

# How to configure TLS support for Snom

This article is meant to assist you in connecting Snom devices with VoipNow using TLS protocol.

## Requirements

Before you start, make sure you have the following:

- The latest VoipNow version (3.0.0 or newer)
- At least a Snom 320 phone device

## Step-by-step guide

### Set Up the Server

On the VoipNow server or on the SIP node (if you have a distributed system) do the following:

**STEP 1:** Open `/etc/kamailio/kamailio.cfg`

**STEP 2:** Check the value of the `verify_certificate` parameter for the **TLS** module:

```
# Check an user certificate to be correctly signed by a trusted CA
modparam("tls", "verify_certificate", 0)
```

If it's set to 0, it means Kamailio will not verify the certificate with a CA. If this is what you want, you can start setting up the phone. Otherwise, continue with the next step

**STEP 3:** Under the line below:

```
tcp_send_timeout=1
```

add the following:

```
tls_ca_list="/etc/kamailio/tls/user/user-calist.pem"
```

**STEP 4:** Open `/etc/kamailio/tls/user/user-calist.pem`

**STEP 5:** Append the list of snom CAs that you can find [here](#).

**STEP 6:** Restart Kamailio by running:

```
/etc/init.d/kamailio restart
```

At this point, the server setup is complete.

## Set up the phone

**STEP 1:** In the web interface of your Snom phone device, add new details related to your account (user, password, proxy, etc) as indicated below:

- Go to a free Identity (e.g. Identity 3)
- Activate it (select **on** next to **Identity active**)
- Write the name of the extension you are using in the **Account** field (e.g. 0003\*003)
- Write the password
- In the registrar and the outbound proxy fields, write the Kamailio server address as described [here](#)

```
<ip_address|hostname>:<tls_port>;transport=tls
#example:
192.168.1.10:5061;transport=tls
```

**STEP 2:** The Snom phone device needs to accept the 4psa certificate used by Kamailio. For this, go to **Setup -> Certificates**.

- In the **Unknown Certificates** tab, there is a list of all certificates unknown by the Snom phone

- Click the [Add exception](#) link next to the one supplied by the Kamailio server

**STEP 3:** Restart the phone.

At this point, the Snom phone device should be able to communicate with your Kamailio server via TLS.

## Possible Problems

If you happen to see the warnings below in the Snom log, you need to make sure that the web interface of the phone accepts the server supplied certificate following the steps detailed above.

```
TLS: Warning: Certificate with subject Country: US; State: Florida; Locality ; Organization: 4PSA; Common Name:
; eMail:   has expired according to the local time of the phone.
TLS: Warning: Certificate clash. Certificate with subject Country: US; State: Florida; Locality ; Organization:
4PSA; Common Name: ; eMail:   is not trusted.Different server certificate with same subject exists on the phone.
TLS: Refusing TLS connection. Invalid or unknown Certificate received
```

## Related articles

- [How to set up Snom 300/320/360 SIP phones to connect to VoipNow](#)
- [How to activate the message waiting indicator on your phone](#)
- [How to decode SIP over TLS with Wireshark](#)
- [How to configure TLS support for Snom](#)