

# **Configuration Aid To Ingate Firewall/SIParator - Setting Up TLS For SIP Signaling Encryption**

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## How To Configure TLS in Ingate Firewall/SIParator

This is how to configure your firewall/SIParator to encrypt SIP media or force the SIP clients to use signaling encryption with TLS.

The settings for SIP signaling encryption are made on the **Signaling Encryption** page under **SIP Services**. You also need a certificate, which is created on the **Certificates** page under **Basic Configuration**.

This feature is only available when the Enhanced Security or the SIP Trunking module has been installed.

### Certificates

Create certificates on the **Certificates** page.

Add a new row to the **Private Certificates** table and enter a name for this certificate. Press **Create new** and enter the certificate information.

If you want to make TLS connections on the LAN and the Internet, you will need one certificate for each interface.

Private Certificates <a href="#">(Help)</a>				
Edit Row	Name	Certificate	Information	Delete Row
<input type="checkbox"/>	Inside		Subject: /CN=10.47.3.243 Issuer: /CN=10.47.3.243 MD5 Fingerprint: 96:3F:8A:4A:90:A4:7C:C4:4D:E2:E9:03:51:AD:FA:37 Valid to: 2010-07-21 14:24:58	<input type="checkbox"/>
<input type="checkbox"/>	main cert		Subject: /CN=sip.ingate.com Issuer: /CN=sip.ingate.com MD5 Fingerprint: 5E:5A:C8:DC:A0:DC:42:FE:C0:BB:FA:B5:5C:60:5E:D0 Valid to: 2010-07-01 14:25:20	<input type="checkbox"/>

If the firewall/SIParator should use TLS to connect to another SIP server, you must upload the CA certificate for that server here. You don't need CA certificates for SIP clients.

Create a new row in the **CA Certificates** table and upload the CA certificate.

CA Certificates <a href="#">(Help)</a>					
Edit Row	Name	CA Certificate	CA CRL	Information	Delete Row
<input type="checkbox"/>	SIP server CA			Subject: /CN=ca.example.com Issuer: /CN=ca.example.com MD5 Fingerprint: 37:8D:16:82:CD:8C:D4:D9:4F:64:7C:75:9B:78:D0:DF Valid to: 2010-07-01 14:17:46	<input type="checkbox"/>

## Signaling Encryption

Go to the **Signaling Encryption** page to make TLS settings.

First, select the allowed SIP transports. If you want to allow signaling via TCP or UDP, select "Any".

If "TLS" is selected, no connections via UDP or TCP will be initiated or accepted. In this case, you must make sure that all clients and servers that the firewall/SIParator should communicate with can be reached via TLS.

If the firewall/SIParator should communicate with other SIP servers, you have already imported their CA certificates. In the **TLS CA Certificates** table, you select these certificates to allow them to be used in TLS connections.

TLS CA Certificates <a href="#">(Help)</a>		
Edit Row	CA	Delete Row
<input type="checkbox"/>	SIP server CA	<input type="checkbox"/>

In the **TLS Connections On Different IP Addresses** table, create one row for the inside and one for the outside IP address. For each IP address, select which certificate should be used for authentication when a TLS connection is made to that IP address, and if the firewall/SIParator should require the client to send its own certificate for authentication, too.

You also select which TLS methods should be accepted for each IP address.

Note that the firewall/SIParator will not accept TLS connections to an IP address which is not listed in this table!

TLS Connections On Different IP Addresses <a href="#">(Help)</a>					
Edit Row	IP Address	Own Certificate	Require Client Cert	Accept Methods	Delete Row
<input checked="" type="checkbox"/>	Outside (193.12.253.115)	main cert	On	SSLv3 or TLSv1	<input type="checkbox"/>
<input checked="" type="checkbox"/>	Inside (10.47.2.243)	Inside	Off	Any	<input type="checkbox"/>

Add new rows  rows.

## Save/Load Configuration

Finally, go to the **Save/Load Configuration** page under **Administration** and apply the new settings by pressing **Apply configuration**.

Save/Load Configuration Show Configuration User Administration U

**Test Run and Apply Conf** [\(Help\)](#)

Duration of limited test mode:

seconds

Apply configuration

When the configuration has been applied, you should save a backup to file. Press **Save config to CLI file** to save the configuration.

**Save/Load CLI Command File** [\(Help\)](#)

The permanent configuration might be affected by loading a CLI file.

Save config to CLI file Load CLI file Local file:  Browse...

## Settings in the Other Server

You need to upload the firewall/SIParator certificate to the other SIP server if the firewall/SIParator should be able to make connections to the server.