



**Tivoli** software

# Transform IT operations with modern, unified asset and service management solutions.



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## Overview

To operate like a business within a business, an IT organization needs firm control over its assets and services. Control requires information – a real-time, enterprise-wide perspective on how well IT resources and activities are aligned with business needs. The role of asset and service management is to provide this view and to automate and support the processes that enable IT to maximize ROI, improve service levels, streamline service delivery and reduce total costs.

Asset and service management is also an essential component of efforts to demonstrate the value of IT to the business. Many organizations are currently moving to implement or enhance their current asset and service management capabilities.

A wide range of asset and service management products is available from vendors of all sizes. However, considerations for choosing a solution should extend beyond purchase cost and basic features. The solution's architecture, how well it meshes with emerging technology standards and whether it supports an evolving IT strategy are also important criteria. This paper outlines important strategic considerations for organizations implementing asset and service management solutions.

### **Transform IT into a business center**

As IT organizations transform from cost centers into business units capable of delivering competitive advantages, performance is under increasing management scrutiny. In the face of elevated accountability, IT organizations are challenged to simultaneously:

- Improve service quality.
- Reduce costs.
- Drive business innovation through technological agility.
- Quantifiably demonstrate IT value and alignment with business goals.

All the while business processes – and IT resources – are increasingly distributed, virtualized and service-oriented, which makes them more difficult to manage. For most IT organizations, meeting the business’ objectives for IT makes adoption of an asset and service management system imperative. The key is choosing a solution that helps meet the operational and strategic requirements of both IT and the overall enterprise today, while offering greater flexibility to adapt to future change.

### **Adopt a business-centric view of IT assets and services**

Charged with doing more and more with less and less, IT organizations must identify and prioritize the most critical services to help ensure that scarce resources are optimally aligned with business needs. This requires a real-time, business-centric view of IT assets. Providing this perspective is the function of today’s asset and service management systems. Their goal is to help transform

### Highlights

Transform a reactive IT organization into a proactive service provider

a reactive IT organization into a proactive service provider that not only keeps applications available, but also understands how the business operates and how the IT infrastructure can best support its strategic direction. Building on a foundation of effective asset and service management, IT organizations can help:

- Maximize return on IT investments.
- Optimize IT process efficiency.
- Reduce the operational and ownership costs of the IT infrastructure.
- Mitigate risk to the business, such as outages.
- Improve service levels.
- Demonstrate business value across initiatives and projects.

By leveraging asset and service management to manage and coordinate all its business processes, IT can help find a cost-effective balance between optimal service levels and optimal support for business goals.

#### **Consider core technology when choosing asset and service management solutions**

Successfully implementing asset and service management requires appropriate technology support. There are a wide range of vendors and solutions in the asset and service management space, and the market continues to evolve. While each IT organization has specific requirements, basic capabilities are useful in nearly every case for managing service desk functions, IT assets and autodiscovery.

***Support service efficiencies with a comprehensive service desk solution***

An IT organization's ability to deliver predictable levels of service and support has a direct impact on business performance. But while employee productivity is critical, the cost of supporting users must be managed in a way that makes sense for the business. To help ensure that service levels meet customer requirements at justifiable cost, IT must create service efficiencies, reduce service outages and streamline service desk operations.

Technology support for these goals requires the ability to establish service level agreements (SLAs), as well as to monitor and escalate incidents and problems in line with SLAs. The service desk must be able to set and identify priorities, and to have timely information to respond more effectively to events as they occur.

Most service desk solutions will provide some means of meeting the above criteria. More advanced features to look for in a service desk application include:

- A self-service interface that allows users to submit tickets, view updates and search a knowledge-base for solutions to their problems.
- Release management capabilities, to streamline the release of changes into the production environment.
- An automated capability to build a searchable knowledgebase of solutions to specific service requests.
- Support for the major service support functions specified in IT Infrastructure Library® (ITIL®) guidelines and best practices.

A service desk solution must also be customizable to meet specific user needs, and should not hamper later upgrades to off-the-shelf application components. Collected data should be quite simple to access, analyze and leverage for both help-desk staff and IT management. For example, it should be routine to create a new type of report without resorting to custom programming.

## Highlights

Enable IT to track assets from inventory, financial, compliance and contract management perspectives

### ***Efficiently track and manage the complete life cycle of IT assets***

IT assets have a direct impact on the performance of a business and its ability to deliver value to stakeholders. If IT assets are not managed effectively, time, money and effort can be wasted, and agility constrained. An IT asset management (ITAM) solution provides information to help track and manage IT assets more efficiently throughout their life cycles. Comprehensive ITAM enables IT to track assets from inventory, financial, compliance and contract management perspectives. An effective ITAM solution will include a customizable workflow to align the solution with IT and business processes. It will also support integration at the tool and architecture levels with external applications such as enterprise resource planning (ERP) solutions. An ITAM solution should help an IT organization to:

- Track IT assets, including their locations and changes to their configurations.
- Record and manage contracts for software licenses, leases, warranties and maintenance to verify license compliance.
- Create and enforce enterprise technology standards.
- Establish and manage chargebacks to other departments.
- Support a streamlined process for procurement and receipt of IT assets.
- Reconcile actual assets with authorized assets (those purchased and under contract).

Help reduce costs, improve service and align IT operations with business goals

Properly implemented ITAM capabilities routinely serve to reduce IT costs, improve service and better align IT operations with business goals.

### **Leverage a solution that goes beyond basic technology**

Beyond basic technology considerations for supporting IT asset and service management are strategic considerations of the solution's architecture and how it fits with the evolving IT portfolio. The availability of advanced asset and service management features enables organizations to leverage them as quickly as needed. Key features include:

- Standards-based architecture.
- Comprehensive IT support.
- Configuration management.
- Support for software asset management (SAM).
- Support for planned work and preventive maintenance.
- Life-cycle management.

### ***Maximize scalability with a standards-based architecture***

When evaluating asset and service management vendors, the technology behind the product is at least as important as features and packaging. Advanced, component-based architectures based on open standards including Java™ 2 Enterprise Edition (J2EE™), extensible markup language (XML), Web services and Lightweight Directory Access Protocol (LDAP) can help IT reduce costs by simplifying interoperability and manageability, while offering improved performance and scalability. Standards-based solutions also reduce the risk of vendor lock-in and support a wider choice among products and vendors.

Similarly, as the IT organization begins to implement a service oriented architecture (SOA), an asset and service management solution built on a service oriented framework is likely to be much more effective than an asset and service management solution built on a proprietary, client-server foundation.

## Highlights

### ***Drive cost efficiencies with comprehensive IT support***

Comprehensive, real-time support for critical IT business processes demands more than traditional, stand-alone ITAM and service desk applications that are loosely coupled through a data integration layer. Strategic asset and service management requires a unified technology architecture that can deliver executive-level control over IT assets and services while minimizing the impact on resources.

A holistic view of IT can drive significant new cost efficiencies. For example, IT organizations often make asset-purchasing decisions based on cost and vendor relationships. With the support of a unified asset and service management solution, these decisions can be based on additional factors like IT support and resource costs, as well as life-cycle planning.

The fine-grained control of a unified asset and service management solution is key to:

- Proactively reducing failures and outages.
- Improving service levels and customer satisfaction.
- Reducing fixed and variable IT costs.

Help maximize the return on investment in IT assets, optimize IT resource allocation and align IT services with business requirements

Each of these tasks is essential to maximizing the return on investment in IT assets, optimizing IT resource allocation and aligning IT services with business requirements. A unified asset and service management architecture has the additional advantage of reducing the number of applications that IT must manage, upgrade and integrate.

### ***Deliver insights across the organization with configuration management***

A strategic asset and service management solution should include a scalable and centralized configuration management database (CMDB) that can be populated and maintained with the appropriate scope and depth of asset data, and with the assistance of automated discovery tools. The database helps IT



organizations properly plan and execute other asset and service management processes and facilitate more efficient change to IT configurations.

A CMDB provides a “single source of record” regarding the identification, verification and management of IT assets that must be kept accurate and fully reconciled across diverse data sources. Its scope and depth should be properly defined, and it should effectively and efficiently use autodiscovery technology.

Another consideration is data architecture. Asset and service management solutions that consist of multiple, stand-alone products that interact through an integration layer can cause scalability and data integration problems.

***Help maintain inventories and reduce costs with software asset management***

Improved policies and procedures for managing software assets can significantly reduce IT software costs and help mitigate the financial risks of improper software management. Robust SAM processes help maintain up-to-date software inventories, supporting more accurate accounting for financial, tax and compliance purposes.

Many companies have no central repository for software licenses, which are instead scattered across business units. Further, there is often little accountability to deter employees from installing unauthorized copies of applications on their desktops. By centralizing software license efforts, SAM can help:

- Connect cross-departmental interactions regarding software assets.
- Monitor and enforce license compliance.
- Enforce entitlement.
- Reduce software purchasing, maintenance and support costs.

## Highlights

Proactively recycle current software assets and thereby reduce the need to purchase new licenses

Technology that enables autodiscovery of all software deployed in an existing operational environment is a key enabler of efficient SAM. Other important features include contract management, inventory management, request management and reporting.

By providing easier access to software license information, SAM can help IT track individual software instances from cradle to grave. This level of transparency supports both incident and problem management. SAM could also help an organization to proactively recycle current software assets, possibly reducing the need to purchase new licenses.

### ***Utilize support for planned work and preventive maintenance***

Progressive IT organizations manage assets, work, materials, procurement and contracts in a proactive manner that optimally supports both planned and unplanned (conditions-based) maintenance activities. This includes matching job tasks to available resources, estimating and approving costs in advance, establishing maintenance priorities and coordinating maintenance to consolidate the scheduling of related or complementary tasks.

This level of support for work management requires an asset and service management solution that can track key preventive maintenance work – including materials related to asset repair – with a window on vendor contracts, procurement data and so on. By optimizing labor utilization to help reduce costly, reactive work and minimize both planned and unplanned downtime, work management capabilities can save money and improve service levels.

Examples of planned work and preventive maintenance activities that asset and service management should support include:

- Technology refresh to better forecast costs and determine timeframes to replace deployed equipment.
- Lease replacement to preschedule work to return or replace leased equipment.
- Support for business cycles to help automate related processes, such as increasing services in line with peak seasonal activities.

***Employ life-cycle management capabilities***

To help assets offer maximum business benefits, an IT organization must understand and track cost history for individual assets and groups of similar assets, from purchase through disposal. Asset life-cycle data supports a range of strategic planning and management capabilities. Asset life-cycle data – such as failure rates for key architecture components – can serve as input to continuity management and business continuity planning (BCP) scenarios. Life-cycle data also aids capacity planning by informing estimates on the useful lifetime of assets in relation to dynamic capacity needs.

Additionally, asset life-cycle management capabilities should enable IT organizations to optimize the value of an asset over its useful life, while helping to reduce repair costs and downtime. For example, a comprehensive change management process can incorporate replacement of certain equipment every 2.5 years if it shows a tendency to require significant repairs after 2.7 years.

**More effectively manage IT assets, resources, changes and service levels with IBM products**

Combining a superior feature set with the industry's most advanced, standards-based architecture, IBM Maximo® asset and service management solutions are designed to help today's enterprise meet its strategic asset and service management requirements, going beyond traditional, stand-alone ITAM and service desk capabilities to provide a comprehensive, executive-level view of critical IT business processes. This holistic perspective supports more effective management of IT assets, resources, changes and service levels – offering a greater degree of control over the business of IT.

Maximo asset and service management solutions support ITIL best practices for asset procurement and management, incident and problem management, change and release management, work management, service level management and autodiscovery.

Maximo asset and service management solutions deliver outstanding business value, innovative functionality and easier customization on an open, SOA-based platform, helping companies maximize the value of their IT assets, reduce asset-related costs and provide higher levels of service to users.

The unified Maximo asset and service management solution consists of three components, which can be deployed separately or together:

**IBM Tivoli® Service Desk** – combines incident and problem management, change and release management, work management and service level management. It offers a unified view of assets, SLAs and service level status, which facilitates more appropriate prioritization and response to unplanned events. This unified view also supports more accessible, efficient and cost-effective service. Other advanced features include:

- Action-based, customizable workflow.
- Self-service automation.
- The ability to automatically build a user-searchable knowledgebase of solutions to incidents.

**IBM Maximo Asset Management for IT** – provides information IT can use to track and manage assets more efficiently, from procurement to retirement. Combining asset tracking, asset reconciliation, compliance management, configuration management, financial management, contract procurement and change management into one seamless solution, Maximo Asset Management for IT automatically reconciles authorized assets with actual deployed assets. Additional integrations to key asset, financial and HR systems can help IT leverage enterprise data.

**Maximo Discovery** – provides an inclusive view of enterprise IT assets from software and PCs to servers and network devices, including the physical location of each asset. In most cases, it is fast, highly accurate, simple to deploy and minimally impacts network traffic. For companies that prefer a different autodiscovery tool, Maximo asset and service management solutions offer a wide range of integration tools to aggregate IT asset data and leverage current investments.

All three Maximo asset and service management components leverage a common architecture and CMDB, and can be implemented as a complete, enterprise-wide solution – together or separately – to support specific initiatives such as asset tracking, life-cycle management, and service desk enhancement.

### **Conclusion**

To transform reactive, cost-centric IT organizations into proactive, business-centric service providers, most enterprises are embracing asset and service management technology. But all asset and service management solutions are not created equal. Many still consist of stand-alone, legacy applications strung together with an integration layer and relying on multiple data sources.

The real-time, comprehensive view of IT assets and services that Maximo asset and service management solutions provide is essential to identifying and prioritizing an IT organization's most critical services, as well as to more optimally aligning IT with business goals.

Maximo asset and service management solutions are unified from the ground up and leverage today's most strategic open standards, including J2EE, XML and Web services. Offering industry-leading features and exceptional strategic value, the products deliver the type of all-encompassing, enterprise-wide view of assets and services that customer-focused IT operations demand. Maximo solutions can offer superior control over IT business processes and alignment with SOAs and other evolving IT initiatives. Maximo asset and service management solutions are part of IBM Service Management, which helps align IT functions with business objectives.

**For more information**

To learn more about how IBM Maximo asset and service management solutions can help align IT functions with business objectives, contact your IBM representative or IBM Business Partner, or visit [ibm.com/tivoli](http://ibm.com/tivoli)

**About Tivoli software from IBM**

Tivoli software provides a comprehensive set of offerings and capabilities in support of IBM Service Management, a scalable, modular approach used to deliver more efficient and effective services to your business. Meeting the needs of any size business, Tivoli software enables you to deliver service excellence in support of your business objectives through integration and automation of processes, workflows and tasks. The security-rich, open standards-based Tivoli service management platform is complemented by proactive operational management solutions that provide end-to-end visibility and control. It is also backed by world-class IBM Services, IBM Support, and an active ecosystem of IBM Business Partners. Tivoli customers and partners can also leverage each other's best practices by participating in independently run IBM Tivoli User Groups around the world – visit [www.tivoli-ug.org](http://www.tivoli-ug.org)



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