How to debug calls that hang up after 30 seconds

Applies to VoipNow 3.0.0 and higher!

Sometimes certain calls or phones happen to drop after 30 seconds. Usually it's because signaling (SIP dialog) has not been properly established. Technically, the SIP ACK (Acknowledgement) message does not reach the intended destination within a specific timeout period. This may happen for a lot of reasons and, consequently, there is no straightforward way to fix it. You need to know the SIP protocol, the way in which the call gets established as well as what messages are exchanged between the two parties involved in the call.

Step-by-step guide

Before you start running any checks, you should verify the VoipNow configuration.

1. Open VoipNow's web management interface
2. Select **Cloud Management** from the main menu.
3. Verify if the infrastructure is properly set on your network (Public, Nat, Public private).

As we've already mentioned, there's no easy to fix this, but there are a couple of ways you can figure out what causes the calls to hang up:

Verify if the issue occurs during the echo test

Dial *52 and wait for more than 30 seconds.

If the hangup occurs after 30 seconds, the problem is most likely due to the network setup of the registered extension. NAT can also be the cause considering that the phone might send the internal IP as the source. In this case, using stun or disabling SIP ALG on the router that is in front might help.

Ensure that the firewalls allow UDP to pass properly

Sometimes the poorly built firewalls may not allow UDP to pass properly. In this case there are two things you can do:

1. Verify if the calls between extensions work properly. If no, then the previous point should help;
2. Verify outgoing calls towards public network. The SIP provider might request a specific header and, if the header is missing or there's something wrong in the SIP request, the call will not be established. In case this happens, you need to investigate with the SIP trunk provider.

Ensure that the right CallerID is sent

For example, if the wrong CallerID is sent (e.g if 0003*001), providers might not recognize it as valid. As a result, 30 seconds later, the call will be dropped.

Some specific remote numbers or prefixes can also trigger the hangup because providers might not route the call. If that's the case, you need to check things with the SIP provider.

If you've tried all these methods and none of them has worked, please contact Support.

Related articles

- How to create a configuration template for a certain SIP device
- How to set up a SIP channel to interconnect with Skype forBusiness account
- Understanding the Call Reports in VoipNow
- Understanding SIP devices provisioning permissions
- How to use Request Logs