



## TANDBERG Video Communication Server Control Application

The TANDBERG Video Communication Server (VCS) Control Application provides SIP proxy and call control as well as H.323 gatekeeper services. VCS is the center of the intelligent video communication network, connecting all infrastructure, management and endpoint devices and is key to interoperability with Unified Communications and IP Telephony networks and VoIP devices.



#### DESIGN FEATURES

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

#### APPLICATION FEATURES

- Flexible zone configuration with named zones and default zone
- Supports inter- and intrazone bandwidth control
- Provides IPv4/v6 Translation Services
- Policy Engine for processing calls
- URI and ENUM dialing
- Device authentication using H.235 and SIP digest authentication
- Embedded setup wizard for easy installation
- SIP Presence Server and User Agent
- TANDBERG FindMe™
- Multiway™

#### PERFORMANCE FEATURES

- Supports up to 2,500 registered devices and 100 concurrent traversal calls
- Up to 200 neighboring zones (traversal zones included)
- 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 increasing capacity and redundancy

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**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**

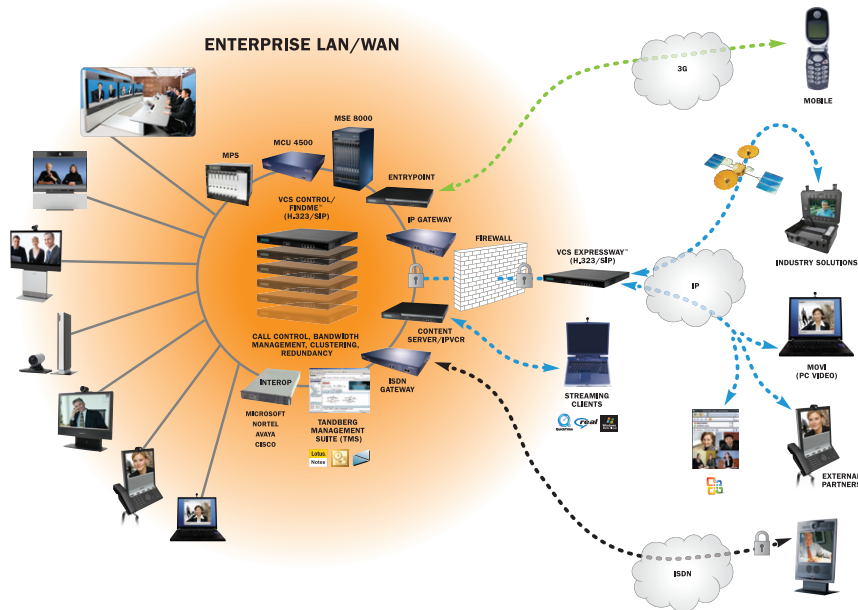


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**TANDBERG**  
 Video  
 Communication Server  
 Control Application