	Integration

Title	Cisco Call manager Express SIP Integration
Document	CISCO-SIP-IN
Last update	2011/10/14
DuVoice Versions	5.00 and above
Switch Versions	N/A

Table of Contents

Overview

This document outlines how to configure the DuVoice system as a trunk to a CISCO PBX.This document does not cover the installation of either product and assumes installer is familiar with the programming of CISCO switches.

Theory of Operation

The DuVoice system interfaces with the Cisco as a trunk.

Features Supported

Message Lights	Yes
Forward to personal greeting RNA	Yes
Forward to personal greeting Busy	Yes
Forward to personal greeting DND	Yes
Different busy greeting	Yes
Auto login to a mailbox	Yes
Multiple tenant	Yes
Voicemail transfer	Yes
Record a call	No
DID Fax	No
Caller ID with message	Yes

Hospitality Features Supported

Room phone control	Yes
Wakeup calls	Yes
Failed wakeup alerting	Yes
Guest name changes	Yes
Room Clean - Room Dirty Status	N/A

Requirements

- DuVoice 5.00 or above.
- Cisco IOS 12.x or above.
- SIP Trunks

CISCO Configuration

In this sample configuration we are using 9000 as the trunk access number and 192.168.11.25 as the IP address for the DuVoice system. These should be changed to numbers matching the installation.

Items in bold are required.

Trunk Settings

```
dial-peer voice 100 voip
 description DuVoice
 destination-pattern 9000
 session protocol sipv2
 session target ipv4:192.168.11.25
 session transport tcp
 dtmf-relay rtp-nte
 codec g711ulaw
```

VoIP Settings

```
voice service voip
 allow-connections sip to sip
 no supplementary-service sip moved-temporarily
 redirect ip2ip
 sip
  registrar server expires max 1200 min 300
```

Note: Enabling **supplementary-service sip moved-temporarily** will cause integration to fail with call forwarding.

SIP Settings

It's suggested to use unsolicited MWI. Replace the IP address shown with that of the DuVoice system.

```
sip-ua
 timers connect 100
 mwi-server ipv4:192.168.11.25 expires 3600 port 5060 transport udp
```

Skinny Station Settings

If you have any stations using the CISCO skinny interface and the DuVoice for voicemail you need to add the following setting.

```
 mwi sip
```

SIP Station Settings

For any SIP stations simply add the following to their configuration.

```
mwi
```

Unified CME interface

This interface allows the DuVoice to change names of stations and the outgoing call permissions. Replace dvuser with a user name of your choice and dvpassword with a password.

```
telephony-service
 xml user dvuser password dvpassword 15
```
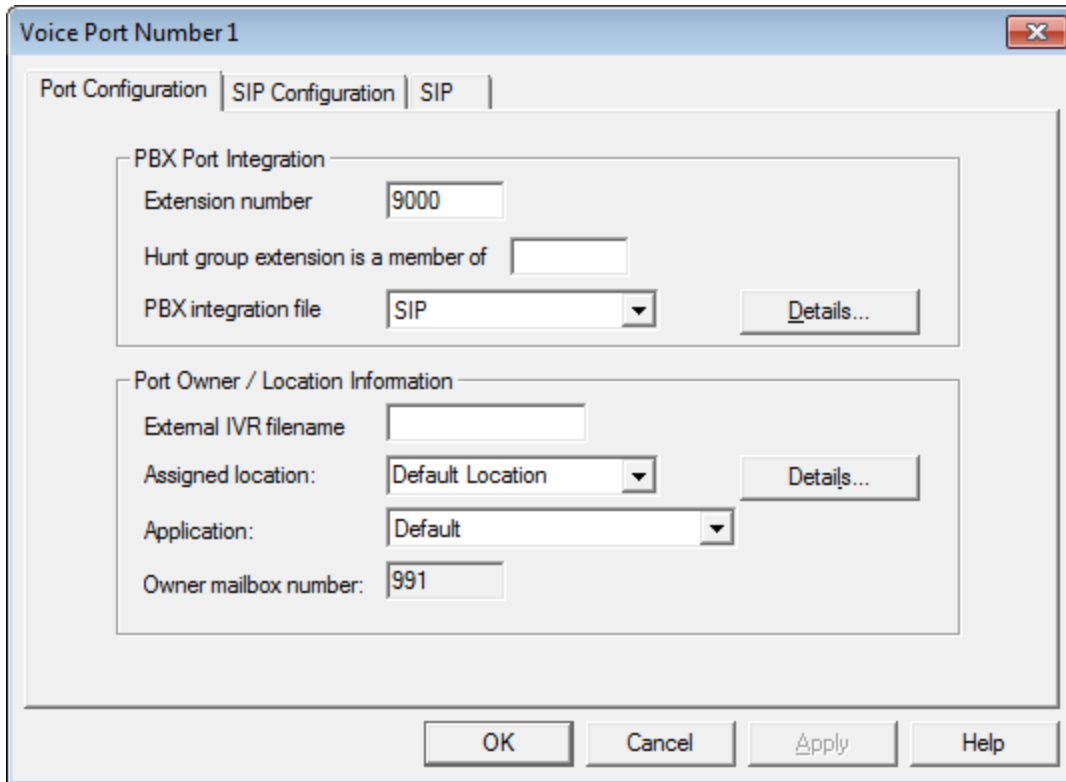
DuVoice Configuration

These steps will guide you through configuring your system to connect with the CISCO. For more information please see the DuVoice Manual located on the system desktop, also located in the DuVoice folder in the Start Menu or online at http://manual.duvoice.com.

Port Configuration

Run System Configuration from the start menu located in the DuVoice folder.
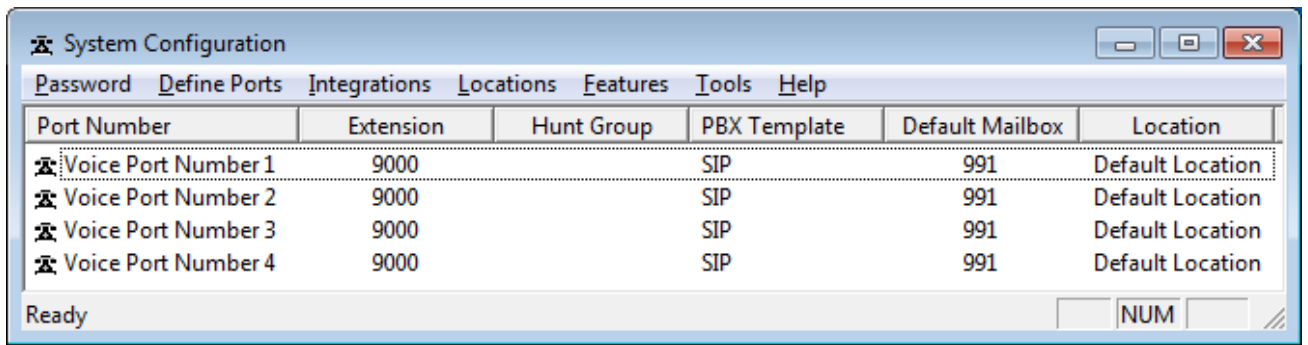
Double click Voice Port Number 1.

Enter the trunk access code configured in the CISCO for each of your lines. In this example it's 9000.

Click **SIP Configuration** tab.

Leave the default settings as you see here.

Click **SIP** tab.

1. Enter the IP address of the CISCO **Registrar address**.
2. Confirm the IP address located in the **Local Address** field is that of the network connection currently being used on the system. If the system has multiple network connections this might be different.
3. Check **SIP Trunk**.

Click **Ok** to save changes.

Hospitality Configuration

Connectors

From System Configuration select Features | Connectors | Cisco

1. Check the Enabled box.
2. Enter the IP address of the Cisco PBX.
3. Enter the user name chosen for the CME interface.
4. Enter the password chosen for the CME interface.

Click **Ok** to save changes.

Room Changes

From System Configuration select Features | Hospitality | Phone Control

1. Choose Cisco from the PBX dropdown.
2. Fill in the User group restrictions / call restriction values used on the PBX.
   The pbx value must match an existing COR list configured on the PBX. The Display text is a user friendly display used in InnDesk.