Modernize and automate IT asset management across hardware, software, and the cloud

How a single system of action can help you lower costs, reduce compliance risk, and unify workflow intelligence across IT
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Introduction

Organizations spend a huge amount of money on enterprise technology. According to Gartner, global IT spending is set to reach $4.4 trillion by the end of 2022, an increase of 4% on 2021\(^1\).

That’s more than the equivalent of the GDP of India and Australia combined\(^2\).

IT services accounts for more than $1.26 trillion of this expenditure, while spending on devices, software and data centre systems accounted for $825 billion, $675 billion and $219 billion respectively. This presents a huge opportunity for savings by optimizing software and hardware assets. And what about the cloud? Gartner predicts that worldwide end-user spending on public cloud services is forecast to grow 20.4% in 2022 to total $494.7 billion, up from $410.9 billion in 2021\(^3\). However, it’s not all good news.
Cloud waste still rampant

Today, advancements in cloud services continue to drive organizations' digital operations, thanks to the dynamic, scalable computing power available. Spend on infrastructure that makes cloud services possible is set to grow by 21.7% in 2022 compared to 2021. However, this unprecedented spend can create cost inefficiencies. Unless IT teams manage this agility, cloud costs spiral upward. In fact, IDC estimates that 20% to 30% of total enterprise cloud spend is wasted due to lack of visibility and control4.

Opportunity in the chaos

By eliminating redundant software licenses, reducing cloud infrastructure or hardware costs, and redistributing IT budgets to support strategic business initiatives, companies can accelerate digital transformation and align technology to contribute directly to bottom-line revenue and growth.

Silo-busting solutions are required

However, most organizations struggle to manage their IT assets. Organizational silos make it difficult to track hardware, including obsolete systems. Enterprise software licenses expire and unlicensed applications proliferate. IT managers become bogged down in spreadsheets and legacy asset management tools that are inefficient and out of date. Taking control of hardware and software systems, reconciling trouble tickets, and planning for future needs becomes a nightmare. It’s hard to think strategically about IT allocations when you can’t manage what you have.

How can modern IT managers be successful?

Fortunately, next-generation IT asset management (ITAM) solutions are making it easy to track hardware, software, and cloud resources. The latest ITAM platforms provide a consolidated snapshot of IT assets to increase visibility, reduce risk, and make it easier to efficiently and strategically utilize IT spending. How do they do it? By leveraging a central platform of IT assets to cut costs, and reduce risk, it’s easier to get work done. Utilizing this single system of action to run software asset management, hardware asset management, Application Portfolio Management (APM) and Cloud Insights on the same platform where IT is secured, operated and serviced, is a game changer.
“We selected ServiceNow because it’s very modular and customizable for very specific requirements. It has a CMDB built in, and the Software Asset Management product seamlessly connects with our contracts database. It’s a cloud-based, agentless, turnkey solution that you can set up in no time, and its integrated workflows are far superior to other platforms. This was the solution we needed for the journey ahead.”

Sam Morrison, Software Compliance Manager, Cox Automotive
Why don't existing software asset management approaches work?

If you have ever tried to manage software assets using Excel, you know the unspeakable pain. Manually collecting software asset data from multiple sources and keeping it up to date and accurate is next to impossible, no matter how much time you spend. And, spreadsheets don’t scale—having different people update the same spreadsheet is a recipe for disaster.

What about legacy software asset management tools? The situation isn’t much better. These point tools work in silos, rather than being seamlessly connected to the rest of IT. Without access to data and capabilities from other information technology infrastructure library (ITIL) systems, these legacy tools fall far short of the mark. For instance:

They don’t leverage existing asset information in the configuration management database (CMDB). Instead, they come with their own standalone discovery tools to track licensing and software usage. This leads to massive duplication of effort, significantly increased costs, incomplete data, and disconnects between software asset management and the rest of IT.
There is no easy way to connect licensing contracts, financial records, and the general ledger. How do you allocate software costs when licensing assignments and usage are in one system, and budgets and actuals are in another? And, without this connection, how do you align your software spend with business priorities?

Software information isn’t integrated into other ITIL processes. For example, whenever there is an IT change, associated software costs aren’t readily available. Instead of seeing potential costs automatically in the change request, users have to go to a separate software asset management tool and manually simulate the same change to understand the costs—assuming that the software asset management tool even has accurate information about the configuration items (CIs) being changed. The old approach also assumes the IT operator is thinking about licensing costs as the IT change is being made.

Integrating legacy software asset management tools with current ITIL systems doesn’t make things better. These integrations are typically costly and brittle, requiring constant maintenance and upkeep. And, let’s face it, these tools weren’t designed to work together. Instead of unlocking the synergies between software asset management and other ITIL processes, integrating siloed tools only provides a way to frequently import and export data, but not a way to automate processes to connected teams and kick off business workflows.
Why don't existing hardware asset management approaches work?

Managing hardware assets can be one of the IT managers’ most frustrating tasks. Even the most basic questions about computing hardware can be challenging. Do you know what assets you have? Do you know where they are? Can you prove it? Legacy hardware asset management tools provide limited visibility into what hardware is currently in use and who has it. Operational silos make it impossible to get a comprehensive picture of corporate assets for budgeting, planning, and overall management—and it’s easy to lose track of new hardware and decommissioned equipment. There are so many limitations with current asset management solutions:

They don’t provide a single point of action across the entire enterprise, leading to multiple spreadsheets and data systems being used. There isn’t a single source of reliable data with a list of all the company’s assets, including part numbers, service contracts, and other identifiers.

They can’t efficiently manage equipment lifecycles making asset planning and budgeting more difficult. Without a centralized hardware tracking system, you have no way to handle lifecycle management—you can’t see which assets need to be upgraded or are reaching end of life and need to proper disposal.

They slow down IT service delivery because task updates to assets are manual. There’s no way to centralize asset receiving, validate requests and fulfillment, or track waste removal when legacy tools are limited.

Tracking company equipment, managing service agreements, and replacing obsolete hardware is near impossible with siloed systems and spreadsheets. Having to reenter hardware tracking data into multiple systems is error-prone and severely limits the ability to track hardware assets. Legacy systems don’t integrate well with other asset management systems so you are never sure what is in inventory, on order, or out of service.
Why don’t existing cloud resource management approaches work?

While cloud vendor billing reports, discovery tools, and other sources provide a wealth of cloud cost and usage data, manually correlating and analyzing it isn’t feasible. There’s just too much data and it changes too fast. Cloud budgets become black holes, with limited insight into how they support specific business services, applications, projects, and other initiatives.

**Manually optimizing cloud spend isn’t realistic**

Even if you could understand all the cloud costs and usage nuances, how do you manually optimize cloud spend with all the moving parts? How do you identify rightsizing opportunities, let alone get approval to make changes? Or what about suspending cloud resources when they’re not needed outside of normal working hours? Imagine trying to manually track rapidly changing cloud resources and turn them off and on every day. It’s an overwhelming challenge for FinOps teams.

**Multiple systems stifle automation**

If you’re tracking cloud activity in separate systems, it’s unlikely you can take advantage of process automation. Viewing your cloud resources with a legacy point tool means multiple UIs and siloed teams.

And if you’re planning, operating, and servicing IT in another system with a CMDB at the core and everything revolving around it—such as IT ops, hardware, IT service, IT financials, analytics, and vendor management—you’ll encounter challenges such as:

- Brittle integrations
- Endless CMDB exports and imports
- Separate asset management for hardware and software
- Potential risk that data won’t be bi-directional
- Delays in management tasks instead of real-time actions

In any case, a manual approach to maintaining cloud services can impede or stall any corrective actions you need to take.
“We'd outgrown our previous solution and it was no longer fit for purpose for a company of our size. We also wanted to take the opportunity to streamline and automate time-consuming processes, such as procurement.

Finding the right partner is essential for achieving your goals. Although we're early in our ServiceNow journey we're expecting to make savings on software, efficiency gains, and reduce the volume of support calls.”

Deborah Mulderrig, Digital Asset Manager, Covéa Insurance
What are the benefits of a single system of action?

Let’s start with the most obvious one. Instead of having multiple ITAM and ITIL tools, there is now a single platform for everything. With IT looking to consolidate tools, putting software asset management, cloud, and hardware asset management on the same system that supports all your other ITIL processes just makes sense. It maximizes the value of your existing platform investment and drives down maintenance costs.

However, the benefits extend far beyond cost reduction. Here are some examples:

**Leverage software and hardware asset data from the CMDB.** There’s no need for costly parallel discovery solutions, or to constantly battle inaccurate, obsolete, and incomplete information. Instead, a mature CMDB is fueled by existing discovery tools and operational processes that deliver comprehensive, high-quality data—including service contracts, licensing, and software usage information.

**Get real-time visibility into deployment, licensing, and compliance positions.** Instead of constantly importing and exporting data between systems, all of the data needed for real-time visibility is in one place, putting accurate, up-to-date information at your fingertips. For instance, because both software asset management and hardware asset management now run on the same platform where you manage IT, you can now quickly reconcile deployed licenses and equipment orders with your financial records, aligning licenses and purchases with actual usage.
“We are seeing millions in hard dollar savings. For example, we can see when we’re double counting licenses. So far, we’ve found 19,000 machines with this type of license overlap.”

Briana Alexander, Vice President of Process and Performance Excellence, Community Health Systems
What are the benefits of a single system of action?

Reduce hardware, cloud, and software costs and risks by coupling ITAM and IT change management. When you tap into existing change processes, you stop the bleeding at the source. By ensuring that software license costs and hardware purchase orders are evaluated and approved as part of the change process, you proactively avoid unnecessary hardware, unlicensed usage, and cloud cost surprises.

Optimize IT spend based on usage and strategic priorities. With a single system of action, you can automatically reallocate unused equipment and reclaim and redistribute software licenses that are not being used or that fall outside of established policies. And, because equipment purchases, software licenses, and cost information are now available to other functions such as Application Portfolio Management (APM), you can ensure that hardware and software costs are included in strategic service optimization and re-architecting initiatives.

Give IT asset management business and service context. For instance, if you have new hires, do you have enough equipment in inventory or is there hardware that can be reallocated? If a desktop software user currently has a license, is that appropriate given their organizational role? Could the license be reclaimed? Similarly, if the software is running on a virtual server, it may be used— but does it support an important application or business service? This type of business and service information, which is available from the single system of action, is critical for optimizing IT spend.
Unleash the value of actionable hardware, cloud, and software information across IT

APM is just one example of how a single system of action leverages ITAM to create cross-functional value. Purchasing, deployment, onboarding/offboarding, and other IT functions all benefit from equipment information and software asset management capabilities. For instance, new equipment orders can be linked to IT financials, HR, and security workflows. Or if a user orders software from the service catalog, software asset management can automatically assign licenses and distribute software—accelerating service delivery and ensuring compliance.

Modernize IT asset management processes

A single system of action allows you to create intuitive workflows that automate your ITAM processes, accelerating, and simplifying how asset management gets done. And, because these workflows extend beyond ITAM, you can seamlessly link hardware, cloud, and software assets with other IT processes, creating end-to-end visibility and control that help you reduce costs and risks.

Integrate your security and asset workflows to remediate threats faster

ITAM and Security Operations can both run together for quick vulnerability remediation. Building workflows that encompass security, IT, and even the asset management facets of the equation can greatly strengthen your Security Operations procedures. Once integrated, these workflows equip security and IT operation teams with a deeper understanding of the issue and they have automated workflows to help with remediation. Everything happens faster.
How do you create a software asset management strategy?

The benefits of next-generation software asset management are clear. So, how do you build a software asset management strategy that lets you unlock these benefits? Here are some guideposts to software asset management success:

**Manage software where you manage the rest of IT**

If you already have a single system of action in IT, then your choice of a software asset management vendor is obvious—add software asset management to your existing platform. If you don’t have a single system of action, choose a software asset management vendor that offers one. Look for a solution that offers deep discovery capabilities, a robust catalog for normalizing software inventory, automated reclamation and redistribution of licenses, and flexible reporting on software usage, costs, and compliance trends.

**Identify your stakeholders and work with them to identify business needs**

Your software asset management strategy should start by identifying what you want to accomplish. You have your own internal objectives, such as reducing the effort needed for vendor audits, but to create broader value, you need to work with other stakeholders to establish clear business goals.

For example, these might include statements such as, “We don’t want to be surprised by shadow IT expenses or applications that are flying under the radar”, or, “We have to optimize our software spend so we invest in applications we actually use and need to support the right business apps.”

**Establish clear outcomes that align with business needs**

Translate each of your goals into one or more measurable outcomes. This focuses your efforts on specific activities and allows you to measure and communicate your success. If you set a goal to pinpoint applications that are no longer business-critical, then the corresponding objective could be to reduce software spend by 15% through the elimination of applications that are redundant or infrequently used.
Don’t try to accomplish everything at once

Adopt an incremental approach that allows you to create a firm foundation and then build on your success. Use the following phases as a template:

**Crawl:** Start small with one specific initiative, such as tracking a single software vendor. Show your success—for example, when you pass the vendor audit with minimal compliance issues, share the dashboard data and leverage native reporting to communicate this.

**Walk:** Focus on the fundamentals that will allow you to broaden your next-generation software asset management program. This includes centralizing data into your CMDB, ensuring that your data is trustworthy, and implementing repeatable, best-practice software asset management processes.

**Run:** Continue to mature your software asset management practices, increase process automation to improve efficiency, and feed software information into other IT areas to create additional business value. Look for opportunities to connect systems and workflows between application portfolio management, security operations, and onboarding processes among others.

**Revisit your software asset management strategy regularly**

Your business doesn’t stand still, and neither should your software asset management strategy. To maintain business alignment, revisit your goals regularly by meeting with stakeholders. Also, continuously compare your performance with your target outcomes, making course corrections where necessary to get you back on track.
How do you create a hardware asset management strategy?

There are several benefits to consolidating hardware asset management. Understanding the value of hardware asset management will help you create a strategy that maximizes your hardware investments. Here are some guideposts to hardware asset management success:

**Start by setting your hardware asset management process objectives**

For a hardware asset management process to work, you need to:

- Ensure that all assets are recorded and maintained in a central asset repository
- Verify that assets are accurately entered, refreshed, and retired
- Maintain all purchase records and lease agreements in one place and link them to each asset
- Ensure that you can automate inventory processes for receiving assets, storerooms, and transfers
- Track assets that are used as loaners or temporary assets

**Normalize asset tracking**

Start by standardizing asset data by manufacturer, model name, and model number for entry into a central Content Library. The Content Library automatically populates the inventory with asset metadata, simplifying discovery, and providing a clean and reliable asset database.
Automate hardware asset management as part of an ITAM initiative

IT assets proliferate as organizations grow, creating challenges in operations, cost, and risk. And management of hardware can be scattered across departments and teams.

You want to centralize asset governance so you can maximize return on investment. That requires end-to-end visibility using a native CMDB so you can access everything from one platform using one architecture and one data model. Then you control all your assets—avoid penalties for misuse and extend value by staying current on maintenance and lease contracts.

Use hardware asset management to provide end-to-end asset lifecycle automation

Hardware asset management automates each stage of the asset lifecycle, including tracking financial, contractual, and inventory details. When workflows are used to handle asset requests, you can automatically manage approvals, issue chargebacks, and provision equipment.

Workflows can be customized to assign asset tasks to incidents, changes, and work orders for faster ticket resolution, or employee onboarding and offboarding. Hardware asset management also automates manual processes such as asset orders, bulk stock orders, deployment, equipment swaps, and asset retirement and disposal.
How do you create a hardware asset management strategy?

Use hardware asset management for asset planning

Mobile auditing apps allow you to maintain detailed records of assets in use across the enterprise. Having an enterprise-wide ITAM system lets you see the hardware that is approaching the end of life by month, quarter, or year. It also shows pending purchase orders and pending equipment deliveries, as well as requests that can be fulfilled from stock versus those that have to be ordered. Up-to-date hardware asset management systems also let you validate asset disposal.

Tackle hardware asset management one step at a time

To create a well-structured asset management workflow, try implementing a hardware asset management strategy one step at a time. Use the following phases as a template:

Crawl: Start with a specific department, vendor, or project and start tracking assets as you acquire and deploy them. Once you have developed a successful hardware intake and workflow you can expand the process to track additional assets.

Walk: Focus on the fundamentals that will allow you to expand your hardware asset management strategy to encompass more assets. Start managing all your hardware assets using a central CMDB so you can be sure you have a single, accurate data source.

Run: As your hardware asset management implementation matures, you can build process automation to improve efficiency and streamline asset planning and procurement. You can also start extracting data for analytics to demonstrate the value of a consolidated hardware asset management infrastructure. You also can develop best practices for your hardware asset management processes. Consider implementing hardware into the onboarding, request, disposal verification for Environment, Social, and Governance (ESG) initiatives.

Refine your hardware asset management workflows

As your equipment needs continue to evolve, so will your hardware asset management strategy. By using a centralized asset management system that integrates with the rest of the enterprise, you can control existing assets and plan for future needs, revisiting requirements for specific departments, mapping assets to business objectives, and reviewing and revising ITAM goals along the way.
Along with modernizing your software asset management and hardware asset management strategies, the migration of workflows to the cloud is the other logical component of your organization’s digital transformation journey. It’s critical to have a strategy in place that will help you maximize as much value from investment in cloud infrastructure early on. Here’s how to get started.

**First steps**

Firstly, it’s vital to have the correct platform in place. With a single-platform solution like ServiceNow, that facilitates management of assets both on-premises and in the cloud, your IT team will be equipped to answer the following questions:

- What cloud resources do you need?
- Are you reserving enough resources to save money?
- Are you using the reserved computing you have?
- Can you track and control your budgeting for your cloud resources?
- Do you know the cost of moving to the cloud or which provider?
- Are you able manage these resources across a multi-cloud environment from AWS to Azure to Google Cloud?

Once you can answer these questions in relation to IaaS, PaaS, and SaaS, you are ready to automate and act upon your cloud resource strategy.
Achieve visibility, leverage right-size instances, optimize and automate

Crawl: Prioritize immediate needs using the power of the Now Platform to discover all your cloud resources, then break down cloud spend by cost center, business service, and other entities.

Walk: Leverage automated workflows to gather run-time information, analyze resource usage, then identify excess resource capacity, such as a virtual server that is unnecessarily large. Make use of right-size cloud instances to identify cost reduction opportunities and receive recommendations on how to correctly match cloud resources to usage.

Focus: Harnessing the power of the cloud and a single platform solution, consider utilizing automation to rapidly address known organizational challenges and drive efficiencies. Benefits include:

- **Optimize cloud costs and usage**
  Get complete visibility of your cloud spend and usage, broken down by services, applications, cost centers, and other entities.

- **Identify cost optimizations targets**
  Pinpoint areas of high spend and stranded cloud assets.

- **Rightsize cloud resources**
  Get automated recommendations on how to reduce cloud costs by correctly dimensioning cloud resources to match usage.

- **Turn off resources when not in use**
  Identify cloud resources that aren’t used outside normal working hours and automatically turn them off and on.

- **Automate optimization approvals**
  Integrate cloud optimization tasks into your existing change management processes.

As time consuming manual processes are automated, you can leverage automated workflows to monitor and forecast cloud spend for the long term by creating more in-depth budgets.

By 2025, cloud-native platforms will serve as the foundation for more than 95% of new digital initiatives, up from less than 40% in 2021.
How do you get started?

Pick an upcoming event that you can use as a catalyst for your next-generation ITAM program. Ideally, look for a planned event that has an impact on your enterprise. Examples of these include:

- Enabling a remote employee workforce
- Setting up a new office or department
- Developing a resource allocation strategy for the coming fiscal year
- IT cost-cutting initiatives
- Upcoming enterprise license agreements (ELAs) or maintenance renewals
- Data center expansions or consolidations
- Moving on-premises software to the cloud
- Point tool consolidation or application rationalization projects
- Cybersecurity initiatives
- New or additional FinOps initiatives
- Elevated need to demonstrate ESG improvements

In some cases, however, you may need to kickstart your next-generation ITAM program to respond to an unplanned event such as a systems audit, merger or acquisition, workforce restructuring, or the need to comply with new government regulations. In order to comply with the privacy of data on your corporate assets, those assets need to be managed accordingly.
Let's recap

When assets become overwhelming, ITAM practitioners fill a mission-critical role for maximizing the value of assets, managing compliance with asset agreements, and ensuring return on investment. However, in order to do their jobs, they need to overcome hurdles such as:

• Manual processes and spreadsheets
• Swivel chair management with point solutions
• Disconnected reporting systems to help management see the bigger asset picture
• Doing busy work tracking down hardware... chasing... duplicating work between multiple systems
• Checking data from brittle integrations and maintaining those integrations
• Feeling burdened by repetitive tasks

Next-generation ITAM tackles these and other issues head-on by incorporating hardware, cloud infrastructure, SaaS apps, and software asset management into a single system of action running ITAM on the same platform that is used to manage the rest of IT. The results are clear and compelling—seamless data sharing, increased data reliability, lower costs, improved efficiency, compliance with vendor agreements, and unleashed business value.

By connecting ITAM with the rest of IT, these solutions help asset management practitioners to reduce risk, increase visibility, work faster and smarter, and deliver the IT spend optimizations that businesses demand.
About ServiceNow ITAM

ServiceNow ITAM enables you to maximize your enterprise investment with the only single architecture solution to feed critical software and hardware data to the business using digital workflows. Leverage machine learning to modernize and simplify how IT asset management gets done.

Drive software, cloud, and hardware visibility, improve compliance health, optimize complex licensing from top publishers, centralize tracking of hardware, and control leases and service contracts.

**Clean data, greater visibility**

Running software asset management, cloud, and hardware asset management assets natively on your existing ITIL platform consolidates lifecycle management, reduces maintenance, and enforces governance. Preserve perpetually clean data in your central source of truth, the CMDB. Help your organization get to value faster, understand the cost implication of an IT change, and automatically control key software, cloud, and hardware assets throughout the enterprise.
Reduce exposure to risk and expense

When ITAM runs locally with business applications like Application Portfolio Management, Vulnerability Response, and HR, it eliminates the need for the constant importing and exporting of data between systems.

Mitigate risk with a single, real-time view across unlicensed software deployments, re-harvesting options, and automate steps to remediate a compliance issue. Adding hardware asset management as part of the same CMDB normalizes hardware data to simplify asset tracking, tells you where equipment is at all times, simplifies maintenance, and tracks important events such as warranties, service contracts, leasing agreements, and end of life.

Unify your assets to your business workflows

With ServiceNow, you can gain insights into all your enterprise environments. Reduce unused assets such as SaaS subscriptions, hardware sitting on a shelf, or cloud IaaS and PaaS that are spun up but seldom used. Digitize workflows to accelerate productivity. Put your teams in a position to succeed, let them work from the same system. Imagine what’s possible when you manage software asset management, cloud, and hardware asset management where you run IT.

Cloud insights

Manage cloud resources to reduce spend and minimize risk. Gain visibility into total cloud consumption across SaaS, IaaS, and PaaS—all in one place.
It’s time for a single system of action. Learn how ServiceNow can help you deliver on the promise of next-generation ITAM.

Learn More

Resources

Ebook: IT asset discovery: from visibility to workflow
Ebook: Creating the ultimate spend-smart IT asset management system

About ServiceNow

ServiceNow (NYSE: NOW) makes the world work better for everyone. Our cloud based platform and solutions help to digitize and unify organizations so that they can find smarter, faster, better ways to make work flow. So employees and customers can be more connected, more innovative, and more agile. And we can all create the future we imagine. The world works with ServiceNow™. For more information, visit: www.servicenow.com.