VIDYO® DEPLOYMENT TECHNICAL REQUIREMENTS

PBX INTEGRATION

TECHNICAL INFORMATION

If you are using a soft phone or IP phone that supports the ability to place calls directly using a SIP dial string, it is possible to call into a VidyoConference™ directly without the involvement of an IP PBX.

Example: 91234@10.10.99.1 This dial string would route a call to the VidyoGateway at IP address 10.10.99.1, on the voice only service prefix "9", to Vidyo extension "1234". Depending on the configuration of the VidyoGateway service prefix, the call will either connect to the Vidyo user's Meeting Room or ring the endpoint with extension "1234" directly.

IP PBX systems allow for various call routing rules that determine how calls are connected. There are two common methods for call routing on the IP PBX: **Direct Dial** and **Extension Dial**.

With the **Direct Dial** method the IP PBX is configured with a dedicated public phone number that will be used exclusively for voice participants joining a VidyoConference™. This number brings callers into an IVR prompting them for the Vidyo user extension. Once they have entered the extension the IP PBX will forward the call over the SIP trunk to the VidyoGateway. The extension users enter at the IVR should match the destination Vidyo extension & the IP PBX will prepend the VidyoGateway™ voice-only prefix.

With the **Extension Dial** method each Vidyo user is another extension similar to a desk phone. This is done by assigning a block of extensions to the VidyoGateway trunk. When creating a user account on the Vidyo system, each user will be assigned a valid extensions. When a user then calls into the PBX from a telephone and has the option to enter an extension, they can enter one of the Vidyo extensions which will then route the call through the SIP trunk to the VidyoGateway. The IP PBX will be configured to route any extension in this range to the VidyoGateway with the VidyoGateway voice-only prefix pre-pended.

DEPLOYMENT REQUIREMENTS

The SIP dial string must include three components: the voice-only service prefix of the VidyoGateway, the extension of the endpoint or Meeting Room you are calling, and the address of the VidyoGateway.

Configure a SIP trunk between the IP PBX and the VidyoGateway

Direct Dial: Configure IP PBX with a dedicated phone number that corresponds to the VidyoGateway

Direct Dial: Configure IP PBX to have an IVR prompt where callers enter the destination Vidyo extension

Extension Dial: Configure IP PBX with a range of extensions that match the Vidyo user extensions or wildcard rules that will be forwarded to the VidyoGateway

Configure the IP PBX to prepend VidyoGateway voice-only prefix and route the call over the SIP trunk to the VidyoGateway
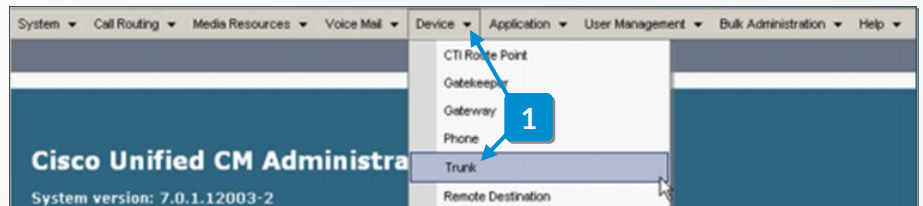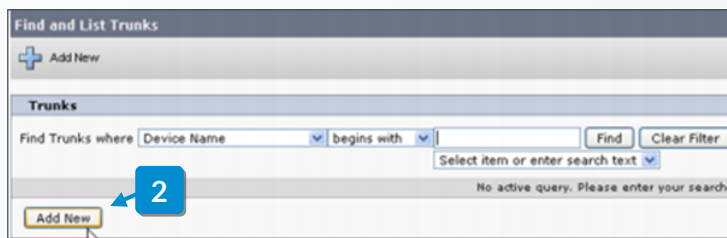
EXAMPLES

Cisco Unified Call Manager v.6.x – v.7.x
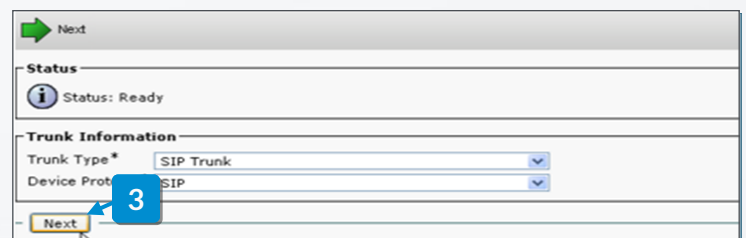
Configuring a Trunk

1. Start on the **Cisco Unified CM Administration** page. Select **Device** & **Trunk**.

2. Select **Add New** under the list of Trunks.

3. Select SIP Trunk & SIP. Then click **Next**.

Call Manager Route Configuration

The Cisco Call Manager requires changes. The Route Configuration needs to be setup. These settings determine when calls will go out though the SIP trunk that was created. **Please consult your Cisco CM documentation to set up the Router Configuration properly.**
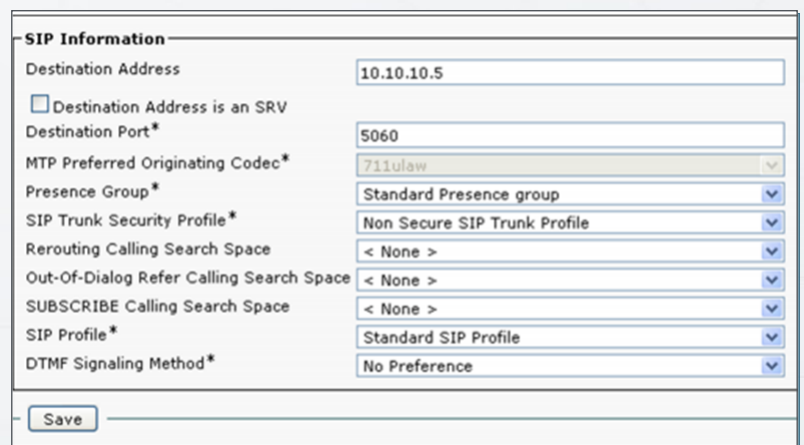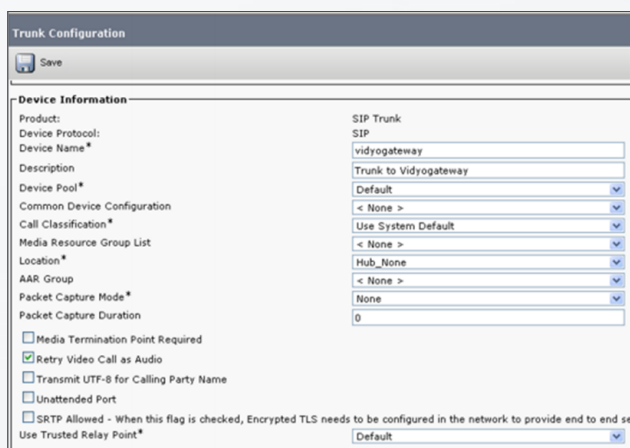
Examples are intended for informational purposes only.
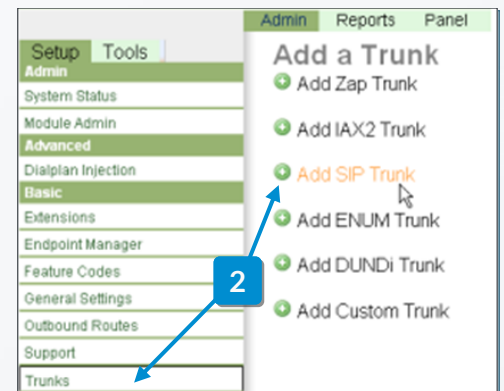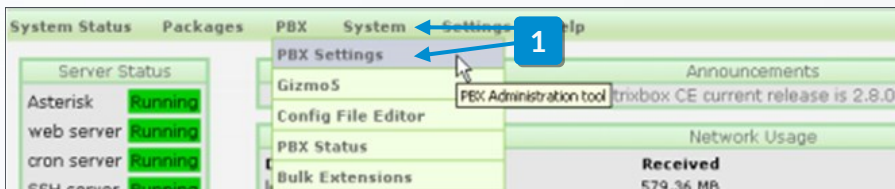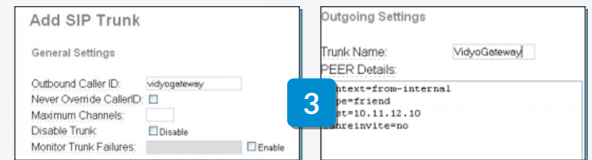
EXAMPLES

Trixbox version 2.6.2.2

Creating a SIP Trunk

1. Start on the **Trixbox** admin page. Select **System** & **PBX Settings**.

2. Select **Trunks** on the left. Under **Admin** click Add **SIP Trunk**.

3. Configure the **Outbound Caller ID**.

Setting Up Outbound Routes

Specify the Dial Pattern so calls can be routed to the VidyoGateway. In the example below "9." was chosen for the Dial Pattern. The "9" represents a Voice Only service that was setup on the VidyoGateway. The following period "." is the wildcard. If a number dialed starts with 9 it will be routed to the SIP trunk you specified under Trunk Sequence. The "." wildcard tells the system to match any combination of characters that follow. See next section for other wildcard patterns.

The Dial Patterns section can be used to specify what dial patterns will match the trunk. The following characters can be used to create a pattern:

X: The X matches any digit from 0 – 9   **Z:** The Z matches any digit from 1 – 9

N: The N matches any digit from 2 – 9. [12347-9]. Numbers within brackets match a number or sequence within the brackets. This example would match on 1,2,3,4,7,8,9.

".": The period acts as a wildcard character matching any combination of characters.   **"|":** The | separates the prefix from the number to be dialed.
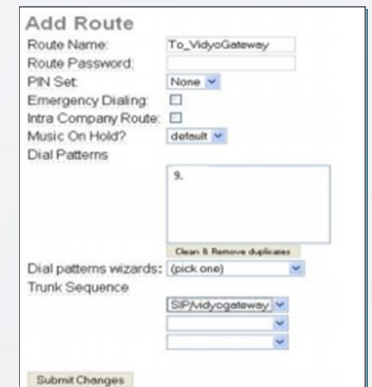
If the configured outbound route uses "9|.", it would strip off the 9 & send remaining digits to the trunk.

Note: The VidyoGateway requires inbound voice calls to follow a SIP format that includes VidyoGateway voice-only prefix, Vidyo extension, and VidyoGateway IP address (ie. 91001@10.10.99.1). Follow best practices from TrixBox to make sure the format sent to the VidyoGateway meets these requirements. **We recommend that you configure your IP PBX so users only have to enter the Vidyo extension and have the Trixbox prepend the VidyoGateway prefix based on configuration rules.**

Examples are intended for informational purposes only.