

SV8500: How to Add Additional SIP Channels on a Dual CPU System (Using the ADMP method)

Overview

This document describes how to add additional SIP channels on an SV8500. There are two documents, each describing two different methods of accomplishing this task. This document describes the preferred procedure.

The main differences between this procedure and the alternate procedure are the following:

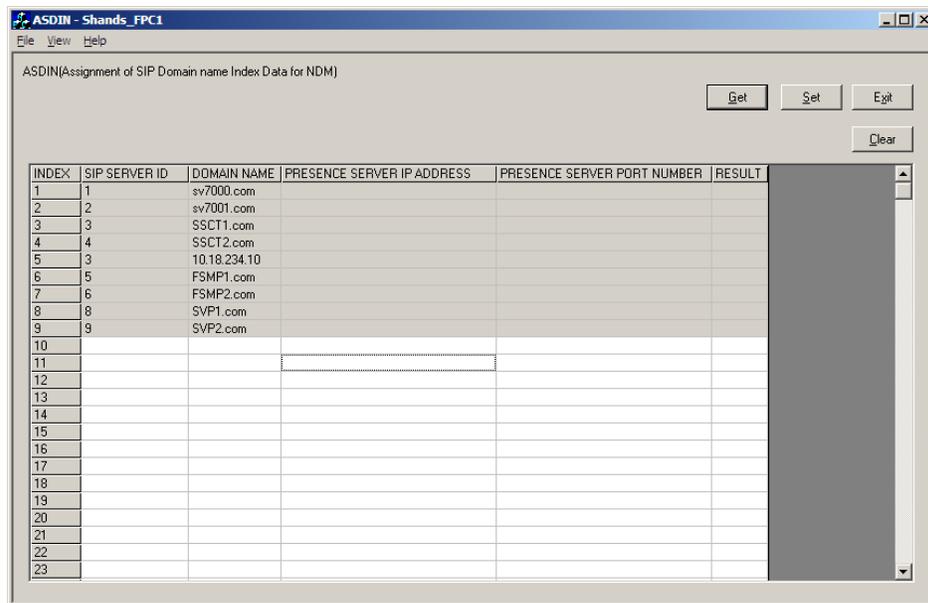
- This procedure will use the ADPM command to reset the SIP Servers instead of the ASPC command to take the SIP Servers offline and online again.
- This procedure will be quicker since resetting the SIP servers happens relatively quickly.

Notes

- ▶ *Important:* The procedure of adding or relocating SIP channels will affect anything that registers to the MPH-ID. (E.g. IP phones, IP Voice Mail, MGs, etc.)
- ▶ You cannot put channels in a virtual PIM, virtual LEN. But you can always put SIP channels in a virtual PIM, true LEN.
- ▶ These instructions also show how to correctly configure an SV8500's Dual SIP Servers **Domain Name** information to support third party SIP and NEC WLAN SIP devices (such as the MH150/160s).
- ▶ For full instructions for initially setting up Dual CPUs in an SV8500, see Knowledge Base entry "SV8500: Initial Data Assignment for Dual CPU".

Steps

1. With PCPro log into the into the NCN node.
2. Verify with the **ASDIN** command whether a third Domain Name for the two SIP servers has correctly been configured.
 - a. Run **ASDIN** command and verify there is a third **Domain Name** to be used with the dual SIP Servers. It *must* be the same as the floating IP address of the dual CPU system. In the below example, there is no third domain configured, so one will have to add it.



The screenshot shows a window titled "ASDIN - Shands_FPC1" with a menu bar (File, View, Help) and buttons for Get, Set, Exit, and Clear. The main area contains a table titled "ASDIN(Assignment of SIP Domain name Index Data for NDM)".

INDEX	SIP SERVER ID	DOMAIN NAME	PRESENCE SERVER IP ADDRESS	PRESENCE SERVER PORT NUMBER	RESULT
1	1	sv7000.com			
2	2	sv7001.com			
3	3	SSCT1.com			
4	4	SSCT2.com			
5	3	10.18.234.10			
6	5	FSMP1.com			
7	6	FSMP2.com			
8	8	SVP1.com			
9	9	SVP2.com			
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					

- b. If there is no configured third Domain Name for the dual SIP server system, then add it to the next available index in the **Domain Name** column and click **Set**. Make it the same as the floating IP address.

After adding the third SIP domain, verify that the **Result** column shows **OK**.

ASDIN(Assignment of SIP Domain name Index Data for NDM)

Registration success (ALL)

INDEX	SIP SERVER ID	DOMAIN NAME	PRESENCE SERVER IP ADDRESS	PRESENCE SERVER PORT NUMBER	RESULT
1	1	sv7000.com			
2	2	sv7001.com			
3	3	SSCT1.com			
4	4	SSCT2.com			
5	3	10.18.234.10			
6	5	FSMP1.com			
7	6	FSMP2.com			
8	8	SVP1.com			
9	9	SVP2.com			
10		10.4.72.130			OK
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					

3. Run the **ASSDN** Command.
4. System-0 – Enter the **SIP Server ID** and **FPC** of the SIP server where you want to add additional SIP Channels and click **Get**.

The screenshot shows a software window titled "ASSDN - Shands_FPC1" with a menu bar (File, View, Help). The main area is titled "ASSDN (Assignment of SIP Server Operating Data for NDM)".

At the top, there are input fields for "SIP Server ID" (value: 5) and "FPC" (value: 33), with "Get" and "Exit" buttons to the right.

Below this is a tabbed interface with "BASE DATA" selected. Other tabs include "DOMAIN", "PRESENCE SERVER", "REDUNDANCY", and "TRAFFIC REPORT".

Under "BASE DATA", there are fields for "CHANNEL" (12) and "NAME" (FSMP1.com), with "Modify" and "Del" buttons. A "TN" field contains the value 1.

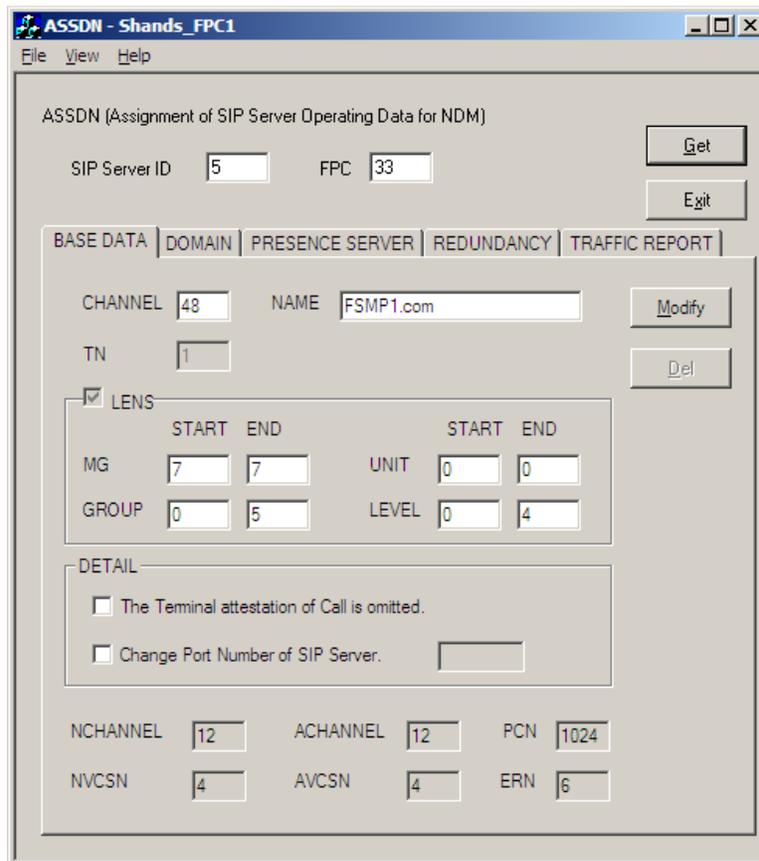
A "LENS" section is checked, containing a table with columns "START" and "END" for "MG" and "GROUP", and "UNIT" and "LEVEL".

A "DETAIL" section contains two unchecked checkboxes: "The Terminal attestation of Call is omitted." and "Change Port Number of SIP Server." with an empty input field.

At the bottom, there are input fields for "NCHANNEL" (12), "ACHANNEL" (12), "PCN" (1024), "NVCSN" (4), "AVCSN" (4), and "ERN" (6).

5. Enter parameters to increase the number of SIP channels.
 - a. Increase the **Channel** parameter to the desired number of SIP channels.
 - b. Find LENS ranges that are free.
 - c. Rules:
 - Best practice: use a contiguous LENS range to make later administration easier.
 - Best practice: put every group of 32 channels into one highway.
 - A single sub highway can only contain SIP channels (B and D channels). So use the entire sub highway.
 - For P-P CCIS, you cannot have the CCIS channel in the same highway as the SIP Channels.

In this example, we are not adding LENSs that will be contiguous with the existing since it was not possible without moving the existing channels.



ASSDN - Shands_FPC1

File View Help

ASSDN (Assignment of SIP Server Operating Data for NDM)

SIP Server ID FPC

BASE DATA | DOMAIN | PRESENCE SERVER | REDUNDANCY | TRAFFIC REPORT

CHANNEL NAME

TN

LENS

	START	END	UNIT	START	END
MG	<input type="text" value="7"/>	<input type="text" value="7"/>		<input type="text" value="0"/>	<input type="text" value="0"/>
GROUP	<input type="text" value="0"/>	<input type="text" value="5"/>	LEVEL	<input type="text" value="0"/>	<input type="text" value="4"/>

DETAIL

The Terminal attestation of Call is omitted.

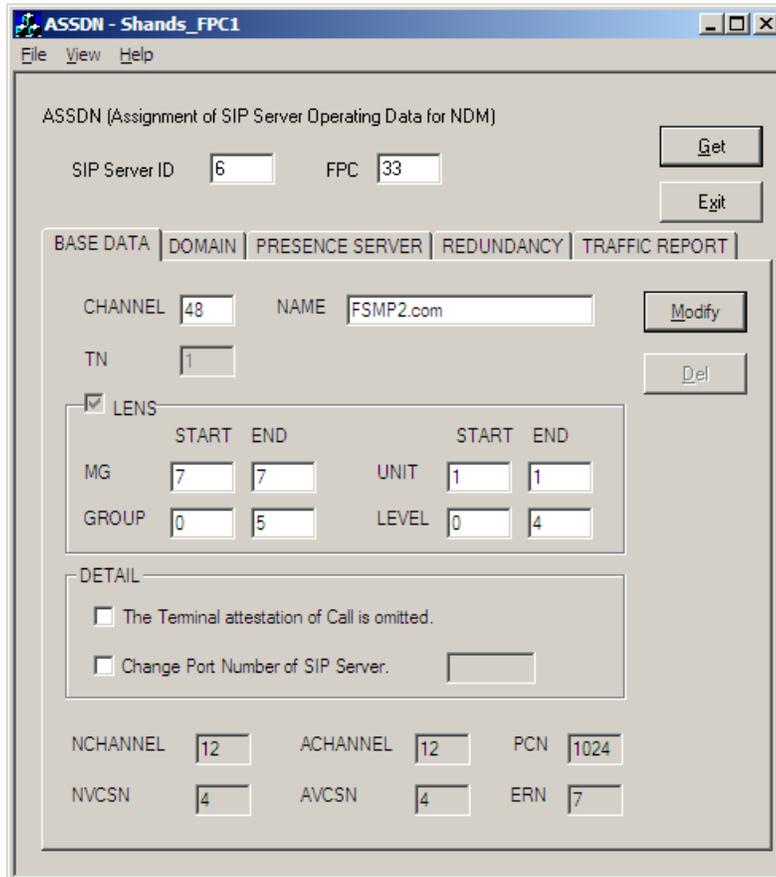
Change Port Number of SIP Server.

NCHANNEL ACHANNEL PCN

NVCSN AVCSN ERN

6. Click **Modify**.

7. System-1 – Enter the **SIP Server ID** and **FPC** of the SIP server where you want to add additional SIP Channels and click **Get**.
8. Enter parameters to add SIP channels. You must specify the same number of SIP Channels as you specified for the System-0 SIP Server. But you must use a different range of LENS. The same rules apply.



ASSDN - Shands_FPC1

File View Help

ASSDN (Assignment of SIP Server Operating Data for NDM)

SIP Server ID FPC

BASE DATA | DOMAIN | PRESENCE SERVER | REDUNDANCY | TRAFFIC REPORT

CHANNEL NAME

TN

LENS

	START	END	START	END
MG	<input type="text" value="7"/>	<input type="text" value="7"/>	UNIT	<input type="text" value="1"/>
GROUP	<input type="text" value="0"/>	<input type="text" value="5"/>	LEVEL	<input type="text" value="4"/>

DETAIL

The Terminal attestation of Call is omitted.

Change Port Number of SIP Server.

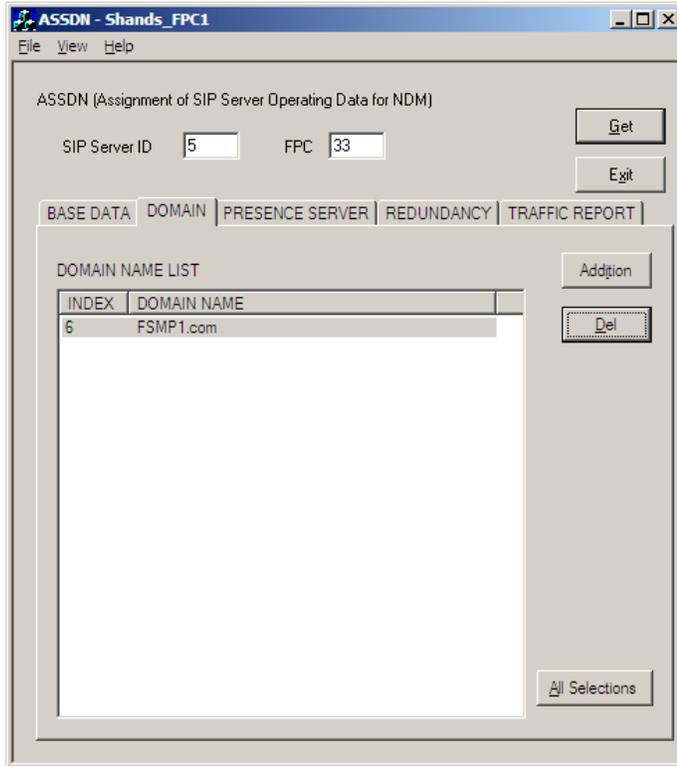
NCHANNEL ACHANNEL PCN

NVCSN AVCSN ERN

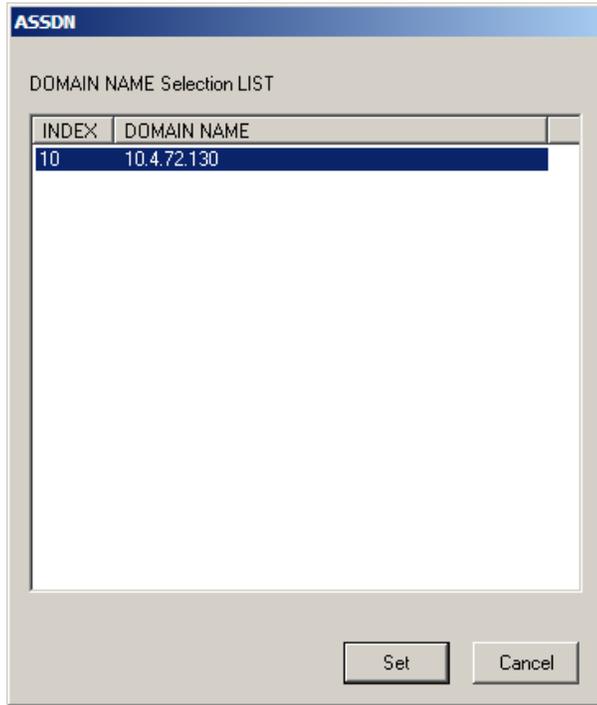
9. Click **Modify**.

10. On the **Domain** tab of the System-0 SIP Server, verify that **both** the System-0 SIP server Domain Name **and** Domain Name that is the Dual system's floating IP address have been added previously during initial Dual CPU configuration.

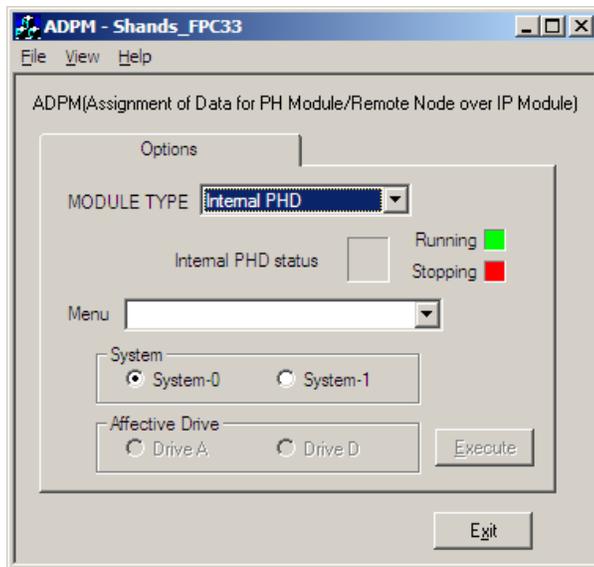
In the example below, the Domain Name that is the system's floating IP address is missing.



11. If the Domain Name that is the Dual system's floating IP address is missing, click **Addition**, select the correct floating IP address Domain Name, and click **Set**.

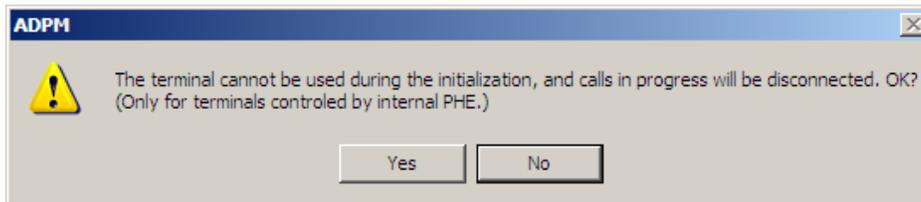
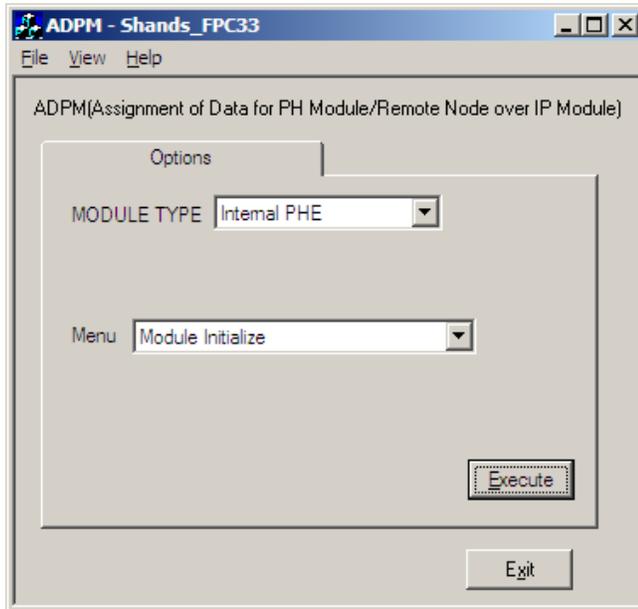


12. With PCPro log into the local node of the SIP servers where you just configured additional SIP channels.
13. Run the **ADMP** command.

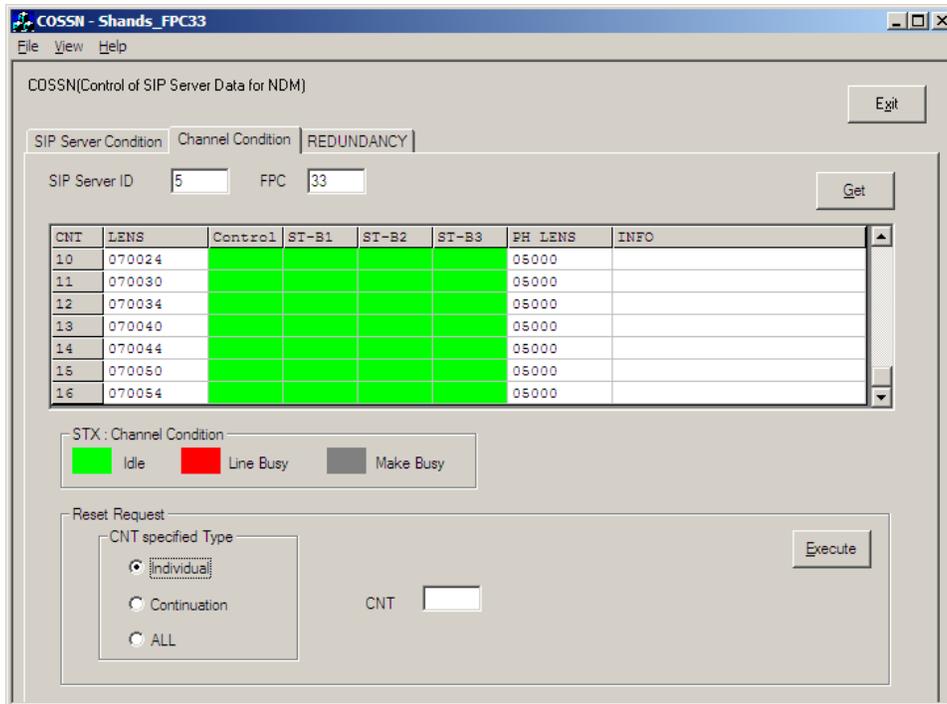
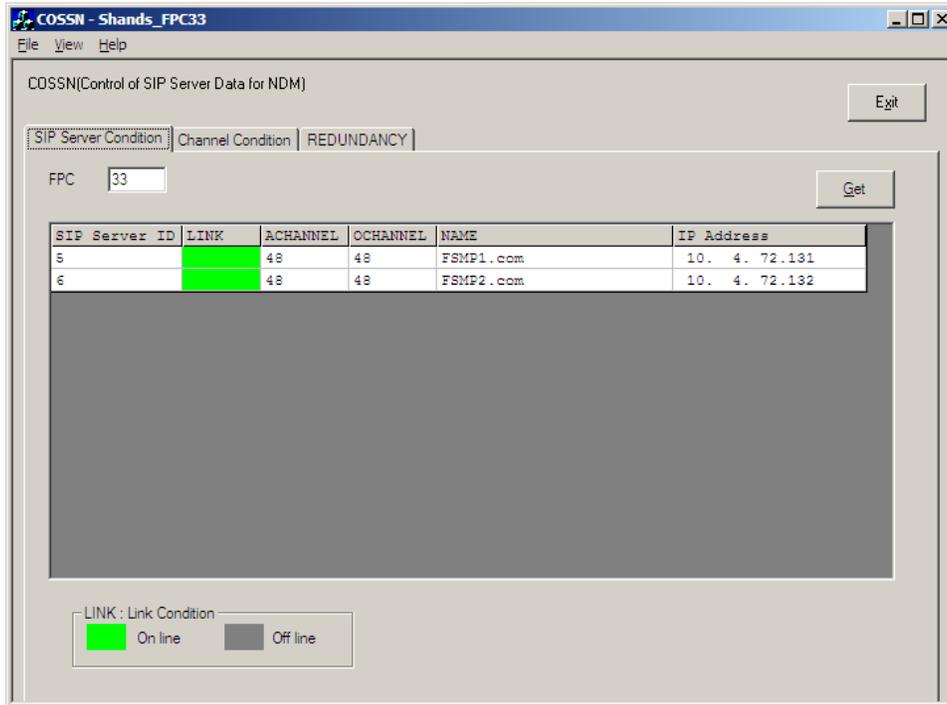


14. Select **Module Type** of **Internal PHE**, select **Module Initialize** from **Menu**, and click **Execute**. This action will reset the SIP Server and allow the new configured Channels to come online.

Important: this will stop anything that registers to MPH-ID (E.g. IP phones, IP Voice Mail, MGs, etc.) while the SIP Server is restarting. It may take a few minutes for all channels to come online.



- Run the **COSSN** Command to verify the SIP servers come back online (it may take a couple of minutes) and that they have all the new channels you added.



COSSN - Shands_FPC1

File View Help

COSSN(Control of SIP Server Data for NDM) Exit

SIP Server Condition Channel Condition REDUNDANCY

SIP Server ID FPC Get

CNT	LENS	Control	ST-B1	ST-B2	ST-B3	PH LENS	INFO
10	071024					05000	
11	071030					05000	
12	071034					05000	
13	071040					05000	
14	071044					05000	
15	071050					05000	
16	071054					05000	

STX : Channel Condition

Idle
 Line Busy
 Make Busy

Reset Request

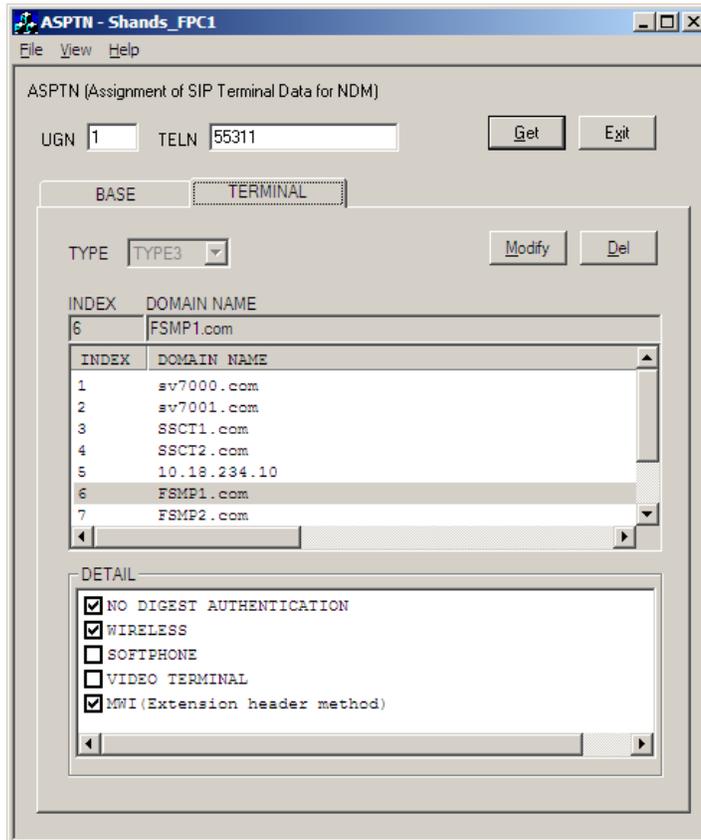
CNT specified Type

Individual
 Continuation
 ALL

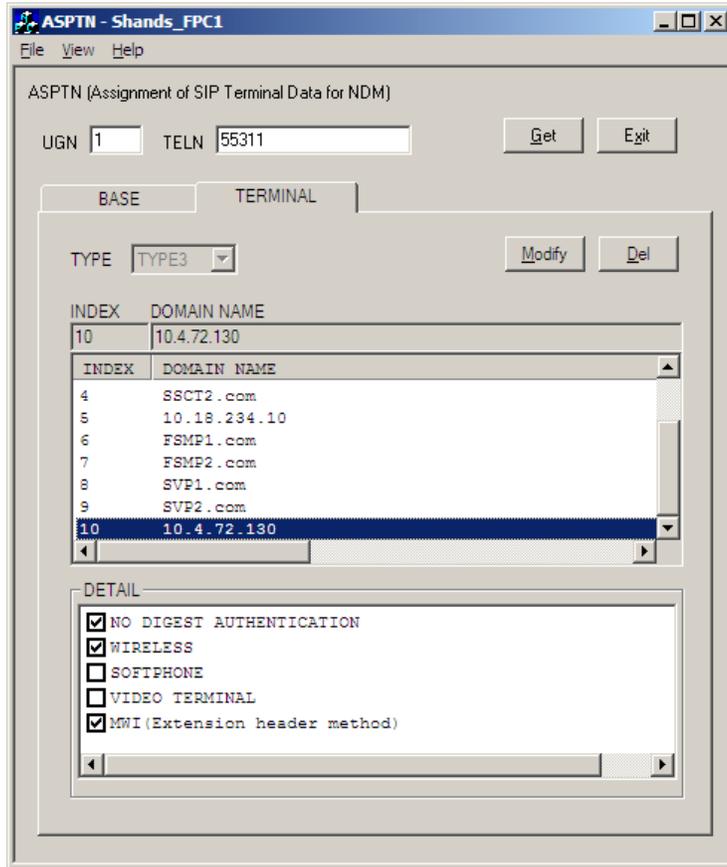
CNT Execute

16. Verify that all the ASPTN stations programmed on these SIP servers are correctly programmed to use the Domain Name that is the system's Floating IP address.

On the **Terminal** tab verify the Floating IP address is selected. In the following example, the System-0 side Domain Name is selected, which is not the correct selection.



17. If an ASPTN station does not have the floating IP address selected, then highlight the **Domain Name** that is the floating IP address and click **Modify**.



This concludes the steps for adding additional SIP Channels and verifying proper Domain Name configuration for a dual SIP server system.