



## **FAQ Supplement**

**Ingate Systems & Microsoft Office Live Communications Server deployment scenarios using Ingate Firewall and SIParator solutions in VoIP networks**



## Overview

Microsoft Office Live Communications Server 2005 allows employees to use rich communication tools with the Windows Messenger client such as VoIP, presence, instant messaging, video, whiteboarding, and other realtime communications functions within the company's local area network (LAN). With Ingate products it is possible to reach outside the company LAN using the full-fledged, proven communications platform that Live Communication Server offers.

In this manner, users can communicate with colleagues and customers who reside outside their LAN. The Ingate Firewall® and Ingate SIParator® maximize the full value of your Live Communication Server investment by lifting the normally present barriers of the LAN and allowing businesses to achieve true global connectivity.

Ingate Systems offers a Firewall line and/or a SIParator line providing solutions for common deployment scenarios involving Live Communications Server. Microsoft and Ingate are working together to ensure that the major strengths of Live Communications Server, enabling rich communication tools along with a strong security and its enterprise integration, can be used in complex network topologies involving firewalls, Network Address Translation (NAT), and trust boundaries.

This document presents some common deployment scenarios in which Ingate product lines resolves network issues on behalf of Microsoft's Live Communications Server and the clients that use it.

For further information on these solutions, or to ask about a deployment scenario that is important to you, please contact your Ingate System representative either by email at [sales@ingate.com](mailto:sales@ingate.com) or by phone at:

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More information about Ingate's solutions is available at [www.ingate.com](http://www.ingate.com).



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## **1. I use NAT in my network and my current firewall does not support SIP based communication, what should I do?**

### **Problem**

My current firewall does not support SIP based communication and hence does not allow me to fully take advantages of the rich communication tools offered by the Live Communication Server. Besides, I want to have a single piece of equipment – a firewall to handle all necessary data traffic along with VoIP capabilities

### **Solution**

The Ingate Firewall offers complete support for the SIP protocol and allows companies to connect a Microsoft Windows® Messenger clients. The phones are connected via the Ingate Firewall acting as a gateway to Microsoft Office Live Communications Server 2005 and handling authentication of these devices. The Ingate Firewall will also allow clients outside the corporate firewall, such as at branch offices or home workers, to connect to Live Communications Server 2005. The SIP proxy and SIP registrar that come standard with the Ingate solution enables the seamless, secure traversal of SIP communications with the addition of a single piece of hardware, the Ingate Firewall. Ingate's SIP proxy allows the system to keep track of where to send incoming session requests even on networks using Network Address Translation (NAT). It is also possible to restrict which users are allowed to register and from where.

## **2. How could I take the full advantages of the LCS without replacing my current firewall infrastructure?**

### **Problem**

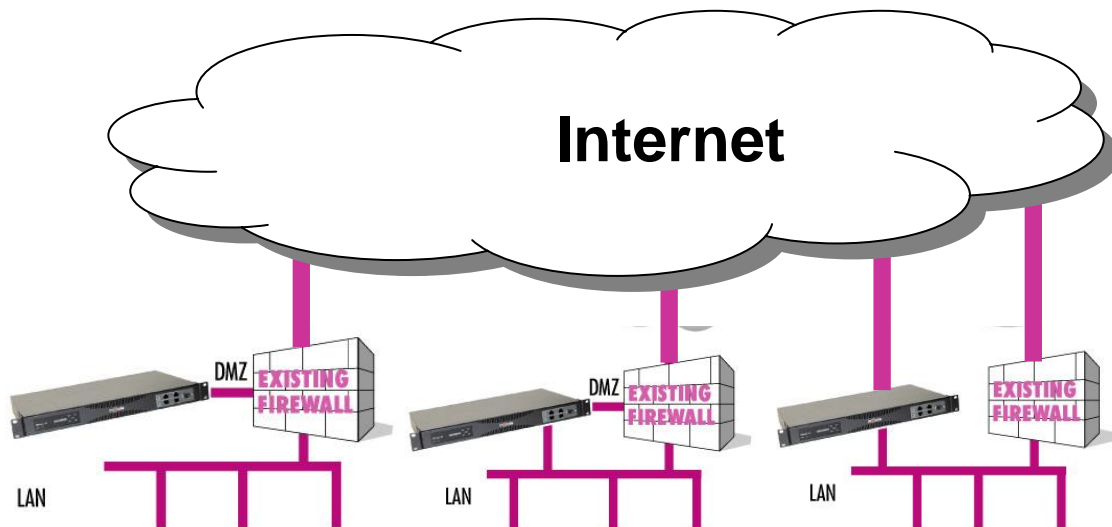
My current firewall infrastructure does not allow me to replace any of my firewalls, and I would like to preserve my firewall investment. However, I am still keen in using the Live Communication Server and to fully exploit rich communication tools outside my LAN.

### **Solution**

The Ingate SIParator seamlessly works with an organization's existing firewall to enable employees to use SIP-based applications, such as the Live Communication Server. The only products of their kind, Ingate's SIParators offer complete support for the SIP protocol and allow organizations to add SIP transparency to their networks. The Ingate SIParator enables companies to connect Session Initiation Protocol (SIP) clients, including Microsoft Windows® Messenger clients. The clients are connected via the Ingate SIParator acting as a gateway to Microsoft Office Live Communications Server 2005 and handling authentication of these devices. The Ingate SIParator will also allow clients outside the corporate firewall, such as at branch offices or home workers, to connect to Live Communications Server 2005. The SIParator is designed to support a full range of capacity requirements and is compatible with all commercially available firewalls. The Ingate SIParator performs all SIP proxy and contains a great flexibility to any enterprise to streamline and adapt their system according to advanced needs.

When deploying an Ingate SIParator in the enterprise, its SIP Proxy will do the necessary re-writing (public to private IP addresses and vice versa) and dynamically open and close necessary ports for media. This creates connectivity across the firewall's NAT boundary. There is no need to modify or replace the enterprise firewall, and all traffic passes through the firewall as before.

There are three different SIParator setups possible, giving the network administrator great flexibility and options; DMZ, DMZ-LAN (no internal calls will go through firewall, thereby off-loading traffic from it), or as a STAND-ALONE configuration.



### 3. In my enterprise I have a number of locations with different number of users

#### Problem

My enterprise has multiple locations with different number of users, so I have different need of scalability.

#### Solution

Ingate Firewalls and SIParators come in a range of sizes to meet enterprise needs from home office to large enterprise, and have been cited by users and media for ease of use. VPN is included in all firewalls and SIParators. Ingate also offers and QoS modules, SIP user licenses and SIP traversal licenses for additional scalability and flexibility, as well as a number of comprehensive online support options to assist with product education and customer service.

### 4. I need to reach users who themselves are behind NATs or Firewalls

#### Problem

My users connect from home, hotels, trade shows, customer sites, usually from behind different type of devices performing NAT. VoIP does not function well when crossing traditional firewalls. I can't place any special hardware or software on my users' premises, yet I need to enable connectivity to these users.

#### Solution

Ingate offers Remote SIP Connectivity (RSC) as an add-on software module to its Firewalls and SIParators, allowing users outside of the enterprise network to be reachable, even if they are situated behind NAT devices, i.e. at hotels, at home, surf zones, and at airports. No longer will remote NATs be a problem for the road warrior working from a hotel room or for the employee working from home. Regardless of their location, they will be able to utilize the same communication tools as they use in the office. Ingate RSC brings the Live Communication Server to the far-flung employees, making them accessible from anywhere, at anytime.

By deploying Ingate Firewall or SIParator on the enterprise premises, the Ingate solution will maintain connectivity across "far-end" NAT and firewall devices. The result is that firewall-bound users will have no problem connecting to your Live Communication Server. This solution enables remote users to connect to a



LCS system as if they were local to it. No VPN, special software, special hardware, or special firewall rules are required. No knowledge or provisioning of the far-end topology is required either.

## **5. I need to protect my VoIP equipment against external attacks**

### **Problem**

My voice equipment is accessible from the Internet. I need equipment to protect it from deliberate attacks, such as DOS attacks.

### **Solution**

Ingate Systems has a strong security heritage. The company developed first firewall in 1994.

By deploying Ingate Firewall or an Ingate SIParator between Live Communication Server and the Internet, Ingates SIP proxy technology will apply strict controls to the SIP and media that may enter your network.

Filtering inbound or outbound traffic on:

IP address (the unit can be configured to allow SIP traffic from only certain IP addresses and/or networks)  
To and From Headers (the unit can be configured to accept traffic where only certain parameters match in the To and From headers in the SIP message.)

Content/MIME Type (the unit can be configured to only allow particular content/MIME types.) This allows control over the types of SIP messages that are allowed.

The result is that legitimate calls are separated from illegitimate call attempts, with the illegitimate call attempts being blocked. The legitimate calls are allowed to pass, but are rate-limited so that their impact on the network can be no more than that of a true, legitimate call.

## **6. I belong to a security conscious corporation, what precautions actions can you provide me with?**

### **Problem**

My organisation has to meet the highest standards of security.

### **Solution**

Ingate solutions offers a number of different security features which are adaptable and maintain the highest standards of security. For instance Ingate offers (1) the ability to black list on IP address and/or Domain. (2) SIP message loop detection. (3) Maximum/guaranteed bandwidths (QoS) ensure maintained VoIP traffic in certain scenarios. (4) Ingate architecture ensures that existing media sessions are unaffected by an overloading attack against the SIP stack. (5) Management access is also isolated from SIP attacks allowing remedial action to be taken.

## **7. I need to allow Transport Layer Security (TLS) in my network**

### **Problem**

When using the Live Communication Server I need to allow TLS based communication both inside and outside my network, especially when outside users are trying to connect to the server, but my current firewall does not support TLS based encryption.

### **Solution**

Ingate supports TLS based SIP communication.