

### NAT ENVIRONMENT

In hardphone mode (see Operating Mode section) VOP uses a hard phone.

VOP connects RTP streams between calls and the hard phone by using SIP RE-INVITES.

These RTP streams then flow within Asterisk (between calls and the hard phone) and not through VOP.

In order to work, SIP ALG must be disabled in the router between VOP and Asterisk, and Asterisk must strictly obey to the IP/Port in the SDP of the RE-INVITES.

In case SIP ALG is enabled or Asterisk is miss-configured, then no audio will be heard either by the caller/ee or on the hard phone or both.

You need to edit the Asterisk configuration file "sip.conf" and ensure that the following red parameters have the following values:

[VOP SIP account]

**canreinvite = no (v1.4-)**

**directmedia = no (v1.6+)**

**nat = no**

Bridge Mode and Softphone Mode don't require any change, they work with any kind of configuration, but the RTP streams flow through VOP.

### PRESENCE

VOP subscribes to Asterisk for every phone contact where presence is required.

To enable presence in Asterisk you need to edit the Asterisk configuration file "sip.conf" and ensure that the following red parameters have the following values:

[general]

**notifyringing = yes**

**limitonpeers = yes (v1.4-)**

You also need to ensure that the SIP accounts of the phones have a "call-limit=X" set up in their section. (X being any value)

Finally you need to edit the Asterisk configuration file "extensions.conf" and ensure that for every phone (X being the number) where presence is required a corresponding line "exten => X,hint,SIP/X" is added.

Once configured, you need to specify to VOP which contact has presence enabled by using the <presence> parameter of the <contact> of a <user> in a <directory> section or in the application by right-clicking on a phone contact in a local directory and selecting "Contact > Presence > Enable".

You can also enable presence for parking rooms using "exten => X,hint,park:X@parkedcalls" (X being the parking room number) and for meetme conference rooms using "exten => X,hint,meetme:X" (X being the meetme conference room number) and for conference bridge rooms using "exten => X,hint,confbridge:X" (X being the conference bridge room name) .