IBM Tivoli Endpoint Manager for Lifecycle Management

A single-agent, single-console approach for endpoint management across the enterprise

The convergence of IT functions that has occurred in recent years—operations groups, for example, taking ever-greater responsibility for security—requires a corresponding convergence of management tools. Without unified, simplified and streamlined capabilities, management tasks in the distributed enterprise run the risk of becoming overwhelming in size and complexity.

IBM Tivoli® Endpoint Manager for Lifecycle Management delivers the comprehensive and powerful approach that IT management needs today. Its single-agent, single-console technology provides real-time visibility into the state of endpoints and gives administrators advanced functionality for managing those endpoints. Now, administrators have a single tool for discovering and inventorying resources, deploying operating systems, distributing software, controlling remote devices, and managing patches and other system changes.

Tivoli Endpoint Manager for Lifecycle Management provides an accurate and comprehensive “single source of truth” for managing hundreds to hundreds of thousands of endpoints from a single server. Deployed in as little as a few hours, this industry-leading solution can shorten update cycles, improve the success rates for provisioning, reduce IT and help-desk labor requirements and boost end user productivity.
Consolidating and simplifying management enterprise-wide

In most distributed environments, numbers of endpoints and network complexity are on the rise, while visibility and control of endpoints are poor and service levels are a challenge to maintain. The quantity and variety of management tools steadily increase, while IT budgets and staff levels remain stagnant or reduced.

Tivoli Endpoint Manager for Lifecycle Management can help organizations meet these challenges. Its centralized capabilities help you setup, see and update systems as well as remediate issues with continuous, pervasive configuration management. The result? High levels of automation combined with fine-grained accuracy enable IT departments to maintain service levels and focus on critical issues. Software deployments and updates are faster. The clutter and expense of multivendor tool sets are reduced. The risk of error is decreased. Processes are optimized and overall operating efficiency is enhanced.

These improvements are achieved through Tivoli Endpoint Manager for Lifecycle Management’s abilities to consolidate and simplify key management services enterprise-wide by:

- Providing a single console that can reach endpoints regardless of location, connection type or status.
- Delivering real-time visibility into all endpoints including desktops, laptops, servers, point-of-sale systems, ATMs and self-service kiosks.
- Scaling to hundreds of thousands of endpoints from a single management server.
- Managing heterogeneous platforms—Microsoft® Windows®, UNIX®, Linux® and Mac operating systems running on physical or virtual machines.
- Enabling remote desktop control to simplify and streamline help-desk calls and problem resolution.
- Managing mobile computers whether connected to the network or not.

A single, unified point of control supports comprehensive reporting for features such as advanced software distribution.
Delivering functions that address the full systems life cycle

Tivoli Endpoint Manager for Lifecycle Management includes the following key functions—and gives you the ability to easily add other targeted functions as needed, without adding infrastructure or implementation costs.

Asset discovery and inventory

With Tivoli Endpoint Manager for Lifecycle Management, asset discovery is no longer a “bean counting” snapshot exercise. The solution creates dynamic situational awareness about changing conditions in the infrastructure. The ability to scan the entire network frequently delivers pervasive visibility and control to help ensure that organizations quickly identify all IP-addressable devices—including network devices and peripherals such as printers, scanners, routers and switches in addition to computer endpoints—with minimal network impact. This function helps maintain visibility into all enterprise endpoints, including mobile laptop and notebook computers that are roaming beyond the enterprise network.

Software distribution

For organizations that face distribution challenges brought on by high-latency and low-bandwidth networks, poor visibility into distributed assets and the need to support roaming endpoints, Tivoli Endpoint Manager for Lifecycle Management provides policy-based installation, closed-loop verification and the ability to manage software distribution across multiple platforms from a single, unified point of control. The solution delivers high first-pass success rates while having minimal impact on network performance. In addition to centralized management, it gives administrators the option to let users provision and de-provision authorized applications and software packages.

Operating system deployment

This feature supports a streamlined, effective and secure process that shrinks deployment and migration time for Windows-based systems. Centralized control and automation simplify deployment of new workstations, laptops and servers throughout the network as well as OS migration and refresh for existing endpoints. At the same time, it reduces management costs, minimizes impact on end users, ensures compliance with the organization’s OS standards and reduces risks associated with non-compliant or insecure configurations. During deployment, the solution saves user profiles and data; it also provides hardware-independent imaging, injecting appropriate device drivers as needed. Immediately after the deployment is complete, the solution agent becomes active to install the required software, enforce configurations and apply patches, eliminating the need for post-migration configuration so that the system is ready for use immediately.

Patch management

Patch management includes comprehensive capabilities for delivering patches for Microsoft Windows, UNIX, Linux and Mac OS and for applications from vendors including Adobe®, Mozilla, Apple and Java™ to distributed endpoints—regardless of their location, connection type or status. A single management server can support up to 250,000 endpoints, shortening times for patches with no loss of endpoint functionality, even over low-bandwidth or globally distributed networks. Real-time reporting provides information on which patches were deployed, when they were deployed, and who deployed them, as well as automatic confirmation that patches were applied for a complete closed-loop solution to the patching process.
Remote desktop control
The remote desktop control feature built into Tivoli Endpoint Manager for Lifecycle Management provides support and control for desktops, laptops and servers throughout the distributed environment from a central location. The desktop control features enable management and troubleshooting of systems that can streamline IT functions and reduce the workload on the organization’s help desk. Remote diagnostics capabilities put real-time endpoint data at administrators’ fingertips with capabilities to assist end users in resolving IT issues. The feature additionally enhances endpoint security by helping ensure that endpoint configurations remain current and compliant with organizational policies.

Software use analysis (optional add-on)
This optional feature provides the ability to discover and analyze applications installed on your organization’s desktops, laptops and servers. Drill-down information about software publishers, titles and applications—down to the version level—also includes aggregated statistics and usage information. Continuous asset assessment and reporting correlates information on software use with license information for immediate, accurate and automated license “true-ups” that identify non-compliant instances and flag them for removal. This feature supports accurate budget planning based on inventory and usage trends and helps prevent overspending, breached contracts and software piracy. It can be easily customized to track homegrown and proprietary applications as well.

The Tivoli Endpoint Manager family
You can further consolidate tools, reduce the number of endpoint agents, and lower your management costs by extending your investment in Tivoli Endpoint Manager for Lifecycle Management to include other components in the Tivoli Endpoint Manager family. Because all functions operate from the same console, management server and endpoint agent, adding more services is a simple matter of a license key change.

- **Tivoli Endpoint Manager for Power Management**—This option enables enforcement of energy conservation policies across the organization, with the granularity necessary to enable application of policies to a single computer.
- **Tivoli Endpoint Manager for Security and Compliance**—This easy-to-manage, quick-to-deploy solution provides unified, real-time visibility and enforcement to help organizations both protect endpoint assets and assure regulators that systems are meeting security compliance standards.

**Tivoli Endpoint Manager: Built on BigFix technology**
The power behind all Tivoli Endpoint Manager functions is a unique, single-infrastructure approach that distributes decision making out to the endpoints, providing extraordinary benefits across the entire solution family, with features that include:

- **An intelligent agent**—Tivoli Endpoint Manager utilizes an industry-leading approach that places an intelligent agent on each endpoint. This single agent performs multiple functions including continuous self-assessment and policy enforcement—but it has minimal impact on system performance. In contrast to traditional client-server architectures that wait for instructions from a central control point, this agent initiates actions in an intelligent manner, sending messages upstream to the central management server and pulling patches, configurations or other information to the endpoint when necessary to comply with a relevant policy. As a result of the agent’s intelligence and speed, the central management server always knows the compliance and change status of endpoints, enabling rapid and up-to-date compliance reporting.
• **Reporting**—The single, unified console built into Tivoli Endpoint Manager orchestrates a high level of visibility that includes real-time and continuous reporting and analysis from the intelligent agents on the organization's endpoints.

• **Relay capabilities**—Tivoli Endpoint Manager’s scalable and lightweight architecture allows any agent to be configured as a relay between other agents and the console. This relay function allows the use of existing servers or workstations to transfer packages across the network, reducing the need for servers.

• **IBM Fixlet® messages**—The Fixlet Relevance Language is a published command language that enables customers, business partners and developers to create custom policies and services for endpoints managed by Tivoli Endpoint Manager solutions.

**Extending the Tivoli commitment to management**

Tivoli Endpoint Manager for Lifecycle Management is part of the comprehensive IBM portfolio, helping organizations address management of the full range of IT operations across the enterprise. Supporting the instrumented interconnected and intelligent IT operations of a smarter planet, IBM solutions help ensure real-time visibility, centralized control and enhanced productivity for the entire IT infrastructure, including its globally distributed endpoints.

---

**Tivoli Endpoint Manager family at a glance**

**Server requirements:**
- Microsoft SQL Server 2005/2008
- Microsoft Windows Server 2003/2008/2008 R2

**Console requirements:**
- Microsoft Windows XP/2003/Vista/2008/2008 R2/7

**Supported platforms for the agent:**
- Mac OS X
- Solaris
- IBM AIX®
- Linux on IBM System z®
- HP-UX
- VMware ESX Server
- Red Hat Enterprise Linux
- SUSE Linux Enterprise
- Oracle Enterprise Linux
- CentOS Linux
- Debian Linux
- Ubuntu Linux
For more information
To learn more about IBM Tivoli Endpoint Manager for Lifecycle Management, contact your IBM sales representative or IBM Business Partner, or visit: ibm.com/tivoli/endpoint

About Tivoli software from IBM
Tivoli software from IBM helps organizations efficiently and effectively manage IT resources, tasks and processes to meet ever-shifting business requirements and deliver flexible and responsive IT service management, while helping to reduce costs. The Tivoli portfolio spans software for security, compliance, storage, performance, availability, configuration, operations and IT life cycle management, and is backed by world-class IBM services, support and research.