

ENTERPRISE@HOME

Keeping remote workforces secure wherever they are

Challenges

Organizations need to keep remote users connected and productive while ensuring business continuity and security. Endpoint protection and a simple VPN back to headquarters is not enough; what's needed is a comprehensive, connected security strategy.

Solution

By combining Mist Wi-Fi and Mist Edge with Juniper Connected Security, organizations can extend the AI-driven Enterprise into employees' homes. Using zero-touch provisioning, Juniper security hardware and Mist Wi-Fi access points can be deployed remotely without requiring a technician's visit.

Benefits

- Gain AI-driven insights into remote user experiences
- Simplify deployments with zero-touch provisioning
- Eliminate overlay VPN technologies while extending the enterprise network into employee homes
- Monitor business Wi-Fi to secure corporate traffic
- Increase security and segment business traffic
- Keep threats in check with advanced security services
- Cultivate a dynamic, flexible, adaptable network

The era in which everyone reported to the office, where all organizational data access occurred strictly within the walls of buildings controlled by that same organization is changing. Working from home has not only proven possible, but accessible at a scale previously considered unmanageable. Now, the real challenge is securing the remote workforce.

Most organizations require basic information security, such as deep network visibility and enforcement, at all points of connection on the network. The work-from-home trend complicates this model by placing employees outside of the traditional on-premises, organizationally secured access network, changing the way we interact across our networks. Organizations of all sizes need the tools required to securely adapt to this changing landscape.

The Challenge

Organizations around the globe have experienced a sudden and significant increase in remote staff, overloading traditionally configured VPNs. While routing all endpoint traffic through an organization's core network infrastructure simplifies security by centralizing and concentrating defenses, it also increases traffic volume, potentially slowing access to resources and negatively impacting the remote user experience.

In today's environment, there is a real need for organizations to provide fast, reliable connections, ensure data is secure, and scale dynamically to meet escalating business demands.

The Juniper Networks Enterprise@Home Solution

By combining Mist Wi-Fi and Mist Edge with Juniper® Connected Security, organizations can extend the AI-driven Enterprise into employee homes to provide the necessary level of protection. With the Juniper Networks® Enterprise@Home solution, organizations can deploy Juniper security hardware and Mist Wi-Fi access points using zero-touch provisioning (ZTP) to roll out managed networking equipment without requiring a visit from a technician. Juniper's cloud-based management solution provides the scalability to meet the needs of even the largest deployments.

Features and Benefits

- **Gain AI-driven insights into the user experience at home and in remote offices.** With Mist, IT teams can proactively troubleshoot and resolve issues from anywhere, using the Marvis Virtual Assistant, proactive anomaly detection, and Dynamic Packet Capture.
- **Simplify deployments with zero-touch provisioning.** With ZTP, there's no need for a technician to go onsite to install and configure the equipment. The user simply plugs in the Mist access point and the Juniper Networks SRX Series Services Gateways firewall, and they come to life—even in a home. The IT department gains immediate insight into the user experience and, in most cases, will be able to identify and resolve any problems autonomously, managed in the cloud.
- **Eliminate overlay VPN technologies while extending the enterprise network into employees' homes.** With Mist Edge, organizations can securely extend their organizational service set identifier (SSID) and authentication services to remote offices, wherever they are. By installing an access point and enabling Mist Edge, organizations can extend their network to any user's remote location or home.
- **Easily monitor business Wi-Fi and keep corporate traffic safe.** Using Mist Wi-Fi with Mist Edge is an add-on to a user's existing home setup, effectively separating home use and business traffic. From a security standpoint, this walls off traffic between the business and other users in the home. If another member of the household accidentally downloads a lateral threat via phishing, the business remains safe.
- **Increase security and segment business traffic, ensuring a quality business user experience with Juniper Connected Security.** In addition to Wi-Fi and a superior user experience, Juniper Connected Security provides powerful tools that organizations can use to extend into an employee's home network. SRX Series Services Gateways bring compact and robust firewalls to enable secure SD-WAN, Juniper Advanced Threat Prevention, and cloud-based orchestration, supporting any deployment needs. Juniper enables organizations to segment their employees' home networks, completely separating organizationally provided equipment from any personal devices on the home network.

In some cases, an enterprise may require additional hardware on site due to compliance issues or the financial impact of downtime. Juniper provides best-in-class security with the SRX Series firewalls that can connect to traditional broadband or terrestrial links for primary or backup traffic. Optionally, the SRX Series firewalls can include Power over Ethernet (PoE) to power devices such as phones or access points.

Juniper can provide the tools needed to support these efforts, saving time and money—all while increasing network reliability and security beyond what is available in traditional Wi-Fi solutions typically found at home.

- **Keep threats in check with advanced security services.** Now more than ever, security devices need to keep pace with the increased network load. Juniper's full suite of advanced threat capabilities, like next-generation firewall (NGFW) services and intrusion prevention system (IPS), helps maintain a safe and secure end-user experience by allowing security policies to scale at the rate of demand, minimizing network risk. Using SRX Series firewalls, IT teams can install additional security on premises to protect the network against threats. These advanced security services can safeguard business traffic while separating business and personal traffic for privacy purposes.
- In some situations, an enterprise may need to have hardwired hardware or use proprietary protocols that require tunneling to function. The robust routing platform available with the SRX Series makes this possible.
- **Cultivate a dynamic and flexible network that can adapt as needs change.** Adding powerful solutions like SD-WAN and LTE backup is a great way to be prepared to scale quickly and easily, without having to rip and replace existing infrastructure. Juniper can help organizations adapt to changing traffic patterns, ensuring they have always-on connectivity and prioritization for business traffic. All of this can be provisioned with ZTP and is managed in the cloud.

By combining the insights-driven expertise of Mist with the security and traffic engineering of the SRX Series firewalls, employee productivity and security are enhanced.

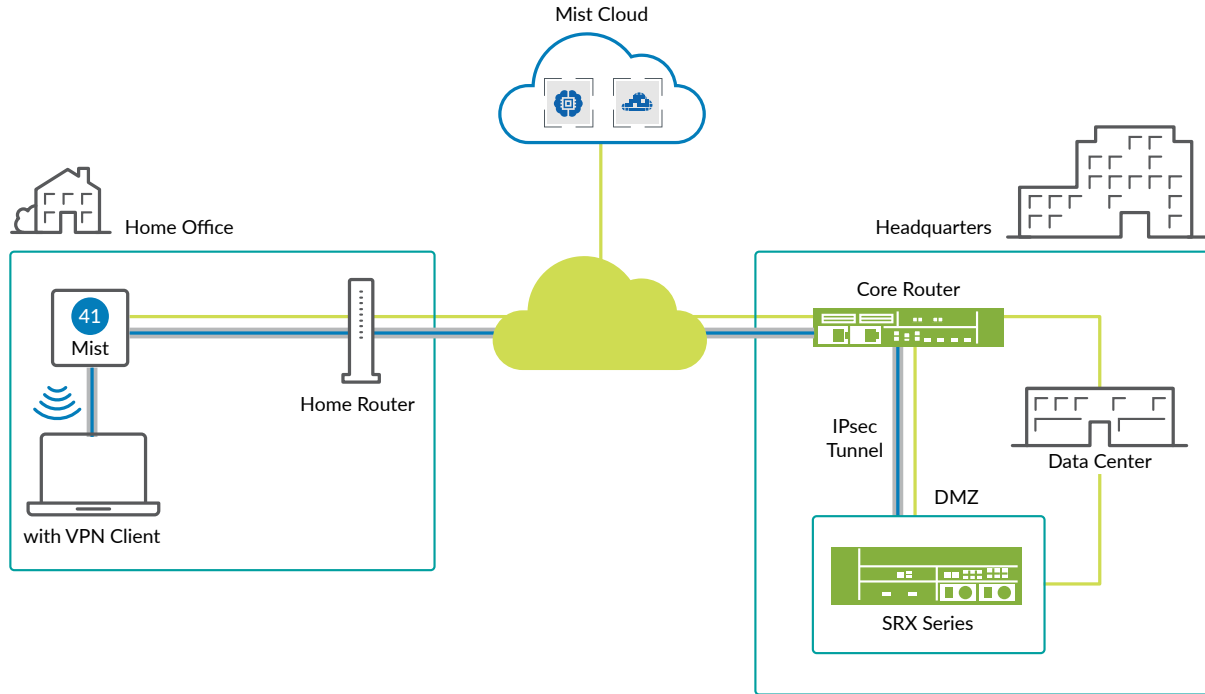


Figure 1: Mist Wi-Fi for Remote Workers solution

Solution Components

Mist Wi-Fi for Remote Workers

Deploying a Mist Wi-Fi access point in a remote office or an employee's home helps organizations leverage AI-driven insights to boost productivity. With Mist's Marvis AI engine, user experience and network issues and anomalies can be proactively identified, with root causes determined and resolved, either automatically or with user-driven actions. This increases network efficiency and allows IT teams to remotely troubleshoot home networks with ease.

Mist empowers organizations to secure their distributed access network, including employees working from home. By scaling with the agility of a microservices cloud, Mist Wi-Fi ensures that even the largest work-from-home deployments can be managed efficiently.

The following table includes an example of the hardware and software specifications for the Mist Wi-Fi for Remote Workers solution.

Product Code	Solution Description
APBRU	Premium performance gigabit Wi-Fi Wave 2 access point (4x4:4) with adaptive Bluetooth low energy array for advanced location-based services and built-in internal antenna—US deployments only.
	Universal AP bracket for T-rail and drywall mounting for indoor access points (included inside the box).

Extending the Enterprise with Mist Edge

The Mist Edge microservices platform helps eliminate costly and complex overlay VPN technologies while extending the enterprise network into employees' homes. Deployed in conjunction with Mist Wi-Fi access points, Mist Edge helps organizations securely extend their wireless and authentication services to remote locations anywhere in the world.

Managing the employee edge allows organizations to maximize traffic security while ensuring the best possible quality of experience (QoE) for the employee. Mist Edge can apply traffic shaping to ensure that traffic is treated rationally, allowing for business continuity while maintaining privacy.

The following table includes an example of the hardware and software specifications for the Extending the Enterprise with Mist Edge solution.

Product Code	Solution Description
AP41-US	Premium performance gigabit Wi-Fi Wave 2 access point (4x4:4) with adaptive Bluetooth low energy array for advanced location-based services and built-in internal antenna—US deployments only.
APBRU	Universal AP bracket for T-rail and drywall mounting for indoor access points (included inside the box).
SUB-ME-1S-1Y	Mist Edge Subscription for one year for one access point (data tunneling service).

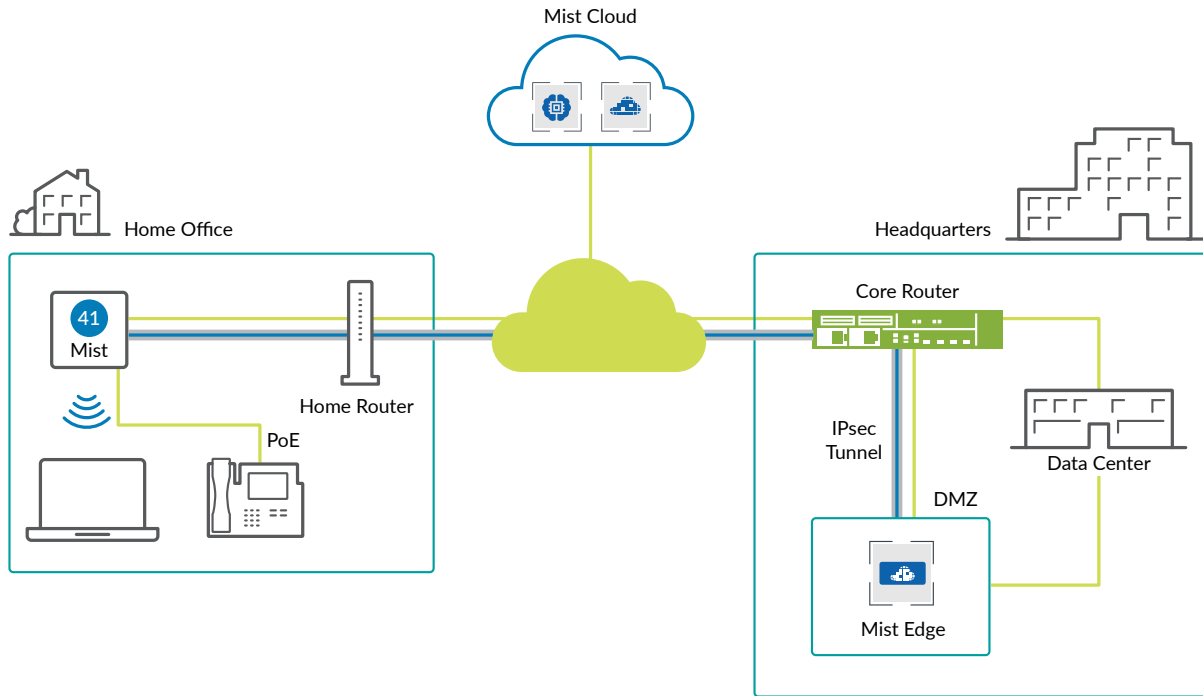


Figure 2: Extending the Enterprise with Mist Edge solution

Juniper Connected Security with Mist

Juniper Connected Security with Mist helps to easily monitor business Wi-Fi and keep corporate traffic safe, ensuring a quality experience by separating personal and business data. In addition to delivering reliable Wi-Fi user experiences with Mist access points, Juniper Connected Security brings powerful tools that can be extended into an employee's home network. The compact and robust SRX Series firewalls enable secure SD-WAN, Juniper Advanced Threat Prevention, cloud-based orchestration, and even LTE backup to support any deployment needs. Optionally, Mist Edge can be added to extend organizational SSID and authentication services to remote locations.

Juniper enables organizations to segment their employees' home network, completely separating organizationally provided equipment from personal devices. At the same time, the organization can provide QoE by applying traffic shaping to ensure that traffic is treated rationally, allowing for business continuity while maintaining privacy.

The following table includes an example of the hardware and software specifications for the Juniper Connected Security with Mist solution.

Product Code	Solution Description
AP41-US	Premium performance gigabit Wi-Fi Wave 2 access point (4x4:4) with adaptive Bluetooth low energy array for advanced location-based services and built-in internal antenna—US deployments only.
APBRU	Universal AP bracket for T-rail and drywall mounting for indoor access points (included inside the box).
SRX340-SYS-JB	SRX340 Services Gateway includes hardware (16GbE, 4x MPIM slots, 4 GB RAM, 8 GB Flash, power supply, cable and RMK), and Junos® operating system software base (firewall, NAT, IPsec, routing, MPLS, and switching).

Juniper can support any deployment needs, ensuring business continuity while maintaining security and privacy. At Juniper Networks, we help our customers maintain a safe and secure end-user experience now and for the future.

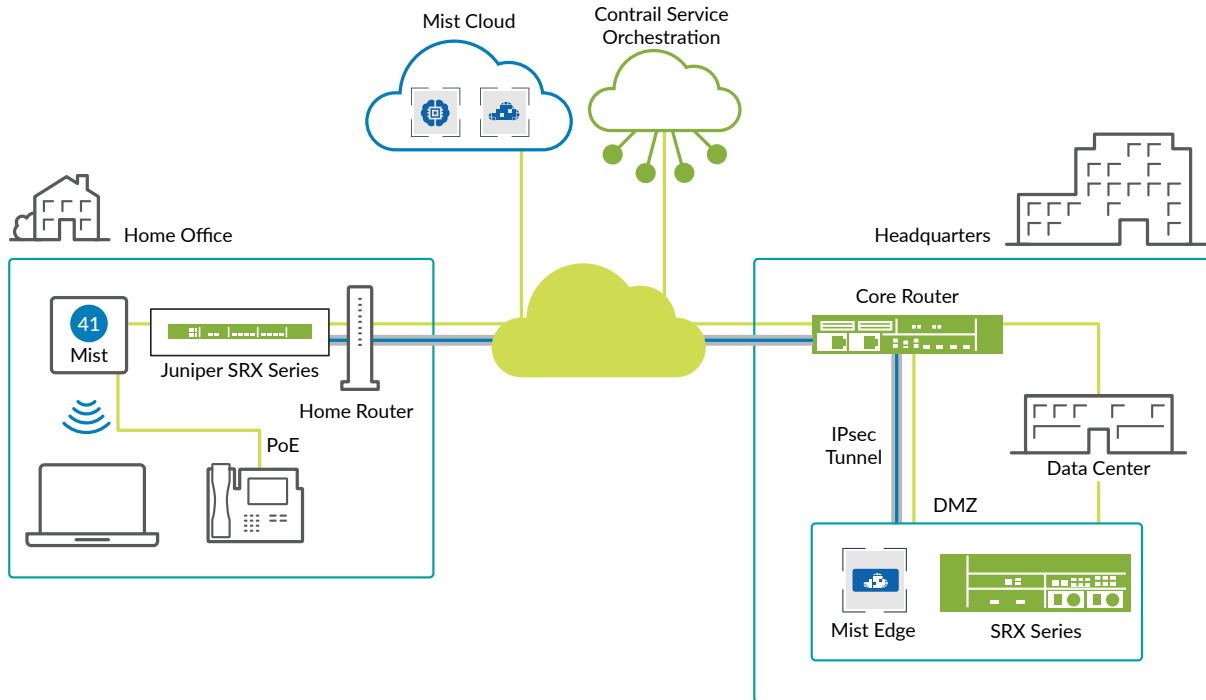


Figure 3: Juniper Connected Security with Mist

Summary—Keeping the Remote Workforce Secure, Wherever They Are

Juniper is ready to help organizations gain insight into their remote user experience and employ automation to enhance and secure that experience. With Mist, Juniper Connected Security, SRX Series firewalls, and Juniper Advanced Threat Prevention, Juniper offers the tools needed to support the remote workforce, wherever they are. These powerful solutions help organizations save time and money while increasing network reliability and security beyond what is available with traditional Wi-Fi solutions found in a typical home environment.

Next Steps

Contact your Juniper Networks representative for more information.

About Juniper Networks

Juniper Networks brings simplicity to networking with products, solutions and services that connect the world. Through engineering innovation, we remove the constraints and complexities of networking in the cloud era to solve the toughest challenges our customers and partners face daily. At Juniper Networks, we believe that the network is a resource for sharing knowledge and human advancement that changes the world. We are committed to imagining groundbreaking ways to deliver automated, scalable and secure networks to move at the speed of business.

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