

JUNOS PULSE: SECURING HEALTHCARE TODAY

Juniper's Integrated Approach to Secure
Network Access, Mobile Security, and Device
Management in Healthcare

Healthcare Solution Overview

Mobility is reshaping healthcare. Illegible handwriting and bulging paper files are being replaced with sleek tablets and sophisticated applications that put patients' medical histories, lab results, and scans at caregivers' fingertips, along with a plethora of medical databases and references. Specialists can use mobile video to diagnose and treat patients in faraway locations. Hospitals can equip patients with sensors, allowing them to be monitored continuously in the hospital and as part of after-care at home.

Today's mobile and connected culture is having a profound impact on healthcare. The network, particularly the mobile network, is an integral part of improving healthcare while holding the line on rising costs.

Challenges

While today's mobile, connected healthcare clearly has its benefits, it also has challenges and pitfalls.

Healthcare organizations must support users who are full- or part-time mobile and remote workers, including physicians in practices and clinics, nurses, home healthcare workers, and temporary employees. These caregivers—and their administrators—demand an increasingly mobile work environment. Enabling fast, secure network access for these users is vital to delivering quality patient care and administrative efficiencies.

Many of these same users—and healthcare providers as well—demand that personal smartphones, tablets, and other personal mobile devices be allowed access to the organization's network. And, if they are not receiving sanctioned enterprise network access, many users are sneaking their personal mobile devices onto the organization's network anyway.

Adding to the problems facing healthcare providers when mobile users go rogue, accessing the healthcare provider's network with unmanaged, unapproved personal mobile devices, is the number, resilience, and virulence of mobile malware threats, security exploits, and attacks. Mobile threats, exploits, and attacks are growing at a magnitude even larger and faster than what was previously experienced with desktop and portable computing devices. Combine all of these factors, and the IT department is often quite simply overwhelmed.

Trends

While healthcare providers struggle to deliver secure, mobile remote network access based on authentication, authorization, and user identity, consumers—you, me, doctors, patients, and everyone else who's a part of today's mobile connected world—use mobile devices for just about everything. Mobile devices span across notebooks and netbooks to tablet devices and smartphones. We increasingly store sensitive, private data and information on these devices such as medical information, bank account numbers, credit card numbers, and social security numbers. This makes smartphones, tablets, and other mobile devices a gold mine for identity thieves and hackers. It also makes these mobile devices dangerous if lost. Imagine your vital financial, personal, or business data—even the results of your latest medical test—falling into the wrong hands.

Juniper Networks Solution Portfolio for Healthcare

Juniper Networks® Junos® Pulse addresses these mobility challenges, delivering connectivity, security, and management for mobile devices at scale. Junos Pulse enables healthcare providers to secure network access and corporate-issued or personal mobile devices for physicians, administrators, patients, and visitors. Junos Pulse provides healthcare organizations with a complete, end-to-end secure mobility offering. It delivers secure, mobile remote network access, reinforced by strong mobile security against malware, viruses, loss or theft, and other exploits, and it provides robust mobile device management (MDM).

Secure Access and Connectivity

Healthcare providers are challenged to deliver secure, mobile remote network access, while limiting resource access based on authentication, authorization, and user identity.

Junos Pulse, through the Junos Pulse Secure Access Service in conjunction with the Juniper Networks MAG Series Junos Pulse Gateways, leverages Juniper's industry-leading SSL VPN technology to provide simple, secure, authenticated access to healthcare providers' networks and resources from any supported smartphone, tablet, or mobile device. The Junos Pulse client, downloadable free of charge from most major mobile application stores and markets, serves as a simple, integrated user interface for the Pulse Secure Access Service, which with the MAG Series protects healthcare institutions and their sensitive data by securely enabling granular, role-based mobile remote network and application access over a broad range of smartphones, tablets, and other mobile devices.

Junos Pulse, working in conjunction with the MAG Series gateways and Secure Access Service, delivers a broad range of purpose-driven remote network and application access methods, including browser-based application access, secure e-mail and calendaring via secure ActiveSync proxy, as well as a complete Layer 3 VPN tunnel. Junos Pulse, MAG Series gateways, and Secure Access Service provide mobile remote users and their transmitted information with unparalleled "data in transit" security.

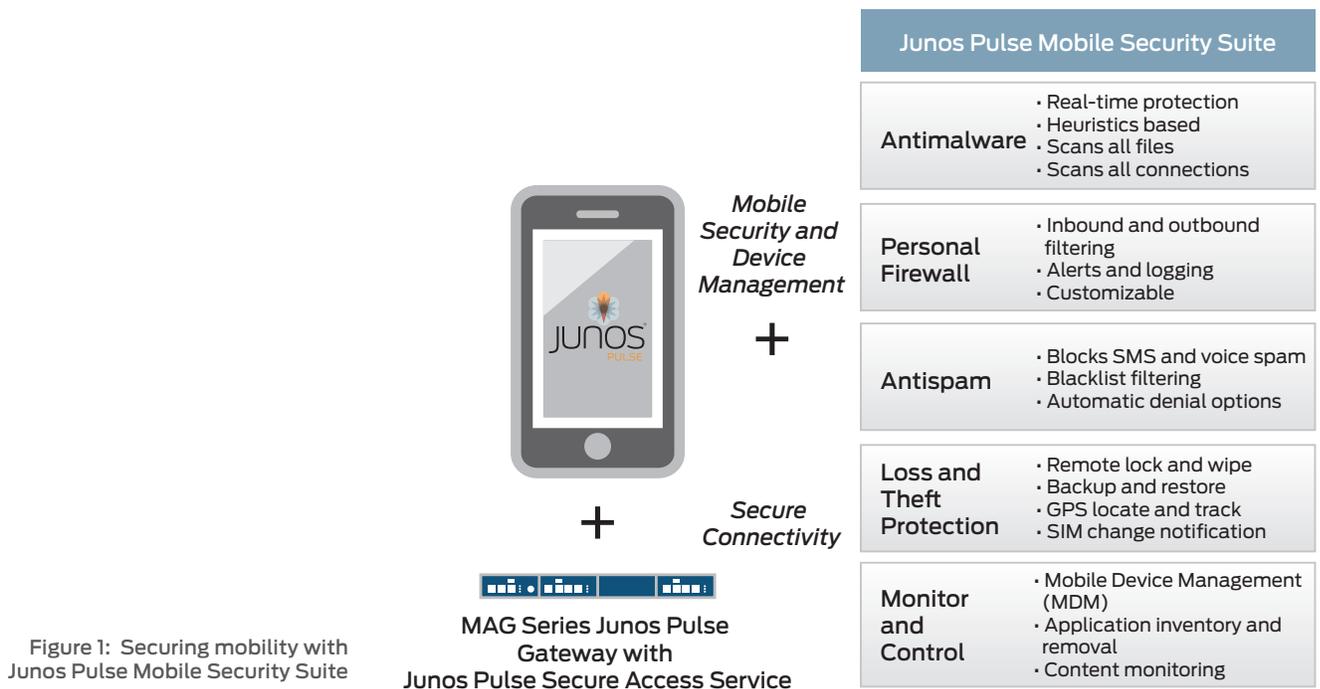


Figure 1: Securing mobility with Junos Pulse Mobile Security Suite

Junos Pulse enforces a simple, consistent level of authentication and access control to smartphones, tablets, and mobile devices, as well as notebooks or netbooks. It also supports multifactor authentication, including the use of soft and hard tokens. And Junos Pulse—in conjunction with the MAG Series gateways and Secure Access Service—provides detailed audit logs, perfect for use in regulatory compliance audits.

Comprehensive Mobile Security and Device Management

As clinicians and administrative staff continue to demand mobile remote access to their vital networks and applications from their personal smartphones, tablets, and other mobile devices, healthcare providers face a complex security problem: A personal mobile device left unprotected or unchecked can lead to the loss, theft, and compromise of valuable, confidential data—both institutional and personal.

Junos Pulse and the Junos Pulse Mobile Security Suite deliver a comprehensive mobile security, management, and control solution that protects smartphones, tablets, and other mobile devices from viruses, malware, spam, loss, theft, physical compromise, and other looming threats. Mobile Security Suite delivers zero-day malware protection through its powerful, heuristics-based antimalware services. It also delivers mobile device configuration and management, as well as monitoring and control services that are purpose-built to secure and manage mobility.

Junos Pulse—via the Junos Pulse Mobile Security Suite—can track and locate a lost or stolen mobile device, back up data from that device, and wipe and lock the device, all remotely. It can sound an alarm on a mobile device, send an alert when its SIM card has been removed, swapped, or replaced, and continue to track the device even when the SIM card has been removed.

Pulse Mobile Security Suite includes support for mobile device configuration and management capabilities¹ for Apple iOS, helping healthcare organizations manage and secure Apple iPhones, iPads, and iPod touch devices connecting to their network. For Apple iOS devices, Mobile Security Suite can enforce and set passcode policies, provision and remove Microsoft Exchange profiles (which also removes corporate-synched e-mail, contacts, and calendar events), provision VPN and Wi-Fi settings, perform remote locate and track² as well as remote lock and wipe of a lost or stolen mobile device, and inventory and restrict applications.

Pulse Mobile Security Suite eases a healthcare provider's mobile device management burden, extends the organization's security policies—even addressing and securing "Bring Your Own Device" (B.Y.O.D.) to work. It simplifies and protects the "consumerization of IT," and it ensures that sensitive information cannot be exploited on a lost or stolen mobile device.

Junos Pulse Mobile Security Suite allows apps on Google Android devices to be automatically removed from a user's Android mobile device without user interaction, with the proper permissions and access rights. It also allows an administrator to automatically remove malware if detected on an Android device, once again without user interaction.³

¹ Please note: Apple iOS mobile device configuration and management functionality in Junos Pulse Mobile Security Suite is only available to customers who have applied to and are members of the Apple iOS Enterprise Developer Program. For more information on the Apple iOS Enterprise Developer Program, please go to <http://developer.apple.com/programs/ios/enterprise/>.

² Please note: Supports Apple iPhones and 3G-enabled Apple iPads only. Apple iPod touch devices and Wi-Fi only Apple iPads do not allow GPS location data to be accessed and collected.

³ Please refer to the Junos Pulse supported platforms document for further details about supported Android devices

Mobile Security Suite is flexible, securing and managing personal mobile devices through a zero touch deployment model. As a cloud-based SaaS offering, Mobile Security Suite speeds and simplifies deployment and user rollout, expedites the mitigation of risk of infection, exploitation, or infiltration from insecure mobile devices accessing the corporate network, and decreases overall security (and specifically, mobile security) costs. Junos Pulse Mobile Security Suite is highly scalable, and it enables healthcare providers to add or take advantage of new mobile security features and capabilities quickly and remotely.

The SaaS deployment of the Junos Pulse Mobile Security Suite allows healthcare IT administrators to manage mobile security and remote management policies by logging into a web-based console using any SSL-enabled Web browser. The management console is hosted in a secure data center, with secure access enabled anytime for IT administrators to manage policies. With the management console in the SaaS deployment hosted in a secure data center, it is able to deliver protected access to administrators so that they can manage policies at any time, from virtually anywhere.

Junos Pulse Mobile Security Suite includes the Mobile Security Gateway, a hosted, web-based administrative management console from which Mobile Security Suite features and services are provisioned, managed, and maintained by healthcare organizations.

Summary—Trusted Security from Juniper for Today's Healthcare

Junos Pulse powerfully yet simply centralizes mobile security, device and configuration management, and secure network access services. It delivers secure mobile remote access while ensuring the integrity and secure use of managed and unmanaged, corporate-issued and personal smartphones, tablets, and mobile devices. Junos Pulse—integrating the MAG Series Junos Pulse Gateways, Junos Pulse Secure Access Service, and Junos Pulse Mobile Security Suite—delivers a robust, secure mobility solution supporting most major mobile devices and operating systems with an unparalleled depth and breadth of mobile access, security, management, and control services.

Junos Pulse can secure the critical aspects of mobility for healthcare—protecting your organization, your patients' confidential information, and your personal data. It's secure, fast, simple, and transparent, and it's always on and always connected—just the way medicine is practiced today.

About Juniper Networks

Juniper Networks is in the business of network innovation. From devices to data centers, from consumers to cloud providers, Juniper Networks delivers the software, silicon and systems that transform the experience and economics of networking. The company serves customers and partners worldwide. Additional information can be found at www.juniper.net.

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