

Highlights

- Manage hundreds of thousands of endpoints regardless of location, connection type or status
- Employ an agent-based approach that delivers up-to-date visibility and automatically remediates issues
- Reduce management complexity and cost, increase accuracy, and boost productivity

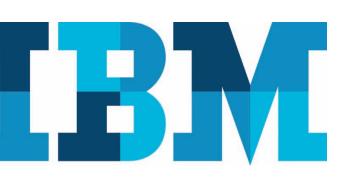
IBM BigFix Lifecycle

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® BigFix® Lifecycle delivers the comprehensive and powerful approach that IT management needs today. Its single-agent, singleconsole 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 (OSs), distributing software, controlling remote devices, and managing patches and other system changes.

BigFix Lifecycle 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 industryleading 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 is 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 are reduced.

BigFix Lifecycle can help organizations meet these challenges. Its centralized capabilities help you set up, 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 to 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.

BigFix Lifecycle simplifies and consolidates key management services enterprise-wide by:

- Delivering unified real-time visibility into all endpoints, including desktops, laptops, servers, mobile devices, point-of-sale systems, ATMs and self-service kiosks
- Scaling to hundreds of thousands of endpoints from a single management server
- Providing a lightweight, flexible infrastructure that ensures connectivity with endpoints regardless of location, connection type or status
- Reducing complexity by managing heterogeneous platforms, including Microsoft Windows, UNIX, Linux and Mac OS X, from a single console
- Making bare-metal provisioning and OS migrations quick and painless
- Giving users control and curbing the volume of help-desk calls through administrator-approved user self-provisioning policies
- Supporting Internet-brokered remote desktop connections to streamline help-desk calls and speed problem resolution
- Ensuring security and compliance of all endpoints through offline and online policy enforcement



A single, unified point of control supports comprehensive reporting for features such as advanced software distribution.

Delivering functions that address the full systems lifecycle

BigFix Lifecycle includes the following key functions and gives you the ability to easily add other targeted capabilities as needed, without additional infrastructure or implementation costs.

Asset discovery and inventory

With BigFix Lifecycle, 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 run distributed scans on 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, BigFix Lifecycle provides policy-based installation, closed-loop verification and the ability to manage software distribution across Windows, UNIX, Linux and Mac OS platforms from a single, unified point of control. The solution delivers high first-pass success rates with minimal impact on network performance. Existing software repositories are migrated easily through automated content creation capabilities while specialized plug-in tools inspect packages for intelligent targeting and deployment of software. Role-based deployment controls are easy to manage through seamless integration with Microsoft Active Directory. The streamlined workflow simplifies the setup of approved user self-provisioning policies and eases the management and enforcement of mandatory software policies.

Operating system deployment

Centralized control and automation simplify bare-metal deployment of Windows images to 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 organizational OS standards and reduces risks associated with noncompliant or insecure configurations. Hardware-independent imaging in conjunction with advanced driver management capabilities takes the guesswork out of OS deployment by injecting appropriate device drivers as needed. The product ensures no loss of management, as agent history is maintained across OS migrations and specialized registration mechanisms automatically reassign unique identities to duplicate agents resulting from image clones. After deployment of the new operating system is complete, the solution agent becomes active to install required software, enforce security configuration policies and apply critical patches.

Patch management

Patch management includes comprehensive capabilities for delivering patches for Windows, UNIX, Linux and Mac OS and for third-party applications, 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 patch times with no loss of endpoint functionality, even over low-bandwidth or globally distributed networks. Virtual patch management capabilities enable offline patching, making stale virtual machine images a thing of the past. 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 BigFix Lifecycle provides support and control for Windows, Linux and Mac OS X 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 an organization's help desk, even across Internet-brokered connections. Remote diagnostics capabilities put real-time endpoint data at administrators' fingertips with capabilities to help end users resolve IT issues, which helps ensure that endpoint configurations remain current and compliant with organizational policies. The solution also supports remote desktop capabilities through built-in Microsoft components, giving users the ability to choose the right technology for their environment.

Power management

The Power Management capability of BigFix Lifecycle helps organizations achieve cost savings by reducing electricity usage while avoiding disruptions in systems management. The capability enables IT organizations to apply conservation policies infrastructure wide while providing the granularity to apply power management policies to a single computer or groups of computers. This feature supports organizational green initiatives with a comprehensive yet simplified capability to manage power options with minimal impact on already-stretched budgets and staff. With real-time tracking, system administrators know exactly how much time an endpoint spends in idle, active, standby and off states, resulting in an accurate view of current power usage and cost. Green impact reports can help promote conservation initiatives, and the graphical reporting data on aggregate power usage and savings can be exported to Microsoft Excel for further analysis.

Server automation

With Server Automation feature built-in, BigFix Lifecycle helps manage physical, virtual and remote servers while lowering operational costs with real-time, policy-based management. The seamless physical and virtual server management from the same, single interface greatly improves visibility and control of all endpoints. BigFix Lifecycle enables users to easily deploy and manage servers across heterogeneous platforms using either pre-built or custom automation. The automated task sequencing capability offered can be used for critical tasks like server builds (for example, deploying operating systems, configuring settings, deploying simple software, changing the host name and restarting computer) or it can be used for other common system administrator tasks that need to be carefully sequenced. It also provides advanced automated patching for physical, virtual and clustered servers.

Endpoint Inspection

BigFix Query provides a real-time status of all your endpoints, enabling accurate identification and inspection of vulnerable devices through a user friendly web interface. You can interrogate endpoints and get precise answers back in seconds, telling you which policies are enforced and which applications and services are installed. You can even examine files and system configuration settings to help you identify additional security threats. Users can use a library of pre-defined queries or quickly and easily create their own custom queries. BigFix Query also verifies the remediation of endpoints, helping to bridge the gap between security and IT operations.

The IBM BigFix family

You can further consolidate tools, reduce the number of endpoint agents and lower your management costs by extending your investment in BigFix Lifecycle to include other components in the IBM BigFix 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.

- *IBM BigFix Protection*—This solution helps reduce business risk by delivering real-time protection from malware and other malicious threats to physical and virtual endpoints—from a single console.
- *IBM BigFix 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.
- *IBM BigFix Inventory*—This software enables users to discover and analyze applications installed on 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.

Built on IBM BigFix technology

The power behind all BigFix functions is a unique, singleinfrastructure approach that distributes decision making out to the endpoints, providing extraordinary benefits across the entire solution family. Features include:

- An intelligent agent—BigFix 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—yet 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 BigFix orchestrates a high level of visibility that includes real-time continuous reporting and analysis from the intelligent agents on an organization's endpoints.
- **Relay capabilities**—The scalable and lightweight architecture of BigFix allows any agent to be configured as a relay between other agents and the console. This relay function enables 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 BigFix solutions.

IBM BigFix family at a glance

Server requirements

- Microsoft SQL Server 2005/2008/2012
- Microsoft Windows Server 2003/2008/2008 R2/2012
- IBM DB2® v10.1
- Red Hat Enterprise Linux v6

Console requirements

• Windows XP/2003/Vista/2008/2008 R2/7/8/2012

Supported platforms for the agent

- Windows XP/2000/2003/Vista/2008/2008 R2/7/8/2012/CE/Mobile/ XP Embedded/Embedded Point-of-Sale
- Mac OS X
- Solaris
- IBM AIX®
- Linux on IBM z Systems™
- HP-UX
- VMware ESX Server
- Red Hat Enterprise Linux
- SUSE Linux Enterprise
- CentOS Linux
- Debian Linux
- Ubuntu Linux

Why IBM?

IBM BigFix for Lifecycle is part of a comprehensive IBM portfolio that helps 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 globally distributed endpoints.

For more information

To learn more about IBM BigFix Lifecycle, contact your IBM representative or IBM Business Partner, or visit: ibm.com/software/products/en/ibm-bigfix-lifecycle

Additionally, IBM Global Financing provides numerous payment options to help you acquire the technology you need to grow your business. We provide full lifecycle management of IT products and services, from acquisition to disposition. For more information, visit: **ibm.com**/financing

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