VCON

VCON SecureConnect

Solutions for secure firewall traversal, encrypted communications and intelligent broadcast distribution

The VCON SecureConnect family of products extends the benefits of IP-based communications safely beyond the edges of the managed data network. The SecureConnect family includes the Application Level Gateway (ALG) Proxy Server and the Advanced Encryption Server. The ALG Proxy server solves the connectivity problems associated with firewalls and NAT servers without threatening network security, and also provides intelligent broadcast distribution using multicast and unicast streaming methods. The Advanced Encryption Server fully encrypts videoconferences (both point-to-point and multipoint) or other data transmissions across public or private networks.

– Secure communication between devices both outside and inside the firewall

– Solves connectivity issues related to firewalls and NAT servers

– Extends the benefits of IP multicast beyond the boundary of the private network

– Remote users only have access to pre-determined, application-specific resources

– Supports both appliance and PC-based systems

– Highly scalable and centrally manageable

– Supports HD DualStream™ allowing endpoints to send and receive simultaneous video+data streams

ALG Proxy Server

This application level gateway (ALG) is a proxy server that specializes in secure firewall/NAT traversal of H.323 traffic (both signaling streams and media streams). It overcomes the connectivity problems that are presented by firewalls and NAT servers. One key benefit of the ALG Proxy architecture is that external devices never connect directly to the private network and internal devices never connect directly to the public network. Scalable from 2 to 100 concurrent calls, the ALG Proxy server can address NAT/Firewall issues on videoconferencing networks of all types. Using intelligent broadcast distribution, the ALG also serves as a multicast to unicast gateway. This allows a multicast session on a private network to be unicasted over the public Internet, and then regenerated back into a multicast stream.

Advanced Encryption Server

This server works in conjunction with the VCON Encryption Client and/or the ALG Proxy server in order to fully encrypt videoconferences or other data transmissions across public or private networks. Authentication, signaling streams, and media streams only pass between specifically authorized devices - all fully encrypted where needed. When combined with the ALG Proxy server, communication sessions from appliance devices can also be fully encrypted. The Advanced Encryption Server supports DES, 3DES and AES encryption standards and the method of encryption is centrally configured and controlled by the network administrator.

The VCON SecureConnect family of firewall traversal and encryption products allows any size organization to have secure, encrypted communications.

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What's included?

ALG Proxy Server:
1U rack-mount server
SecureConnect documentation
SecureConnect recovery disks
1-year software subscription

Advanced Encryption Server
1U rack-mount server
SecureConnect documentation
SecureConnect recovery disks
1-year software subscription

Specifications

ALG Proxy Server

Scalability
Up to 100 concurrent calls

Latency
Unencrypted: 2ms
Encrypted: 5ms

Traffic proxied through ALG Proxy
Gatekeeper registration
Call set up messages
RTP-based media streams (audio & video)
MXM administrator's console login
Remote endpoint/device configuration
VCON Interactive Multicast streams
HD DualStream™
H.323 Annex Q (FECC)
Neighbor Gatekeeper[1]
Directory Gatekeeper[1]

Supported codecs
Audio codecs: any codec transported over RTP
Video codecs: any codec transported over RTP

Configurable QoS
IP Precedence and DiffServ
Unique values for audio, video, data streams
Bandwidth limits

Intelligent broadcast distribution
Multicast-to-unicast gateway
Unicast-to-multicast regeneration
Interactive multicast support
Integrated SDP listener
Policy management
MPEG distribution
H.26x distribution

High availability for ALG Proxy Server
Dual hard drives on RAID controller, configured for
    mirroring
Dual memory modules
Dual NIC cards
Software watchdog to restart services

Advanced Encryption Server[2]

Capacity
Concurrent logins - up to 10,000
Concurrent calls - up to 1,000

Encryption standards supported
DES
3DES
AES

Firewall port:
Port 443 (HTTPS) for login

Encryption client
PC Requirements:
    OS: Windows 98, NT, 2000, XP
    200Mhz + processor
    Internet Explorer 5.0 or above
Authentication method:
    User ID and password identification

High availability for Advanced Encryption Server
Dual hard drives on RAID controller, configured for
    mirroring
Dual memory modules
Dual NIC cards
Software watchdog to restart services

[1] Between MXM servers or to non-MXM gatekeepers that are not behind an ALG Proxy.

[2] The VCON Advanced Encryption Server has been certified by NIST (The National Institute of Standards and Technology) as having correctly implemented the AES algorithm. Certificate #112 can be verified at the following URL: http://csrc.nist.gov/cryptval/aes/aesval.html