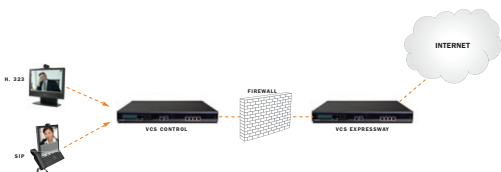




TANDBERG Video Communication Server Expressway™ Application

The TANDBERG Video Communication Server (VCS), deployed with the Expressway™ Application, provides standards-based firewall traversal for SIP and H.323 devices. VCS enables communication with the outside world regardless of SIP or H.323 protocol, enabling organizations to utilize all of their video communication investments.



DESIGN FEATURES

- Designed to work with any H.323 or SIP device
- Appliance-based architecture enables easy deployment and high reliability
- Designed to work with any firewall
- Full multi-vendor support
- Secure and reliable
- 1U rack mountable
- Dual Network Interface option available

APPLICATION FEATURES

- Firewall Traversal H.460.18/19 Compliant including support for Multiplexed Media
- Firewall Traversal STUN Compliant
- Traverse any number of firewalls
- Policy Engine for processing calls
- URI and ENUM dialing
- Device authentication using H.235
- Embedded setup wizard for easy installation
- SIP Presence Server and User Agent

PERFORMANCE FEATURES

- Supports up to 2,500 registered devices and 100 concurrent traversal calls
- Enables URI dialing for massive scalability
- HTTPS, SSH and SCP for secure management
- Uses compact flash for critical storage and a hard drive for other functions
- Supports clustering of up to six VCS increases capacity and redundancy

PROTECT YOUR TECHNOLOGY INVESTMENT WITH
TANDBERG'S PORTFOLIO OF **CONSTANT CARE SERVICES**.
VISIT WWW.TANDBERG.COM

TANDBERG VCS CAPACITY

Up to 2,500 registrations
 Up to 500 non-traversal calls
 Up to 100 traversal calls
 Up to 200 neighbor zones

TANDBERG VCS CONTROL APPLICATION FEATURES

H.323 gatekeeper
 SIP Proxy/Registrar

TANDBERG VCS EXPRESSWAY™ APPLICATION FEATURES

NAT Traversal functionality enabling secure traversal of any NAT firewall
 Registration of traversal-enabled endpoints
 STUN discovery and STUN Relay services

TANDBERG VCS MAIN FEATURES (CONTROL AND EXPRESSWAY™ APPLICATIONS)

SIP and H.323 support, including SIP/H.323 gateway for locally registered endpoints
 IPv4 and IPv6 support, including IPv4/IPv6 Interworking
 SIP and H.323 interworking for non-registered endpoints
 Bandwidth management on both a per-call and a total usage basis, configurable separately for calls within the local subzones and to neighboring systems and zones
 URI and ENUM dialing via DNS, enabling global connectivity
 Automatic downspeeding option for calls that exceed the available bandwidth
 Flexible zone configuration with prefix, suffix and regular expression support
 Can function as a standalone VCS or be neighbored with other systems such as VCS, Border Controllers, Gatekeepers and SIP proxies
 Can be clustered with up to 5 other VCS peers for capacity and redundancy purposes
 Optional endpoint authentication
 Control over which endpoints are allowed to register
 Administrator Policy including support for CPL
 Embedded setup wizard via a serial port for initial configuration
 System administration via a web interface or RS-232, Telnet, SSH and HTTPS
 Static NAT Support* (requires Dual Network Interface Option)

OPTIONAL FEATURES

TANDBERG FindMe™ (User Policy)
 SIP/H.323 interworking for non-registered endpoints
 Dual Network Interface
 Multiway™
 TMS Agent

ARCHITECTURE

Secure appliance-based architecture
 Flash memory and hard drive
 ITU-T H.323 v6 compliant
 ITU-T H.225 v6 compliant
 TANDBERG Expressway Technology
 H.460.18/.19 compliant
 H.460.18 client proxy support
 Supports H.460.19 multiplexed media

RELIABILITY

Registrations survive system restart
 Fast start-up time
 Configuration Replication for Clusters
 Expressway process recycling within seconds
 H.225 Alternate Gatekeeper Support

SUPPORTED RFCs

RFC 2543, RFC 3261, RFC 3264, RFC 1889, RFC 3265, RFC 3325, RFC 3515, RFC 3891, RFC 3892, RFC 2327, RFC4566

SECURITY

Secure Management with HTTPS, SSH and SCP
 – Secure File Transfer
 – Inactivity Timeout
 Can lock-down IP services
 Authentication required on HTTP(S), Telnet, SSH, SCP and serial port
 Compatible with H.235 v2 and v3 enabled H.323 devices
 H.235 Authentication support
 TLS for SIP signaling
 Roles based password protected GUI user access
 Ability to enforce strict passwords
 Ability to disable root access over Telnet or SSH

MANAGEMENT

Supports industry standards such as RS-232, Telnet, HTTP(S), XML, SNMP, SCP and SSH
 Embedded setup wizard on serial port for initial configuration
 Advanced management support and configuration with TANDBERG Management Suite 1.2.0 or newer
 Call logging and diagnostics
 Support for logging to a syslog server
 Local time zone aware

CALL CONTROL AND REGISTRATIONS

Supports manual registration of H.323 and SIP endpoints and API call control
 Supports H.225/Q.931, H.245 call control routed mode and non call routed mode
 Supports H.323-SIP Interworking Encryption
 Supports H.323-SIP Interworking DuoVideo
 Registration of H.323 ID, E.164 aliases and services
 Supports Unicode (UTF-8) registration for global implementation
 Disconnect H.323 calls from the API interface
 URI Dialing
 Up to 100 traversal calls
 Up to 100 services for a single device
 Up to 2500 registered Expressway Devices
 Direct call signaling between neighbored VCSs, border controllers and gatekeepers
 Call Policy Management (RFC 3880) including Call Policy and User Policy (FindMe)
 Conference hunting for MCU cluster support
 Call Routed Mode
 Call Loop Detection Mode

ZONE CONTROL

Supports Remote Zone monitoring
 Supports Remote Zone redundancy
 Supports up to 200 neighbor zones (including VCSs, Border Controllers, gatekeepers and SIP proxies)
 Supports sub-zone area definition for bandwidth management
 Flexible zone configuration with named zones and default zone
 Supports forwarding of requests to neighbor zones (including VCSs, border controllers, gatekeepers and SIP proxies)
 Registration Control (open, specifically allow, specifically deny)

BANDWIDTH MANAGEMENT

Interzone — definable call-by-call
 – Max bandwidth per call
 – Max aggregate bandwidth for all neighboring zones
 Intrazone — definable call-by-call
 – Max bandwidth per call
 – Max aggregate bandwidth
 Auto-downspeeding if call exceeds per-call maximum
 Gateway load balancing
 Automatic network failover
 Provides capacity warnings for users and administrators

INTERFACES

4x 10/100/1000 Base-TX Ethernet ports (RJ-45) (front)
 1x RS232 console port (RJ-45)2 (front)

POWER

Auto-sensing 250W (Max) 580 BTU/hr power supply
 90–264V AC full range @ 47–63Hz

COOLING SYSTEM

Six 40 mm fans for system cooling

SYSTEM CONTROL AND INDICATIONS

1x Power LED
 1x Alarm LED
 1x Power on/off switch (rear)
 4x Act/Link/10/100/1000 LEDs on Ethernet Ports

NETWORK

Supports DNS Addressing
 Supports IPv4 and IPv6 simultaneously
 Provides IPv4/IPv6 Translation Services

APPROVALS

Directive 73/23/EEC (Low Voltage Directive)
 – Standard EN 60950
 Directive 89/336/EEC (EMC Directive)
 – Standard EN 55022, Class A
 – Standard EN 55024
 – Standard EN 61000-3-2/-3-3
 Approved according to UL 60950 and CAN/CSA C22.2 No. 60950
 Complies with FCC15B Class A

DIMENSIONS

426(W) x 457.2(D) x 43.5(H) mm (16.8" x 9" x 1.72")
 1U rack-mount chassis

ENVIRONMENT

Operating temperatures: 0° C to 40° C (32° F to 104° F)
 Storage temperatures: -20° C to 80° C (-4° F to 140° F)
 Relative humidity: 10% to 90% (Non-condensing)

CERTIFICATION

LVD 73/23/EC
 EMC 89/366/EEC



VCS Version X11 is ICSA Labs Certified

AWARDS

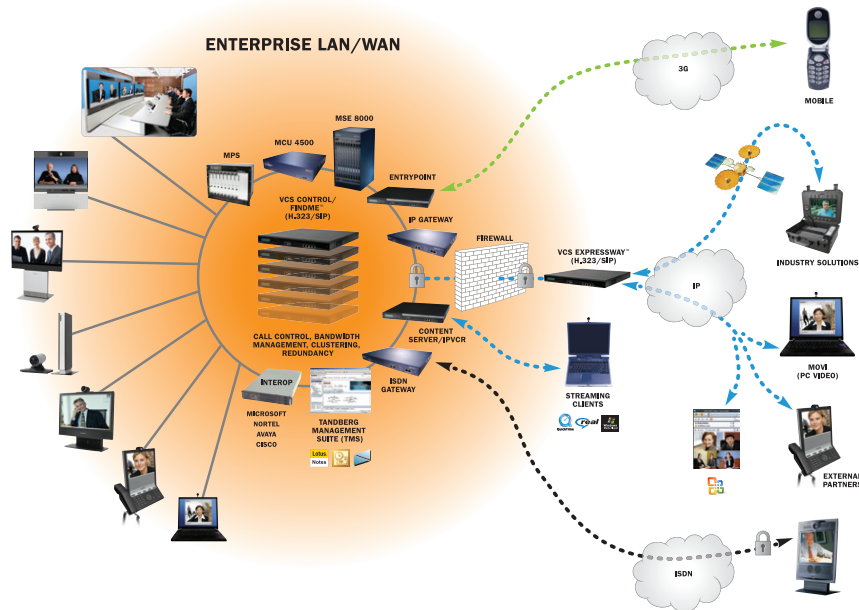


All specifications subject to change without notice, system specifics may vary.

All images in these materials are for representational purposes only, actual products may differ.

TANDBERG, Expressway and FindMe are registered trademarks or trademarks of TANDBERG in the U.S. and other countries.

All other trademarks are property of their respective owners.



TANDBERG
 Video
 Communication Server
 Expressway™ Application