

# AVENTAIL® EX-2500™, EX-1600™, & EX-750™



Aventail Smart SSL VPNs deliver the easiest remote access control solution available today. Aventail offers users seamless access to more applications from more devices and locations. And administrators get security and control through one easy-to-manage gateway. As the leading IPsec replacement VPN, Aventail's award-winning family of SSL VPN appliances can boost your productivity and security while easing your overall cost of ownership.

## Why choose Aventail?

### The easiest remote access controller on the market

Aventail delivered the first SSL VPN, and delivers on the promise of complete remote access control today. With maturing mobile technologies like WiFi and VoIP, booming global markets, and heightened focus on remote access for disaster preparedness, today's enterprises have an increasingly distributed and mobile workforce. Remote access control has become a business imperative.

## Detect the security of any end point

### Robust interrogation for secure control of the end point

Only Aventail® End Point Control™ (EPC™) lets you enforce granular access control rules for Windows®, Windows Mobile, Macintosh®, and Linux® end point environments. EPC combines pre-authentication interrogation to protect from keystroke loggers and other malware, as well as confirming end-point criteria like antivirus updates.

For more flexible security control, Aventail® Policy Zones™ let you

apply zones of detected end point criteria to automated policy enforcement. For example, a user's access may be quarantined—and the user automatically redirected to remediation instructions—until a particular security patch is installed. Should an end point device be lost or stolen, Device Watermarks allow rapid and simple access revocation, based upon detection of client certificates on the end point. Untrusted end points can be protected from keystroke sniffers by enforcing authentication using Aventail's Virtual Keyboard.

### Advanced EPC for ultimate protection

Optional Aventail® Advanced EPC™ combines the granular end point control detection of

Advanced Interrogator with the superior data protection of Secure Desktop.

Advanced Interrogator simplifies end point protection by allowing administrators to set up device profiles from a comprehensive predefined list of antivirus, personal firewall, and anti-spyware solutions for Windows platforms, including version and currency of signature file update. On unmanaged end point devices like kiosks, Cache Control extends beyond basic cache cleaning to purge browser cache, session history, cookies, and passwords. For even deeper protection, Secure Desktop offers advanced data



### EX-2500

You are an enterprise with hundreds or thousands of remote access users. You need high availability to ensure anytime access to critical applications.

The EX-2500 offers:

- Clustering and high availability (HA) support:
  - Up to 8 nodes of externally sourced load balancing.
  - 2 nodes for internal HA with integrated load balancing.
- Support for up to 2,000 concurrent users per load balanced node or HA pair.



### EX-1600

You are a growing mid-size company, an enterprise department, or you have a remote facility. You support 25 to 250 concurrent remote access users who need anytime access.

The EX-1600 offers:

- Clustering for high availability (HA) and load sharing.
  - Up to 8 nodes of externally sourced load balancing.
  - 2 nodes nodes for internal HA with integrated load balancing.
- Support for up to 250 concurrent users per load balanced node or HA pair.



### EX-750

You are a small to mid-size company, an enterprise department, or you have a remote facility. You support up to 50 concurrent remote access users.

The EX-750 offers:

- The advantages of Aventail's proven, secure, and easy-to-manage SSL VPN platform at a lower cost.
- A cost-effective unit intended for standalone use.
- An ideal solution if your user base will not grow beyond 50 concurrent users.

Expensive NAC initiatives seek to control access, but are less effective in extending beyond the traditional network perimeter. IPsec VPNs can be cumbersome to use and manage. Only Aventail Smart SSL VPNs deliver a complete remote access control solution today, without escalating infrastructure costs or complexity.

## Detect, protect, and connect

Applying a comprehensive approach to remote access control, Aventail SSL VPNs first detect the security of an end point prior to authentication; protect resources with granular policy based on that user and end point; and then connect the user effortlessly to only authorized resources.

protection technology that creates a virtual encrypted environment that prevents sensitive information from being left behind.

On Aventail SSL VPNs, users are never granted open network-wide access to your resources. Connections are closed by default, providing “deny all” firewall-style protection.

## Protect your enterprise resources with ease

### Streamlined policy management

With its context-sensitive help and Setup Wizard, an Aventail SSL VPN is easy to set up and deploy, letting you rapidly establish a single secure gateway for both internal and external access to resources.

Remote access control management is simplified with Aventail® Unified Policy™. This extensible object-based policy model consolidates control of all Web resources, file shares, and client-server resources in a single location. This lets you quickly set policy with a single rule across all objects, so that policy management can take only minutes instead of the hours it takes with other VPNs. Groups can be populated dynamically based on RADIUS, LDAP, or Active Directory authentication repositories, including Nested Groups. Aventail SSL VPNs offer robust authentication support for Single Sign-On (SSO) and forms-based Web applications. And users can easily update their own passwords at any time without IT assistance.

### Intuitive management and reporting

The Aventail® Management Console™ provides a rich, centralized set of monitoring capabilities for auditing, compliance, management, and resource planning. Optional Aventail® Advanced Reporting™ allows robust auditing of who accessed what enterprise resources, at what time, from which remote location, using standard or custom reports that can be accessed

from any Web browser. Visual tools provide real-time information on system state, and give you direct, intuitive options for managing all system objects.

## Connect users to resources—simply and seamlessly

### Broadest application access from the most end points

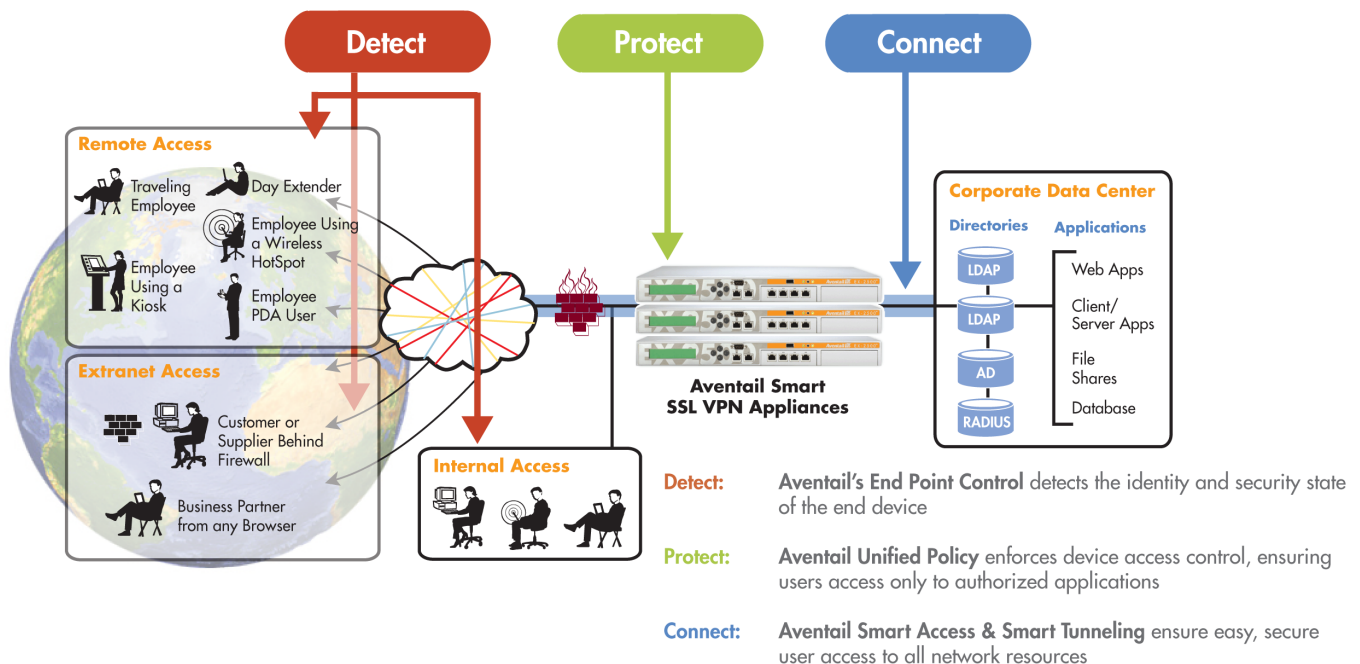
From the very first connection, Aventail SSL VPNs deliver intelligent access to all network resources, including Web-based, client/server, server-based, host-based, and back-connect applications such as VoIP. Aventail SSL VPNs work seamlessly across all platforms—Windows, Windows Mobile, Linux, or Macintosh—from desktops, laptops, kiosks, PDAs, and smartphones, as well as automated application-to-application remote access. This unparalleled ease of use significantly increases productivity, while reducing support costs associated with more cumbersome solutions.

From the user’s perspective, Aventail® Smart Access™ does all the work. Smart Access dynamically determines and deploys the appropriate access method and security level based on the type and state of the device, user identity, and resources needed. Adaptive addressing and routing dynamically adapts to networks, eliminating addressing and routing conflicts common with other solutions. Smart Access streamlines installation and activation of any required agents on Windows devices according to Microsoft standards.

### Clientless Web-based access or full “in-office” experience

Aventail SSL VPNs offer both clientless browser-based access and full access from Windows, Windows Mobile, Macintosh, and Linux environments to client/server and legacy applications. Aventail® WorkPlace™ provides users with a personalized and policy-driven Web portal that provides easy access to Web-

## Aventail Remote Access Control



*Aventail's Remote Access Controller provides secure access for all users, devices and applications*

based and client/server applications from virtually any device or location, including desktops, laptops, PDAs, smartphones, even from wireless hot spots and kiosks. The portal can be optimized for the type of access device; for example, for smartphones, only the mobile versions of applications would be available. Users can define their own shortcuts to frequently-used resources, personalizing their experience. Aventail WorkPlace works well for those accessing the network from devices not managed by your organization.

Aventail® Connect™ access delivers an “in-office” experience for Windows, Windows Mobile, Macintosh, and Linux users, enabling full access to a broad base of client/server and Web-based applications, and all other network resources. Connect Access is enabled through a lightweight, Web-deployable agent, or optionally, through a standard MSI installation that makes client provisioning simple and flexible. Aventail Connect is ideal for users needing full application access from devices that are owned and managed by your organization, and that require strong desktop security, including split-tunneling control and personal firewall detection.

Users benefit from the unparalleled application reach of Aventail® Smart Tunneling™ a patent-pending Layer 3 technology that supports UDP, TCP, and IP protocols, as well as support for back-connect applications like VoIP. In NAT mode, no set up of IP address pools is required.

#### A solution customized to your users’ needs

Optional Aventail® Native Access Modules™ offer additional native access to Windows Terminal Services, as well as native support for load-balanced Citrix farm environments as an alternative to expensive Citrix nFuse implementations. Aventail® Host Access Modules™ directly integrate industry-leading AttachmateWRQ terminal emulation with your Aventail SSL VPN to access a wide range of host-based applications on IBM, UNIX, and OpenVMS environments.

#### Most complete access solution for mobile devices

Aventail® Mobile™ provides Web and client-based access to critical network resources from any wireless network environment with complete security and control, including Windows Mobile (CE) 4.21 and 5.0 PDAs and smart phones, Symbian smart phones, DoCoMo iMode devices, and WAP-enabled devices.

Aventail Mobile provides centralized management of all devices with granular access control and the ability to prohibit access from the device if lost or stolen. And with Session Persistence, mobile users can have the flexibility to retain a current session as they switch between networks—on the go between office, commute, home, and hotel—without needing to re-authenticate.

#### High availability and flexibility you can rely on

For added reliability, Aventail SSL VPNs offer high availability (HA) with integrated load balancing and active/active stateful failover on the EX-2500 and EX-1600, eliminating the added cost of a third-party load balancer. And with an optional Aventail Spike License Pack, you can temporarily and cost-effectively increase your remote user count to the maximum capacity of those Aventail appliances for disaster recovery or planned business cycle peaks, whether it’s a few dozen or a few thousand additional users.

#### The clear business choice: Aventail SSL VPNs

Aventail’s market-leading EX-Family of SSL VPN appliances offers your business the best solution for secure remote access control. With Aventail, you can enhance your enterprise network security, increase your mobile workforce productivity for greater return on investment (ROI), and reduce IT overhead for a lower total cost of ownership (TCO). Aventail’s best-of-breed technology gives you flexible access options for disaster recovery, and supports easy audits to help you comply with Sarbanes-Oxley, HIPAA, Basel 2, and other regulatory requirements, even during unexpected business disruptions. And Aventail SSL VPNs make an ideal replacement strategy for IPSec VPNs. From any business perspective, Aventail is the easy choice for secure access.

### About Aventail

Aventail is the best-of-breed remote access company. Aventail delivered the first SSL VPN solution in 1997 and today is a market leader, delivering a remote access control solution that is the easiest to use and easiest to control. Aventail SSL VPN appliances provide users with transparent, clientless access to more applications from more devices via any network environment. For network managers, Aventail delivers a single secure access gateway for all users, internal and external, to all network resources with complete security. With more than 2.5 million end users around the globe, Aventail is the SSL VPN of choice among mid-sized to large-sized organizations worldwide, including AT&T, Chicago Housing Authority, DePaul University, DuPont, the Environmental Protection Agency (EPA), IBM Global Services, James Richardson International, Mississippi Department of Corrections, Organization for Economic Cooperation and Development (OECD), Overlake Hospital, Radiology Ltd., and Sanyo. For more information, go to [www.aventail.com](http://www.aventail.com).

#### MARKET LEADERSHIP

Awards and Reviews



Certifications



#### WHO RELIES ON AVENTAIL?

Customers



Service Providers



## Feature Specifications

### SECURITY

#### Network & device protection

- Split tunneling control
- Hides internal DNS namespace and IP addressing scheme
- URLs can be aliased
- Hardened against attack
- Can prevent direct connections to internal network
- TCP/UDP port restrictions

#### Authentication methods

- Serverside digital certificates, independent of end-user authentication method
- Username/password
- Clientside digital certificates
- RSA SecurID and other one-time password tokens
- Dual/stacked authentication

#### Directories

- Microsoft Active Directory (native mode)
- LDAP (Active Directory, Sun iPlanet, etc.)
- RADIUS (Windows NT, ACE, etc.)
- Dynamic groups based off an LDAP/AD query
- Certificate revocation lists (CRL)

#### Single sign-on adapters

- Forms-based single sign-on for Web authentication products like Netegrity SiteMinder and RSA ClearTrust
- HTTP basic authentication (IETF RFC 2617) forwarding

- Windows domain SSO (Connect only)

- NTLM for Microsoft Web servers

#### Password management

- Notification of password expiration and password change from the Aventail Workplace portal

#### Access control options

- User and group (handles users in multiple groups)
- Source IP and network
- Destination network
- Service/Port, such as FTP, HTTP (OnDemand and Connect only)
- Define resources by destination URL, host name or IP address, IP range, subnet, and domain
- Day, date, time, and range
- Browser encryption key length
- Policy Zones (controls access and data protection based on end point security profile)
- Quarantine and Deny Zones
- File system access controls (Windows domain, Windows Server UNC, Full-path UNC)

#### Encryption

- Configurable session length
- Ciphers: DES, 3DES, RC4, AES
- Hashes: MD5, SHA

#### Aventail® Smart Tunneling™ (Layer 3 connection)

- Split tunneling and redirect all access

- Dynamic proxy detection and authentication
- Dynamic routing
- Adaptive addressing
- OnDemand tunnel mode (browser-based access via Workplace)
- Connect Tunnel mode
- Session Persistence across IP address changes
- NAT mode (does not require IP address pools)

#### Aventail® End Point Control™ (EPC™)

- Aventail End Point Interrogator (classifies end point into Policy Zones)
- Wildcard selection with Boolean operators
- Cache Control (data protection)
- Detection of files and running processes
- WholeSecurity Confidence Online Enterprise Edition (malware and Trojan scanning)
- Zone Labs Integrity Clientless Security (malware and Trojan scanning)
- Device Watermarking

#### Aventail® Advanced EPC™

- Advanced Interrogator (simplified granular end point detection, including detailed configuration information on over 100 anti-virus, anti-spyware, and personal firewall solutions, including McAfee, Symantec, Sophos and Trend)
- Secure Desktop (advanced data protection)

### ACCESS AND APPLICATION SUPPORT

#### Aventail® Workplace™ Access (browser-based access)

- Clientless access to Web-based resources
- Web-based: HTTP/HTTPS, DHTML/HTML, JavaScript, VBScript
- Web file access: SMB/CIFS, DFS
- Personal Bookmarks

#### Aventail Workplace Mobile access

- Workplace access configuration for any mobile device
- Supports WAP, smartphone, iMode, and PDA browsers

#### Aventail® OnDemand™ (Client/server & network access within Workplace):

- Passive and active mode FTP
- Any TCP- or UDP-based application (single-port, multi-port, dynamic port, including standard Internet e-mail protocols, native e-mail protocols, terminal emulation protocols, and terminal services)
- Aventail® Connect™ access (Windows client)
  - Any TCP- or UDP-based application (single port, multi-port, dynamic port, including standard Internet e-mail protocols, native e-mail protocols, terminal emulation protocols, and terminal services)
  - Native access to Windows Terminal Services as well as Citrix farms

- Passive and active mode FTP

- Windows networking support (Windows/NT domain logon integration), drive mapping, password change notification and change, login scripts)
- Connect Tunnel Service Edition (remote application-to-application access)

#### Aventail® Connect Mobile™ (Windows Mobile client)

- Aventail Connect Mobile is a certified application for Windows Mobile™-based Pocket PCs
- Lightweight, Web-deployed agent provides access to both Web and client/server applications

### AUDITING, MONITORING & LOGGING

#### Auditing

- Aventail® Advanced Reporting™
- User/group
- Source IP address and port
- Destination IP address and port
- Bytes processed
- Date/time
- URLs accessed
- Authentication method
- RADIUS auditing and accounting integration

#### Monitoring

- User connection monitoring
- Event alarms
- View logs and performance information via the Aventail Management Console
- SNMP integration including Aventail-specific SNMP MIB

### Logging

- Support for central SYSLOG server
- W3C common log format
- SOCKS5 log format (OnDemand and Connect only)

### MANAGEMENT & ADMINISTRATION

- Aventail Management Console (AMC): centralized Web-based management for all access options
- Secure Shell (SSH) support
- Directory browsing and connection testing
- Serial console access
- DHCP address provisioning integration
- Customizable templates for Workplace portal
- MSI installer option for Connect access integrates with standardized software distribution processes
- Role-based administration

### HIGH AVAILABILITY

#### Aventail EX-2500

- Support for high-availability (up to 8-node clusters from external sources) with built-in load-balancing and stateful authentication failover
- Support for load-balanced arrays using standard external load balancers

#### Aventail EX-1600

- Support for high-availability 2-node clusters with built-in load-balancing and stateful authentication failover
- Support for load-balanced arrays using standard external load balancers

## Hardware Technical Specifications

### AVENTAIL EX-2500 APPLIANCE

Form factor: 1U rack-mount

Dimensions: 17" W x 1.7" H x 19.6" D (43cm W x 4.4cm H x 50 cm D)

Processor: Intel Xeon 2.4 GHz CPU 533 MHz FSB 2 GB DDR RAM

#### NETWORK

Six 10/100/1000Base-T Ethernet

#### POWER

Input voltage: 120 (6A) / 240 (3A) VAC auto-switching

Output power: 300W

Power supply: MTBF 100,000 hours at 35° C (95° F)

#### ENVIRONMENTAL

Operating temperature: 0°C to 40°C (32°F to 104°F)

Non-operating shock: 50g, 11 msec

#### REGULATORY APPROVALS

Emissions: FCC Part 15 Class A, CE, C-Tick, VCCI, CCC, BSMI

Safety: UL, cUL, CE, TUV, STQC, S, PSB, CCC, BSMI, CB Scheme

### AVENTAIL EX-1600 APPLIANCE

Form factor: 1U rack-mount

Dimensions: 1.7" H x 16.8" W x 13.2" D (4.4cm H x 42.6cm W x 33.4cm D)

Processor: Intel Pentium, 2.4 GHz CPU, 533 MHz FSB, 1 GB DDR RAM

#### NETWORK

Two 10/100 and one 1000Base-T Ethernet, 2 USB Ports, 1 serial bus connection (DB9)

#### POWER

Input voltage: 120 (6A) / 240 (3A) VAC auto-switching

Output power: 185W

Power supply: MTBF 100,000 hours at 35° C (95° F)

#### ENVIRONMENTAL

Operating temperature: 0°C to 40°C (32°F to 104°F)

Non-operating shock: 50g, 11 msec

#### REGULATORY APPROVALS

Emissions: FCC Part 15 Class A, CE, C-Tick, VCCI, CCC, BSMI

Safety: UL, cUL, CE, TUV, STQC, PSB, CCC, BSMI, CB Scheme

### AVENTAIL EX-750 APPLIANCE

Form factor: 1U rack-mount

Dimensions: 17" W x 1.71" H x 15" D (43.18cm W x 4.34cm H x 38.1cm D)

Processor: Intel P4 2.4 GHz CPU, 533 MHz FSB, 512 MB DDR RAM

#### NETWORK

Two 10/100Base-T Ethernet

#### POWER

Input voltage: 100 (5A)/240 (3A) VAC PFC auto-switching

Output power: 200W

Power supply: MTBF 100,000 hours at 40° C

#### ENVIRONMENTAL

Operating temperature: 0° - 50° C

Non-operating shock: 50g, 11 msec

#### REGULATORY APPROVALS

Emissions: FCC Class A, EN, VCCI

Safety: CAN/CSA, UL, CB Scheme