

Spectrum Enterprise SIP Trunking Service Cisco CUCM R11.0.1 with CUBE R11.5.0 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

C IP PBX Configuration Guide



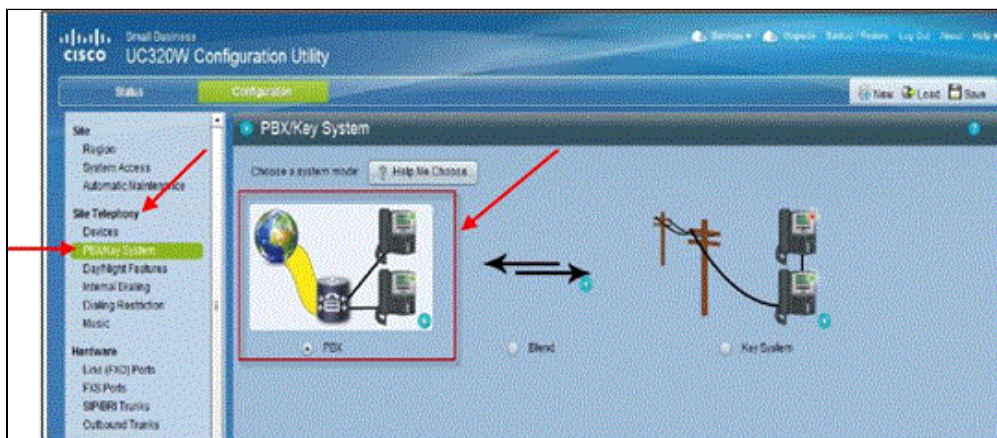
1 Introduction

This document describes how to configure the Cisco UC320W IP PBX to interoperate with the Charter network. It does not provide any information as to how to provision, configure, or use the features of the Cisco. Please refer to the documentation provided with the IP PBX or contact the vendor.

2 Setting PBX/Key System

The system was tested as a PBX. Follow the step-by-step procedure to confirm.

| Step | Action | Result |
|------|--|--------|
| 1 | At the Cisco UC320W Configuration Utility screen Click the Configuration tab | |
| 2 | In the left frame of the window, Navigate to Telephony | |
| 3 | Click PBX/Key System | |
| 4 | In the right frame of the window Select PBX | |
| 5 | Procedure completed | |





3 Configuration

3.1 Creating SIP Trunk

To create a SIP trunk, follow the step-by-step procedure

| Step | Action | Result |
|------|--|--|
| 1 | At the Cisco UC320W Configuration Utility screen Click the Configuration tab | |
| 2 | Navigate to Ports and Trunks Click SIP/BRI Trunks | |
| 3 | Click PBX/Key System | |
| 4 | Click the Add a SIP/BRI Trunk | SIP/BRI screen opens |
| 5 | At the Provider drop-down menu Select SIP Generic SIP Provider | |
| 6 | Click the down-arrow on Settings Select CharterSIP | |
| 7 | At Description Select CharterSIP | |
| 8 | At Proxy Enter: The appropriate IP address | Note: This is the static LAN IP address of the Charter e-SBC. Use the actual e-SBC LAN IP for the network. |
| 9 | Confirm the following is left blank (no data): Require registration Outbound Proxy Confirm Only Allow Calls To | |
| 10 | At Call Capacity Select the appropriate amount for 100% of WAN upstream bandwidth | Note: Check with a Charter representative for a proper setting |
| 11 | Confirm 3 LIR IISEXIIS nuX Eili aliKTqiii is left blank | |
| 12 | At Company Name Enter: the appropriate company name | |
| 13 | At Account ID Enter: The appropriate account ID | Note: This is the pilot number for registration |

| | | |
|----|--|------------------------|
| 14 | <p>Under Digest Authentication</p> <p>Confirm the following is left blank (no data):</p> <p>Authentication ID</p> <p>Confirm Password</p> <p>Under SRV Record</p> <p>Confirm SRV Record Lookup Confirm SRV Auto Prefix Under NAT</p> <p>Confirm NAT Mapping</p> <p>Confirm Send NAT Keep Alive</p> <p>Confirm Local SIP Port is 5060</p> | |
| 15 | Click on Systemwide SIP Parameters | A drop down form opens |
| 16 | <p>At Codec</p> <p>Select G711u</p> | |
| 17 | <p>At Outbound fax</p> <p>Select passthrough</p> | |
| 18 | Click Apply Configuration | |
| 19 | Procedure completed | |

SIP/BRI Trunks

Provider SIP Generic SIP Provider

Settings CharterSIP

Description CharterSIP

Proxy 10.64.2.177

Require registration

Uses SIP Remote-Party-ID

Outbound Proxy

Only Allow Calls To

Call Capacity 10 100% of WAN upstream bandwidth
Maximum Call Capacity is 12

Prefix dialed numbers with "+1"

Company Name Tekvizon

Account ID 8644385386
(often Account Phone Number)

Digest Authentication

Authentication ID

Password

SRV Record

SRV Record Lookup

SRV Auto Prefix

NAT

NAT Mapping

Send NAT Keep Alive

Local SIP Port: 5060

Systemwide SIP Parameters

These settings affect all SIP providers on the system

Codec G711u

Outbound FAX passthrough

Packetization Size in milliseconds 30

NAT STUN Server

Static IP Address for Site

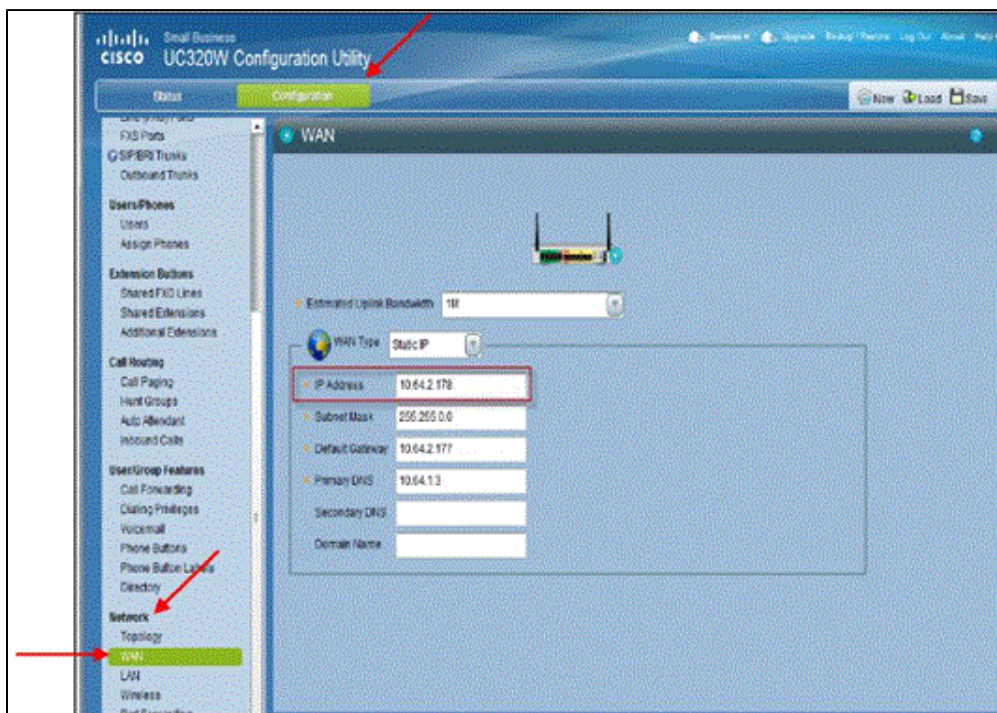
Add a SIP/BRI Trunk 1 Trunk(s) of 4 created



3.2 Acquiring eSBC IP Address for PBX Trunk Account

To acquire the eSBC IP address for PBX trunk account, follow the step-by-step procedure.

| Step | Action | Result |
|------|--|-------------------------|
| 1 | At the Cisco UC320W Configuration Utility screen Click the Configuration tab | |
| 2 | In the left frame of the window Navigate to Network | |
| 3 | Click WAN | WAN screen opens |
| 4 | In the right frame of the window Record IP Address | 10.64.2.178 for example |
| 5 | Procedure completed | |



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