



Solutions for secure firewall traversal and encrypted communications

In today's business environment, many commercial enterprises, public and governmental organizations deploy VPNs, firewalls, and NATs to protect themselves from virtual threats posed by hackers, spyware, and other malicious activity. However, it is equally important to create and maintain open, yet secure, communications channels with customers, partners, suppliers, and employees working at different locations.

Emblaze-VCON's Frontier is the most effective solution for applying secure firewall traversal and network address translation to an H.323 IP multimedia communication network. It creates a secure tunnel for streaming video, audio, and data across multiple networks and to the public Internet. Setup of Frontier does not require additional configuration of security infrastructure, resulting in seamless communication without compromising enterprise security.

Frontier Product Suite

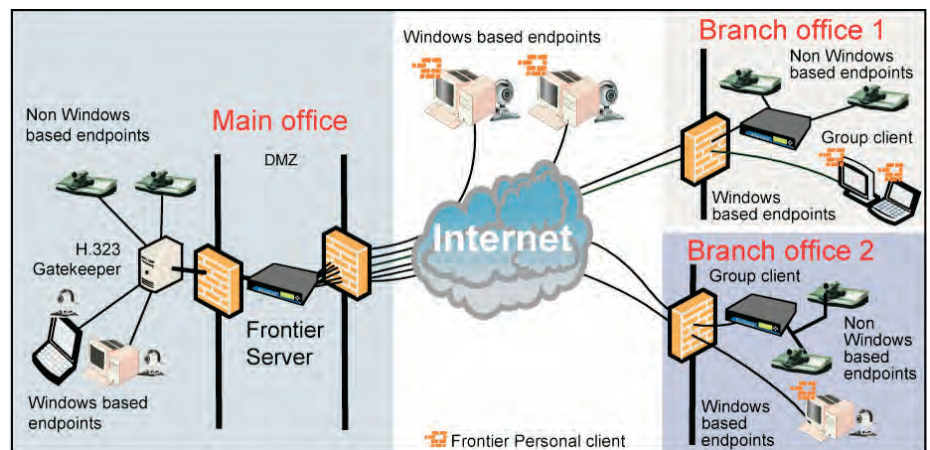
The Frontier **Server** is the central component through which all communications among registered users pass. The appliance is typically deployed in a DMZ or Service Provider's Network edge and is registered to an H.323 gatekeeper. The Frontier Server functions as the proxy for H.323 clients by substituting its own IP address to outside, thus preventing exposure of private enterprise IP addresses. All traffic is restricted to a single bi-directional port. A single server supports up to 50 calls at a single time, and call capacity may be increased by cascading multiple servers. Administrators can connect and monitor clients from a remote management console via a

The Frontier **Client** is installed in Windows-based H.323 endpoints. The client's connection to the Frontier Server is a secure H.323 tunnel across the enterprise's firewall/NAT.

The Frontier **Group Client** acts as a sole proxy through which non-Windows H.323 devices connect to the Frontier Server. The Group-client provides a single port connection to the Server for all endpoints registered to it. Endpoints registered in the Group-client can engage with each other in point-to-point conferences without calling the Server, saving valuable bandwidth.

Advantages of Deploying Frontier

- Communication appliance based on Hardened Linux.
- Easy to deploy and to implement.
- Traverses all types of firewalls and NATs while maintaining their security policies.
- Easy to implement, requiring no additional configuration on the existing security infrastructure. All connections are routed through a single fixed port.
- Supports all types of Windows-based and non-Windows H.323 endpoints.
- Works with any standard H.323 gatekeeper.
- Applies AES encryption through all signaling and media transmitted to public networks.
- Enforces client/server authentication for both single and repeated connections.
- Almost no system and traversal latency (less than 6 ms).
- Handles up to 50 simultaneous calls. Call capacity may be increased by cascading multiple servers on a single site or in several locations.
- Automatic failover capability in multiple server configurations.



In the sample application, the Frontier Server, situated in the DMZ, secures communication between endpoints in the organization's Main Office and clients located in the Branch Offices and in public networks. From the Main Office, endpoints register to the Server, which has registered to an H.323 gatekeeper Sites in the Branch Offices operate behind their own firewalls and are connected to the Main Office through IP. Windows-based clients register directly to the Server. Non-Windows-based clients register to Group clients which act as proxy connections to the Server. Videoconferencing among all these clients is only allowed through secured tunneling through the Frontier server. Additionally, the calls are encrypted using AES techniques.



Video Made Easy

Specifications

**Emblaze-VCON Ltd.
Headquarters**
Beit Rakefet
1 Emblaze Square
POB 2220
Ra'anana 43662
Israel
Tel: +972-9-7627800
Fax: +972-9-7627803

**Emblaze-VCON, Inc.,
Americas**
2 University Plaza, Suite 201
Hackensack, NJ 07601
USA
Tel: +1-201-883-1220
Fax: +1-201-883-1229

**Emblaze-VCON China
Representative Office**
Unit905, Tower B, COFCO Plaza
8 Jianguomennei Avenue
Beijing, 10005
China
Tel: +86-10-6526-9791
Fax: +86-10-6526-9790

Emblaze-VCON France
70/92 Boulevard Anatole France
93200 Saint Denis
France
Tel: +33-155-840-175
Fax: +33-155-840-179

**Emblaze-VCON GmbH
Germany**
Robert-Bosch-Str. 44
D-61184 Karben Frankfurt
Germany
Tel: +49-6039-488-749
Fax: +49-8976-757-143

Emblaze-VCON Italy
Via Portuense 1555
Commercio M27
00050 Ponte Galeria (Rome)
Italy
Tel: +39-06-400-43110
Fax: +39-06-400-43113

Emblaze-VCON Spain
Emblaze-VCON Tele-
comunicaciones S.A.
Castellana 141 Plt. 18
28046 Madrid
Spain
Tel: +34-91-789-3438
Fax: +34-91-570-7199

Emblaze-VCON UK
London House, 42 Brook St.
London, W1K 5DB
United Kingdom
Tel: +44 (0)117 302 6795
Fax: +44 (0)117 302 6794

Frontier Server and Group-client

Call Capacity	Up to 50 concurrent calls per server	Physical Dimensions	428.6 (W) 360 (D) 44 (H) mm 16.87 (W) 14.17 (D) 1.73 (H) in
Ethernet Ports	Two 10/100 Mb, Four 1 Gb Fast Ethernet ports	Storage Dimensions	1U 19" Rackmount
Serial Port	One DB9 (for console) One 2x5 pin-connector	Weight	9.8 kg / 21.59 lb
LCD Panel	2x16 characters module with four push-buttons	Operating Environment	Temperature: 5-40°C (41-104°F) Humidity: 20-90% rel. humidity
LEDs	Power status Storage access	Storage Environment	Temperature: 0-70°C (32-158°F) Humidity: 5-95% rel. humidity
Power	220 W, ATX PSU	Certification	CE/FCC/UL

Frontier Client

- Client System requirements:
Windows XP/2000 Intel Pentium III 600 MHz or higher
128 MB RAM

