

Application Note

SmartNode 4000 Series used Single Phone VoIP and PSTN Access

The SmartNode with a combination of FXS and FXO ports can connect to telephone sets, PSTN lines and VoIP services at the same time. This way one single handset can be used to:

- Make and receive calls from/to the PSTN
- Make and receive calls from/to the Internet

The SmartNode Call routing can be used to route calls based on destination, best rates etc and provide fallback routing in case of network outages on either side.

System Overview

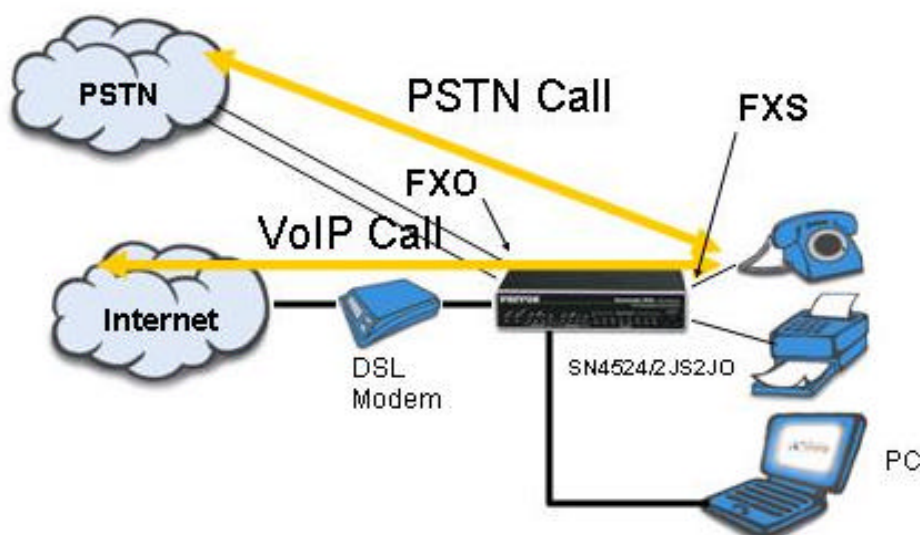


Figure 1: Schematic diagram of the Application

The following elements are required for this Application:

- 2-wire Telephone handset or PBX to connect to the FXS ports of the SmartNode
- 2-wire telephone lines from the PSTN to connect the FXO ports of the SmartNode
- Ethernet connection and IP Addresses to an IP LAN or WAN
- Sufficient bandwidth of minimum 25kbit/s per call through the entire IP Network
- An account with a SIP or H.323 Internet Telephony Service Provider (ITSP) including credentials and protocol specific settings

Note that this Configuration Note provides a basic setup which is intended to get you started quickly and make a first call. In most cases the minor adaptations described in the configuration files will be sufficient for your network. However, the SmartNode has many additional configuration options which allow to fit the product in various network scenarios. Please consult the SmartWare Software Configuration Guide for the complete configuration documentation.

How To Adapt To Your Network

The configuration file is available as an ASCII file (.cfg) file. You can edit the configuration file with any text editor (MS Word, Wordpad). Save changed files in text format. You may also change the file extension to .txt for your convenience.

The configuration files contains comments (lines with a leading #) with instructions where and how to change the parameters which may need to be adapted to your network.

For instructions on how to download the configuration using a TFTP server to the SmartNode please consult the **Quick Start Guide**.

Note: Please follow the instructions in the Quick Start guide **exactly - step by step** to insure that the configuration is activated correctly!

Configuration Files

The application is symmetric meaning that a SmartNode can be the Originating Gateway and Terminating Gateway at the same time for different calls. Therefore only one configuration file is presented.

SPA.cfg