

# Juniper Networks Secure Access 2000



The Juniper Networks Secure Access 2000 (SA 2000) SSL VPN enables small-to-medium-sized companies to deploy cost effective remote and extranet access, as well as intranet security. Users can access the corporate network and applications from any standard Web browser. The SA 2000 uses SSL, the security protocol found in all standard Web browsers, as a secure access transport mechanism. The use of SSL eliminates

the need for client software deployment, changes to internal servers, and costly ongoing maintenance. Juniper's Secure Access appliances also offer sophisticated partner/customer extranet features that enable controlled access to differentiated users and groups with no infrastructure changes, no DMZ deployments, and no software agents. This functionality also allows companies to secure access to the corporate intranet, so that administrators can restrict access to different employee, contractor or visitor populations, based on the resources that they need.

The SA 2000 comes with the streamlined feature set that an enterprise would need to deploy secure remote access, as well as a basic customer/partner extranet or secure intranet. The Advanced license enables additional sophisticated features that meet the needs of more complex deployments with diverse audiences and use cases, as well as Juniper Networks Central Manager.

## Value Summary

### Lower Total Cost of Ownership

- Secure remote access with no client software deployments or changes to servers, and virtually no ongoing maintenance
- Secure extranet access with no DMZ buildout, server hardening resource duplication, or incremental deployments to add applications or users

### End-to-End Security

- Numerous security options from the end user device, to the application data and servers
- Juniper's Endpoint Defense Initiative includes native functionality as well as client- and server-side APIs for effective enforcement and unified administration of best-of-breed endpoint security

### Rich Access Privilege Management Capabilities

- Dynamic, controlled access at the URL, file, application and server level, based on a variety of session-specific variables including identity, device, security control and network trust level

### Provision by Purpose

- Three different access methods allow administrators to balance security and access on a per-user, per-session basis

### High Availability

- Cluster pair deployment option, for high availability across the LAN and the WAN

### Streamlined Manageability

- Central management option for unified administration
- User self service features enhance productivity while lowering administrative overhead

## Lower Total Cost of Ownership

In addition to enterprise-class security benefits, the SA 2000 has a wealth of features that enable low total cost of ownership.

Features	Benefits
Uses SSL, available in all standard Web browsers	Secure remote access with no client software deployment and no changes to existing servers
Based on industry-standard protocols and security methods	The investment in the Secure Access 2000 can be leveraged across many applications and resources over time.
Extensive directory integration & broad interoperability	Existing directories can be leveraged for authentication and authorization. Standard-based interfaces and APIs provide seamless integration with 3rd party products
Multiple Hostname Support Advanced software feature set	Provides the ability to host different virtual extranet Websites from a single SA 2000 appliance, saving the cost of incremental servers, easing management overhead and providing a transparent user experience with differentiated entry URLs
Customizable User Interface Advanced software feature set	Allows the creation of completely customized sign-in pages to give an individualized look for specified roles, streamlining the user experience

## End-to-End Layered Security

The SA 2000 series provides complete end-to-end layered security, including endpoint client, device, data and server layered security controls. These include:

Features	Benefits
Native Host Checker	Client computers can be checked at the beginning and throughout the session to verify an acceptable security posture requiring or restricting network ports; checking files/process and validating their authenticity with MD5 hash checksums. Performs version checks on security applications, and carries out pre-authentication checks and enforcement. Enables enterprises to write their own host check method to customize the policy checks. Resource access policy for non-compliant endpoints is configurable by the administrator.
Host Checker API	Created in partnership with best-of-breed endpoint security vendors, enables enterprises to enforce an endpoint trust policy for managed PCs that have personal firewall, antivirus clients, or other installed security clients, and quarantine non-compliant endpoints
Host Check Server Integration API	Enables enterprises to deliver and update third party security agents from the SA 2000, which reduces public-facing infrastructure, enables consolidated reporting of security events, and enables policy-based remediation of non-compliant clients
Policy-based enforcement	Allows the enterprise to establish trustworthiness of non-API-compliant hosts without writing custom API implementations, or locking out external users such as customers or partners that run other security clients
Hardened security appliance and Web server	Hardened security infrastructure, audited by 3rd party security experts including CyberTrust, effectively protects internal resources and lowers total cost of ownership by minimizing the risk of malicious attacks.
Security services employ kernel-level packet filtering and safe routing	Ensures that unauthenticated connection attempts, such as malformed packets or DOS attacks are filtered out
Cache Cleaner	All proxy downloads and temp files installed during the session are erased at logout, ensuring that no data is left behind
Data Trap & cache controls	Prevents sensitive meta-data (cookies, headers, form entries, etc) from leaving the network, and allows for rendering of content in a non-cacheable format

## Access Privilege Management Capabilities

The SA 2000 appliance provides dynamic access privilege management capabilities without infrastructure changes, custom development, or software deployment/maintenance. This facilitates the easy deployment and maintenance of secure remote access, as well as secure extranets and intranets. When a user logs in to the SA 2000, they pass through a pre-authentication assessment, and are then dynamically mapped to the session role that combines established network, device, identity and session policy settings. Granular resource authorization policies further ensure exact compliance to security strictures.

Features	Benefits
Hybrid role- / resource-based policy model	Administrators can tailor access to dynamically ensure that security policies reflect changing business requirements
Pre-authentication assessment	Network and device attributes, including presence of Host Checker/Cache Cleaner, source IP, browser type and digital certificates, can be examined even before login is allowed and results are used in dynamic policy enforcement decisions
Dynamic authentication policy	Leverages the enterprise's existing investment in directories, PKI, and strong authentication, enabling administrators to establish a dynamic authentication policy for each user session
Dynamic role mapping	Combines network, device and session attributes to determine which of three different access methods, or combination of methods, is allowed enabling the administrator to provision by purpose for each unique session
Resource authorization	Enables extremely granular access control to the URL, server, or file level to tailor security policies to specific resources
Granular auditing and logging	Fine-grained auditing and logging capabilities in a clear, easy-to-understand format can be configured to the per-user, per-resource, and per-event level. Auditing and logging features can be used for security purposes as well as capacity planning
Custom expressions Advanced software feature set	Enable the dynamic combination of attributes on a "per-session" basis, at the role definition/mapping rules and the resource authorization policy level
Web-based Single Sign-On BASIC Auth & NTLM	Alleviates the need for end users to enter and maintain multiple sets of credentials for Web-based and Microsoft applications
Web-based Single Sign-On Forms-based, Header Variable-based, SAML-based Advanced software feature set	In addition to BASIC Auth and NTLM SSO, the advanced feature set provides the ability to pass user name, credentials and other customer defined attributes to the authentication forms of other products and as header-variables, to enhance user productivity and provide a customized experience. SAML-based integration for authentication and authorization

### Provision by Purpose

The Secure Access 2000 includes three different access methods. These different methods are selected as part of the user's role, so the administrator can enable the appropriate access on a per-session basis, taking into account user, device, and network attributes in combination with enterprise security policies.

Features	Benefits
Clientless Core Web access	<ul style="list-style-type: none"> <li>Access to Web-based applications, including complex JavaScript, XML or Flash-based apps and Java applets that require a socket connection, as well as standards-based e-mail, files and telnet/SSH hosted applications.</li> <li>Core Web access also enables the delivery of Java applets directly from the Secure Access appliance.</li> <li>Provides the most easily accessible form of application and resource access, and enables extremely granular security control options</li> </ul>
Secure Application Manager (SAM)	<ul style="list-style-type: none"> <li>A lightweight Java or Windows-based download enables access to client/server applications using just a Web browser. Also provides native access to terminal server applications without the need for a pre-installed client</li> </ul>
Network Connect	<ul style="list-style-type: none"> <li>Provides complete network-layer connectivity via an automatically provisioned cross-platform download</li> <li>Users need only a Web browser. Network Connect transparently selects between two possible transport methods, to automatically deliver the highest performance possible for every network environment.</li> </ul>

### High Availability

The SA 2000 includes a variety of capabilities for the availability and redundancy required for mission-critical access in demanding enterprise environments.

Features	Benefits
Stateful peering	Units that are part of a cluster pair synchronize system-state, user profile-state, and session-state data among a group of appliances in the cluster for seamless failover with minimal user downtime and loss of productivity
Clustering	Cluster pairs multiply aggregate throughput to handle unexpected burst traffic as well as resource intensive application use. Clusters can be deployed in either Active/Passive or Active/Active modes across the LAN or across the WAN for superlative scalability with a large number of user licenses, which scales access as the user base grows

### Streamlined Management and Administration

The SA 2000 includes a variety of features available from a central management console at the click of a button. These benefits are extended across clustered devices, with the addition of SA Central Manager, part of the Advanced Software features set. Central Manager is a robust product with an intuitive Web-based UI designed to facilitate the task of configuring, updating and monitoring Secure Access appliances whether within a single device, local cluster or across a global cluster deployment.

Features	Benefits
Central Manager Advanced software feature set	Cluster pairs can be seamlessly managed from an integrated central management console, making administration convenient and efficient. The Central Manager allows administrators to track cluster-wide metrics, push configurations and updates, and provide backup and recovery for local and clustered appliances.
User self-service features Password management integration Web Single Sign-On	Increases end user productivity, greatly simplifies administration of large diverse user groups, and lowers support costs
Role-based delegation Advanced software feature set	Granular role-based delegation lessens IT bottlenecks by allowing administrators to delegate control of diverse internal and external user populations to the appropriate parties, associating real-time control with business, geographic, and functional needs
Easy-to-edit role mapping and resource authorization policies	Administrators can copy and re-use existing policies, simplifying the process of setting up complex multi-variable policies or administration for multiple types of groups/roles
Customizable audit log data Advanced software feature set	Using Secure Access Central Manager, log data can be compiled in standard formats including W3C or WELF, as well as tailored for input into proprietary report packages
SNMP	Enhanced monitoring with standards-based integration to third party management systems

## Specifications

### Upgrade Options

Software

- Secure Application Manager and Network Connect Upgrade Option (SAMNC)
- Advanced Software Feature Set (includes Central Manager)
- Secure Meeting Upgrade Option

### Technical Specifications

#### SA 2000

- Dimensions: 16.7"W x 1.74"H x 15"D  
(42.42cmW x 4.41cmH x 38.10cmD)
- Weight: 13.2lb (5.99 kg) typical (unboxed)
- Material: 18 gauge (.048") cold-rolled steel
- Fans: 1 blower, 1, 40mm ball bearing fan in power supply

#### Panel Display

- Front Panel Power Button
- Power LED, HD Activity, Temp

#### Ports

##### Network

- Two RJ-45 Ethernet - 10/100/1000 full or half-duplex (auto-negotiation)

##### Console

- One 9-pin serial console port

#### Power

- AC Power Wattage 260 Watts
- AC Power Voltage 100-240VAC, 50-60Hz, 2.5A Max
- System Battery CR2032 3V lithium coin cell
- Efficiency 65 % minimum, at full load
- MTBF 87,000 hours

#### Environmental

- Operating Temp 50° to 95°F (10°C to 35°C)
- Storage Temp -40° to 158°F (-40°C to 70°C)
- Relative Humidity (Operating) 8 % to 90 % noncondensing
- Relative Humidity (Storage) 5 % to 90 % noncondensing
- Altitude (Operating) -50 to 10,000 ft (3,000m)
- Altitude (Storage) -50 to 35,000 ft (10,600m)

#### Safety and Emissions Certification

- Safety: EN60950-1:2001 + A11, UL60950-1:2003, CSA C22.2 No. 60950-1, IEC 60950-1:2001
- Emissions: FCC Class A, VCCI Class A, CE class A

#### Warranty

- 90 days – can be extended with support contract

## Ordering Information

### Secure Access 2000 Base System

SA2000 Secure Access 2000 Base System

### Secure Access 2000 User Licenses

SA2000-ADD-25U Add 25 simultaneous users to SA 2000  
 SA2000-ADD-50U Add 50 simultaneous users to SA 2000  
 SA2000-ADD-100U Add 100 simultaneous users to SA 2000

### Secure Access 2000 Feature Licenses

SA2000-SAMNC Secure Application Manager and Network Connect for SA 2000  
 SA2000-ADV Advanced for SA 2000  
 SA2000-MTG Secure Meeting for SA 2000

### Secure Access 2000 Clustering Licenses

SA2000-CL-25U Clustering: Allow 25 additional users to be shared from another SA 2000  
 SA2000-CL-50U Clustering: Allow 50 additional users to be shared from another SA 2000  
 SA2000-CL-100U Clustering: Allow 100 additional users to be shared from another SA 2000

### Accessories

SA-ACC-RCKMT-KIT-1U Spare Secure Access Rack Mount Kit - 1U  
 SA-ACC-PWR-AC-USA Spare Secure Access AC Power Cord USA  
 SA-ACC-PWR-AC-UK Spare Secure Access AC Power Cord UK  
 SA-ACC-PWR-AC-EUR Spare Secure Access AC Power Cord EUR  
 SA-ACC-PWR-AC-JPN Spare Secure Access AC Power Cord JPN



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