

## Spectrum Enterprise SIP Trunking Service NEC 3C IP PBX Configuration Guide

### About Spectrum Enterprise:

Spectrum Enterprise is a division of Charter Communications following a merger with Time Warner Cable and acquisition of Bright House Networks. Spectrum Enterprise is a national provider of scalable, fiber technology solutions. The Spectrum Enterprise portfolio includes networking and managed services solutions, including Internet access, Ethernet and Managed Network Services, Voice, TV and Cloud solutions. Our industry-leading team of experts works closely with clients to achieve greater business success.

### About this document:

Spectrum Enterprise assures IP PBX compatibility by conducting interoperability testing to ensure any potential compatibility issues have been resolved prior to installation. Please review the IP PBX configuration instructions in this guide prior to your installation date.

Be advised that this document may contain references to Charter or Charter Business. All references to Charter should be read as Spectrum Enterprise.

**Thank you,**

**Spectrum Enterprise**

# NEC 3C IP PBX Configuration Guide



## 1 Introduction

The document describes how to configure the NEC 3C IP PBX to interoperate with the Charter network. It does not provide any information how to provision, configure or use the features of the IP PBX. Please refer to the documentation provided with the IP PBX or contact the vendor.

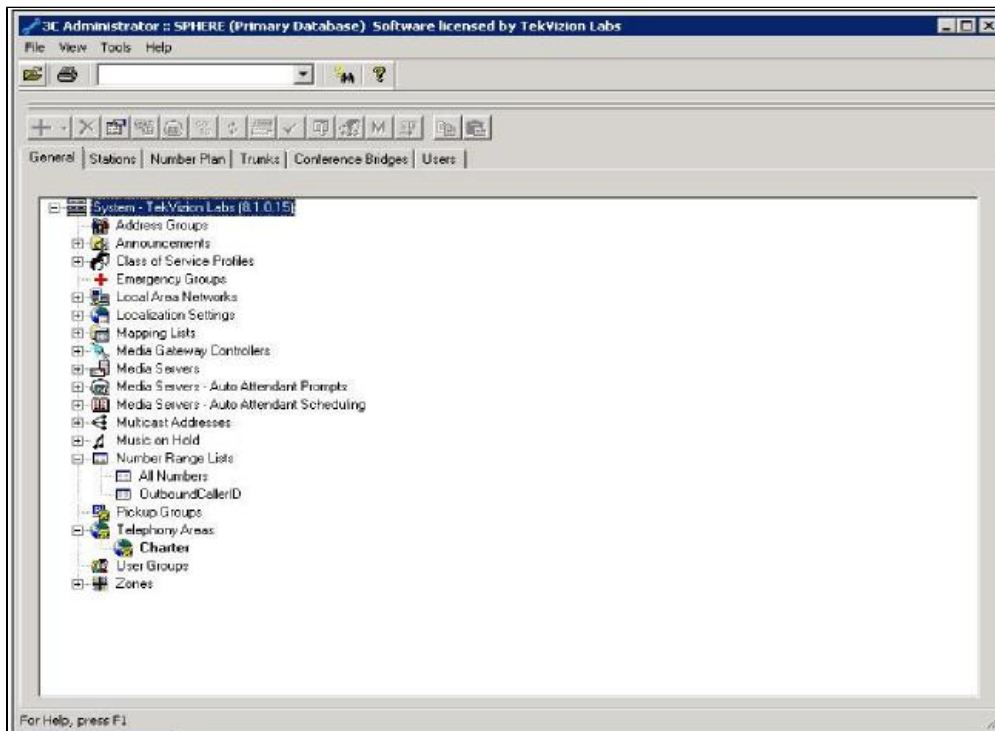
## 2 Configuration

To configure the NEC 3C IP PBX, follow the step-by-step procedure.

### Requirements:

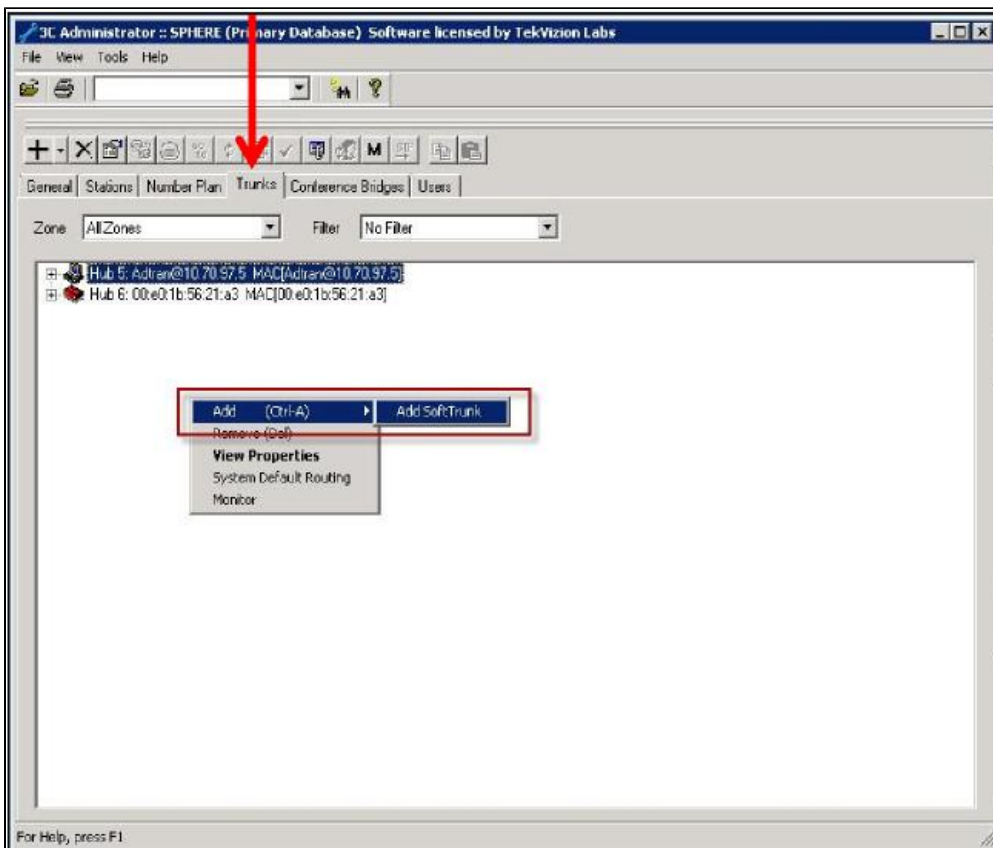
- NEC 3C Administrator Tool (for configuration)
- NEC 3C Console (for logging) installed on NEC 3C server

Step	Action	Result
1	Login to the NEC 3C Server	
2	Double click the NEC 3C Administrator Tool	Administrator Tool opens with access to configure the PBX.
3	Go to the next table.	





Step	Action	Result
1	To configure a trunk In 3C administrator tool Click <b>Trunks</b> tab	
2	Right click on the open space Select <b>Add</b>	
3	Click <b>Add Soft Trunk</b>	Configure Service Provider screen opens.
4	Go to the next table.	



Step	Action	Result
------	--------	--------

1	At the Configure Service Provider fill the required fields.  A sample configuration continues as an example:	
2	User Agent: <b>Generic SIP Trunk</b>	<b>Note:</b> Set this field first to filling all the other fields. Selecting User Agent will reset all the fields. If a predefined trunk exists for the network in the drop-down list, select the appropriate one.
3	Description: <b>CharterSIPTrunk</b>  Account: <b>Adtran</b>  Service Provider Domain: <b>LAN IP address of eSBC</b>	<b>Note:</b> 10.70.97.5 is used here. Use the correct LAN IP address of eSBC for the network
4	Outbound Proxy: <b>LAN IP address of eSBC</b>	<b>Note:</b> 10.70.97.5 is used here. Use the correct LAN IP address of eSBC for the network
5	Port: <b>5060</b> Registration  Type: <b>None</b>  Primary MGC: <b>Computer name of 3C server</b>	<b>Note:</b> SPHERE is used here. Use the exact name of 3C server in use.
6	Secondary MGC: <b>None</b>  Preferred Transport: <b>UDP</b>  Click <b>Ok</b> button	
7	Go to the next table.	

**Configure Service Provider**

Description: CharterSIPTrunk

Account: Adtran

Service Provider Domain: 10.70.97.5

Outbound Proxy: 10.70.97.5

Port: 5060

Registration Type: None

Primary MGC: SPHERE

Secondary MGC: None

Contact Domain:

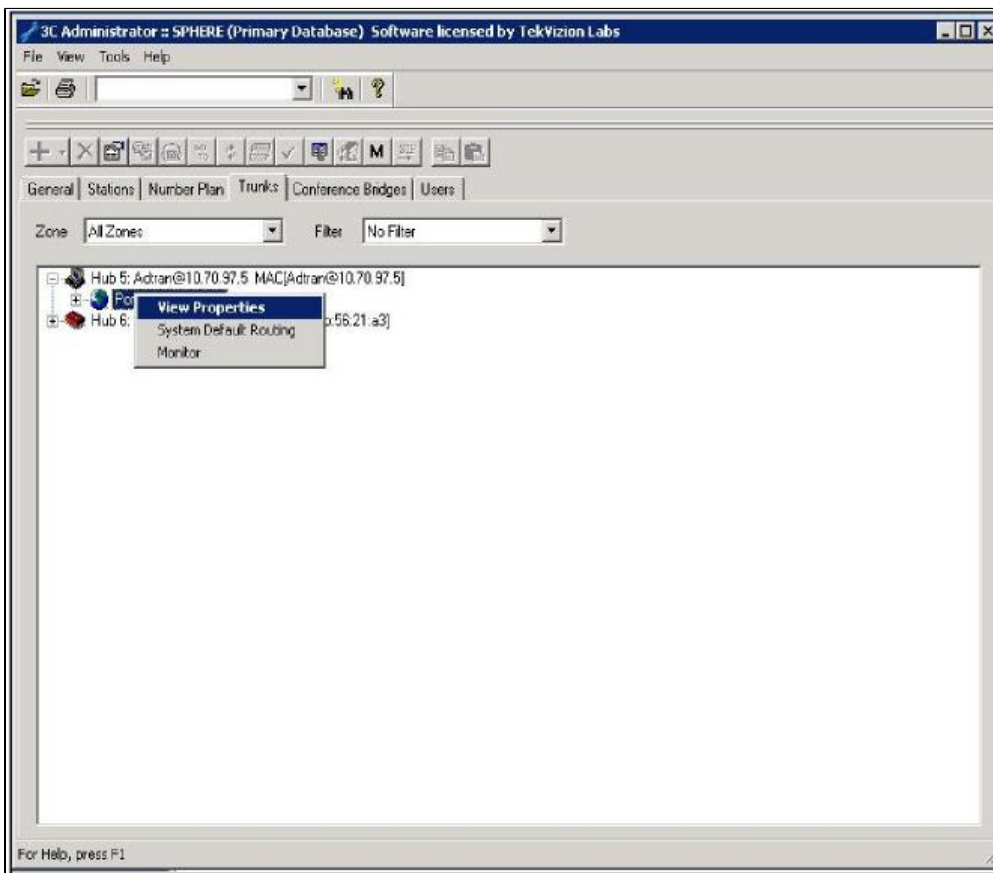
Preferred Transport: UDP

User Agent: Generic SIP Trunk

DNS Test OK Cancel



Step	Action	Result
1	Click <b>Trunks</b> tab	A Hub will be created with the account name. <b>Note:</b> Adtran is the account name used in above configuration, so Hub5: Adtran is created.
2	To expand the hub Right click the port Click <b>View Properties</b>	Properties for Trunk hub 5 port 1 opens.
3	Go to the next table.	



Step	Action	Result
------	--------	--------

1	<p>Click the <b>General</b> tab</p> <p>A sample configuration continues as an example:</p>	<p>A Hub will be created with the account name.</p> <p><b>Note:</b> Adtran is the account name used in above configuration, so Hub5: Adtran is created.</p>
2	<p>Confirm Name: Name of the trunk hub&lt;number&gt; <b>port&lt;number&gt;</b></p> <p>Confirm Hardware Id: <b>Trunk followed by a number</b></p> <p>Max Duration: <b>21600</b> is used here for example</p> <p>Confirm In Service: <b>Checked</b></p> <p>Confirm Allow Emergency Calls from non-emergency group</p> <p>Stations: <b>Checked</b></p> <p>Telephony Area: <b>Select the pilot number of the trunk</b></p> <p>Zone: <b>Select the zone</b></p>	
	<p>Total Capacity: <b>3</b> used here for example</p> <p>Inbound Capacity: <b>3</b> used here for example</p> <p>Set Outbound Capacity: <b>3</b> used here for example</p> <p>Outbound Caller ID: Click <b>Add</b></p> <p>Under Number Range: Select the <b>number range</b></p>	
3	<p>Go to the next table.</p>	

**Properties for Trunk hub 5 port 1**

General | Authorization | Inward Routing | Outward Routing | Emergency Groups | Settings

Name: hub 5 port 1    Port: 1     In Service

Hardware Id: Trunk:2    Max Duration: 21600     Allow Emergency Calls from non-emergency group Stations

Telephony Area: Charter: +1 864 4385386

Zone: TekVizion Labs

Total Capacity: 3

Inbound Capacity: 3    Outbound Capacity: 3

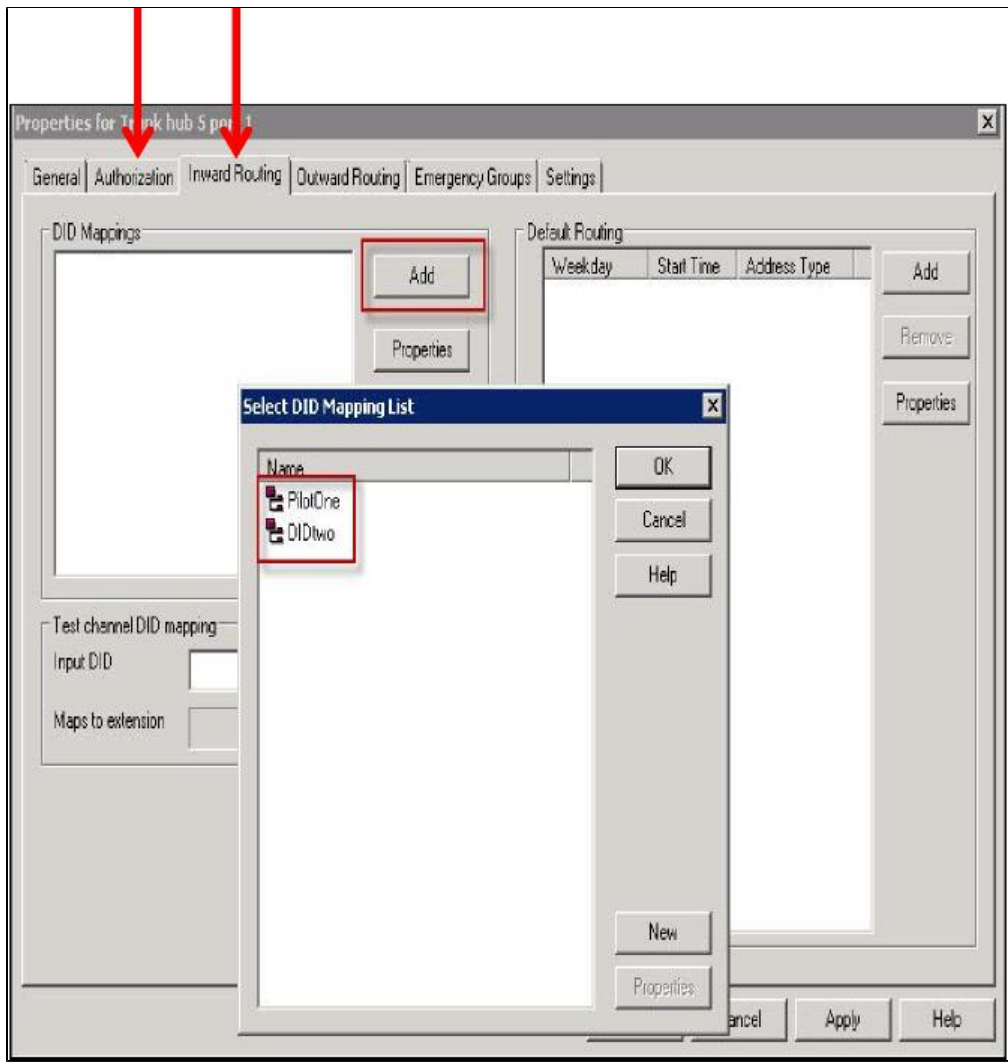
Outbound Caller ID:

Number Range	
All Numbers	
OutboundCallerID	

Buttons: Add, Remove, OK, Cancel, Apply, Help

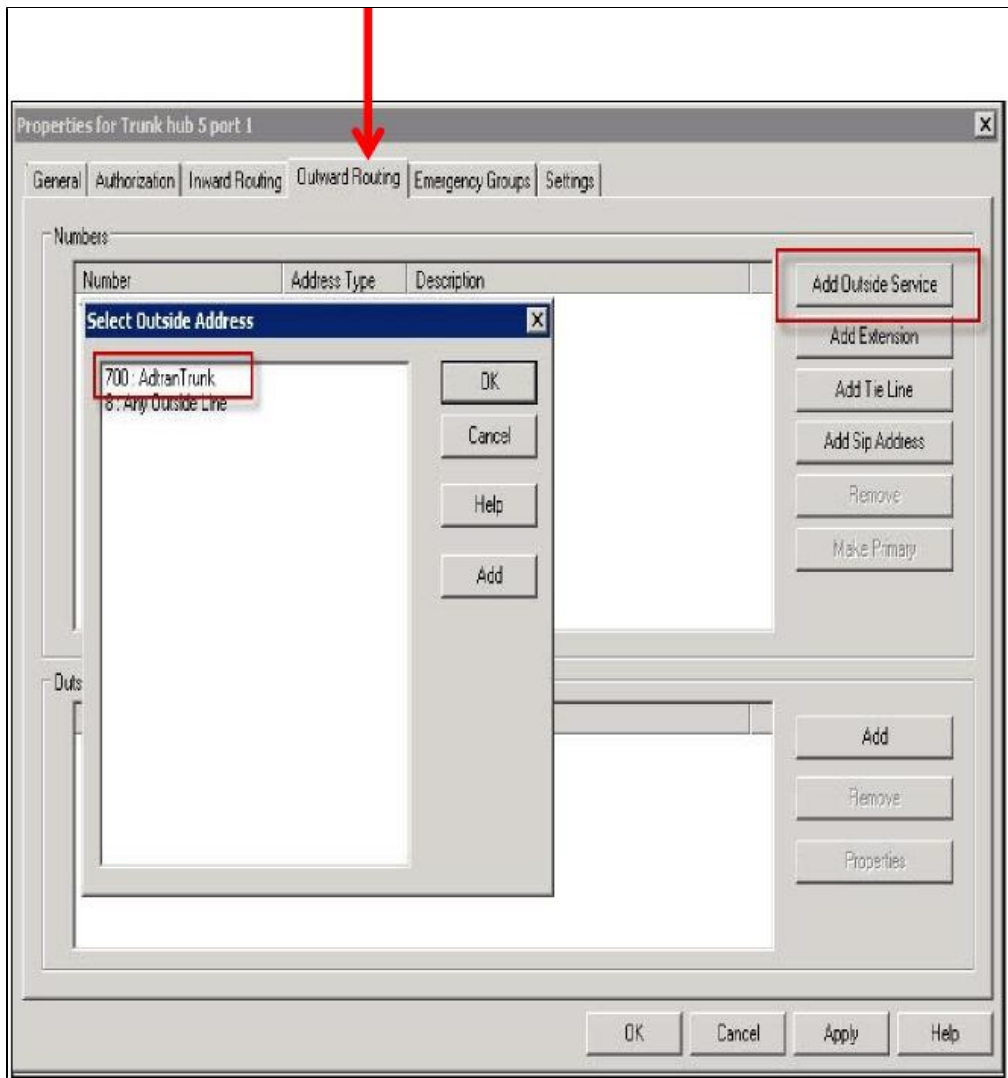


Step	Action	Result
1	Click on <b>Authorization</b> tab	
2	Confirm Use Authorization: <b>Unchecked</b>	
3	Click on <b>Inward Routing</b> tab	
4	At DID Mappings Click <b>Add</b> button	Select DID Mapping List screen opens
5	Add the related mapping lists.	
6	Click the <b>OK</b> button.	
7	Go to the next table.	

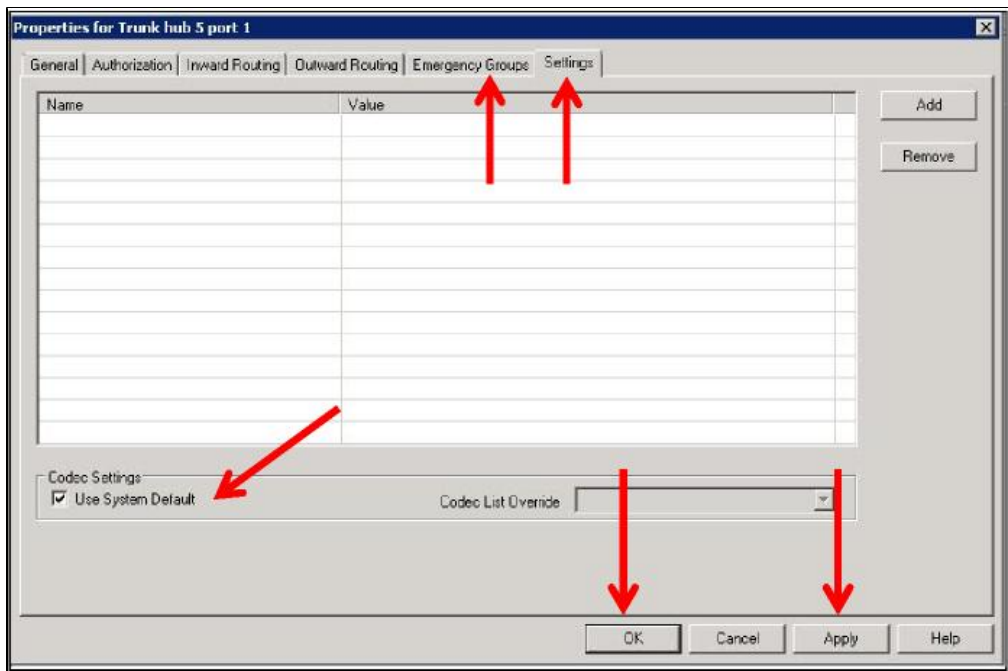


Step	Action	Result
1	Click <b>Outward Routing</b> tab	
2	At Numbers Click <b>Add Outside Service</b> button	Select Outside Address screen opens
3	Select the Outside service created under Number Plan	
4	Click the <b>OK</b> button	
5	Go to the next table.	

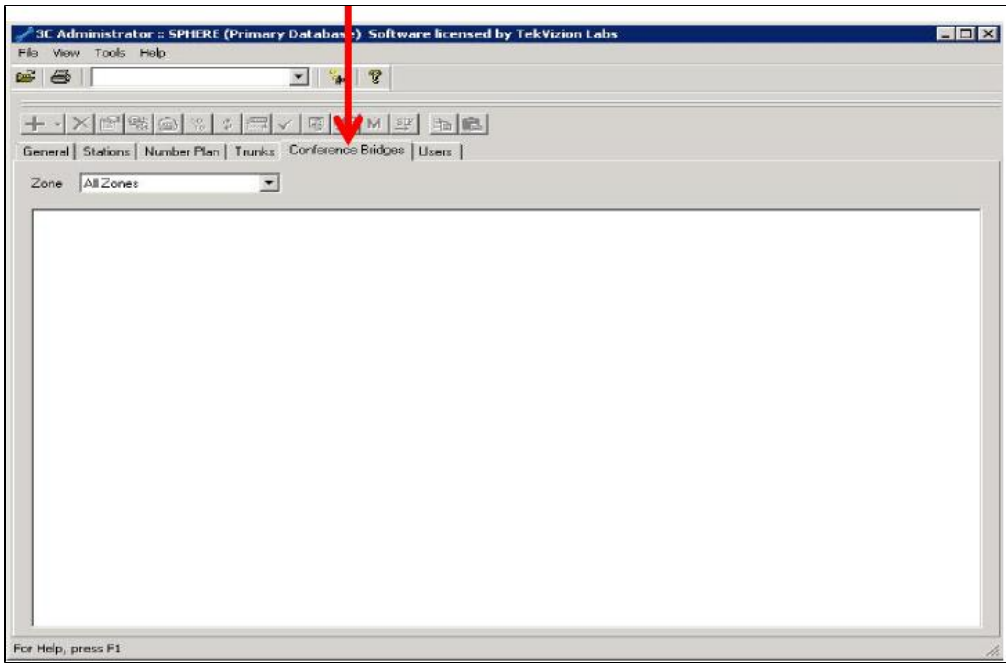




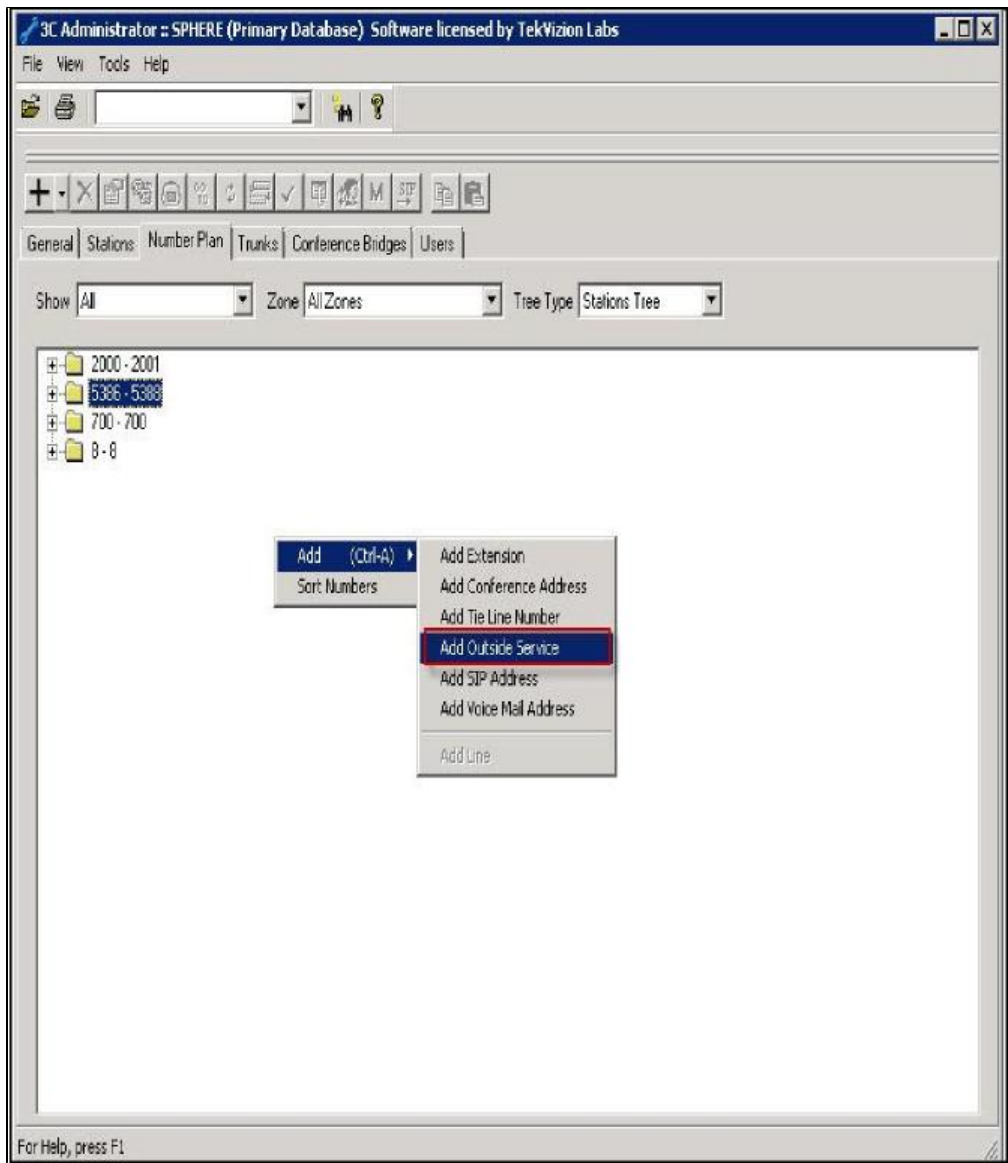
Step	Action	Result
1	Click <b>Emergency Groups</b> tab	
2	Confirm: Groups list is empty (no data)	
3	Click on <b>Settings</b> tab	
4	Confirm: No data is added	
5	Under Codec Settings, Confirm Use System Default: <b>checked</b>	
6	Click <b>Apply</b> and <b>OK</b> buttons	Return to the main screen.
7	Go to the next table.	



Step	Action	Result
1	Click <b>Conference Bridges</b> tab	
2	Confirm no data is added	
3	Click on <b>Users</b> tab	
4	Confirm <b>SRV3Csupport</b> is added	
5	Go to the next table.	



Step	Action	Result
1	Click <b>Number Plan</b> tab	
2	Right click on the white space Click <b>Add</b> Click <b>Add Outside Service</b>	Properties for Outside Service 700-Adtran Trunk screen opens.
3	Go to the next table.	



Step	Action	Result
1	Click <b>General</b> Tab	A sample configuration continues as an example:
2	Number: <b>700</b> is used here Name: <b>AdtranTrunk</b> is used here Hunt Order: <b>Single Line</b> Type: <b>PSTN Gateway</b> Confirm Search/Display in Client: <b>unchecked</b>	
3	Under Trunks Click <b>Add</b>	

4	Select trunk	
5	Go to the next table.	

Properties for Outside Service 700 : AdtranTrunk

General | Address Groups | Call Recording

Number: 700      Hunt Order: Single Line

Name: AdtranTrunk      Type: PSTN Gateway

Search/Display in Client

Trunks

Description	Priority
hub 5 port 1 (Adtran@10.70.97.5)	0

Buttons: Add, Remove, Trunk Properties, Up, Down, Reset

Buttons: OK, Cancel, Apply, Help



Step	Action	Result
1	Click <b>Address Groups</b> tab Confirm no data is entered	
2	Click <b>Call Recording</b> tab Confirm no data is entered	
3	Click <b>Apply</b> button	
4	Click <b>OK</b> button	

5	Procedure completed.	
---	----------------------	--



---

The information contained herein is confidential and should not be disclosed, copied, or duplicated in any manner without written permission from Charter Communications™.