

SV8500: How to Add Additional SIP Channels on a Dual CPU System (Using the ASPC 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 alternative procedure while the other document (ADMP method) describes the preferred procedure.

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

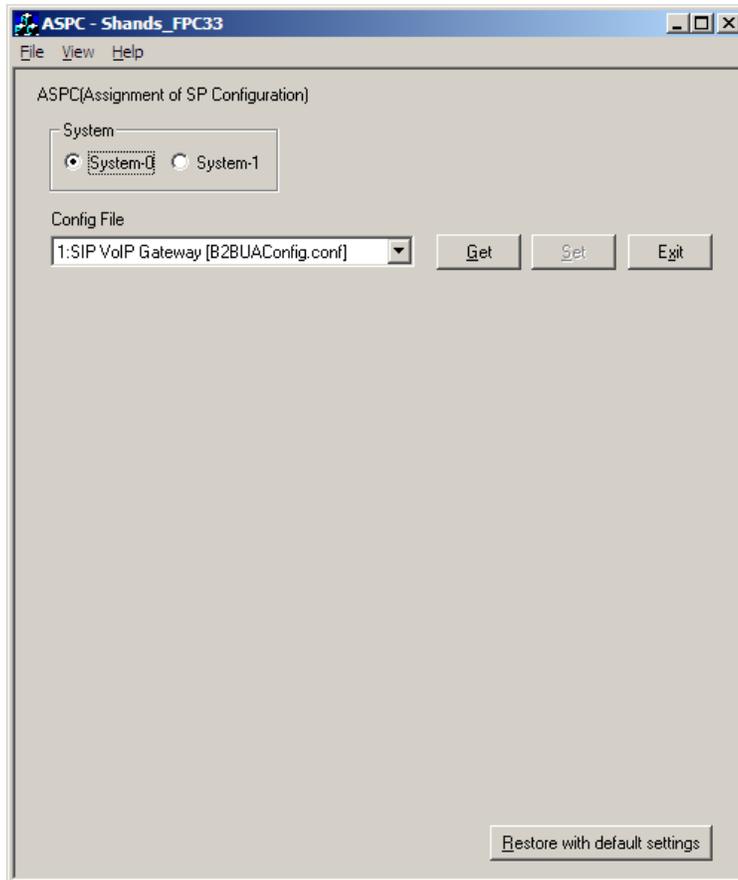
- This method disables the SIP Servers using the ASPC command.
- This method will take longer to complete due to waiting for the SIP servers go offline and to go online.

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".

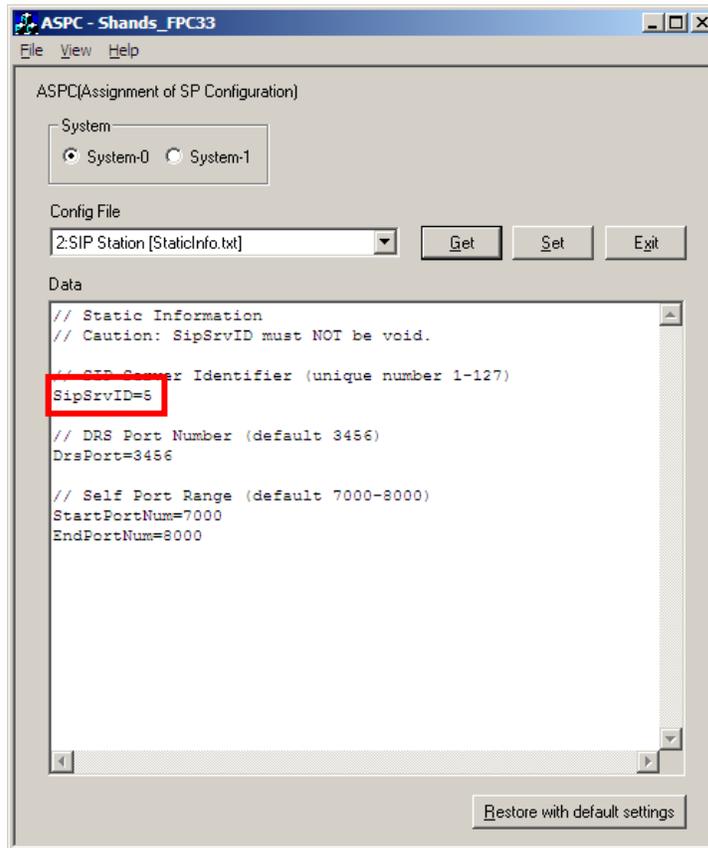
Steps.

1. With PCPro log into the local node the SIP servers where you want to add additional SIP Channels.
2. Run the **ASPC** command.



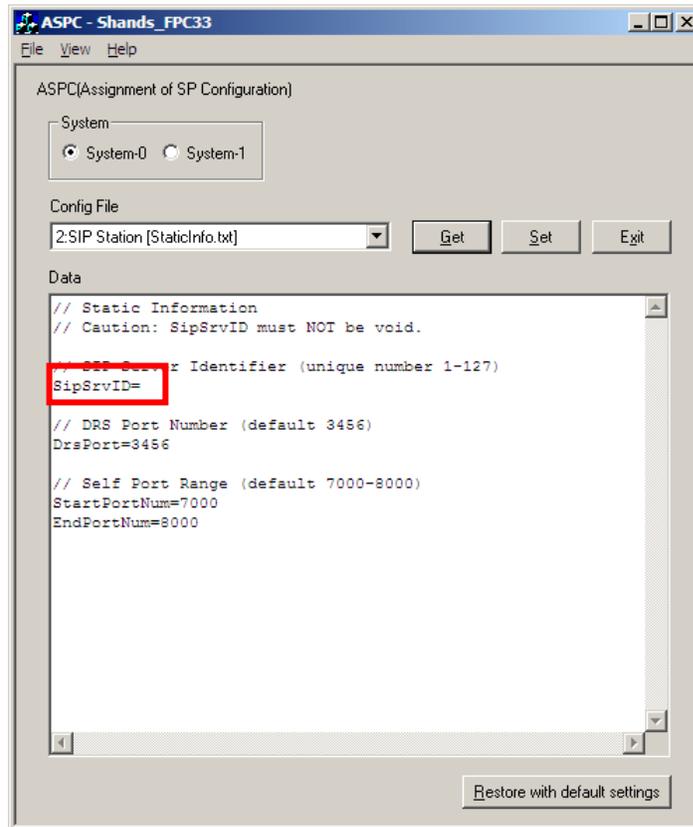
3. System-0

- a. For **Config File** select “**2:SIP Station**” and press **Get**.



- b. Make a note of the current SIP Server ID on the line, **SipSrv=<no.>**. You will need to know this in order restore the SIP Server to service later.

- c. Delete the SIP Server ID by placing the cursor after the **SipSrv=<no.>** and backspacing.



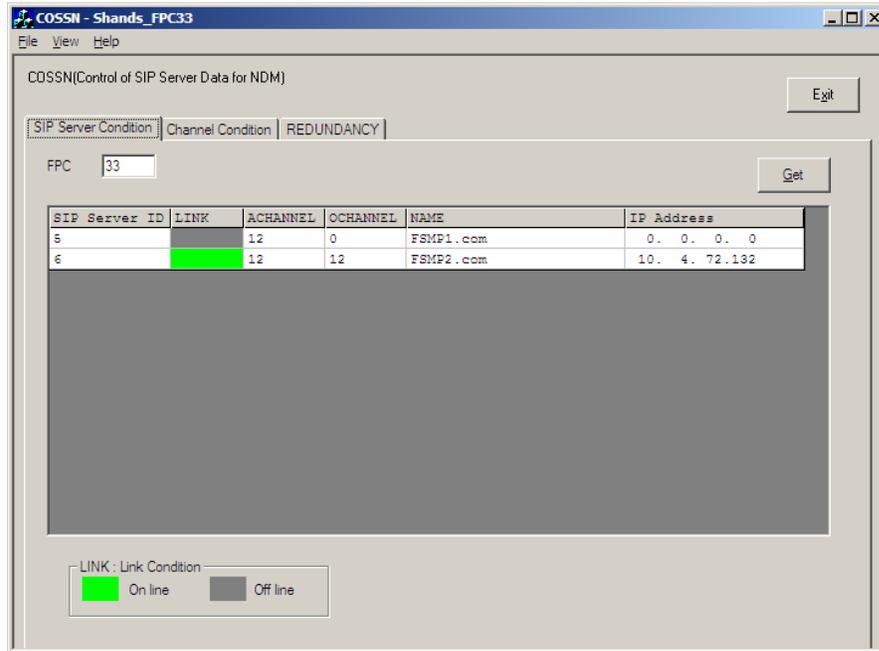
- d. The click **Set**.

► *Important: this will stop anything that registers to MPH-ID (E.g. IP phones, IP Voice Mail, MGs, etc.)*

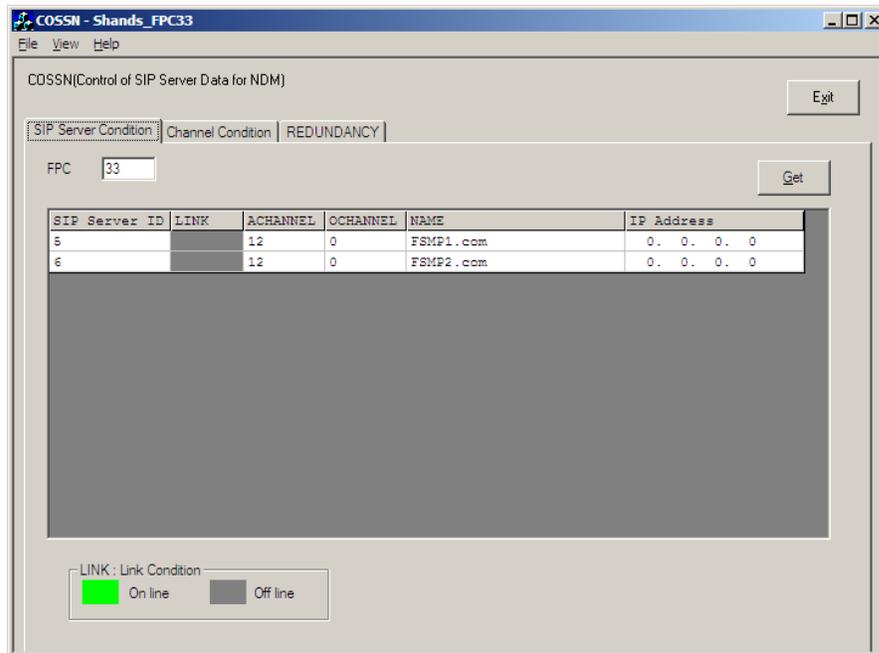
4. System-1 – Repeat the same steps you performed for System-0.
5. Run the **COSSN** command from the same node (or the NCN).

It takes a while for the SIP servers to shut down. Use **COSSN** to verify they are both down.

- a. Enter the **FPC** and click **Get**.



- b. Keep clicking **Get** until you see both SIP Servers are Offline. It can take up to a couple of minutes.



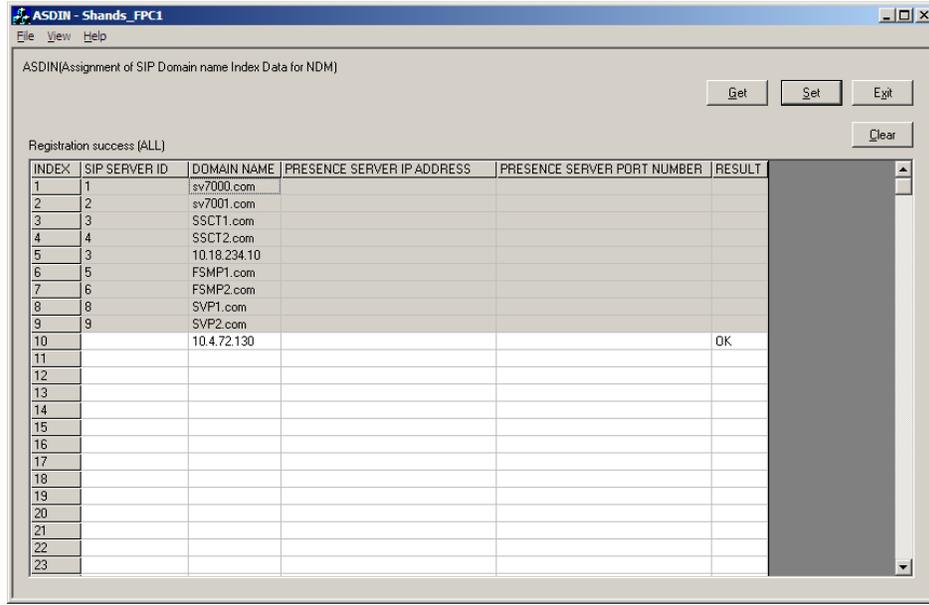
6. With PCPro log into the into the NCN node.
7. Verify with the **ASDIN** command whether a third Domain Name for the two SIP servers has correctly been configured.
 - a. Run **ASDIN** command and verify there is a third **Domain Name** to be used with the dual SIP Servers. It *must* be the same as 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 with the following data:

| 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 | | | | | |
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| 19 | | | | | |
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| 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**.



The screenshot shows a window titled "ASDIN - Shands_FPC1" with a menu bar (File, View, Help) and a title bar. Below the menu bar is the text "ASDIN(Assignment of SIP Domain name Index Data for NDM)". There are three buttons: "Get", "Set", and "Exit". Below these is a "Clear" button. The main area contains a table with the following data:

| 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 | | | | | |
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| 14 | | | | | |
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| 23 | | | | | |

8. Run the **ASSDN** Command.
9. 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" on the left, and "UNIT" and "LEVEL" on the right. All these fields are currently empty.

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 next to it.

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

10. 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.

The screenshot shows the 'ASSDN - Shands_FPC1' window. The title bar includes 'ASSDN - Shands_FPC1' and standard window controls. The menu bar has 'File', 'View', and 'Help'. The main area is titled 'ASSDN (Assignment of SIP Server Operating Data for NDM)'. It contains several input fields and buttons:

- SIP Server ID: 5
- FPC: 33
- Buttons: Get, Exit
- Navigation tabs: BASE DATA (selected), DOMAIN, PRESENCE SERVER, REDUNDANCY, TRAFFIC REPORT
- CHANNEL: 48
- NAME: FSMP1.com
- Modify button
- TN: 1
- Del button
- LENS
- LENS configuration table:

| | START | END | UNIT | START | END |
|-------|-------|-----|-------|-------|-----|
| MG | 7 | 7 | 0 | 0 | 0 |
| GROUP | 0 | 8 | LEVEL | 0 | 4 |
- DETAIL section:
 - The Terminal attestation of Call is omitted.
 - Change Port Number of SIP Server. []
- NCHANNEL: 12
- ACHANNEL: 12
- PCN: 1024
- NVCSN: 4
- AVCSN: 4
- ERN: 6

11. Click **Modify**.

12. System-1 – Enter the **SIP Server ID** and **FPC** of the SIP server where you want to add additional SIP Channels and click **Get**.
13. 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.

The screenshot shows the 'ASSDN - Shands_FPC1' window with the following configuration details:

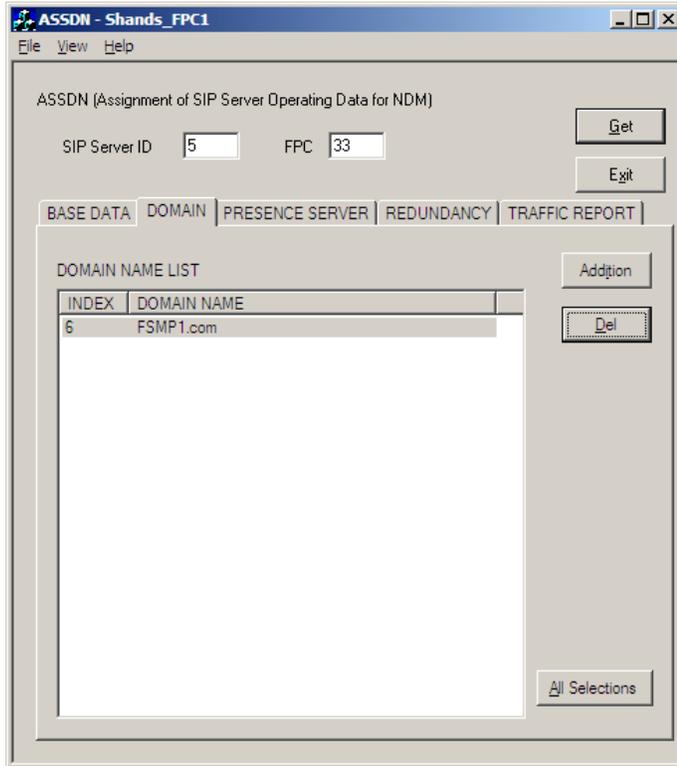
- ASSDN (Assignment of SIP Server Operating Data for NDM)**
 - SIP Server ID: 6
 - FPC: 33
 - Buttons: Get, Exit
- BASE DATA** (Selected Tab)
 - CHANNEL: 48
 - NAME: FSMP2.com
 - TN: 1
 - Buttons: Modify, Del
- LENS** (Checked)

| | START | END | UNIT | START | END |
|-------|-------|-----|-------|-------|-----|
| MG | 7 | 7 | 1 | 1 | 1 |
| GROUP | 0 | 5 | LEVEL | 0 | 4 |
- DETAIL**
 - The Terminal attestation of Call is omitted.
 - Change Port Number of SIP Server. []
- Channel Counts**
 - NCHANNEL: 12
 - ACHANNEL: 12
 - PCN: 1024
 - NVCSN: 4
 - AVCSN: 4
 - ERN: 7

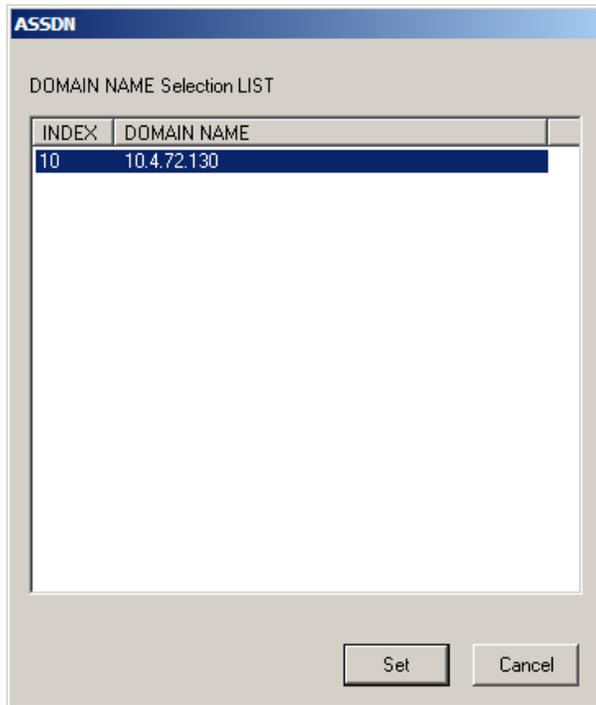
14. Click **Modify**.

15. 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.

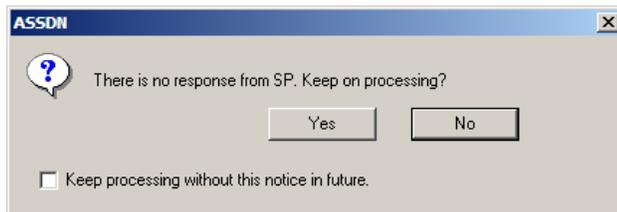
In the example below, the Domain Name that is the system's floating IP address is missing.



16. 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**.

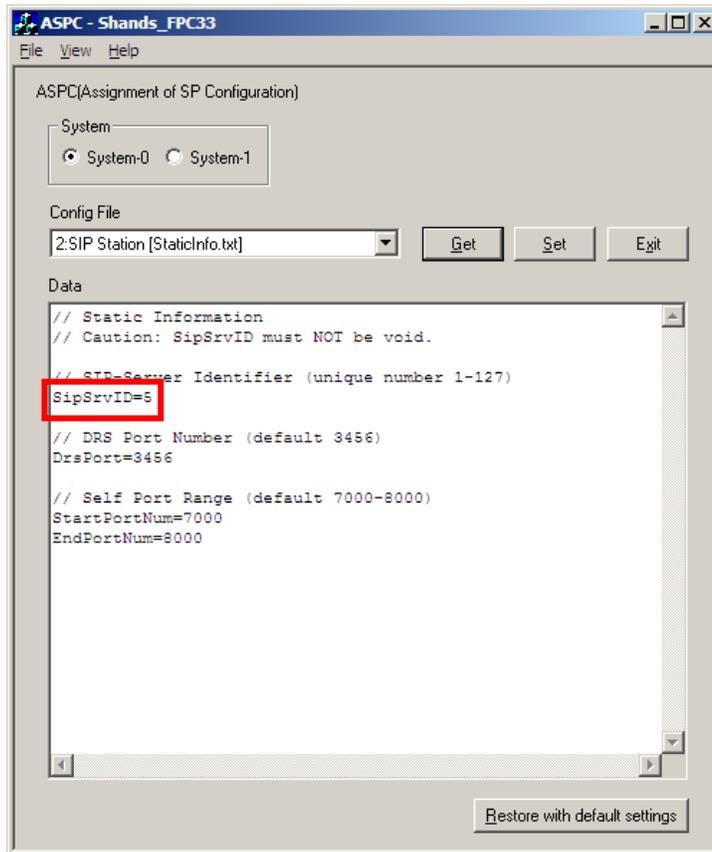


The following message is normal since the SIP servers are Offline. Click **Yes** to continue.

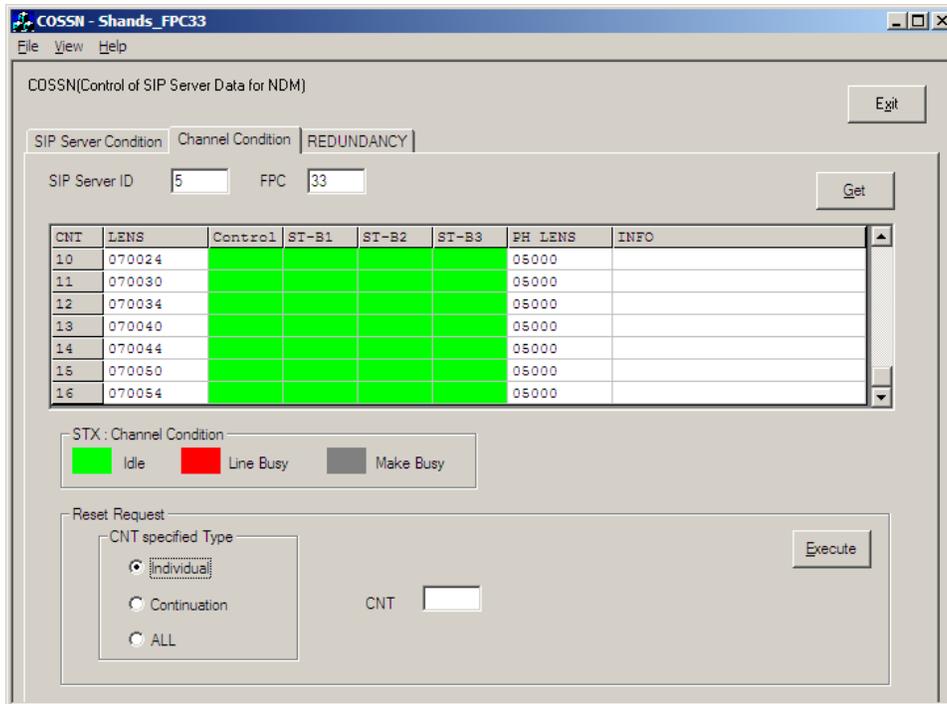
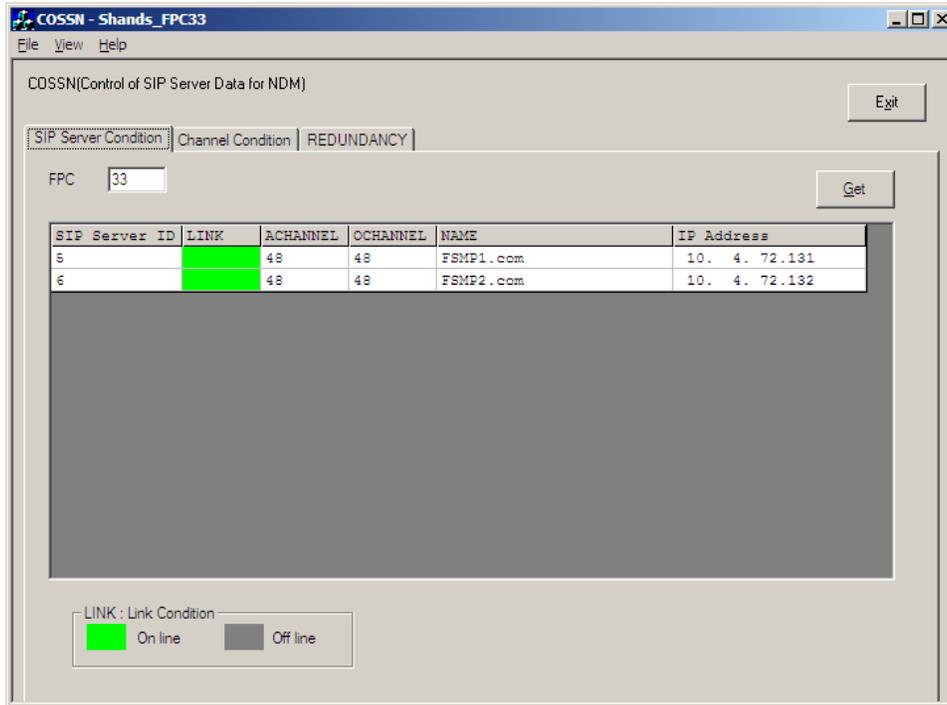


17. With PCPro log back into the local node of the SIP servers where you just configured additional SIP channels.
18. Run the **ASPC** command.

19. For System-0 and System-1, reverse the steps you performed at the beginning of these instructions by adding back the SIP Server ID number and clicking **Set**.



20. 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

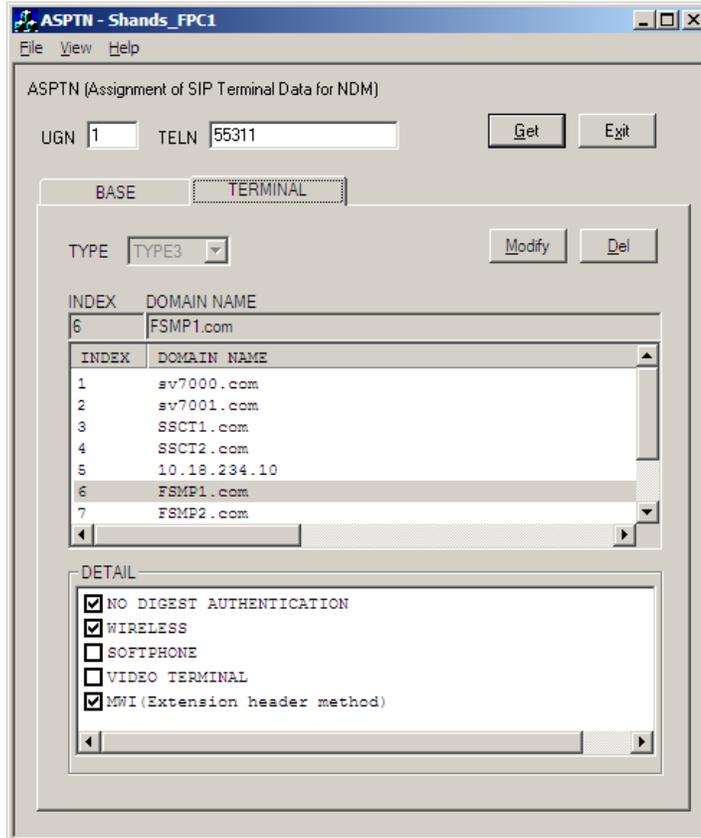
CNT specified Type

Individual
 Continuation
 ALL

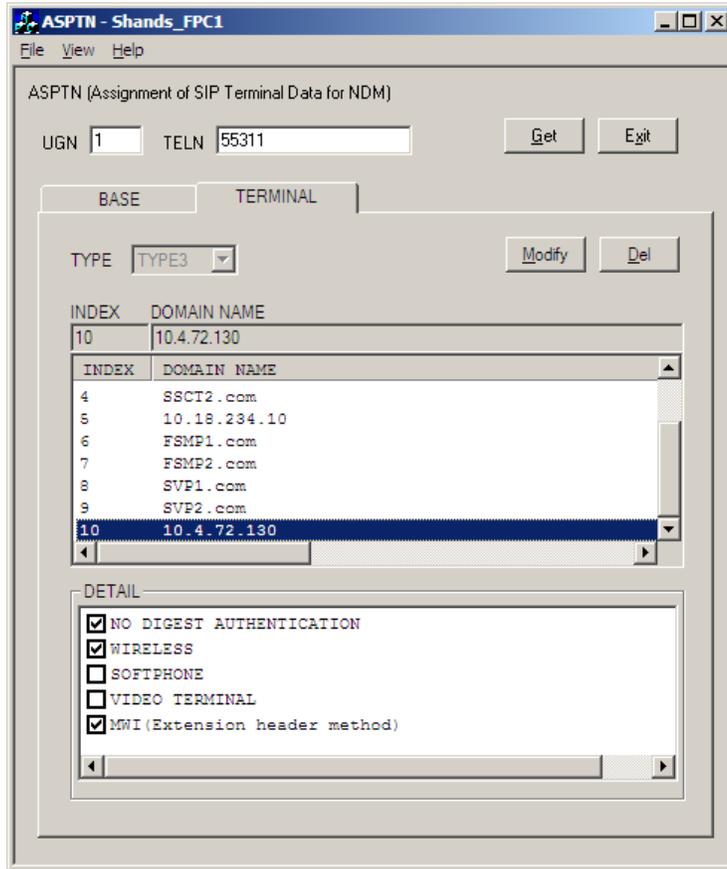
CNT Execute

21. 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.



22. 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.