Cisco SIP - ISDN Gateway

The following configuration file example is known to work when configuring sipX with a Cisco SIP ISDN Gateway setup. You must replace parameters within the file (e.g., sip-server dns:servername.com) with your site specific parameters when you copy the file through a terminal window into the Cisco Gateway.

1. Copy and save the following example, starting with the first exclamation point (!).
2. Open a terminal window/telnet to the Cisco gateway.
3. At a command prompt enter the Write to Screen command (e.g., Cisco#wr t) after gaining access through protected mode (enter the "enable" command at a command line prompt to enter protected mode and a # sign displays with the prompt) and a similar configuration displays. Copy and save this file.
4. Note the differences between your hardware configuration and the hardware configuration in this example; your interfaces may be different. Be sure to account for these differences and modify your new file to reflect them.
5. Note the differences in the software configuration and make sure the appropriate changes are made in your new configuration as, for example, with the ISDN switch type. There are many different switch possibilities besides primary-5ess, which is part of the following example file, such as primary-4ess. You must know your switch type and have a technical knowledge of switching.
6. Type the config command to enter an editable mode and copy the file example into the Cisco gateway when you have finished making any necessary changes.

```
!You have to configure your Serial Interface. As an example, you can configure the

!serial interface as 5ess.

isdn switch-type primary-5ess

!

template mon

!

voice call carrier capacity active

voice rtp send-recv

!

voice service voip

sip

! Define the codecs you will be using.

!

voice class codec 1

codec preference 1 g711ulaw

codec preference 2 g729br8

!

!As indicated in the steps above, introducing this example file, the following is relevant for a T1 connection; your hardware may be different (e.
g., you may have an E1 connection).
interface Serial1/0:23

no ip address

no logging event link-status

isdn switch-type primary-5ess

isdn incoming-voice voice

isdn send-alerting

no cdp enable

!

!You have to configure a dial peer to dial out of a specific interface.

!Here, you will be dialing out T1 ports 0 through 23. The 7 digit

!number will be prefixed by 1781 and sent out one of the T1 channels.

!So if you dialed 5551212 your outgoing number would be 17815551212.
```

```
!
!
dial-peer voice 20 pots
huntstop
application session
destination-pattern .......$
port 1/0:23
forward-digits all
prefix 1781
!
!
!For the voip calls you need to configure voip dial peers:
! Here all 3 digit calls will go to sip-server.
dial-peer voice 200 voip
huntstop
application session
destination-pattern ...$
rtp payload-type nte 98
voice-class codec 1
session protocol sipv2
session target sip-server
dtmf-relay rtp-nte
!
!
!The sip ua configuration will be similiar to what follows:
!
sip-ua
max-forwards 12
no oli
sip-server dns:servername.com
```