Introduction

The information in this document is intended as a general guide to help you set up the Cloudli service on your SIP compatible telephone system. It contains only Cloudli-specific parameters that need to be configured on your Patton Trinity device. For full and proper functioning of the Cloudli service and all other features, your Patton device should be set up according to the detailed instructions provided by the manufacturer in their configuration guide.

Encryption Service License

If you are subscribing to a Cloudli encryption service and have purchased the Patton device from Cloudli, it will come with the Patton CryptAgent License pre-installed. If you purchased the device elsewhere, you must procure the Patton CryptAgent License and related installation instructions directly from Patton or their authorized reseller.

Configuration methods

The Patton Trinity devices can be configured in the following ways.

- ***Auto-Provisioning:*** Cloudli automatically configures the SIP parameters and channel assignments on supported Patton Trinity devices. See related section below.

- ***Manual Configuration:*** For control over the full range of configuration options you can:
    - Manually create a **Patton Trinity Configuration File**, using a text editor. See related section below.
    - Use the ***Command Line Interface*** available via the Patton device console. Contact Patton or authorized reseller for an up to date copy of the Patton Trinity CLI Reference Guide.
    - Use the ***Web Wizards*** available via the Patton portal. Contact Patton or authorized reseller for access.

If not using the Auto-Provisioning method you will need the SIP Parameter values of your Cloudli account. See the section on Manual Configuration below for instruction on how to obtain these values.

Auto-Provisioning

If you purchase the device from Cloudli or provide us with the MAC address of a supported Patton device you purchased elsewhere, you may prefer this configuration method for its ease of use however this method has limited scope with respect to the full range of configuration options available with Patton Trinity devices as it only provides control over configuring SIP parameter and channel assignments.

The Cloudli SIP parameters and channel assignments are configured automatically via the Cloudli/Patton Remote Configuration Service (RCS). The RCS is made up of two components:

a) The Patton Redirect Server (PRS) available via the Patton Cloud.
b) The Cloudli Provisioning Server (CPS).

Step 1 – Notify Cloudli of device's MAC address

The first step is to provide Cloudli with the device's MAC address. If you've purchased the device through Cloudli or one of its agents as part of the bundled service offering, Cloudli will already have that information and there is nothing for you to do.

Step 2 – Cloudli creates device configuration

The Cloudli Provisioning Server creates and maintains the device's configuration and associates it with the provided MAC address. You can contact the Cloudli service desk (service@cloudli.com) to request a copy of the configuration for viewing or request changes to the device's channel assignments.

Step 3 – Cloudli updates the Patton Redirect Server

Cloudli uses the MAC address to update the PRS. The first time the device powers up with access to the Internet it connects to the PRS. The PRS provides the CPS address to the device.

Step 4 – Device connects to Cloudli Provisioning Server

Once connected to the CPS the device receives the configuration settings it needs to connect to the Cloudli service (VoIP Softswitch).

Step 5 – Device connects to the Cloudli VoIP Softswitch

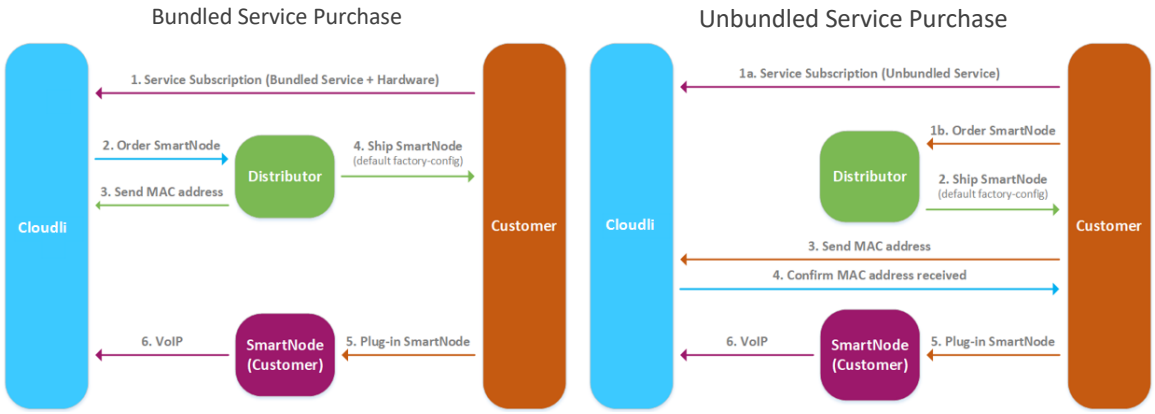
With the correct configuration in place the device is able to connect and authenticate with Cloudli. The device can now register to receive calls and can make calls using its configured credentials.

Plug-n-Play Deployment

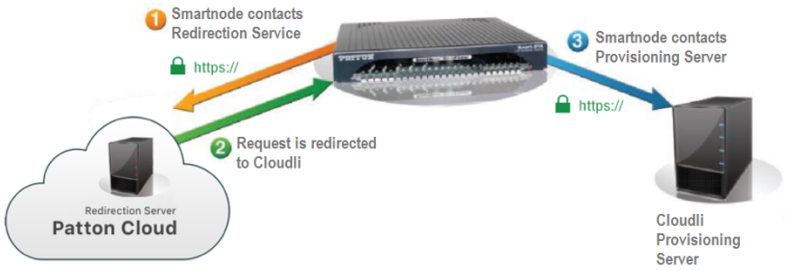
From a customer's perspective, the auto-provisioning mechanism described above enables plug-n-play deployment of Patton SmartNode products. The following diagrams illustrate the behind the scene

activity that make this possible, starting with customer perspective diagrams, which provide a high level of detail followed with more detailed diagrams covering technical aspects of the workflow.

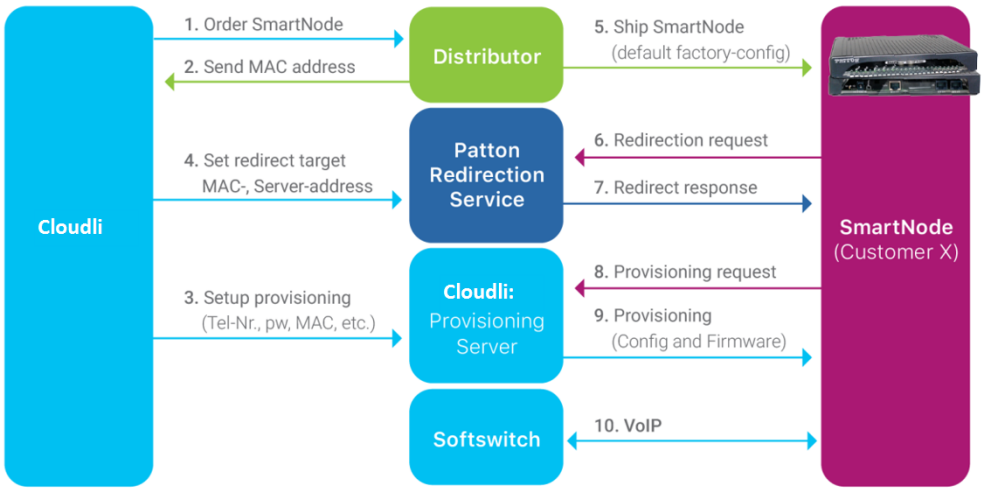
Auto-Provisioning Overview



Device Provisioning via Redirect Server in Patton Cloud



Details Auto-Provisioning Workflow



Manual Configuration

Manual Configuration Methods

Command Line Interface & Web Wizard Users

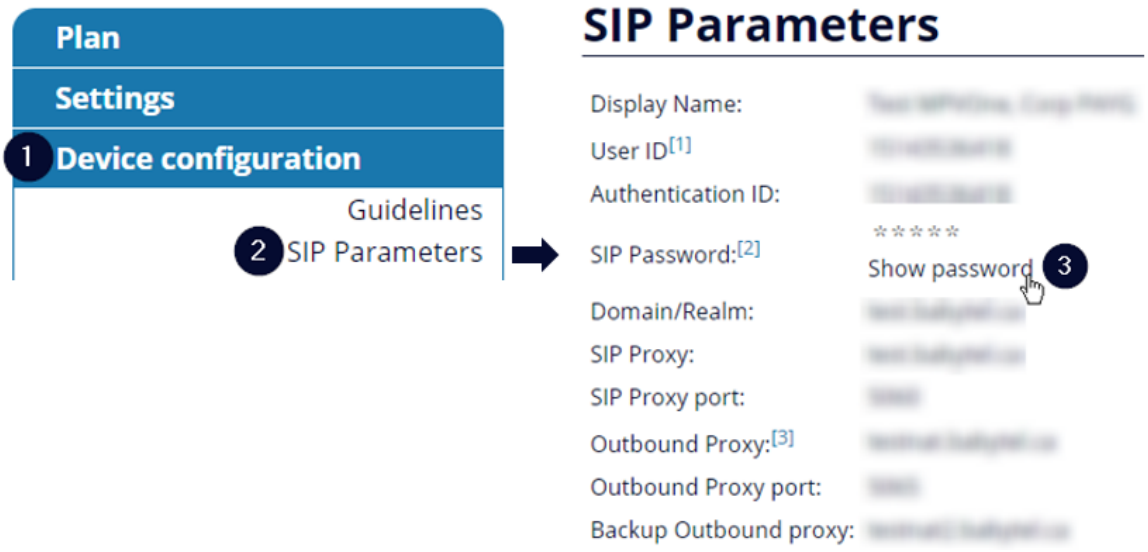
Use of the Command Line Interface, available via the Patton device console, or the Web Wizards, available via the Patton portal, is outside the scope of this document. Contact Patton or authorized reseller for information on or assistance with these manual configuration methods.

Patton Trinity Configuration File

This configuration method involves the use of a text editor to customize a configuration file according to the steps outlined below.

Step 1 - Gather all the necessary information

Your User ID and Web password were provided to you in the Signup Confirmation email. Go to the Cloudli website (www.cloudli.com) and login using your ID and password. (The login command can be found at the top right corner of the page.) Click on **Device Configuration** to expand the menu and then click on **SIP Parameters**. A page similar to the example shown below will be displayed, with values relevant to your account.



Please have this information at hand when you configure your system.

Step 2 – Create a startup-config file

Use a text editor to customize a Patton configuration file called startup-config according to your specific needs and account parameters. Download the latest Cloudli template for this file at this location: https://www.cloudli.com/hubfs/Cloudli-Configuration-Guides/Cloudli-Patton-Trinity-Config-Temp.txt

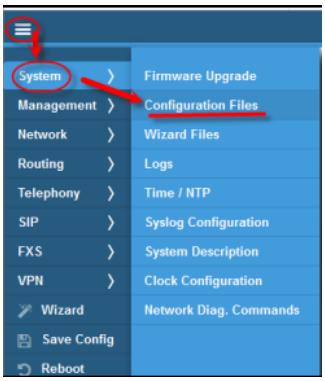
Contact Patton or visit https://www.patton.com/manuals to get the latest copy of a Patton Trinity configuration guide with details on Trinity configuration commands and information on how to make configuration changes beyond what is outlined here.

Once modified according to your needs you must upload the startup-config file to the device. Instructions on how to do that are provided in step 3.

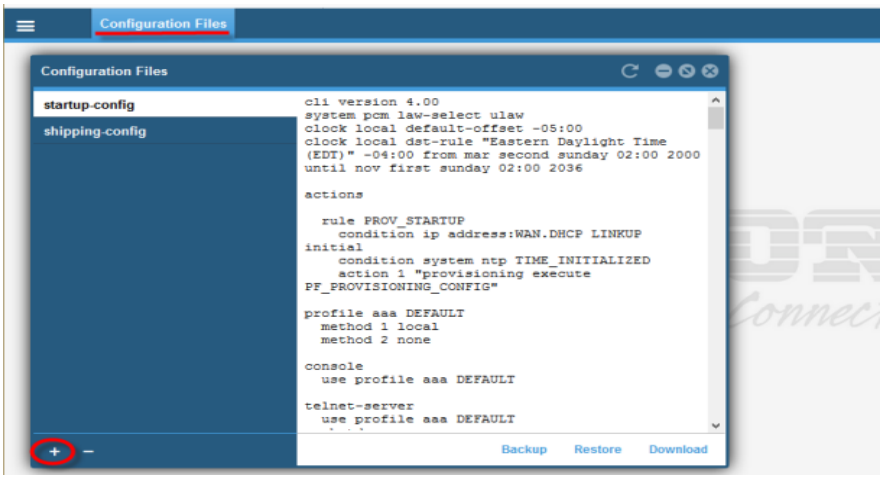
Appendix A shows a copy of the startup-config template with Cloudli specific settings. Settings that you may need to modify for your specific environment are highlighted in yellow. SIP Parameter labels that you will need to replace with values specific to your Cloudli account are formatted as **<label>** (displayed in a **blue/bold** font). These tokens should be replaced by the corresponding SIP parameters specific to your Cloudli account as described in Step 1 above. For example, using the data above the token **<User ID>** would be replaced by **15144480593**.

Step 3 - Load the startup-config file

1. Connect to your Patton device (HTTP/HTTPS)
2. Click the menu button ( ) from the upper left-hand side
3. Select **System/Configuration** Files and a window will pop-up.



4. Click the **+** sign to add a new startup-config.



5. Browse to the modified saved configuration file and then add it as the 'startup-config' and click 'OK'. The configuration will now be saved and loaded on the next boot up.
6. Reboot the device. Click the menu button ( ) and select 'Reboot'. Answer 'Yes' to the pop-up window to initiate the reboot.

Contact

If you require assistance you can contact us email at service@cloudli.com.

You can also reach us by phone Monday-Friday 8am to Midnight Eastern Time and Saturday-Sunday 10am to 6pm Eastern time at:

Canada	USA
Montréal: 514 201-6550 Toronto: 416 848-0990 Toll free: 1-877-258-VoIP (8647)	Toll free: 1-877-808-VoIP (8647)

Address: 1425 René-Lévesque, Suite 700, Montréal, Québec, Canada H3G 1T7

Website: www.cloudli.com

Thank you for choosing Cloudli as your Internet Telephony Service Provider. We at Cloudli will continually strive to provide you a reliable service. As well, we will be regularly adding additional capabilities that you may find useful. Please keep up-to-date by visiting us at the Cloudli website. Pleasant surprises may await you.

APPENDIX A

```
##########################################################################
# Template for Configuring Patton Trinity SN4141 for use with Cloudli
# ========================================================================
#
# This template covers the following configuration options:
#
#   Routing Options:
#
#     Hunt Group: Single authenticated account with its inbound calls hunting cyclically
#                 across all FXS ports.
#     Ring All  : Single authenticated account with its inbound calls ringing all
#                 available FXS ports simultaneously.
#     Per Line  : One or more authenticated accounts, each with one or more users (DIDs)
#                 and each user ringing at least one FXS port.
#
#   Line Type Options:
#
#     FAX       : The FXS port is optimized for Fax calls.
#     MODEM     : The FXS port is optimized for Modem or Alarm system calls.
#     DEFAULT   : The FXS port is optimized for Voice calls.
#
# ========================================================================
#

cli version 4.00
system pcm law-select ulaw
clock local default-offset -05:00
clock local dst-rule "Eastern Daylight Time (EDT)" +1:00 from mar second sunday 02:00 2000 until nov
first sunday 02:00 2036

actions

  rule PROV_STARTUP
    condition ip address:WAN.DHCP LINKUP initial
    condition system ntp TIME_INITIALIZED
    action 1 "provisioning execute PF_PROVISIONING_CONFIG"

profile aaa DEFAULT
  method 1 local
  method 2 none

console
  use profile aaa DEFAULT

telnet-server
  use profile aaa DEFAULT
  shutdown
```

```
ssh-server
  use profile aaa DEFAULT
  no shutdown

snmp-server
  shutdown

web-server
  protocol http port 80 redirect-to-https
  protocol https port 443
  use profile aaa DEFAULT
  no shutdown

ntp
  server ntp.babytel.net
  no shutdown

profile napt NAPT_WAN

dns-server
  host 192.168.1.1 smartnode.local
  relay dns-client
  shutdown

####################################
# Manual DNS Client configuration #
####################################
#
# Uncomment this section for STATIC IP configuration on ethernet port 0/0
# ------------------------------------------------------------------------
#dns-client
#  name-server 0.0.0.0
#  name-server 0.0.0.0
#
# SEE BELOW FOR IP ADDRESS AND DEFAULT GATEWAY CONFIGURATION <<<
# ============================================================

profile dhcp-server DHCPS_LAN
  network 192.168.1.0/24
  lease 24 hours
  default-router 192.168.1.1
  domain-name-server 192.168.1.1
  include 192.168.1.10 192.168.1.99

profile tls DEFAULT
  authentication incoming
  authentication outgoing
  private-key pki:private-key/DEFAULT
  own-certificate 1 pki:certificate/DEFAULT
  diffie-hellman-parameters pki:diffie-hellman-parameters/DEFAULT-2048

profile provisioning PF_PROVISIONING_CONFIG
  destination configuration
```

```
  use profile tls DEFAULT
  location 1
https://redirect.patton.com/$(system.serial);mac=$(system.mac);serial=$(system.serial);hwMajor=$(system
.hw.major);hwMinor=$(system.hw.minor);swMajor=$(system.sw.major);swMinor=$(system.sw.minor);sw
Date=$(system.sw.date);productName=$(system.product.name);cliMajor=$(cli.major);cliMinor=$(cli.mino
r);osName=Trinity;subDirTrinity=/Trinity;subDirSmartWare=;dhcp66=$(dhcp.66);dhcp67=$(dhcp.67)
  location 2 $(dhcp.66)
  location 3 $(dhcp.66)/$(system.serial).cfg
  location 4 http://$(dhcp.66)/$(dhcp.67)
  location 5 http://$(dhcp.66)/$(system.serial).cfg
  location 6 tftp://$(dhcp.66)/$(dhcp.67)
  location 7 tftp://$(dhcp.66)/$(system.serial).cfg
  activation reload immediate

profile fxs DEFAULT_EU
  electrical-standard etsi
  caller-id standard fsk-etsi presentation mid-ring

profile fxs DEFAULT_US
  electrical-standard bell
  caller-id standard fsk-bell presentation mid-ring

profile fxs-supplementary-services DEFAULT
  toggle-call pattern !

profile fxs-supplementary-services FAX_MODEM
  no call-hold
  no call-waiting
  no drop-passive-call
  no drop-active-call
  no toggle-call
  no call-transfer
  no park-call
  no aoc emit relay

profile call-progress-tone defaultAlertingtone
  play 1 1000 first-tone 440 -19 second-tone 480 -19
  pause 2 3000

profile call-progress-tone defaultBusytone
  play 1 500 first-tone 480 -24 second-tone 620 -24
  pause 2 500

profile call-progress-tone defaultCongestiontone
  play 1 250 first-tone 480 -24 second-tone 620 -24
  pause 2 250

profile call-progress-tone defaultDialtone
  play 1 1000 first-tone 350 -13 second-tone 440 -13

profile call-progress-tone defaultReleasetone
  play 1 250 first-tone 480 -24 second-tone 620 -24
  pause 2 250
```

```
profile tone-set DEFAULT

profile voip DEFAULT
  codec 1 g729 rx-length 20 tx-length 20
  codec 2 g711ulaw64k rx-length 20 tx-length 20
  dtmf-relay rtp
  fax transmission 1 relay t38-udp
  fax transmission 2 bypass g711ulaw64k rx-length 20 tx-length 20
  modem transmission 1 bypass g711ulaw64k rx-length 20 tx-length 20

profile voip FAX
  codec 1 g711ulaw64k rx-length 20 tx-length 20
  dtmf-relay rtp
  fax transmission 1 relay t38-udp
  fax transmission 2 bypass g711ulaw64k rx-length 20 tx-length 20

profile voip MODEM
  codec 1 g711ulaw64k rx-length 20 tx-length 20
  dtmf-relay inband
  modem transmission 1 bypass g711ulaw64k rx-length 20 tx-length 20

profile pstn DEFAULT

profile ringing-cadence DEFAULT
  play 1 1000
  pause 2 4000

profile rip DEFAULT

profile sip DEFAULT

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
# Configure STATIC or DHCP IP address on WAN ethernet port 0/0 #
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
context ip ROUTER

# Uncomment this section for DHCP configuration on ethernet port 0/0
# ------------------------------------------------------------------
#  interface WAN
#    ipaddress DHCP dhcp
#    use profile napt NAPT_WAN DHCP
#
## Else for STATIC IP configuration uncomment and enter desired IP address and gateway
# ---------------------------------------------------------------------------------
#  interface WAN
#    ipaddress STATIC 0.0.0.0/24
#
#  routing-table DEFAULT
#    route 0.0.0.0/0 gateway 0.0.0.0 metric 0
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE SECTIONS <<<
# ======================================================
```

```
 interface LAN
  ipaddress LAN 192.168.1.1/24

 routing-table DEFAULT

 bgp
  shutdown

 rip
  shutdown

context ip ROUTER
 use profile dhcp-server DHCPS_LAN

################################################################################
# Enter Patton cloud account Organization Key or leave as is for no account #
################################################################################
nodems-client
 server nodems.patton.io
 organization-key <Organization Key>
 resource any
 no shutdown

profile packetsmart DEFAULT

profile ppp DEFAULT

cwmp-client
 no discovery
 bind ipaddress ROUTER WAN DHCP
 session-retry-maximum 1
 shutdown

 stun
  shutdown

context cs SWITCH
 digit-collection timeout 3
 no shutdown

############################
# Enter Your Display Name #
############################
 mapping-table calling-e164 to calling-name CNAM
#
# Uncomment this section for single CNAM configuration
# ------------------------------------------------------
#    map default to "<Display Name>"
#
## Else for multiple CLI/CNAM configuration uncomment unnecessary lines or add lines as needed
# ------------------------------------------------------------
#    map <User ID 1> to "<Display Name 1>"
```

```
#    map <User ID 2> to "<Display Name 2>"
#    map <User ID 3> to "<Display Name 3>"
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE SECTIONS <<<
# ======================================================

#####################################
# Route Inbound Calls to FXS Ports #
#####################################
 routing-table called-e164 RT_TO_FXS
#
# Uncomment this section for Hunt Group configuration
# ---------------------------------------
#    route <User ID> dest-service HUNTPORTS
#
## Else uncomment this section for Ring All configuration
# -----------------------------------------
#    route <User ID> dest-service ALLPORTS
#
## Else uncomment from this section lines needed for Per Port configuration
# ---------------------------------------------------------------
#    route <User ID 1> dest-interface IF_FXS_00
#    route <User ID 2> dest-interface IF_FXS_01
#    route <User ID 3> dest-interface IF_FXS_02
#    route <User ID 4> dest-interface IF_FXS_03
#    route <User ID 5> dest-interface IF_FXS_04
#    route <User ID 6> dest-interface IF_FXS_05
#    route <User ID 7> dest-interface IF_FXS_06
#    route <User ID 8> dest-interface IF_FXS_07

#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE SECTIONS <<<
# ------------------------------------------------------

 routing-table called-e164 RT_TO_SIP_GW1
   route [2-9]11T!0 dest-interface IF_GW1 CNAM
   route *98T!0 dest-interface IF_GW1 CNAM
   route *72[0-4]!0 dest-interface IF_GW1 CNAM
   route 1..... dest-interface IF_GW1 CNAM
   route [2-9]..... dest-interface IF_GW1 CNAM
   route 011..T dest-interface IF_GW1 CNAM

 routing-table called-e164 RT_TO_SIP_GW2
   route [2-9]11T!0 dest-interface IF_GW2 CNAM
   route *98T!0 dest-interface IF_GW2 CNAM
   route *72[0-4]!0 dest-interface IF_GW2 CNAM
   route 1..... dest-interface IF_GW2 CNAM
   route [2-9]..... dest-interface IF_GW2 CNAM
   route 011..T dest-interface IF_GW2 CNAM

 routing-table called-e164 RT_TO_SIP_GW3
   route [2-9]11T!0 dest-interface IF_GW3 CNAM
   route *98T!0 dest-interface IF_GW3 CNAM
```

```
  route *72[0-4]!0 dest-interface IF_GW3 CNAM
  route 1..... dest-interface IF_GW3 CNAM
  route [2-9]..... dest-interface IF_GW3 CNAM
  route 011..T dest-interface IF_GW3 CNAM

 routing-table called-e164 RT_TO_SIP_GW4
  route [2-9]11T!0 dest-interface IF_GW4 CNAM
  route *98T!0 dest-interface IF_GW4 CNAM
  route *72[0-4]!0 dest-interface IF_GW4 CNAM
  route 1..... dest-interface IF_GW4 CNAM
  route [2-9]..... dest-interface IF_GW4 CNAM
  route 011..T dest-interface IF_GW4 CNAM

 routing-table called-e164 RT_TO_SIP_GW5
  route [2-9]11T!0 dest-interface IF_GW5 CNAM
  route *98T!0 dest-interface IF_GW5 CNAM
  route *72[0-4]!0 dest-interface IF_GW5 CNAM
  route 1..... dest-interface IF_GW5 CNAM
  route [2-9]..... dest-interface IF_GW5 CNAM
  route 011..T dest-interface IF_GW5 CNAM

 routing-table called-e164 RT_TO_SIP_GW6
  route [2-9]11T!0 dest-interface IF_GW6 CNAM
  route *98T!0 dest-interface IF_GW6 CNAM
  route *72[0-4]!0 dest-interface IF_GW6 CNAM
  route 1..... dest-interface IF_GW6 CNAM
  route [2-9]..... dest-interface IF_GW6 CNAM
  route 011..T dest-interface IF_GW6 CNAM

 routing-table called-e164 RT_TO_SIP_GW7
  route [2-9]11T!0 dest-interface IF_GW7 CNAM
  route *98T!0 dest-interface IF_GW7 CNAM
  route *72[0-4]!0 dest-interface IF_GW7 CNAM
  route 1..... dest-interface IF_GW7 CNAM
  route [2-9]..... dest-interface IF_GW7 CNAM
  route 011..T dest-interface IF_GW7 CNAM

 routing-table called-e164 RT_TO_SIP_GW8
  route [2-9]11T!0 dest-interface IF_GW8 CNAM
  route *98T!0 dest-interface IF_GW8 CNAM
  route *72[0-4]!0 dest-interface IF_GW8 CNAM
  route 1..... dest-interface IF_GW8 CNAM
  route [2-9]..... dest-interface IF_GW8 CNAM
  route 011..T dest-interface IF_GW8 CNAM

 interface sip IF_GW1
  bind context sip-gateway GW_1
  route call dest-table RT_TO_FXS
  remote <Outbound Proxy> <Outbound Proxy Port>
  address-translation incoming-call called-e164 p-called-party-id
#
# Uncomment the required voip profile
# ----------------------------------
```

```
#    use profile voip FAX
#    use profile voip MODEM
#    use profile voip DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# -----------------------------------
    trust remote

  interface sip IF_GW2
    bind context sip-gateway GW_2
    route call dest-table RT_TO_FXS
    remote <Outbound Proxy> <Outbound Proxy Port>
    address-translation incoming-call called-e164 p-called-party-id
#
# Uncomment the required voip profile
# -----------------------------------
#    use profile voip FAX
#    use profile voip MODEM
#    use profile voip DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# -----------------------------------
    trust remote

  interface sip IF_GW3
    bind context sip-gateway GW_3
    route call dest-table RT_TO_FXS
    remote <Outbound Proxy> <Outbound Proxy Port>
    address-translation incoming-call called-e164 p-called-party-id
#
# Uncomment the required voip profile
# -----------------------------------
#    use profile voip FAX
#    use profile voip MODEM
#    use profile voip DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# -----------------------------------
    trust remote

  interface sip IF_GW4
    bind context sip-gateway GW_4
    route call dest-table RT_TO_FXS
    remote <Outbound Proxy> <Outbound Proxy Port>
    address-translation incoming-call called-e164 p-called-party-id
#
# Uncomment the required voip profile
# -----------------------------------
#    use profile voip FAX
#    use profile voip MODEM
#    use profile voip DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
```

```
# ------------------------------------
   trust remote

  interface sip IF_GW5
    bind context sip-gateway GW_5
    route call dest-table RT_TO_FXS
    remote <Outbound Proxy> <Outbound Proxy Port>
    address-translation incoming-call called-e164 p-called-party-id
#
# Uncomment the required voip profile
# ------------------------------------
#    use profile voip FAX
#    use profile voip MODEM
#    use profile voip DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# ------------------------------------
   trust remote

  interface sip IF_GW6
    bind context sip-gateway GW_6
    route call dest-table RT_TO_FXS
    remote <Outbound Proxy> <Outbound Proxy Port>
    address-translation incoming-call called-e164 p-called-party-id
#
# Uncomment the required voip profile
# ------------------------------------
#    use profile voip FAX
#    use profile voip MODEM
#    use profile voip DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# ------------------------------------
   trust remote

  interface sip IF_GW7
    bind context sip-gateway GW_7
    route call dest-table RT_TO_FXS
    remote <Outbound Proxy> <Outbound Proxy Port>
    address-translation incoming-call called-e164 p-called-party-id
#
# Uncomment the required voip profile
# ------------------------------------
#    use profile voip FAX
#    use profile voip MODEM
#    use profile voip DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# ------------------------------------
   trust remote

  interface sip IF_GW8
    bind context sip-gateway GW_8
```

```
   route call dest-table RT_TO_FXS
   remote <Outbound Proxy> <Outbound Proxy Port>
   address-translation incoming-call called-e164 p-called-party-id
#
# Uncomment the required voip profile
# ----------------------------------
#    use profile voip FAX
#    use profile voip MODEM
#    use profile voip DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# ----------------------------------
   trust remote

##########################################
# Configure ACD if not routing Per Line #
##########################################
#
# Uncomment this section for Hunt Group configuration
# ---------------------------------------
#  service hunt-group HUNTPORTS
#    cyclic
#    drop-cause normal-unspecified
#    drop-cause no-circuit-channel-available
#    drop-cause network-out-of-order
#    drop-cause temporary-failure
#    drop-cause switching-equipment-congestion
#    drop-cause access-info-discarded
#    drop-cause circuit-channel-not-available
#    drop-cause resources-unavailable
#    route call 1 dest-interface IF_FXS_00
#    route call 2 dest-interface IF_FXS_01
#    route call 3 dest-interface IF_FXS_02
#    route call 4 dest-interface IF_FXS_03
#    route call 5 dest-interface IF_FXS_04
#    route call 6 dest-interface IF_FXS_05
#    route call 7 dest-interface IF_FXS_06
#    route call 8 dest-interface IF_FXS_07
#
## Else uncomment this section for Ring All configuration
# -----------------------------------------------
#  service distribution-group ALLPORTS
#    route call 1 dest-interface IF_FXS_00
#    route call 2 dest-interface IF_FXS_01
#    route call 3 dest-interface IF_FXS_02
#    route call 4 dest-interface IF_FXS_03
#    route call 5 dest-interface IF_FXS_04
#    route call 6 dest-interface IF_FXS_05
#    route call 7 dest-interface IF_FXS_06
#    route call 8 dest-interface IF_FXS_07
#
## Else leave the above sections commented for Per Line configuration
# ---------------------------------------------------------
```

```
 interface fxs IF_FXS_00
  route call dest-table RT_TO_SIP_GW1
#
# Uncomment the required fxs-supplementary-services profile
# ---------------------------------------------------------
#   use profile fxs-supplementary-services FAX_MODEM
#   use profile fxs-supplementary-services DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# -----------------------------------

 interface fxs IF_FXS_01
  route call dest-table RT_TO_SIP_GW2
#
# Uncomment the required fxs-supplementary-services profile
# ---------------------------------------------------------
#   use profile fxs-supplementary-services FAX_MODEM
#   use profile fxs-supplementary-services DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# -----------------------------------

 interface fxs IF_FXS_02
  route call dest-table RT_TO_SIP_GW3
#
# Uncomment the required fxs-supplementary-services profile
# ---------------------------------------------------------
#   use profile fxs-supplementary-services FAX_MODEM
#   use profile fxs-supplementary-services DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# -----------------------------------

 interface fxs IF_FXS_03
  route call dest-table RT_TO_SIP_GW4
#
# Uncomment the required fxs-supplementary-services profile
# ---------------------------------------------------------
#   use profile fxs-supplementary-services FAX_MODEM
#   use profile fxs-supplementary-services DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# -----------------------------------

 interface fxs IF_FXS_04
  route call dest-table RT_TO_SIP_GW5
#
# Uncomment the required fxs-supplementary-services profile
# ---------------------------------------------------------
#   use profile fxs-supplementary-services FAX_MODEM
#   use profile fxs-supplementary-services DEFAULT
#
```

```
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# ----------------------------------

  interface fxs IF_FXS_05
    route call dest-table RT_TO_SIP_GW6
#
# Uncomment the required fxs-supplementary-services profile
# ---------------------------------------------------------
#    use profile fxs-supplementary-services FAX_MODEM
#    use profile fxs-supplementary-services DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# ----------------------------------

  interface fxs IF_FXS_06
    route call dest-table RT_TO_SIP_GW7
#
# Uncomment the required fxs-supplementary-services profile
# ---------------------------------------------------------
#    use profile fxs-supplementary-services FAX_MODEM
#    use profile fxs-supplementary-services DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# ----------------------------------

  interface fxs IF_FXS_07
    route call dest-table RT_TO_SIP_GW8
#
# Uncomment the required fxs-supplementary-services profile
# ---------------------------------------------------------
#    use profile fxs-supplementary-services FAX_MODEM
#    use profile fxs-supplementary-services DEFAULT
#
# DON'T FORGET TO UNCOMMENT A PROFILE <<<
# ----------------------------------

#########################################################
# Enter your SIP Parameters from your Cloudli account #
#########################################################
#
# Uncomment this section for Hunt Group or Ring All configuration
# -------------------------------
#authentication-service AS_1
#  username <Authentication ID> password <SIP Password>
#
## Else for Per Line configuration uncomment lines needed
# ----------------------------------------------
#authentication-service AS_1
#  username <Authentication ID 1> password <SIP Password 1>

#authentication-service AS_2
#  username <Authentication ID 2> password <SIP Password 2>
```

```
#authentication-service AS_3
#  username <Authentication ID 3> password <SIP Password 3>

#authentication-service AS_4
#  username <Authentication ID 4> password <SIP Password 4>

#authentication-service AS_5
#  username <Authentication ID 5> password <SIP Password 5>

#authentication-service AS_6
#  username <Authentication ID 6> password <SIP Password 6>

#authentication-service AS_7
#  username <Authentication ID 7> password <SIP Password 7>

#authentication-service AS_8
#  username <Authentication ID 8> password <SIP Password 8>
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE SECTIONS <<<
# ------------------------------------------------

##########################################################################
# Configure Outbound Authentication, DIDs and (Virtual Number) Aliases #
##########################################################################
#
# Uncomment this section for Hunt Group or Ring All configuration
# --------------------------------
#Location-service LS_1
# domain 1 <Outbound Proxy> <Outbound Proxy Port>
# match-any-domain
#
# identity <User ID>
## You can specify multiple alias DIDs per account
#   alias expression <User IDa>
#   alias expression <User IDb>
#
#   authentication outbound
#     authenticate 1 authentication-service AS_1 username <Authentication ID>
#
#   registration outbound
#     registrar <Outbound Proxy> <Outbound Proxy Port>
#     transport-protocol force udp
#     lifetime 60
#     register auto
#
## Else for Per Line configuration uncomment sections needed
# ------------------------------------------------
#Location-service LS_1
# domain 1 <Outbound Proxy> <Outbound Proxy Port>
# match-any-domain
#
# identity <User ID 1>
## You can specify multiple alias DIDs per account
```

```
#   alias expression <User ID 1a>
#   alias expression <User ID 1b>
#
#   authentication outbound
#     authenticate 1 authentication-service AS_1 username <Authentication ID 1>
#
#   registration outbound
#     registrar <Outbound Proxy> <Outbound Proxy Port>
#     transport-protocol force udp
#     lifetime 60
#     register auto
#
#Location-service LS_2
# domain 1 <Outbound Proxy> <Outbound Proxy Port>
# match-any-domain
#
# identity <User ID 2>
## You can specify multiple alias DIDs per account
#   alias expression <User ID 2a>
#   alias expression <User ID 2b>
#
#   authentication outbound
#     authenticate 1 authentication-service AS_2 username <Authentication ID 2>
#
#   registration outbound
#     registrar <Outbound Proxy> <Outbound Proxy Port>
#     transport-protocol force udp
#     lifetime 60
#     register auto
#
#Location-service LS_3
# domain 1 <Outbound Proxy> <Outbound Proxy Port>
# match-any-domain
#
# identity <User ID 3>
## You can specify multiple alias DIDs per account
#   alias expression <User ID 3a>
#   alias expression <User ID 3b>
#
#   authentication outbound
#     authenticate 1 authentication-service AS_3 username <Authentication ID 3>
#
#   registration outbound
#     registrar <Outbound Proxy> <Outbound Proxy Port>
#     transport-protocol force udp
#     lifetime 60
#     register auto
#
#Location-service LS_4
# domain 1 <Outbound Proxy> <Outbound Proxy Port>
# match-any-domain
#
# identity <User ID 4>
```

```
## You can specify multiple alias DIDs per account
#   alias expression <User ID 4a>
#   alias expression <User ID 4b>
#
#   authentication outbound
#     authenticate 1 authentication-service AS_4 username <Authentication ID 4>
#
#   registration outbound
#     registrar <Outbound Proxy> <Outbound Proxy Port>
#     transport-protocol force udp
#     lifetime 60
#     register auto
#
#Location-service LS_5
# domain 1 <Outbound Proxy> <Outbound Proxy Port>
# match-any-domain
#
# identity <User ID 5>
## You can specify multiple alias DIDs per account
#   alias expression <User ID 5a>
#   alias expression <User ID 5b>
#
#   authentication outbound
#     authenticate 1 authentication-service AS_5 username <Authentication ID 5>
#
#   registration outbound
#     registrar <Outbound Proxy> <Outbound Proxy Port>
#     transport-protocol force udp
#     lifetime 60
#     register auto
#
#Location-service LS_6
# domain 1 <Outbound Proxy> <Outbound Proxy Port>
# match-any-domain
#
# identity <User ID 6>
## You can specify multiple alias DIDs per account
#   alias expression <User ID 6a>
#   alias expression <User ID 6b>
#
#   authentication outbound
#     authenticate 1 authentication-service AS_6 username <Authentication ID 6>
#
#   registration outbound
#     registrar <Outbound Proxy> <Outbound Proxy Port>
#     transport-protocol force udp
#     lifetime 60
#     register auto
#
#Location-service LS_7
# domain 1 <Outbound Proxy> <Outbound Proxy Port>
# match-any-domain
#
```

```
# identity <User ID 7>
## You can specify multiple alias DIDs per account
#   alias expression <User ID 7a>
#   alias expression <User ID 7b>
#
#   authentication outbound
#     authenticate 1 authentication-service AS_7 username <Authentication ID 7>
#
#   registration outbound
#     registrar <Outbound Proxy> <Outbound Proxy Port>
#     transport-protocol force udp
#     lifetime 60
#     register auto
#
#Location-service LS_8
# domain 1 <Outbound Proxy> <Outbound Proxy Port>
# match-any-domain
#
# identity <User ID 8>
## You can specify multiple alias DIDs per account
#   alias expression <User ID 8a>
#   alias expression <User ID 8b>
#
#   authentication outbound
#     authenticate 1 authentication-service AS_8 username <Authentication ID 8>
#
#   registration outbound
#     registrar <Outbound Proxy> <Outbound Proxy Port>
#     transport-protocol force udp
#     lifetime 60
#     register auto
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE OPTIONS <<<
# ======================================================

# Uncomment this section for Hunt Group or Ring All configuration
# ---------------------------------
#context sip-gateway GW_1
# Include this line if using the Patton encryption license
#-----------------------------------------------------------------
#  proprietary-encryption babytel
#  bind location-service LS_1
#
# interface IF_SIP
#   transport-protocol udp+tcp 5060
#   no transport-protocol tls
#
# Uncomment this option for DHCP configuration on ethernet port 0/0
# ----------------------------------------------------------------
#   bind ipaddress ROUTER WAN DHCP
#
## Else for STATIC IP configuration uncomment this option
# ------------------------------------------------------
```

```
#   bind ipaddress ROUTER WAN STATIC
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE OPTIONS <<<
# ======================================================
#
#context sip-gateway GW_1
# notify check-sync accept
# no shutdown
#
## Else for Per Line configuration uncomment each gateway as needed
# ----------------------------------------
#context sip-gateway GW_1
# Include this line if using the Patton encryption license
#--------------------------------------------------------
#  proprietary-encryption babytel
#  bind location-service LS_1
#
# interface IF_SIP
#   transport-protocol udp+tcp 5060
#   no transport-protocol tls
#
# Uncomment this option for DHCP configuration on ethernet port 0/0
# ------------------------------------------------------------------
#   bind ipaddress ROUTER WAN DHCP
#
## Else for STATIC IP configuration uncomment this option
# ------------------------------------------------------
#   bind ipaddress ROUTER WAN STATIC
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE OPTIONS <<<
# ======================================================
#
#context sip-gateway GW_1
# notify check-sync accept
# no shutdown
#
#context sip-gateway GW_2
# Include this line if using the Patton encryption license
#--------------------------------------------------------
#  proprietary-encryption babytel
#  bind location-service LS_2
#
# interface IF_SIP
#   transport-protocol udp+tcp 5061
#   no transport-protocol tls
#
# Uncomment this option for DHCP configuration on ethernet port 0/0
# ------------------------------------------------------------------
#   bind ipaddress ROUTER WAN DHCP
#
## Else for STATIC IP configuration uncomment this option
# ------------------------------------------------------
#   bind ipaddress ROUTER WAN STATIC
```

```
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE OPTIONS <<<
# ====================================================
#
#context sip-gateway GW_2
# notify check-sync accept
# no shutdown
#
#context sip-gateway GW_3
# Include this line if using the Patton encryption license
#-----------------------------------------------------------
#  proprietary-encryption babytel
#  bind location-service LS_3
#
# interface IF_SIP
#   transport-protocol udp+tcp 5062
#   no transport-protocol tls
#
# Uncomment this option for DHCP configuration on ethernet port 0/0
# -----------------------------------------------------------------
#   bind ipaddress ROUTER WAN DHCP
#
## Else for STATIC IP configuration uncomment this option
# ---------------------------------------------------------
#   bind ipaddress ROUTER WAN STATIC
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE OPTIONS <<<
# ====================================================
#
#context sip-gateway GW_3
# notify check-sync accept
# no shutdown
#
#context sip-gateway GW_4

# Include this line if using the Patton encryption license
#-----------------------------------------------------------
#  proprietary-encryption babytel
#  bind location-service LS_4
#
# interface IF_SIP
#   transport-protocol udp+tcp 5063
#   no transport-protocol tls
#
# Uncomment this option for DHCP configuration on ethernet port 0/0
# -----------------------------------------------------------------
#   bind ipaddress ROUTER WAN DHCP
#
## Else for STATIC IP configuration uncomment this option
# ---------------------------------------------------------
#   bind ipaddress ROUTER WAN STATIC
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE OPTIONS <<<
```

```
# ================================================
#
#context sip-gateway GW_4
# notify check-sync accept
# no shutdown
#
#context sip-gateway GW_5
# Include this line if using the Patton encryption license
#---------------------------------------------------------
#  proprietary-encryption babytel
#  bind location-service LS_5
#
# interface IF_SIP
#   transport-protocol udp+tcp 5064
#   no transport-protocol tls
#
# Uncomment this option for DHCP configuration on ethernet port 0/0
# ----------------------------------------------------------------
#   bind ipaddress ROUTER WAN DHCP
#
## Else for STATIC IP configuration uncomment this option
# ---------------------------------------------------------
#   bind ipaddress ROUTER WAN STATIC
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE OPTIONS <<<
# ================================================
#
#context sip-gateway GW_5
# notify check-sync accept
# no shutdown
#
#context sip-gateway GW_6
# Include this line if using the Patton encryption license
#---------------------------------------------------------
#  proprietary-encryption babytel
#  bind location-service LS_6
#
# interface IF_SIP
#   transport-protocol udp+tcp 5065
#   no transport-protocol tls
#
# Uncomment this option for DHCP configuration on ethernet port 0/0
# ----------------------------------------------------------------
#   bind ipaddress ROUTER WAN DHCP
#
## Else for STATIC IP configuration uncomment this option
# ---------------------------------------------------------
#   bind ipaddress ROUTER WAN STATIC
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE OPTIONS <<<
# ================================================
#
#context sip-gateway GW_6
```

```
# notify check-sync accept
# no shutdown
#
#context sip-gateway GW_7
# Include this line if using the Patton encryption license
#-----------------------------------------------------------
#  proprietary-encryption babytel
#  bind location-service LS_7
#
# interface IF_SIP
#   transport-protocol udp+tcp 5066
#   no transport-protocol tls
#
# Uncomment this option for DHCP configuration on ethernet port 0/0
# ------------------------------------------------------------------
#   bind ipaddress ROUTER WAN DHCP
#
## Else for STATIC IP configuration uncomment this option
# ------------------------------------------------------
#   bind ipaddress ROUTER WAN STATIC
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE OPTIONS <<<
# ======================================================
#
#context sip-gateway GW_7
# notify check-sync accept
# no shutdown
#
#context sip-gateway GW_8
# Include this line if using the Patton encryption license
#-----------------------------------------------------------
#  proprietary-encryption babytel
#  bind location-service LS_8
#
# interface IF_SIP
#   transport-protocol udp+tcp 5067
#   no transport-protocol tls
#
# Uncomment this option for DHCP configuration on ethernet port 0/0
# ------------------------------------------------------------------
#   bind ipaddress ROUTER WAN DHCP
#
## Else for STATIC IP configuration uncomment this option
# ------------------------------------------------------
#   bind ipaddress ROUTER WAN STATIC
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE OPTIONS <<<
# ======================================================
#
#context sip-gateway GW_8
# notify check-sync accept
# no shutdown
#
```

```
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE SECTIONS <<<
# ------------------------------------------------

sip-survivability
  shutdown

port ethernet 0 0
  bind interface ROUTER WAN
  no shutdown

port ethernet 0 1
  bind interface ROUTER LAN
  no shutdown

#####################################################
# Enter your User ID for the FXS ports to be used #
#####################################################
port fxs 0 0
  use profile fxs DEFAULT_US
#
# Uncomment this line for Hunt Group or Ring All configuration
# ------------------------------
#  subscriber-number <User ID>
#
## Else for Per Line configuration uncomment this line
# ---------------------------------------
#  subscriber-number <User ID 1>
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE LINE <<<
# -----------------------------------------------
  bind interface SWITCH IF_FXS_00
  no shutdown

port fxs 0 1
  use profile fxs DEFAULT_US
#
# Uncomment this line for Hunt Group or Ring All configuration
# ------------------------------
#  subscriber-number <User ID>
#
## Else for Per Line configuration uncomment this line
# -----------------------------------------
#  subscriber-number <User ID 2>
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE LINE <<<
# -----------------------------------------------
  bind interface SWITCH IF_FXS_01
  no shutdown

port fxs 0 2
  use profile fxs DEFAULT_US
#
# Uncomment this line for Hunt Group or Ring All configuration
```

```
# ----------------------------
#  subscriber-number <User ID>
#
## Else for Per Line configuration uncomment this line
# ------------------------------------------
#  subscriber-number <User ID 3>
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE LINE <<<
# ------------------------------------------
 bind interface SWITCH IF_FXS_02
 no shutdown

port fxs 0 3
 use profile fxs DEFAULT_US
#
# Uncomment this line for Hunt Group or Ring All configuration
# ----------------------------
#  subscriber-number <User ID>
#
## Else for Per Line configuration uncomment this line
# ------------------------------------------
#  subscriber-number <User ID 4>
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE LINE <<<
# ------------------------------------------
 bind interface SWITCH IF_FXS_03
 no shutdown

port fxs 0 4
 use profile fxs DEFAULT_US
#
# Uncomment this line for Hunt Group or Ring All configuration
# ----------------------------
#  subscriber-number <User ID>
#
## Else for Per Line configuration uncomment this line
# ------------------------------------------
#  subscriber-number <User ID 5>
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE LINE <<<
# ------------------------------------------
 bind interface SWITCH IF_FXS_04
 no shutdown

port fxs 0 5
 use profile fxs DEFAULT_US
#
# Uncomment this line for Hunt Group or Ring All configuration
# ----------------------------
#  subscriber-number <User ID>
#
## Else for Per Line configuration uncomment this line
# ------------------------------------------
```

```
#  subscriber-number <User ID 6>
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE LINE <<<
# ------------------------------------------------
  bind interface SWITCH IF_FXS_05
  no shutdown

port fxs 0 6
  use profile fxs DEFAULT_US
#
# Uncomment this line for Hunt Group or Ring All configuration
# -----------------------------
#  subscriber-number <User ID>
#
## Else for Per Line configuration uncomment this line
# ------------------------------------------
#  subscriber-number <User ID 7>
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE LINE <<<
# ------------------------------------------------
  bind interface SWITCH IF_FXS_06
  no shutdown

port fxs 0 7
  use profile fxs DEFAULT_US
#
# Uncomment this line for Hunt Group or Ring All configuration
# -----------------------------
#  subscriber-number <User ID>
#
## Else for Per Line configuration uncomment this line
# ------------------------------------------
#  subscriber-number <User ID 8>
#
# DON'T FORGET TO UNCOMMENT ONE OF THE ABOVE LINE <<<
# ------------------------------------------------
  bind interface SWITCH IF_FXS_07
  no shutdown
```