Application note:

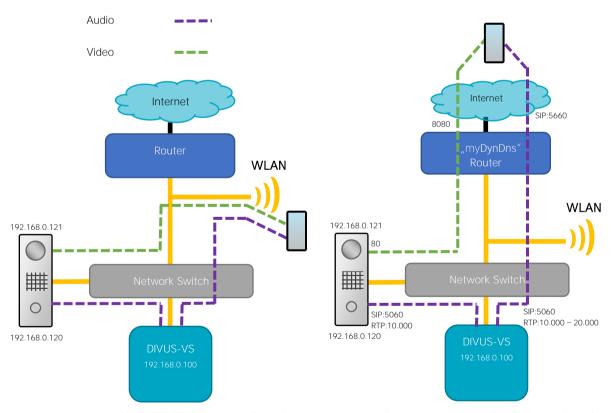
VIDEOPHONE remote mode v.2.2

NETWORK CONFIGURATION FOR VIDEOPHONE REMOTE MODE



ATTENTION! For the further understanding the basic knowledge of DIVUS VIDEOPHONE 4 is required. Therefore it is highly recommended to read that documentation before reading this application note; the documentation can easily be found on our homepage www.divus.eu.

A simple network scheme follows, showing the network structure of reference for this application note:



Local: No special network configuration; correct configuration of DIVUS OPENDOOR and DIVUS VIDEOPHONE is of course expected.

Remote: port forwarding is required inside Internet router for communication of audio and video. Additionally some special parameter in DIVUS-VS must be set.

To be able to use the remote mode you need a static external IP address or a domain name provided by a DDNS service to access your system from outside.

To enable the communication through the internet router the following setup is required:

- Port forwarding for the SIP port: never use the standard SIP port for external access because it may result in ghost calls caused by internet spam services. Therefore, forward a port of your choice from outside to port 5060 (UDP) on the IP address of the VoIP server, for example: 5660 → 5060 on 192.168.0.100. Use the port defined here as SIP port for the external access in DIVUS VIDEOPHONE 4's remote settings.
- 2) Port forwarding for the video stream: forward an external port of your choice to port 80 (UDP and TCP) of the IP address of the OD-Cam, for example: 8080 → 80 on 192.168.0.121. In DIVUS VIDEOPHONE phonebook use this port together with the external address of your router for remote camera URL configuration for example: myDynDns.org:8080.
- 3) RTP-Port of OD-Sip: To ensure the RTP- packets work correctly change the parameter "local RTP port" in OD-Sip under "Advanced settings → SIP advanced" from standard "6000" to "10000".
- 4) DIVUS-VS:
 - a) sip_custom.conf: Ensure that the parameter "qualify" is set to "10000" and the parameter "nat" is set to "yes" for each defined client. If one of them is not set, there may be one direction audio only!
 - b) sip.conf: Specify the local network range with the parameter "localnet", so that the sytem knows the local network and can so differ between communication outside and inside of the local network; for example "localnet = 192.168.0.0/255.255.2550" to specify the local network with range 192.168.0.X and subnet mask 255.255.255.0. Additionally define the external IP parameters:
 - i. If you have static external IP address: Ensure that the parameter "externaddr" is set to your static external IP address complete with your external UDP Port, which forwards to the SIP Port 5060 on DIVUS-VS; for example: externaddr=92.10.25.143:5660
 - ii. If you use a dynamic DNS service: Ensure that the parameter "externhost" is set to your dynamic DNS domain name complete with your external UDP Port, which forwards to the SIP Port 5060 on DIVUS-VS; for example: externhost=mydynDns.org:5660. Check also the parameter "externrefresh", which defines in which interval the dynamic DNS hostname is refreshed to resolve the new dynamic IP address; if the interval doesn't match your requirements please increase or decrease it according to your dynamic DNS timings.



NOTE: Step 4b not always is required, depending on the configured internet Router and the network infrastructure the remote mode can already work as soon as step 1-4a are done; nevertheless, if there should arise problems with registration or audio communication in remote mode, follow the indications in section 4b.



ATTENTION! In the DIVUS-VS configuration files like "sip.conf", "sip_custom.conf" and "extension_custom.conf" the semicolon character marks the beginning of a comment. Therefore please verify that no semicolon character is placed before the parameters you want to be applied in the configuration of asterisk.



ATTENTION! As VoIP server for this purpose one of the following DIVUS devices may be used: DIVUS VS1, VS2, VS3, DIVUS KNX Server or DIVUS KNX Superio with OPTIMA v. 2.2+. For detailled setup instructions of OPTIMA for remote access (intercom) please refer to the *OPTIMA* Intercom-manual.