

SECURING JUNIPER NETWORKS VPN SOLUTIONS

RSA Two-Factor Authentication Secures Access to Network Resources

Challenge

An increase in remote access needs is driving corporations to find an easy-to-manage, secure solution to provide access to sensitive corporate assets.

Solution

Juniper Networks and RSA, the Security Division of EMC, provide a compelling security solution that incorporates SSL or IPsec VPN solutions with strong, two-factor authentication that is flexible, scalable and simple to administer.

Benefits

The combination of RSA and Juniper Networks security technologies provides businesses with secure access solutions that are easy to administer for mobile employees and business partners.

As businesses continually search for ways to boost worker productivity, more often than not they look to provide or expand the ability to work remotely. Providing remote network access creates flexible work environments that not only enable extended hours of work, but also attract and retain employees who appreciate the flexibility that teleworking provides. However, providing remote access needs to be coupled with a strong security policy to prevent unauthorized access to the corporate network and its resources. Strong two-factor authentication establishes trusted identities for securing access to enterprise networks.

The Challenge

Businesses are experiencing an increasing need to provide telecommuters, mobile employees, small branch locations, business partners and customers with easy and cost-effective remote or site-to-site access to corporate applications and resources. The security challenge is commensurate with the growth and variety of external audiences. True network security requires a bulletproof access method and controls established to manage the identity of the individual who is accessing network resources. In addition to encryption, a key component of a secure remote or site-to-site access solution is end-user authentication. Furthermore, many security experts regard passwords as inadequate to prove the user's identity and recommend two-factor or strong authentication to ensure that only authorized users are granted access to an enterprise's most valuable resource—information.

The Juniper Networks RSA Two-Factor Authentication Solution

Juniper Networks® VPN solutions, in conjunction with RSA SecurID® strong authentication, provide secure remote and site-to-site access to corporate assets. The Juniper Networks SA Series SSL VPN Appliances do not require changes to the servers or client-side hardware and software, and virtually eliminate the need for ongoing support. Users access the appliance via an SSL connection, included in all standard Web browsers, for easy access to enterprise resources and applications. The SA Series intermediates the client request, performs two-factor authentication against



The Security Division of EMC

the RSA Authentication Manager Software, and provides further authorization and access control functions. The SA Series includes dynamic access privilege management features that take into account a variety of attributes to ensure that each user's session adheres to security policies, whether they are mobile employees accessing the LAN from a managed PC or a business partner accessing an extranet from an untrusted network. Additional fine-grained authorization and access control functions are enhanced through a certified and supported integration with the RSA Access Manager Solution.

To establish secure site-to-site communications, Juniper Networks ICSA-certified IPsec VPNs provide cost-effective and resilient connectivity. Juniper Networks dynamic route-based IPsec VPNs create highly available networks that survive connection failures by automatically finding alternate routes, while accommodating for changes in the network.

Features and Benefits

Integrated Solution

Juniper Networks and RSA provide a compelling security solution that is flexible, simple to administer and very robust.

Proven and Reliable

RSA's strong, two-factor authentication solution has been embraced by thousands of companies and is used by millions of users worldwide. The SA Series SSL VPN Appliances are best-in-class VPN solutions.

Enterprise Scalability

The SA Series and RSA SecurID solution scales to meet any enterprise need.

Lower Total Cost of Ownership

The Juniper Networks and RSA solution dramatically lowers the cost of ownership for remote and site-to-site access. No client hardware is needed, no changes are required to servers and ongoing maintenance is virtually eliminated. The convenience of using RSA SecurID and the SA Series SSL VPN Appliance or site-to-site IPsec VPN ensures that the solution will be used properly.

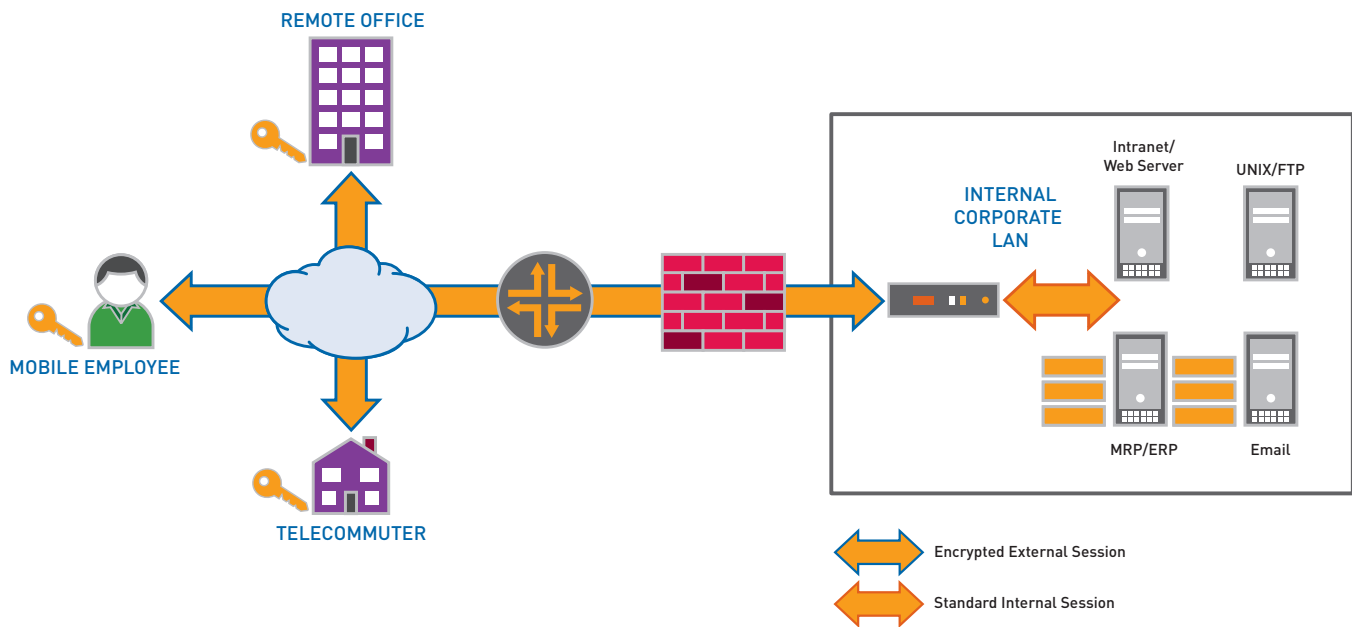


Figure 1: Secure Remote Access via Juniper Networks SA Series and RSA Strong Two-Factor Authentication

Solution Components

The RSA SecurID solution comprises three components: RSA Authentication Manager Software, RSA Authentication Agent Software and RSA SecurID Authenticator. The RSA Authentication Agent Software functions much like a security guard, standing between users and the SA Series server to enforce two-factor authentication via RSA Authentication Manager Software.

RSA SecurID two-factor authentication is based on something you know (a PIN) and something you have (an RSA SecurID Authenticator)—providing a much more reliable level of user authentication than reusable passwords. To ensure the authenticity of each user, the RSA Authentication Manager Software will prompt users to enter their passcode (PIN + token code from the RSA SecurID Authenticator). Access is granted only when the user has entered a valid RSA SecurID passcode.

RSA and Juniper Networks Provide Secure Remote Access with Two-Factor Authentication

RSA's authentication solution, combined with Juniper Networks SA Series SSL VPN Appliances, provides a seamless, integrated, two-factor authentication method for users to access corporate resources remotely via VPN with little doubt as to the identity of the person accessing data. Additionally, security professionals can authenticate to the firewall/VPN itself to perform administrative tasks and monitor or modify security policy, further enhancing the security of the solution.

The Juniper Networks and RSA solution seamlessly supports a variety of authentication options, providing secure access for employees, customers and partners while striking the right balance between risk, cost and convenience. User access for local users with non-encrypted connections supports runtime and Web authentication. User access for remote or site-to-site VPN users with encrypted connections supports Xauth and L2TP. And administrative user access supports privilege management.

Next Steps

For more information about how your organization can benefit from RSA two-factor authentication and Juniper Networks SA Series, please visit www.juniper.net/sa-series.

About RSA

RSA, the Security Division of EMC, is the premier provider of security solutions for business acceleration, helping the world's leading organizations succeed by solving their most complex and sensitive security challenges. RSA's information-centric approach to security guards the integrity and confidentiality of information throughout its life cycle—no matter where it moves, who accesses it or how it is used.

RSA offers industry-leading solutions in identity assurance and access control, encryption and key management, compliance and security information management, and fraud protection. These solutions bring trust to millions of user identities, the transactions that they perform and the data that is generated. For more information, please visit www.RSA.com and www.EMC.com.

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.

Corporate And Sales Headquarters

Juniper Networks, Inc.
1194 North Mathilda Avenue
Sunnyvale, CA 94089 USA
Phone: 888.JUNIPER (888.586.4737)
or 408.745.2000
Fax: 408.745.2100

APAC Headquarters

Juniper Networks (Hong Kong)
26/F, Cityplaza One
1111 King's Road
Taikoo Shing, Hong Kong
Phone: 852.2332.3636
Fax: 852.2574.7803

EMEA Headquarters

Juniper Networks Ireland
Airside Business Park
Swords, County Dublin, Ireland
Phone: 35.31.8903.600
Fax: 35.31.8903.601

Copyright 2009 Juniper Networks, Inc. All rights reserved. Juniper Networks, the Juniper Networks logo, JUNOS, NetScreen, and ScreenOS are registered trademarks of Juniper Networks, Inc. in the United States and other countries. "Engineered for the network ahead" and JUNOSE are trademarks of Juniper Networks, Inc. All other trademarks, service marks, registered marks, or registered service marks are the property of their respective owners. Juniper Networks assumes no responsibility for any inaccuracies in this document. Juniper Networks reserves the right to change, modify, transfer, or otherwise revise this publication without notice.

To purchase Juniper Networks solutions, please contact your Juniper Networks representative at 1-866-298-6428 or authorized reseller.