

Application Note

SmartNode 4000 Series used for FXO 2nd Dial-Tone Access

This application enables a service provider or enterprise network administrator to provide toll bypass to anyone. The user is not required to have an Internet connection or any special equipment. Each call is made up of three parts:

- Regular PSTN call from the Calling-Party to the Originating Gateway
- Voice over IP call between the Originating and the Terminating Gateway
- Regular PSTN call from the Terminating Gateway to the Called Party

System Overview

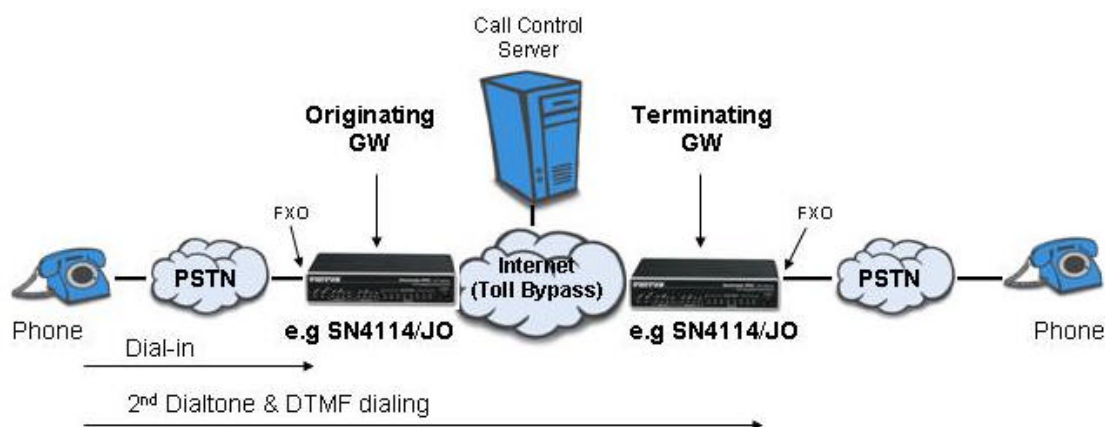


Figure 1: Schematic diagram of the Application

The operation procedure is the following:

- User dials a regular extension number to access the Originating SmartNode GW
- The Originating Gateway accepts the call and plays a 2nd dial-tone
- The user then dials the number of the party he wants to call
- The Originating Gateway collects this number and routes it over the IP Network to the corresponding Terminating Gateway
- The Terminating Gateway accepts the call and initiates the PSTN call to the Called-Party

The following elements are required for this Application:

- • 2-wire telephone lines from the PSTN to connect the FXO ports of the SmartNode on the Originating- and Terminating Sides
- • Ethernet connection and IP Addresses to an IP LAN or WAN on the Originating and Terminating side
- Sufficient bandwidth of minimum 25kbit/s per call through the entire IP Network

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.

2DT.cfg