

# Managing and Securing Endpoints in Healthcare



Secure and manage servers, desktops, laptops, smartphones and tablets in highly distributed environments, regardless of connection



Automate continuous patch and regulatory compliance, to help IT to satisfy regulatory mandates and protect against costly data breaches



Quickly inventory and assess new endpoints during an acquisition or merger, ensuring they are patched and in compliance before adding them to the network

From local multi-specialty clinics to government healthcare systems, the healthcare industry is in a continuous state of rapid growth, fueled by a global population boom. The industry is also one of the most complex and highly regulated fields, as acquisitions and mergers continue to drive rapid growth of many healthcare organizations, payers and providers.

On top of that, physicians and other medical practitioners are being asked to care for more patients. Consequently, they need immediate access to medical information via familiar mobile devices. That means more pressure is exerted on IT to support the latest technology and consistently manage those devices whether they are connected to the network or not.

Behind the scenes, Healthcare IT has been tasked not only with keeping a variety of mission critical systems running, but also with ensuring security and regulatory compliance against the backdrop of a growing number of cyberattacks. Ransomware attacks have driven IT to focus on patching vulnerabilities quickly and maintaining consistent security policies across all endpoints.

With limited IT staff and budgets, many healthcare organizations feel hobbled by responsibilities that have grown too large and complex to manage efficiently and cost effectively. HCL BigFix helps Healthcare organizations by providing a single unified endpoint management platform for servers, desktops, laptops, smartphones and tablets, regardless of operating system, location or connection.

# An infusion of diverse and intelligent endpoints in healthcare

In the healthcare industry, Internet-connected endpoints are becoming more instrumental, integrated, and intelligent than ever before. HCL BigFix helps healthcare IT organizations better understand, control and manage endpoints whether they are located in a hospital emergency or examination room, the hospital admissions area, an ambulance, or at a doctor's office, clinic, or urgent care center.

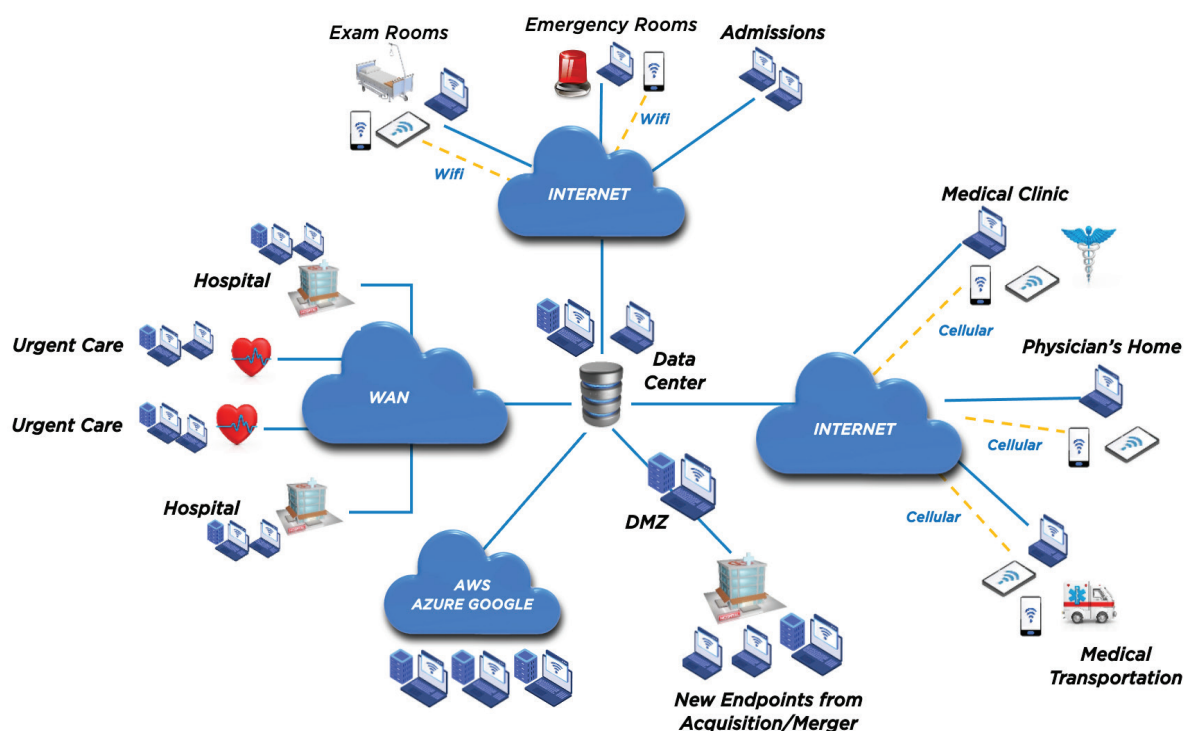
HCL BigFix delivers a unified management platform to manage the variety of endpoints commonly used in a heterogeneous environment, including those running on Microsoft Windows, Linux, UNIX, macOS, iOS and Android. BigFix also has evolved to manage up to 300,000 endpoints from a single management server.

Using the BigFix intelligent agent, IT can manage and secure desktops, laptops and servers, utilizing a broad range of management functions such as software distribution, continuous compliance, automation, remote desktop control, and hardware and software inventory. In contrast, other endpoint management solutions are extremely slow due to their dependence on a central command-and-control server. The BigFix intelligent agent initiates updates and configuration

actions at the endpoint and automatically notifies the management server when a status changes. As a result of the intelligent agent's bidirectional communication, the BigFix management server always maintains current endpoint status, enabling real-time reporting.

HCL BigFix also manages mobile devices -- smartphones and tablets -- which are popular with patient-care professionals moving between examination rooms and roaming between multiple offices or clinics. With BigFix, healthcare IT organizations can effectively manage and secure mobile devices, including enterprise-owned and employee-owned (BYOD) mobile devices, alongside laptops, desktops and servers using the same management platform. Using mobile device management (MDM) actions and hundreds of MDM policies, IT can manage the mobile device lifecycle, from enrollment to retirement, ensuring that mobile devices are secure.

HCL BigFix is unified endpoint management supporting a wide variety of endpoints, and delivering the important management and security capabilities required in the healthcare industry today.



BigFix helps healthcare IT operations better understand, control and manage the status and compliance of every endpoint in the network.

## Maintaining secure and compliant endpoints

For healthcare organizations, accurate and timely maintenance of endpoints is critical to operations, and keeping endpoints in compliance and protecting patient information continues to be of paramount importance. Healthcare regulations and guidelines impacting IT organizations include the Health Insurance Portability and Accountability Act (HIPAA), the Health Information Technology for Economic and Clinical Health Act (HITECH), and the General Data Protection Regulation (GDPR). Failure to demonstrate compliance with these and many other mandates can severely impact operations of a healthcare IT organization.

Patch management, for example, is covered by the security management process standard of the HIPAA administrative safeguards. Moreover, the U.S. Department of Health & Human Services' Office for Civil Rights has stated that promptly patching vulnerable software is a requirement for HIPAA compliance in order to protect electronic protected health information (ePHI).<sup>1</sup>

At an average of \$9.23 million per incident, healthcare leads as the top industry for the most expensive data breach costs.<sup>2</sup> Healthcare organizations must address a unique set of endpoint security and compliance challenges that satisfy regulatory mandates while preventing data breaches and ransomware attacks.

BigFix can help mitigate risk in three ways. First, BigFix can help keep endpoints patched and up-to-dated. By regularly delivering patch content for 90+ operating system variants and high first-pass patch success rates of up to 98%, IT can spend less time packaging and testing updates as well as less time remediating failed patches.

Secondly, BigFix enables Healthcare IT to deploy consistent security policies across all managed endpoints from a single platform. Policies are built using thousands of out-of-the-box security checks aligned with several industry-standard security benchmarks. BigFix enables *continuous* compliance, eliminating repetitive and time-consuming remediation required when endpoints drift out of compliance.

Lastly, BigFix integrates with vulnerability scanners such as Tenable and Qualys to speed vulnerability remediation. Integration enables IT Operations and IT Security to collaborate to reduce vulnerability remediation time from days or weeks to hours or minutes.

HCL BigFix is a proven, powerful remedy for what ails many growing healthcare IT organizations. It is a single management platform that delivers visibility and control, continuous compliance, and consistent security policies across all endpoints.

By far, the biggest and fastest-changing concern we face in healthcare is the threat of ransomware attacks. Cyber- criminals and nation-states are distracting the industry and trying to pull us away from our core mission of caring for patients.

*~ SVP and CIO of a university medical system*



### Defense against ransomware

Ransomware attacks are growing in frequency, and unfortunately, costing organizations millions of dollars. Prevention should be a top priority because once attackers gain access to your endpoints it is too late. After that, quickly stopping the attack can mitigate the damage and financial exposure of ransomware.

Since 80% of attacks exploit well-known vulnerabilities, the best way to prevent an attack is by patching and updating software to the latest versions. Good patch and update hygiene is a core element in the security strategy of any organization. BigFix helps prevent an attack by:

- Keeping all systems patched with the latest security patches and software updates
- Eliminating configuration drift and enforcing configuration policy
- Ensuring that security software (e.g. Antivirus or EDR) is deployed to endpoints and the service is running
- Maintaining an accurate software inventory, identifying and removing unauthorized software that poses a security risk

During a security incident, BigFix provides visibility and control across all endpoints, helping IT to quickly identify, isolate, and remediate infected endpoints. Once the immediate threat is contained, BigFix can be leveraged to create, deploy, continually enforce a new security baseline to strengthen your defense against further attacks.

<sup>1</sup> <https://www.hipaaajournal.com/hipaa-patch-management-requirements>

<sup>2</sup> 2021 Cost of a Data Breach Report, Ponemon and IBM

## Speeding urgent care of endpoints during acquisitions and mergers

Acquisitions and mergers are increasingly common in the healthcare industry. Larger health systems are expanding their market share and diversifying their business in terms of geography and service lines, while smaller providers who have felt the impact of the pandemic are pursuing expansion to gain access to clinical, strategic and financial resources. Regardless of size, all healthcare providers are incented to build up capacity in an effort to meet increasing demand for healthcare services.

Healthcare IT organizations play an important role during mergers and acquisitions. First, they must perform an inventory of IT hardware and software assets which is key to confirming the valuation of those assets. Inventorying IT assets can be a manual and time consuming activity and is a key area where automation can be valuable during an acquisition.

Secondly, once assets are inventoried, IT is then responsible for merging endpoint infrastructures which can pose substantial security risk. The best practice involves bringing new endpoints into compliance before they are brought onto the network.

Additionally, once newly acquired, compliant endpoints are on the network, the IT organization must maintain *continuous* compliance. By minimizing or eliminating windows of vulnerability, organizations can maintain a security posture that is highly resistant to cyberattacks and regulatory non-compliance penalties.



BigFix can expedite IT's response to a merger or acquisition. The BigFix management platform enables IT to install an internet-facing relay within the DMZ of the acquired organization which provides visibility to all devices on the network. Once the relay is installed, the BigFix agent can be quickly deployed to desktops, laptops and servers providing immediate visibility to hardware and software inventory, patch and compliance status, server configurations, and the IP ranges in use. With this valuable information, IT staff can patch, deploy security and standard applications, update configuration settings, and migrate all domains.

With BigFix, the endpoints can be brought into compliance before being added to the network, thereby minimizing security risk. This orderly process ensures that the migration of new endpoints is fast, efficient and safe.

### Case Study: Hundreds of hours saved by a large healthcare company

A large, US healthcare company headquartered on the East coast is rapidly expanding. Besides owning more than 40 hospitals, the company has hundreds of healthcare locations including freestanding emergency departments and urgent care centers. It is actively acquiring additional hospitals and healthcare systems to strengthen the pipeline of medical professionals who serve rural and under-served urban areas, and to increase the number and diversity of healthcare professionals.



Using BigFix, the company can quickly assess the state of new endpoints and create a comprehensive plan to bring the endpoints into compliance before connecting their networks. BigFix has sped the process of acquisition and saved the company hundreds of hours of effort by automating endpoint assessment, patching, and compliance while greatly minimizing security risk of adding non-compliance endpoints to the network.

# Satisfying the unique needs of healthcare

With numerous critical issues facing healthcare IT, maintaining endpoints at healthcare organizations can be a daunting task. They can be charged with managing a wide variety of endpoints, improving the organization's security posture, maintaining compliance, and quickly responding to acquisitions and mergers. Healthcare IT must also address the following:



## Cost and efficiency

While the quality of patient healthcare is paramount, affordability is a priority in the face of spiraling healthcare demands and costs. Manual, labor-intensive IT processes both increase the cost and complexity and decrease the efficacy of endpoint management. The challenge is to maintain high quality IT service levels with limited, or perhaps shrinking, IT staff and budget. HCL BigFix offers integrated tools to automate endpoint management and streamline many operational tasks. By implementing BigFix, many healthcare organizations have consolidated endpoint tools, simplifying their IT infrastructure and staffing requirements while saving money and improving service delivery.



## Visibility

In a distributed healthcare environment, it's difficult to know what endpoints are on the network, what software is installed on each endpoint, how each is configured, if security software is running, and which endpoints need patches. The lack of visibility also makes it difficult to manage compliance, and it exposes the organization to technology and business risks, including the existence of unmanaged endpoints on the network and unauthorized software that could be a security risk. BigFix offers persistent discovery and visibility, ensuring that hardware and software inventories are accurate and complete. BigFix also provides an operational view of all endpoints for comprehensive visibility and control.



## Bandwidth variability

When healthcare networks stretch across a region, a country or the globe, infrastructures can struggle to keep up. Although larger healthcare facilities have high speed connections, many smaller or remote clinics and offices are connected via low-bandwidth, high-latency networks. As a result, endpoint management tasks such as software distribution can consume a high percentage of available bandwidth, slowing network performance and end-user productivity. With BigFix's automatic bandwidth throttling, software distributions occur without impacting end user productivity.



## Lifecycle management

Keeping endpoints patched and secure is a top priority in healthcare, but effective endpoint management also requires broader, lifecycle capabilities:

*BigFix Operating System Deployment* speeds the provisioning of new endpoints. It provides centralized control and automation to simplify bare-metal deployment of Windows and Linux images to new workstations, laptops and servers throughout the network, as well as OS migration and refresh for existing endpoints.

*BigFix Software Distribution* provides policy-based installation, closed-loop verification, a self-service portal and the ability to manage software distribution across operating systems from a single, unified point of control.

*BigFix Server Automation* manages physical, virtual and remote servers across heterogeneous platforms using either prebuilt or custom automation. Automated task sequencing capabilities can be used for critical tasks such as the patching of server clusters and the automated deprovisioning of endpoints.

*BigFix Remote Control* provides support and control for Windows, Linux and macOS desktops, laptops and servers from any location, on or off of the corporate network. It enables troubleshooting of attended or unattended systems, streamlining IT functions and reducing the workload on help desk staff.

BigFix supports lifecycle management, allowing Healthcare IT to manage and control endpoints, from provisioning to retirement.

## Why BigFix?

---

Today's healthcare organizations strive for operational excellence while facing a unique set of IT challenges. HCL BigFix can help by empowering IT organizations in healthcare to enhance endpoint compliance and security while saving valuable time and resources. By enabling improved endpoint visibility, new levels of automation, and centralized control from a single management platform, HCL BigFix provides a powerful, cost-effective and unified endpoint management solution, helping Healthcare IT to:

- Manage and control a wide variety of endpoints running Windows, UNIX, Linux, macOS, iOS and Android, regardless of location and connection. BigFix helps maintain healthy IT operations, providing visibility to all managed endpoints by leveraging a single management platform for servers, desktops, laptops, smartphones and tablets.
- Maintain regulatory and patch compliance as required by mandates and guidelines such as HIPPA, FDA 21 CFR Part 11, NIST 800-53, the EU Directive and GDPR which protect sensitive patient information. In doing so, BigFix can help healthcare IT meet regulatory compliance while avoiding compliance penalties and security incidents such as ransomware attacks which pose an even greater financial risk.
- Rapidly respond to acquisitions and mergers. BigFix can speed assessment of endpoint hardware, software, and configurations; report on non-compliant systems; and remediate non-standard and non-compliant endpoints. Once remediated, newly acquired endpoints may be brought onto the network without creating security risks.

HCL BigFix also understands that today's healthcare organizations must also contend with initiatives to drive down costs and improve operational efficiency; provide visibility to all managed endpoints and asset information; improve responsiveness, even over low-bandwidth network connections; and manage an endpoint through its lifecycle, including operating system provisioning, software distribution, server and task automation, and remote desktop control.

HCL BigFix is helping healthcare IT organizations bring efficiency and cost savings to their daily operations while benefiting from additional visibility and control. HCL BigFix is improving healthcare IT and empowering it toward a better and healthier future.

Find more, Do more, Fix more...with BigFix!

## For more information

---

To learn more about BigFix, please contact your HCL Software Sales Representative, HCL Business Partner, or visit [www.BigFix.com](http://www.BigFix.com).



### For more information

To learn more about BigFix, contact your HCL Software representative, HCL Business Partner, or visit [www.BigFix.com](http://www.BigFix.com).

### About HCL Software

HCL Software is a division of HCL Technologies (HCL) that operates its primary software business. It develops, markets, sells, and supports over 20 product families in the areas of DevOps, Automation, Digital Solutions, Data Management, and Mainframes. HCL Software has offices and labs around the world to serve thousands of customers. Its mission is to drive ultimate customer success with their IT investments through relentless innovation of its products. For more information, please visit [www.hclsoftware.com](http://www.hclsoftware.com).