Configuring Cisco Unified Communications Manager for the NovaTec TransNova S3 Voice Gateway

This document describes how to configure Cisco Unified Communications Manager systems to use the NovaTec TransNova® S3 SIP Voice Gateway (S3).

NovaTec publishes complete technical information for this voice gateway on its website and in the online help for its TransNova configuration and TraceInfo Client software. This document emphasizes configuration that you must do within Cisco Unified Communications Manager Administration.

Calls between ISDN endpoints on the same S3 get routed through the Cisco Unified Communications Manager, so call detail records (CDRs) can get collected.The configuration steps that are shown in this document ensure that all calls transit the Cisco Unified Communications Manager.

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Configuring Call Signaling and Routing

This section describes procedure that you must perform with Cisco Unified Communications Manager Administration and with the TransNova configuration software.

Perform the following procedure with Cisco Unified Communications Manager Administration.

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Note Even though the S3 is a gateway, you configure it in Cisco Unified Communications Manager Administration as a phone.

	Task	Important Notes
Step 1	Choose **User Management > End User**.	The Find and List End Users window displays.
Step 2	Click **Add New**.	The End User Configuration window displays.
Step 3	Enter values for User ID and Last name.	Enter values only for these fields. This user will be used for digest authentication.
Step 4	When you complete the end user information, save your changes and add the end user by clicking **Save**.	
Step 5	Choose **Device > Phone.**	The Find and List Phones window displays.
Step 6	Click the **Add New** button.	The Add a New Phone window displays.
Step 7	From the Phone Type drop-down list box, select "Transnova S3" and click **Next**.	The Phone Configuration window displays.
Step 8	Enter the values that are described at the right. Choose defaults for all other required values in this window. Then, click **Save**	Enter the S3 MAC Address. From the Phone Button Template drop-down list box, select "Standard S3". From the Device Security Profile drop-down list box, select "Transnova S3 - Standard SIP Non-Secure Profile". From the SIP Profile drop-down list box, select "Standard SIP Profile". From the Digest User drop-down list box, select the end user that you created in Step 3. If your systems requires it, check the Media Termination Point Required check box. After you click **Save**, the Phone Configuration window refreshes and adds the Association Information field.
Step 9	From the Association Information field, click the link "Line [1] - Add a new DN".	The Directory Number Configuration window displays.
Step 10	From the Directory Number Configuration window, assign data as described in the section "Directory Number Configuration Settings" of the *Cisco Unified Communications Manager Administration Guide*.	
Step 11	Repeat Step 9 and Step 10 to add DNs to Lines 2, 3, and 4.	

Perform the following procedure with the TransNova configuration software. For more information, refer to the TransNova configuration software online help.

Procedure

Step 1 Configure the interface type.

Step 2 Configure the IP address, gateway name, and so on.

Step 3 Add a SIP trunk Group and assign interfaces.

Step 4 Create incoming and outgoing Dialing Plans.

Step 5 Create a trunk group for the SIP interface.

Step 6 Allocate each of the subscriber DNs to an ISDN interface.

Step 7 Configure the general SIP settings.

Step 8 Configure SIP User Mapping and Local Mapping.

Step 9 Optionally, configure NTP.

Configuring the Data Codec

This section describes procedure that you must perform with Cisco Unified Communications Manager Administration and with the TransNova configuration software.

Perform the following procedure with Cisco Unified Communications Manager Administration.

	Task	Important Notes
Step 1	Choose **Device > Device Settings > SIP Profile**.	The Find and List SIP Profiles window displays.
Step 2	Click the **Add New** button.	The SIP Profile Configuration window displays.
Step 3	In the Name field, enter a name for the profile.	
Step 4	From the Early Offer for G.Clear Calls drop-down list box, select the applicable CODEC.	Choose from the following types: • CLEARMODE • CCD • G.nX64 • X-CCD (preferred)
Step 5	Click **Save**.	The SIP Profile Configuration window refreshes and indicates “Add successful”.
Step 6	Choose **Device > Phone.**	The Find and List Phones window displays.
Step 7	Use the navigation tools in the Find and List Phones window to find the S3 that you added in Configuring Call Signaling and Routing.	

	Task	Important Notes
Step 8	From the list of records that display, click the link for the record that you want to view.	The window displays data for the item that you choose.
Step 9	From the SIP Profile drop-down list box, select the applicable SIP profile. Then, click **Save**.	

Perform the following procedure with the TransNova configuration software. For more information, refer to the TransNova configuration software online help.

Procedure

Step 1 Go to "TIP/SIP/SIP codec mapping" and ensure that the desired Data CODEC has Payload type 125 and that no other CODEC has the same type. If the CODEC is not in the list, create a new CODEC.

Step 2 When you edit or create a data CODEC, set the payload type to 125 and the Bearer capability to 8890.

Step 3 If all CODECs are to be included in the initial installation, set the order in which they appear in the SDP by selecting a CODEC and moving it up or down the list.

Step 4 Ensure that the required data CODEC is specified for each entry in the **NIP/SIP/Mapping lists/User Mapping** table.

Downloading the S3 Configuration

Perform the following procedure with the TransNova configuration software. For more information, refer to the TransNova configuration software online help.

Procedure

Step 1 Obtain the S3's configuration database file (*.mdb file).

Step 2 Under "Extras / Network options", set the IP address of the unit to which you want to download.

Step 3 Use "Configuration data / Process" or press the computer F7 key to prepare the configuration data.

Step 4 Select "Configuration data / Transmit to target system" or press the computer F5 key to begin the download.

Updating the S3 Firmware

Perform the following procedure with the TransNova TraceInfo Client software. For more information, refer to the TransNova TraceInfo Client software online help.

Procedure

Step 1 Start the TraceInfo Client.

Step 2 Select “Settings” and configure the IP address of the S3. Leave the port set to 800. Click **OK**. Then, click the **Connect** button. Then, click the Connect button. By default, the username is “TECHNIK”. Leave the **Password**, **System ID**, **System-Name** and **Dialling no.** fields blank, and **Network** set to TCP/IP.

Step 3 Select the “Diagnosis” tab.

Step 4 Click the **Firmware** button and select the required firmware file. Then, click the **Open** button.

Step 5 At the prompt “Do you really want to upload new firmware to the target system?”, click the **Yes** button. The data transmission then begins.

Note The downloaded software is not active until after you power-cycle the S3.

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