faces when trying to figure out what to do with all of the outdated service management systems scattered throughout the enterprise. Using ServiceNow, organizations have been able to consolidate these into a single system of record that fully supports process automation. ServiceNow also includes a modern ITAM solution that allows organizations to consolidate legacy ITAM systems and fully automate the ITAM lifecycle.

ServiceNow has already proven itself in the enterprise with some of the largest organizations in the world. It runs on an advanced, cloud-based, high-availability architecture that provides speed and reliability that often surpasses what organizations can economically do in-house. ServiceNow also provides users with a modern experience that is easy to use and personalize. This helps drive adoption and keep training costs low. Since ServiceNow is a software-as-a-service (SaaS) solution, it can be deployed much more efficiently and quickly than legacy applications. This dramatically increases the chances of completing a project successfully.

**ONE SYSTEM OF RECORD**

Organizations that deploy ServiceNow IT Asset Management are often transitioning from stand-alone ITAM and Software Asset Management (SAM) point solutions to a fully integrated suite of applications sharing a common interface and database. Forgetting features and functions for a second, just this transformation alone opens the door to incredible value by having data and processes merged together on one platform. This section will explore some specific areas where organizations can realize even greater value from using ServiceNow.

**ITAM and ITSM Are Stronger Together**

IT Service Management (ITSM) and ITAM work very closely together. Naturally, it makes sense for them both to be managed in one system of record. ITSM supplies a lot of data around asset failure and performance that is quite valuable for asset managers. Understanding which asset models perform best, or worst, can help IT determine the best asset standards that will help increase the reliability of services over time.

ITAM collects inventory details that are very useful to the service desk. This includes information about an end-user’s machine, where they are located, and what software the end-user is entitled to have. Having ITSM and ITAM together also helps organizations make more informed decisions and design better processes by using technical data from the Configuration Management Database (CMDB) and business data from the IT asset repository. Imagine the value of having a change risk calculator that factors in asset details such as the age of the assets being changed or whether it was due to be returned from a lease expiring in sixty days. These examples are just a glimpse of what is possible with ITAM and ITSM together.

**ITAM and Workflow**

Perhaps the most exciting aspect of having ITAM on the ServiceNow platform is the ability to use the graphical workflow editor to automate activities together with other processes. This can include something as simple as notifying a purchasing group to replenish low stock or something more advanced like identifying when unauthorized software has been installed and offering some instructions for correcting the violation.

It is important to note that the workflow engine can access any data in ServiceNow needed for a process. For instance, an organization using ServiceNow Project and Portfolio Management can create a workflow for requesting asset resources for a project that captures the required assets and sends the approval request to the project managers.
ITAM and Service Catalog

Organizations use service catalogs to offer all types of goods and services to their users. Standard asset models and product bundles make it easier to create a smarter service catalog. Asset inventory capabilities allow for advanced workflows that can check inventory in stockrooms before issuing a purchase request. ServiceNow Software Asset Management (SAM) completely transforms what can be done in a software request. For example, after a software request is approved, the workflow can check available licenses and then automatically create an entitlement record under that license to record the approval. Multiple assets can be grouped into order guides to streamline the user experience.

Runbook Automation enables expensive, slow and error-prone manual tasks to be transformed into automated tasks processed by the workflow engine.

ITAM and Runbook Automation (RBA)

Organizations looking to get the most cost savings and increased efficiency elect to enhance ServiceNow ITAM with ServiceNow Runbook Automation (RBA). RBA enables expensive, slow and error-prone manual tasks to be transformed into automated ones processed by the workflow engine.
RBA is also extremely flexible in that it can interface directly with virtual machines or integrate with configuration tools that an organization may already have. Looking at the example of the software request above, the process can be fully automated so that after approved entitlement is granted to a user, RBA will install the software directly on the user’s machine or pass information to another tool that can do the installation. The result is a fully automated process that saves lots of time and dramatically improves the end-user experience.

**ITAM and Analytics**

The ServiceNow reporting engine makes it easy to access and analyze any piece of information from throughout ServiceNow. Any authorized person can create their own reports and dashboards without the need of report designers. This means that questions can be answered much faster and decisions made sooner. Something that used to very time-consuming with legacy ITAM systems, like creating a report showing software compliance, can be completed in seconds and even scheduled and shared with managers and capacity planners instantly.

ServiceNow includes an easy to use report builder

**ITAM and Discovery**

One of the key challenges facing ITAM projects is data integrity. Projects that use multiple legacy products and separate technologies need to spend a lot time and effort determining how to reconcile, normalize, synch, replicate, and identify data. ServiceNow allows you to bypass that extra effort by providing a robust agentless discovery tool on the same platform as all other ServiceNow applications. This removes the need to build complex integrations leaving more time to extract value from the collected data.

ServiceNow Discovery collects configuration details and maps relationships in the CMDB. An asset administrator can easily define which configuration classes also need to be tracked in the IT asset repository. Once defined, the records are automatically kept synchronized. Discovery can be used at any stage of the asset lifecycle to streamline a process. For instance, after an asset is unboxed, it can be immediately scanned and recorded into the IT asset repository. After new software is installed, discovery can be triggered to validate the installation on the target machine as well.
Organizations that choose ServiceNow to manage all their software license needs are future-proofing their investment.

SOFTWARE ASSET MANAGEMENT FOR THE FUTURE

Software asset management (SAM) is an important part of the ServiceNow ITAM solution that includes many innovative and compelling features to help organizations reach higher levels of process maturity.

SAM and Virtualization

Many organizations use the ServiceNow Service Catalog and ServiceNow RBA workflows to provision resources on VMware and Amazon EC2. Determining the correct cost of these virtual offerings can be difficult since software license models and costs are often not well understood or ignored altogether. There are significant cost implications from all the software licenses that are deployed in a virtual environment including operating systems, applications, tools, clients and plug-ins. VMware vSphere and vCloud Director licenses are expensive as well. Amazon EC2 billing is calculated by usage, which can lead to a massive bill that IT has to pay without any way of reconciling if proper software asset management and governance is not in place.

One important way that ServiceNow helps organizations with virtual environments is by managing their entire lifecycle on one platform. The same service catalog that contains descriptions and pricing information for the virtual resources can also contain the software license entitlements that need to be approved with the request. The same workflow that drives the creation of a virtual resource can also kickoff a discovery task so that the technical and software installation information is populated in the CMDB. This allows SAM to compare the software license and entitlement data against the discovered information in the CMDB. This results in organizations having an automated process to manage costs and maintain software license compliance.

In addition to tracking virtual technologies, ServiceNow also tracks business information, such as contracts, in the asset repository. For example, when an Amazon EC2 instance is provisioned, a discovery task can update the CMDB and the system will automatically create a related asset record. A relationship between the asset record and the contract can also be created. This gives organizations the information needed to reconcile the bill when it arrives.

SAM and SaaS

Every year, SaaS solutions such as ServiceNow continue to prove their superiority over legacy, premise-based solutions, leading more and more organizations to subscribe to cloud-based applications. Not surprisingly, the popularity of these applications has led to challenges controlling and managing the growing number of subscription licenses. Indeed, the future world may have very few applications installed on customer premises. Even Microsoft now offers a cloud-based version of their Office suite. Tools that are entirely based on scanning local networks and searching hard drives for licenses are quickly becoming obsolete. Organizations that choose ServiceNow to manage all of their software license needs are future-proofing their investment.

ServiceNow supports many software license models and types
ServiceNow SAM helps organizations stay on top of their SaaS compliance requirements by providing full support for subscription models. Starting with the software license contract, all of the important details of the agreement are kept in ServiceNow. The software license record tracks the number of users that an organization is permitted to have. The integration capabilities built-into the platform allow organizations to bring in data directly from SaaS vendors for tracking software usage. Finally, software counters inform software administrators about their immediate and planned compliance levels.

Counters help track software license compliance

By combining the ServiceNow Service Catalog, RBA, SAM, and workflow, an organization can offer a cutting-edge requisition process that allows users to request SaaS applications. The license approver has access to the number of licenses on hand and the user's profile before approving the license entitlement. Workflow and RBA can also drive the process automatically by informing stakeholders of the SaaS application request and creating the transaction to add or remove the user.

This type of advanced automation can even be worked into the process for new hires. It is also important to consider that when an employee leaves an organization, it is also necessary to have a solution that can identify all of the software licenses and subscriptions that can be removed and recycled for other users.

SAM and Entitlements

ServiceNow SAM offers levels of depth and usability not commonly found in other software asset management systems. For example, entitlements are not just about recording the names of employees that are entitled to use a software license. Software contracts have many restraints that must be considered to determine if a user or workstation should be entitled.

Some of these constraints reflect the details of a contract, such as a site license, that limits the entitlement of users to a specific geographic location. Other constraints could be external, such as government laws that prohibit certain software to be distributed in certain countries. Having a solution that is smart enough to keep organizations from making mistakes that may result in serious penalties reflects the progressive nature of ServiceNow.

Entitlements in ServiceNow also reflect the general desire in business today for people to be accountable for what they do or spend. Software counters in ServiceNow SAM offer the option to break down the distribution and usage of licenses to various levels of the business. This allows IT to hold the business more accountable at different levels including department, cost center, business or location. Asset managers can drill down to further levels to explain why there is a compliance violation and supply a list of unauthorized users.
Optimizing is designing and consistently executing automated processes that enforce company policies and reduce waste.

ServiceNow provides more than just reports and counters of entitlement data. Notifications can be added to workflows that alert users and even their managers as soon as unauthorized software is discovered. This notification can provide all the information and links needed to become complaint— all without any human contact from the asset manager.

<table>
<thead>
<tr>
<th>Name</th>
<th>Software model</th>
<th>Rights</th>
<th>Installs</th>
<th>License type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft Office Professional 2011</td>
<td>Microsoft Office Professional 2011</td>
<td>370</td>
<td>25</td>
<td>Per named user</td>
</tr>
<tr>
<td>Microsoft Visual Studio Light Switch</td>
<td>Microsoft Visual Studio Light Switch 2011</td>
<td>575</td>
<td>578</td>
<td>Per workstation</td>
</tr>
<tr>
<td>MSDN</td>
<td>Microsoft MSDN 2010</td>
<td>600</td>
<td>595</td>
<td>Per workstation</td>
</tr>
<tr>
<td>ServiceNow</td>
<td>ServiceNow Enterprise Edition</td>
<td>510</td>
<td>410</td>
<td>Usage (User)</td>
</tr>
</tbody>
</table>

Color-coding provides a quick summary of software license compliance levels

Many organizations primarily focus on finding non-compliant software and calculating the amount of licenses that need to be purchased to meet current compliance requirements. ServiceNow has an innovative feature called planned compliance that uses entitlement data to help understand what should actually be purchased to be compliant with planned goals. This allows organizations to finally get ahead of vendors and optimize future license spend.

OPTIMIZING IT ASSET MANAGEMENT

“Optimization” is a common buzzword in business. Sometimes, it can be mistakenly depicted as an imaginary finish line that an organization races to cross. In reality, organizations are always optimizing through ongoing small tasks and process improvements to reduce spend and increase efficiency over time. ServiceNow includes significant functionality that allows organizations to optimize their operations. The following section shares examples.

Go from Showing to Doing

Many IT asset management systems are typically only able to collect data and generate reports and dashboards. While this helps organizations to make decisions that drive actions, a person or another system must actually perform the action. For example, a list of unauthorized users of Microsoft Project provides a software license administrator a starting point for taking action. However, the administrator then has to find out more information about the unauthorized users and track them down one by one to determine if access to the software should be revoked or replaced with something cheaper. This is not an optimal solution.

ServiceNow allows organizations to automate this activity. Instead of waiting for a report and manually tracking people down, the system can initiate a workflow as soon as an unauthorized user is discovered that automatically notifies the user of the situation and presents a survey to learn what functionality the person really needs to do their job.

Workflow can also follow logic to determine the appropriate corrective action, such as:

- Have a manager approve the software license for the user
- Issue a software entitlement record for the user
- Remove the software using RBA
- Offer the end-user less expensive software of the same category
- Offer the end-user the latest standard software of the same category
- Install a free viewer that will allow the user to view the files
- Inform the software admin that their attention is needed
This example demonstrates that optimizing is more than just showing data in reports that tell you where you could save money. True optimizing is designing and consistently executing automated processes that enforce company policies and reduce waste. Optimizing is in the doing.

**Looking at Software Usage to Lower Costs**

Another optimizing scenario is removing expensive software from authorized users who do not use the software frequently or at all. ServiceNow has placeholders to store usage information. This can include the last time the software was used, the amount of time the software spent in the foreground or background of a user's desktop, and the amount of times that the software was accessed in a given period.

A similar workflow to the unauthorized usage example can be used to notify authorized users they are consuming a license that is being underutilized and give them an opportunity to complete a survey justifying why they need to keep the software or choose to uninstall it which returns the license to the pool. The user can also be presented with options to replace the expensive software title with free viewers or less expensive software from the same category.

An organization could also choose to enforce a stronger policy that automatically removes expensive software from users based on a condition such as not using it for the last nine months, so the license can be re-issued. If the organization already has a good software requisition process, it would be a relatively painless procedure to have the user request Microsoft Project if they need to use it again.

**Optimizing Vendors**

By far the most direct and significant way that organizations can reduce hardware and software spend is to receive a higher discount from their vendors. ServiceNow arms vendor managers with important data and tooling to help determine the optimal mix of vendors. The overall strategy is to consolidate vendors by understanding the overlap of similar products across all asset categories. By standardizing and removing redundant products, organizations can focus on purchasing more from fewer vendors, which should earn the right to a higher discount. One or two percentage points of discount with a major vendor could yield millions of dollars, depending on the size of the organization.
ServiceNow makes it easy to define standard product bundles and make them available through the service catalog.

ServiceNow ITAM tracks all of the hardware and software models and their usage. This offers an ideal way to understand how many different vendors are used in each asset category and how many of each product model is actually deployed over time. Since all ServiceNow data lives in a single system of record, it is easy to track demand of each model and vendor through the service catalog request history. It is also easy to report the number of incidents, products, defects, changes, and outage records by model and vendor. All of this data ensures that vendor managers can negotiate from a position of advantage.

Standardizing on fewer vendors and models is an effective way to increase purchasing power. However, consolidation can be difficult in organizations that exercise very little control of the requisition process. To help address this, ServiceNow makes it easy to define standard product bundles and make them available through the service catalog. Organizations can design product bundles to only include models from preferred vendors. A great use for product bundles is defining a set of product models by role. As people refresh their equipment, they can only request from the bundles that fit their role, which will optimize the vendor mix over time.

Sample standard product bundle

![Sample standard product bundle](image-url)
Optimizing the Refresh Cycle

Once vendors and models are standardized, it becomes easier to determine what equipment should be stored in stockrooms and where those stockrooms should be located. Having equipment nearby allows requests to be fulfilled quickly. ServiceNow helps organizations maintain these optimal inventory levels automatically. As supplies are consumed, stock rules can trigger transfer orders to replenish inventory from a central warehouse or directly from a vendor. Rather than process individual orders that take time to process and ship, replenishments can be consolidated into bulk orders to get better vendor discounts.

Equipment refreshes are a necessary part of doing business. When done manually, they can be very time-consuming and disruptive. ServiceNow provides the information and technology that allows organizations to automate much of the equipment refresh cycle saving time and productivity.

For example, ServiceNow can use asset aging to determine when to purchase equipment in bulk and distribute it to stockrooms. A workflow can track individual assets and notify the user when their equipment is ready for replacement. The notification can contain instructions on how to get help and prepare for the refresh. This workflow can also include additional steps to reserve new assets for the user and create work tasks for IT personnel to manage the physical replacement. Workflow can automatically transfer license entitlements from the old machine to the new one. ServiceNow RBA can be added to handle many of the technical parts of the refresh to save even more time and to reduce disruptions even further.

These examples provide only a brief glimpse of how organizations are using ServiceNow to move further along in their IT transformation journeys. The common thread is that having a single system of record allows ITAM and every other ServiceNow application to work closely together. In addition to having a common database, workflows provide organizations the ability to automate activities that drive accountability and efficiency. ServiceNow enables truly transformational service automation that breaks down the silos that have prevented organizations from fully optimizing their IT and business operations.