

# JUNOS PULSE: MOBILITY REDEFINED

## Juniper’s Standards-Based, Intelligent Integrated Network Client

### Challenge

User mobility and portable devices demanding anytime/anywhere access, increasing numbers of non-employee network users, and the exploding number of malware threats and security breaches, all coupled with budget cuts mean a plethora of business network challenges to be addressed.

### Solution

Junos Pulse is a single client that integrates intelligent, dynamic access control—both remote access via Juniper Networks SA Series SSL VPN Appliances and LAN access via Juniper Networks Unified Access Control (UAC)—with WAN acceleration to deliver a comprehensive, location-aware, identity-enabled, easy-to-use client for all network and application access, security, and acceleration needs.

### Benefits

- Single software client integrating remote access, network access control, and WAN acceleration
- Simple, intuitive, consistent user experience
- Location-aware intelligence, providing *anytime/anywhere* optimized application access
- Identity-aware security, access, and acceleration
- Standards-based and future-proof client

### Simple, Anytime/Anywhere Unified Accessibility

The meteoric rise in the number of mobile users and portable devices necessitating fast, secure network access to be productive from around the world, around-the-clock has unleashed a myriad of issues that need immediate resolution. With large and growing numbers of constantly mobile workers traveling from one location to another while demanding consistent network and application access from any device or location, it is critical for businesses to ensure that user productivity is maximized by making secure network connectivity and authorized access as seamless and transparent as possible with a minimum of user interaction.

To address the need for fast, pervasive yet secure anytime/anywhere access, many worldwide companies and organizations are deploying SSL VPN remote access, network access control (NAC), network acceleration, and endpoint security solutions to secure, protect, and accelerate user access to corporate resources. Whether these solutions come from a single vendor or from multiple vendors, businesses are challenged by the need to deploy, configure, and maintain separate software clients for each product. This challenge negatively impacts both the IT department and the end user. The IT department must deal with increased corporate costs associated with managing additional software agents, including deployment, administration, and end user support. A user’s lack of savvy might lead to network connectivity problems or other related issues—all of which can mean another expensive help desk call, possibly an office visit, maybe even a truck roll. Deploying a disparate, loosely integrated conglomerate of products is sure to increase a company’s support costs relating to the mitigation of end user concerns and errors.

### The Challenge

Paramount to the success of today’s enterprises and service providers is the ability for authenticated, authorized users to seamlessly access all necessary applications—from any device, anywhere, and at any time—to maximize user productivity. Enabling even basic connectivity across all desired platforms can be a huge challenge. Enabling secure connectivity with an easy end user experience can be even more challenging. Plus, as the number of breaches and network threats grows exponentially, businesses must make sure that a mobile user’s device is secure before being connected to the network.

From their corporate-issued laptops to their personal smartphones, ubiquitous data access has become a requirement for today’s worldwide, follow-the-sun, 24x7 workforce. Today’s workers don’t have the time or patience to deal with installing different software agents or to figure out highly technical network and security jargon. These workers just want to access their data, *now*. The challenge for IT staff is to seamlessly enable network connectivity for

users from any device, at any time, from virtually anywhere, while minimizing end user interaction with complex technologies. As four, five, or more endpoint security and connectivity clients are added to each end user device, the potential for problems—such as connection conflicts—increases exponentially.

At the same time, today's businesses require clear visibility into network access, along with granular role-based access control. Identity-enabling network access helps businesses tackle these issues while addressing regulatory compliance requirements and audits. But with so many users—both employees and non-employees—accessing corporate networks from so many different devices, this challenge can be daunting.

While these issues are important and must be addressed, the need for businesses to retain product choice and flexibility today and in the future—while leveraging existing deployments to limit costs, decrease operating expenditures, and increase usability—remains critical. Answering these issues and challenges is strategic to the success and continued viability of the network, which means it's tantamount to the success or failure of today's businesses.

## Junos Pulse

Juniper Networks® Junos Pulse is a dynamic, standards-based, integrated multi-service network client. A core component of Juniper Networks Junos® software platform, Pulse redefines the mobility experience—delivering integrated connectivity, acceleration, and security anytime/anywhere while drastically simplifying the end user experience. With Pulse, end users no longer need to interact with network connectivity and security software. Users simply supply their credentials, and Pulse takes care of the rest. The IT staff is also able to reduce the number of software agents required and installed down to one, minimizing software conflicts and reducing deployment costs.

End users are not experts in network security technologies, yet many of today's mobility deployments force them to know more than they should ever need or want to know about network security just to access the network. Junos Pulse removes that complexity with an interface designed to minimize end user interaction. From any location and device, end users simply provide their credentials and Pulse takes over, serving as a gateway for user authentication, endpoint services, and

comprehensive integrity checks. Junos Pulse's marriage of many underlying industry leading technologies with its simple and elegant user interface redefines the mobile experience for your end users.

For example, Junos Pulse automatically launches a remote access or a local access session depending on a users' location. When users attempt to access the network remotely, Pulse automatically detects that they are attempting remote access and prompts users for their credentials to authenticate them to the appropriate Juniper Networks SA Series SSL VPN Appliances. When these same users move to a corporate location and to a direct, local network connection, their remote access session is transparently handed off from the SA Series appliances to the Juniper Networks IC Series Unified Access Control Appliances automatically, without any end user interaction required. If additional software, add-ons, or other capabilities are required for a new connection, Pulse automatically downloads and installs those components without any end user or administrator interaction.

Simplifying the end user experience and limiting human interaction also benefits the IT department, saving valuable help desk time and expense. Junos Pulse integrates several previously disparate applications into one, comprehensive, multi-service client—simplifying maintenance, administration, and deployment of network clients. Businesses no longer have to deal with separately managed and administered agents.

Junos Pulse is the unified end user interface to a number of market-leading, industry-proven Juniper Networks security, access, and acceleration appliances and platforms. Pulse provides remote access and connectivity to enterprise and service provider networks in conjunction with SA Series SSL VPN Appliances. It also integrates WAN acceleration features provided by Juniper Networks WXC Series Application Acceleration Platforms. Pulse also delivers secure, identity-enabled access control for LANs and network applications by working with Juniper Networks Unified Access Control (UAC). In addition, Pulse is a platform that integrates an increasing number of select third-party endpoint security applications—including anti-spyware and anti-malware provided by Webroot Software—fostering a network security, access, and application ecosystem.

## Features and Benefits

FEATURES	BENEFITS
Single, integrated client for remote access, WAN acceleration, and NAC	Saves training and support costs, and eliminates the expense of deploying, configuring, and maintaining separate clients.
Intelligent, location-aware network access and acceleration	Delivers fast, secure, anytime/anywhere network access automatically, seamlessly migrating from one type of access to another depending on the user's location, without user intervention.
Identity-enabled network security, access control, and acceleration	Increases the visibility and manageability of network security and access, and accelerates access to network resources based on user identity, role, and location.
Comprehensive endpoint security	Checks endpoint devices for antispymware and antimalware, and ensures that user devices adhere to defined corporate security policies before, during, and after network connection.
Standards-based (IEEE, Trusted Computing Group (TCG))	Saves deployment cost and time, and future-proofs network investments by leveraging new and existing network infrastructure and deployed endpoint software through open standards such as Trusted Network Connect (TNC) specifications like IF-MAP.
Consistent, simple user experience	Intelligent, dynamic integrated multiservice client increases user productivity by automating and simplifying authorized access to network resources and limiting user interaction.
Third-party integration	Delivers a platform for integration of select third-party, best-in-class network and endpoint security applications.

## Solution Components

Junos Pulse delivers:

**Intelligence**—Anytime, anywhere access while automatically enabling the appropriate technologies and connectivity options without requiring involvement from the end user.

**Consistency**—The simple, elegant Pulse user interface focuses on providing only necessary information, simplifying the end user experience.

**Simplicity**—Pulse is easy to deploy and maintain as administrators can package and dynamically deploy a single client with all necessary access, security, and acceleration components without having to deploy and maintain multiple, potentially conflicting clients.

Junos Pulse integrates the clients for several industry-proven products into one, intelligent, comprehensive client:

**Secure, Remote Access**—Pulse provides authorized remote users with network access by interfacing to the market-leading SA Series SSL VPN Appliances, delivering secure access over SSL for remote users to networked resources and applications.

**Enterprise Access Control**—Pulse delivers NAC across the enterprise by integrating with Unified Access Control, Juniper's standards-based, comprehensive network and application access control solution providing identity-based, location-aware granular access controls and robust endpoint security and integrity checks.

**WAN Acceleration for Application Access**—Pulse offers identity-enabled, optimized, and accelerated access interfacing with WXC Series appliances to deliver vital application acceleration. By deploying the WXC Series alongside SA Series SSL VPN Appliances, enterprises can provide accelerated remote access via SSL VPN to their users.

**Platform for Third-Party Integrations**—Pulse can serve as a platform for integration of select third-party, best-in-class network and endpoint security applications—building a network access, security, and acceleration client ecosystem.

### Summary—One Intelligent, Integrated Network Access and Acceleration Client

Junos Pulse, part of the Junos software platform, is Juniper's consolidated presence on the user's endpoint.

Standards-based Pulse identity-enables security, network, and application access—and WAN acceleration—while delivering comprehensive, on-demand endpoint security. Its location-aware intelligence removes the need for user intervention or configuration. Pulse detects where the user is and adjusts its connections as necessary—enabling intelligent, secure, authorized, and accelerated *anytime/anywhere* connectivity. Pulse automatically and seamlessly migrates user sessions from one type of access to another based on the user's location, without user intervention. It delivers control over who is allowed on the network where they are allowed on the network, and provides greater visibility into what users and their devices are doing while they are on the network.

Junos Pulse is the one integrated network access, security, and acceleration client today's businesses need.

### Next Steps

For more information on Junos Pulse and the other components that comprise the Junos software platform, please contact your Juniper Networks representative.

## About Juniper Networks

Juniper Networks, Inc. is the leader in high-performance networking. Juniper offers a high-performance network infrastructure that creates a responsive and trusted environment for accelerating the deployment of services and applications over a single network. This fuels high-performance businesses. Additional information can be found at [www.juniper.net](http://www.juniper.net).

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