

IPMA 7.0 Easy Setup Reference Guide



Cisco IP Manager Assistant

Agenda

- What is IPMA?
- Overview of IPMA Call Flow
- Step by Step Proxy Mode Setup
- Traces

IPMA

IPMA is an application that allow managers and assistants to work together more effectively. It has two modes: proxy line mode and shared line mode.

Using Manager Assistant in Shared-Line Mode

If a system administrator has configured Cisco Unified Communications Manager Assistant in shared-line mode, the manager and assistant share a directory number; for example 8001. The assistant handles calls for a manager on the shared directory number. When a manager receives a call on 8001, both the manager's phone and the assistant's phone will ring.

The Cisco Unified Communications Manager Assistant features that are not applicable in shared-line mode include default assistant selection, assistant watch, call filtering, and divert all calls. An assistant cannot see or access these features on the Assistant Console application. The assistant's phone will not have the softkey for the divert all feature. The manager's phone will not have the softkeys for assistant watch, call intercept, or divert all feature.

If you are an assistant using Cisco Unified Communications Manager Assistant in shared-line mode, you **do not need** to be logged in to receive calls. Calls to your manager will automatically ring on your phone. You need to be logged into Assistant Console if you wish to use the application to handle calls or if you want to use the softkey on your phone to transfer a call to the manager's voice messaging system. See [Getting Started with the Assistant Console](#) for more information on using the Assistant Console.

If you are a manager using Cisco Unified Communications Manager Assistant in shared-line mode, you can share your directory number with up to 10 assistants. Any assistant who shared your directory number can answer and handle a call. See ["For Managers--How to Use Your Phone with Cisco Unified Communications Manager Assistant in Shared-line Mode."](#)

Using Manager Assistant in Proxy-Line Mode

If a system administrator has configured Cisco Unified Communications Manager Assistant in proxy-line mode, the manager and assistant do not share a directory number. The assistant handles calls for a manager using a proxy number. The proxy number is not the manager's directory number, but an alternate number chosen by the system that an assistant uses to handle the manager's calls.

In proxy-line mode, a manager and an assistant have access to all features in Cisco Unified Communications Manager Assistant, including default assistant selection, assistant watch, call filtering, and divert all calls.

If you are an assistant using Cisco Unified Communications Manager Assistant in proxy-line mode, you must log in to the Assistant Console and have a filter enabled to receive calls made to your manager on your phone. You can use Assistant Console application for all call handling features, such as answering or transferring a call. See [Getting Started with the Assistant Console](#) for more information on using the Assistant Console.

If you are a manager using Cisco Unified Communications Manager Assistant in proxy-line mode, you can set up filters to selectively sort and filter incoming calls to your assistant. See [For Managers--How to Use Your Phone with Cisco Unified Communications Manager Assistant in Proxy-Line Mode](#) for information on using all the features in Cisco Unified Communications Manager Assistant.

Status Display on Manager's IP Phone

Shared-Line Mode



DND

Assistant Watch to display caller info

Proxy Mode



Assistant Console
Login or Not

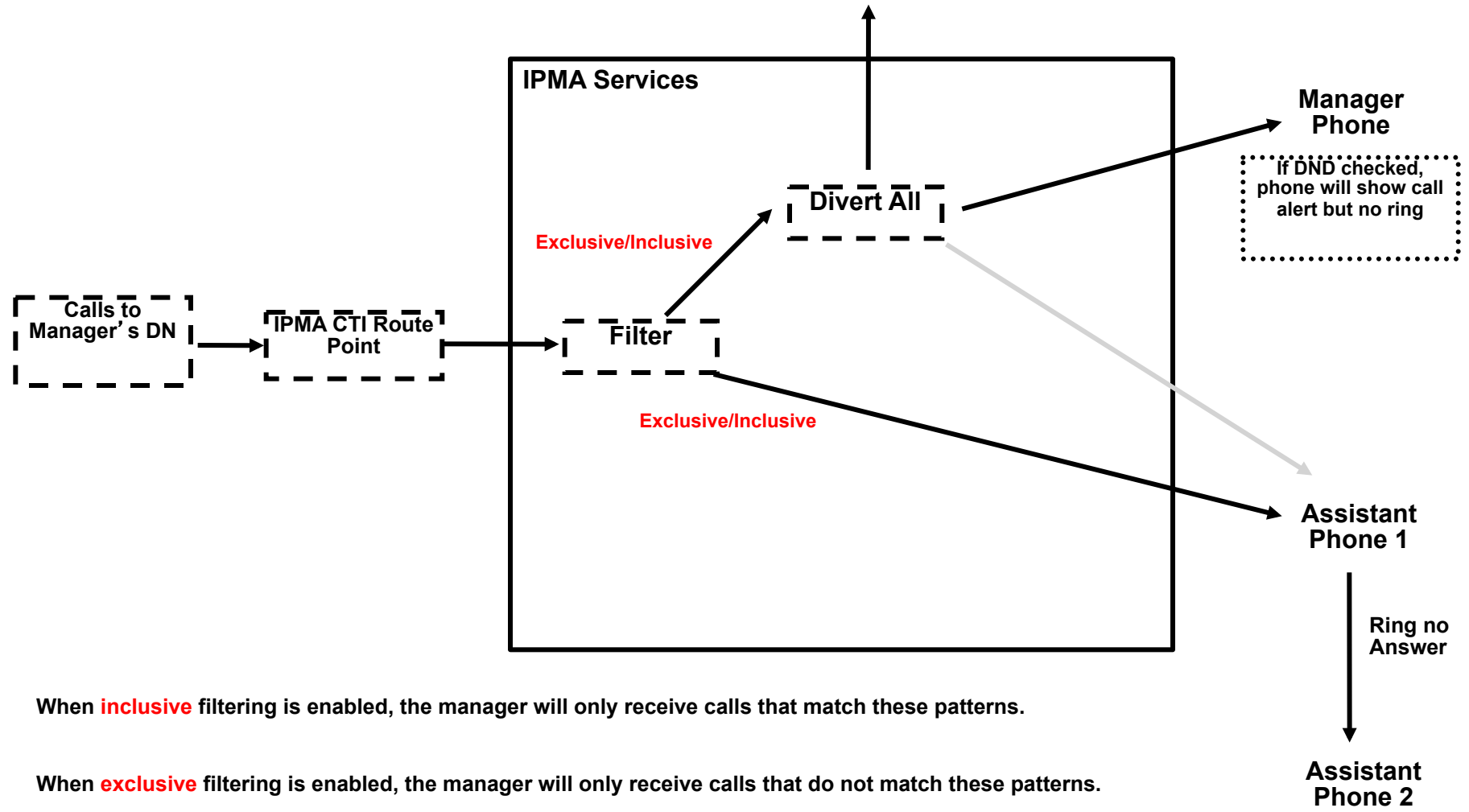
Filter

DND

Divert All

IPMA Proxy Mode call flow

All Other Phones, could be the Assistant phone as well.

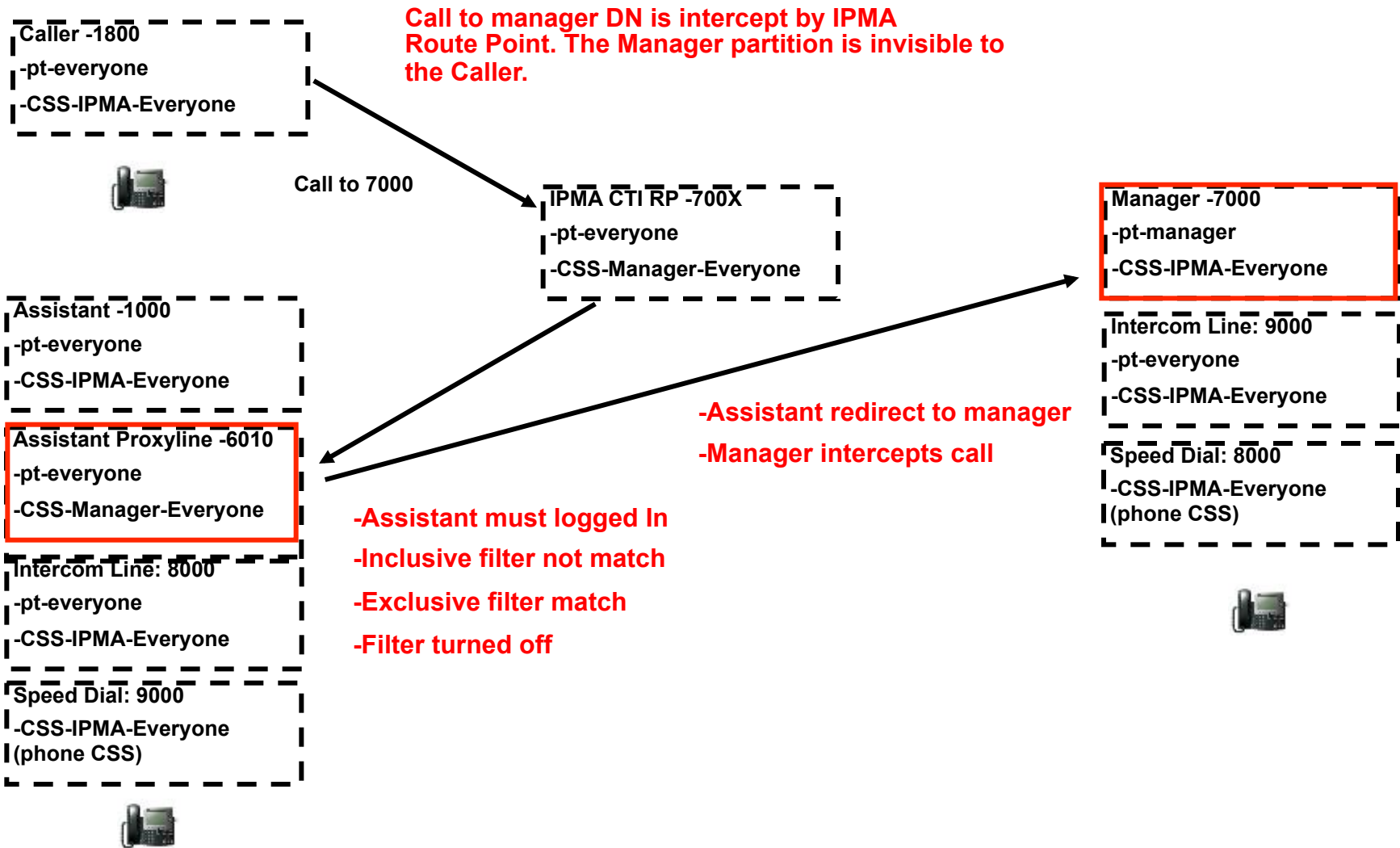


When **inclusive** filtering is enabled, the manager will only receive calls that match these patterns.

When **exclusive** filtering is enabled, the manager will only receive calls that do not match these patterns.

Divert All – means redirect

CSS and Partition Overview



Step by Step Setup: Create 3 Partitions

The screenshot shows a web interface titled "Find and List Partitions". At the top, there are four buttons: "Add New" (with a plus icon), "Select All" (with a grid icon), "Clear All" (with a grid icon), and "Delete Selected" (with a grid icon and a red X). Below this is a "Status" section with an information icon and the text "3 records found". The main section is titled "Partition (1 - 3 of 3)". It contains a search bar with the text "Find Partition where" followed by a dropdown menu set to "Name", the text "begins with", and another dropdown menu. Below the search bar is a table with three rows, each with a checkbox and a "Partition Name" column. The names are "pt-everyone", "pt-ipma", and "pt-manager". At the bottom of the interface are four buttons: "Add New", "Select All", "Clear All", and "Delete Selected".

	Partition Name
<input type="checkbox"/>	pt-everyone
<input type="checkbox"/>	pt-ipma
<input type="checkbox"/>	pt-manager

pt-everyone – contains all the regular lines

pt-ipma – contains CTI route point managed by IPMA service (will further discuss in later slides)

pt-manager – contains the managers' main DN.

Create Two CSS

Calling Search Space Information

Name*

Description

Route Partitions for this Calling Search Space

Available Partitions**

Selected Partitions

Calling Search Space Information

Name*

Description

Route Partitions for this Calling Search Space

Available Partitions**

Selected Partitions

Remember, the idea of IPMA is to put a layer between Manager and everyone else. And that layer is the Assistant. So we need to set up two CSS, one that can use to reach the Manager and one that cannot.

CSS-contains-Manager-Everyone – it can use to reach the Manager

CSS-contains-IPMA-Everyone – it cannot use to reach the Manager

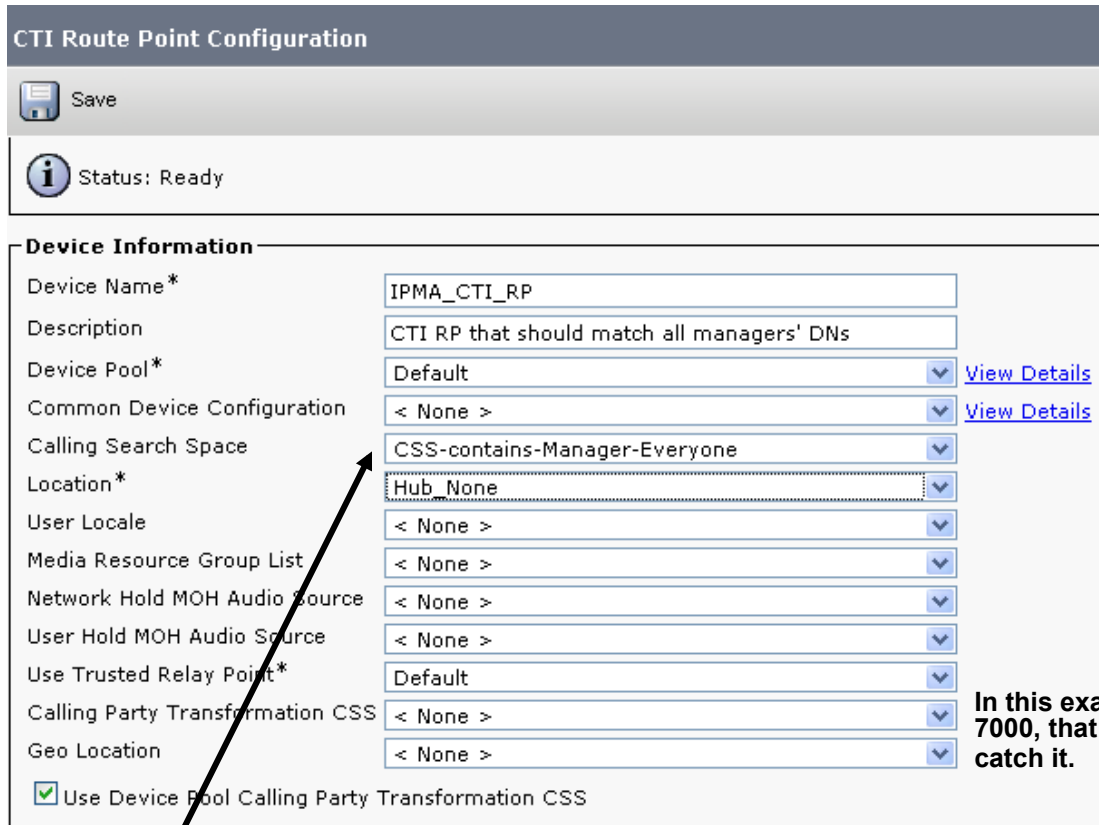
Who needs visibility of Manager Partition?

- Proxy Lines
- IPMA CTI Route Point
- MWI Numbers

They need to use a CSS that contains Manager partition.

IPMA CTI Route Point

The main purpose of this CTI Route Point is to intercept calls targeting manager's DN.



CTI Route Point Configuration

Save

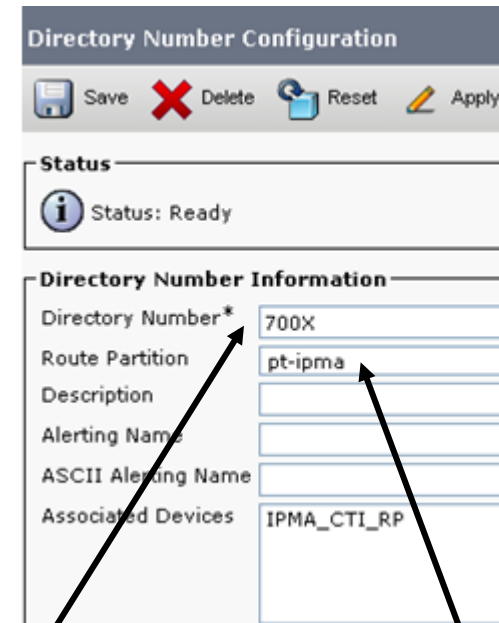
Status: Ready

Device Information

Device Name*	IPMA_CTI_RP
Description	CTI RP that should match all managers' DNs
Device Pool*	Default View Details
Common Device Configuration	< None > View Details
Calling Search Space	CSS-contains-Manager-Everyone
Location*	Hub_None
User Locale	< None >
Media Resource Group List	< None >
Network Hold MOH Audio Source	< None >
User Hold MOH Audio Source	< None >
Use Trusted Relay Point*	Default
Calling Party Transformation CSS	< None >
Geo Location	< None >

Use Device Pool Calling Party Transformation CSS

CSS that can reach Manager main phone DN.



Directory Number Configuration

Save Delete Reset Apply

Status: Ready

Directory Number Information

Directory Number*	700X
Route Partition	pt-ipma
Description	
Alerting Name	
ASCII Alerting Name	
Associated Devices	IPMA_CTI_RP

In this example, our manager's DN is 7000, that is why we are using 700X to catch it.

Remember, all other user should use CSS-contains-IPMA-Everyone, so when they dial 7000 to find the manager, they should match this 700x pattern instead.

Regular Caller Phone Configuration Example

Phone Configuration Related Links: [Back To Find/List](#)

Save Delete Copy Reset Apply Config Add New

Update successful

Association Information

[Modify Button Items](#)

1	Line [1] - 1800 in pt-everyone
2	Line [2] - Add a new DN
3	Add a new SD
4	Add a new SD
5	Add a new SD
6	Add a new SD
7	Add a new SD
8	Add a new SD
----- Unassigned Associated Items -----	
9	Add a new SD
10	Add a new SUR

Phone Type

Product Type: Cisco IP Communicator
Device Protocol: SCCP

Device Information

Registration	Registered with Cisco Unified Communications Manager 10.88.7.32
IP Address	10.99.25.89
Active Load ID	Unknown
<input checked="" type="checkbox"/> Is Active	
Device Name*	<input type="text" value="SEP001A6B69B9E6"/>
Description	<input type="text" value="Regular Employee"/>
Device Pool*	<input type="text" value="Default"/> View Details
Common Device Configuration	<input type="text" value="< None >"/> View Details
Phone Button Template*	<input type="text" value="Standard CIPC SCCP"/>
Softkey Template	<input type="text" value="< None >"/>
Common Phone Profile*	<input type="text" value="Standard Common Phone Profile"/>
Calling Search Space	<input type="text" value="CSS-contains-IPMA-Everyone"/>

Located in the regular partition

A CSS that can reach IPMA CTI route point but not manager's DN directly. If they can reach the Manager DN directly, then it will bypassed the IPMA service and defeat the IPMA's purpose.

Setting up Manager's phone

Assign Softkey Template (Standard Manager)

Add a Primary Line (partition: Manager, CSS-IPMA-Everyone)

Setup the Voice Mail Profile (optional)

Add Intercom Line (partition: Everyone, CSS-IPMA-Everyone) Check
“auto-answer”

Add speed dial for intercom line of each configured assistant

Subscribe to IP Phone Service “IPMA Services” (see later slide)

Set user locale for the device

Manager's Phone

Association Information

Modify Button Items

1	Line [1] - 7000 in pt-manager
2	Line [2] - 9000 in pt-everyone
3	8000
4	Add a new SD
5	Add a new SD
6	Add a new SD
----- Unassigned Associated Items -----	
7	Line [3] - Add a new DN
8	Add a new SD
9	Add a new SURL
10	Add a new BLF SD

Phone Type

Product Type: Cisco 7960
Device Protocol: SCCP

Device Information

Registration: Registered with Cisco Unified Communications Manager 10.5.2
IP Address: [14.129.12.13](#)
Active Load ID: Unknown
 Is Active
MAC Address*: 00097CAC5781
Description: Manager Phone
Device Pool*: Default [Vi](#)
Common Device Configuration: < None > [Vi](#)
Phone Button Template*: Standard 7960 SCCP
Softkey Template: Standard Manager
Common Phone Profile*: Standard Common Phone Profile
Calling Search Space: CSS-contains-IPMA-Everyone

Primary DN

Change it to Standard Manager Template

Speed dial to Assistant's Intercom Line





Intercom Line, it is for Assistant to call to.

A CSS that should be able to react Assistant's DN


IPMA Phone Services

http://IPMAserverIP/ma/servlet/MAService?
cmd=doPhoneService&Name=#DEVICENAME#

IP Phone Services Configuration

 Save  Delete  Update Subscriptions  Add New

Status

 Add successful

Service Information

Service Name*

ASCII Service Name*

Service Description

Service URL*

Service Category* ▼

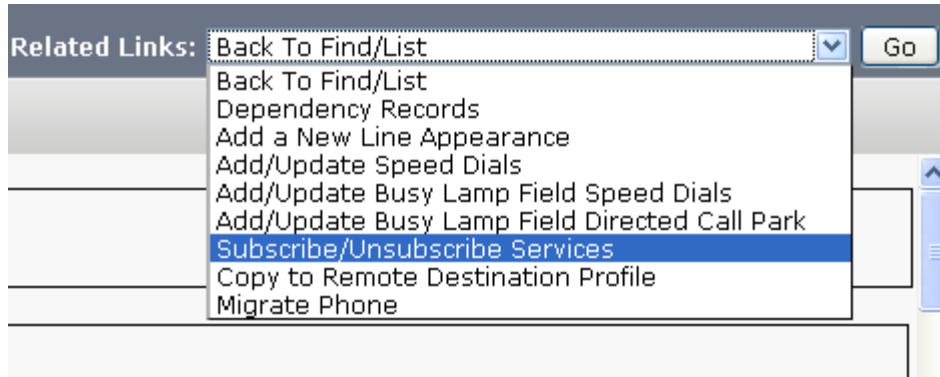
Service Type* ▼

Service Vendor

Service Version

Enable

Subscribe **ONLY** Manager Phone to IPMA Service



Service Information


Service Subscription: IPMA Service

Service Name*

ASCII Service Name*

Subscribed Services

[Subscribe a New Service](#)

 [IPMA Service](#)

Setting up Assistant's Phone

Assign Softkey Template (Standard Assistant)

Add a primary line (Partition: Everyone, CSS-IPMA-Everyone)

Add proxy lines (Partition: Everyone, CSS-Manger-Everyone)
for each configured manager

Add incoming intercom line (Partition: Everyone, CSS-IPMA-Everyone) with auto-answer

Add speed dial for the intercom line of each configured manager

Set user locale for the device

Assistant's Phone

Association Information

Modify Button Items

1	Line [1] - 1000 in pt-everyone
2	Line [2] - 6010 in pt-everyone
3	Line [3] - 8000 in pt-everyone
4	9000
5	Add a new SD
6	Add a new SD
----- Add On Module(s) -----	
7	None
8	None
9	None
10	None
11	None

Phone Type

Product Type: Cisco 7961G-GE
Device Protocol: SCCP

Standard Assistant template

Device Information

Registration: Registered with Cisco Unified Communications Manager 10.8E
IP Address: [14.129.12.14](#)
Active Load ID: SCCP41.8-5-2S
 Is Active
MAC Address*: 001EF729CC7F
Description: Assistant Phone
Device Pool*: Default [View](#)
Common Device Configuration: < None > [View](#)
Phone Button Template*: Standard 7961G-GE SCCP IPMA
Softkey Template: Standard Assistant
Common Phone Profile*: Standard Common Phone Profile
Calling Search Space: CSS-contains-IPMA-Everyone

Primary DN

Proxy Line

Speed Dial to Manager's Intercom line

Intercom Line, it is for Manager to call to.

When IPMA Service is invoke, Assistant's main line doesn't call the Manager DN but the proxy line does. That is why the CSS here cannot call Manager's DN. (See next slide for Proxy Line Config)

Proxy Line Configuration

Proxy Line is a line that IPMA service control and it is a representation of the real Manager's DN.

Directory Number Information

Directory Number*

Route Partition

Description

Alerting Name

ASCII Alerting Name

Allow Control of Device from CTI

Associated Devices

▼ ▲

Dissociate Devices

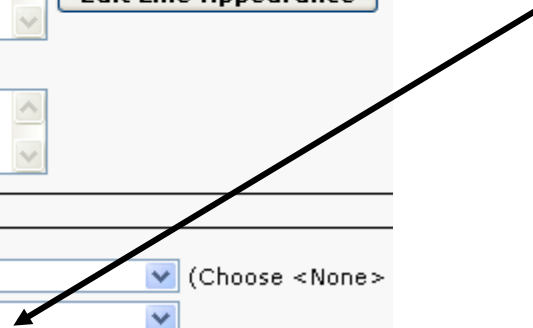
Directory Number Settings

Voice Mail Profile (Choose <None>)

Calling Search Space

Presence Group*

A CSS that can reach Manager's DN



IPMA Service Parameter

System>Service Parameter>Cisco IP Manager Assistant

Parameter Name	Parameter Value	Suggested Value
CTIManager (Primary) IP Address *	<input type="text" value="10.88.7.32"/>	
CTIManager (Backup) IP Address	<input type="text"/>	
Route Point Device Name for Proxy Mode	<input type="text" value="IPMA_CTI_RP"/> ▼	
CAPF Profile Instance ID for Secure Connection to CTIManager	<input type="text" value="< None >"/> ▼	
Clusterwide Parameters (Parameters that apply to all servers)		
Cisco IPMA Server (Primary) IP Address *	<input type="text" value="10.88.7.32"/>	
Cisco IPMA Server (Backup) IP Address	<input type="text"/>	
Cisco IPMA Server Port *	<input type="text" value="2912"/>	2912
Cisco IPMA Assistant Console Heartbeat Interval *	<input type="text" value="30"/>	30
Cisco IPMA Assistant Console Request Timeout *	<input type="text" value="30"/>	30
Cisco IPMA RNA Forward Calls *	<input type="text" value="False"/> ▼	False
Alpha Numeric UserID *	<input type="text" value="True"/> ▼	True
Cisco IPMA RNA Timeout *	<input type="text" value="10"/>	10
CTIManager Connection Security Flag *	<input type="text" value="Non Secure"/> ▼	Non Secure

IPMA Service Parameter

Clusterwide Parameters (Softkey Templates)

Assistant Softkey Template	Standard Assistant	▼	Standard Assistant
Manager Softkey Template for Proxy Mode	Standard Manager	▼	Standard Manager
Manager Softkey Template for Shared Mode	Standard Shared Mode Manager	▼	Standard Shared Mode Manager

Clusterwide Parameters (IPMA Device Configuration Defaults for Proxy Mode)

Manager Partition	pt-manager	
All User Partition	pt-everyone	
IPMA Calling Search Space	CSS-contains-Manager-Everyone	
Manager Calling Search Space	CSS-contains-IPMA-Everyone	
Cisco IPMA Primary Phone Service	IPMA Service	▼
Cisco IPMA Secondary Phone Service	< None >	▼

Clusterwide Parameters (Proxy Directory Number Range for Proxy Mode)

Starting Directory Number	6000
Ending Directory Number	6010

Clusterwide Parameters (Proxy Directory Number Prefix for Proxy Mode)

Number of Characters to be Stripped from Manager DN	0	0
Prefix for Manager DN		

Create two Users (Manager and Assistant)

User (1 - 2 of 2)

Find User where begins with

<input type="checkbox"/>	User ID ^	First Name	Last Name
<input type="checkbox"/>	Manager		Manager
<input type="checkbox"/>	Assistant		Assistant

User: Manager

User Information

User ID*	Manager
Password
Confirm Password
PIN
Confirm PIN
Last name*	Manager

Device Associations

Controlled Devices SEP00097CAC5781

**Make sure you associate
manager phone device with the
manager user.**

User: Assistant

User Information

User ID*	Assistant
Password
Confirm Password
PIN
Confirm PIN
Last name*	Assistant

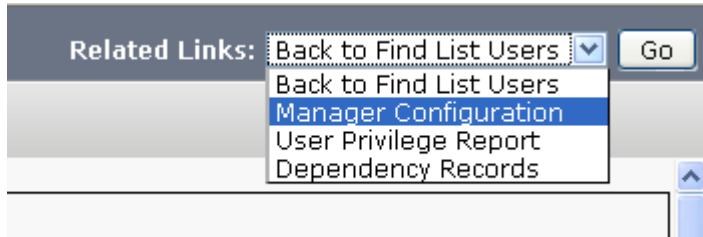
Device Associations

Controlled Devices	SEP001EF729CC7F
--------------------	-----------------

Make sure you associate assistant phone device with the assistant user.

Manager User IPMA Configuration

Under Manager User Configuration Page



Manager Information

Mobile Manager

Uses Shared Lines

Device Name/Profile* SEP00097CAC5781 (dropdown)

Intercom Line line 2 - 9000 - pt-everyone (dropdown)

Assistant Information

Available Assistants (empty text box)

Associated Assistants* Assistant, Assistant (text box) [View Details](#)

Controlled Lines

Available Lines line 2 - 9000 - pt-everyone (text box)

Selected Lines* line 1 - 7000 - pt-manager (text box)

Assistant User IPMA Configuration

Under Assistant User Configuration Page

Related Links:

- Back to Find List Users
- Assistant Configuration**
- User Privilege Report
- Dependency Records

Assistant Information

Device Name*

Intercom Line

Primary Line

Manager Information

Associated Managers [View Details](#)

Manager Association to Assistant Line

Available Lines*	Manager Names*	Manager Lines*
<input type="text" value="line 2 - 6010 - pt-everyone"/>	<input type="text" value="Manager, Manager"/>	<input type="text" value="line 1 - 7000 - pt-manager"/>
<input type="text" value="-- Not Selected --"/>	<input type="text" value="-- Not Selected --"/>	<input type="text" value="-- Not Selected --"/>
<input type="text" value="-- Not Selected --"/>	<input type="text" value="-- Not Selected --"/>	<input type="text" value="-- Not Selected --"/>

Proxy Line



Restart – IPMA Services

Cisco Unified Serviceability>Tools>Feature Services

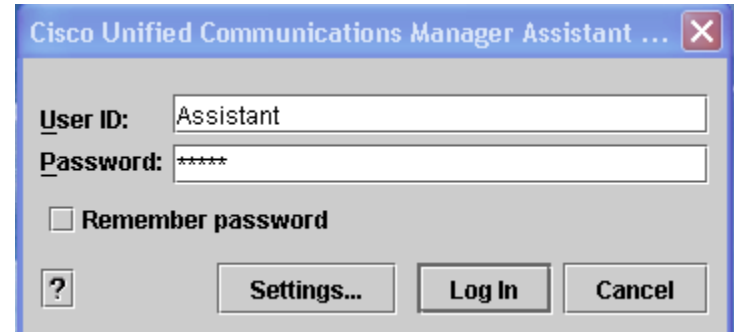
CTI Services				
	Service Name	Status	Activation Status	Start Time
<input type="radio"/>	Cisco CallManager Attendant Console Server	Started	Activated	Tue Oct 10 10:10:10 AM CEST 2006
<input checked="" type="radio"/>	Cisco IP Manager Assistant	Started	Activated	Tue Oct 10 10:10:10 AM CEST 2006
<input type="radio"/>	Cisco WebDialer Web Service	Started	Activated	Tue Oct 10 10:10:10 AM CEST 2006

Assistant Console

Application > Plugins

[Download](#) [Cisco Unified CallManager Assistant Console](#)

The Cisco Unified CallManager Assistant Console helps assist in installing the assistant console, a client-server Java application. The assistant console connects to the Cisco Unified CallManager IP consoles and can connect to a single Cisco Unified CallManager IP console. MD5(/usr/local/thirdparty/jakarta-tomcat/webapps/plugins/Cisco/ab:91:28:6a:77:a7:7e:80:22:94:4b:f8:ad:09:2d)



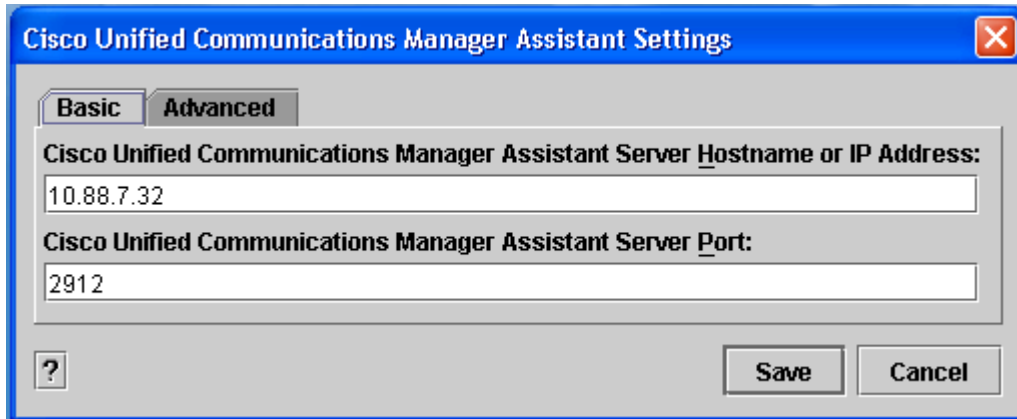
Cisco Unified Communications Manager Assistant ...

User ID: Assistant

Password: *****

Remember password

? Settings... Log In Cancel



Cisco Unified Communications Manager Assistant Settings

Basic Advanced

Cisco Unified Communications Manager Assistant Server Hostname or IP Address:
10.88.7.32

Cisco Unified Communications Manager Assistant Server Port:
2912

? Save Cancel

Assistant Console Interface

Cisco Unified Communications Manager Assistant Console: Assistant

File Edit View Call Manager Help

My Calls

- Manager Lines
 - 6010 Manager
- My Lines
 - 1000
 - Intercom

Speed Dials - Sample Group

Name	Telephone Nu...	Notes
Jim Jones	12345	This is a sample e...

Directory:

Name Search Clear

Name	Telephone	Department

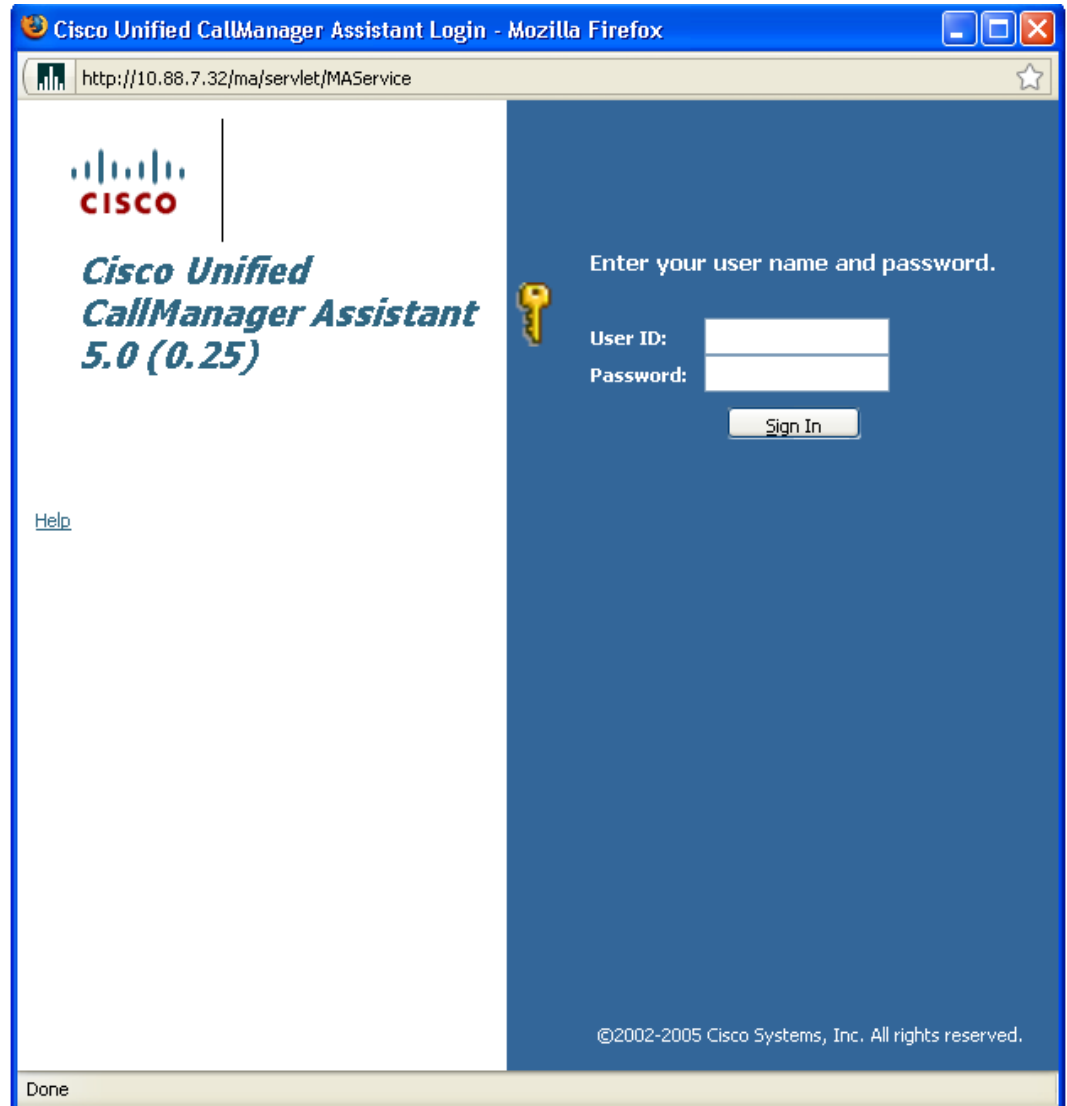
My Managers

Manager	Intercom	DND	Divert All	Asst. Watch	Alert Tone	Filter Calls	Filter Mode	Call Details
Manager	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="radio"/> Inclusive <input type="radio"/> Exclusive	7000

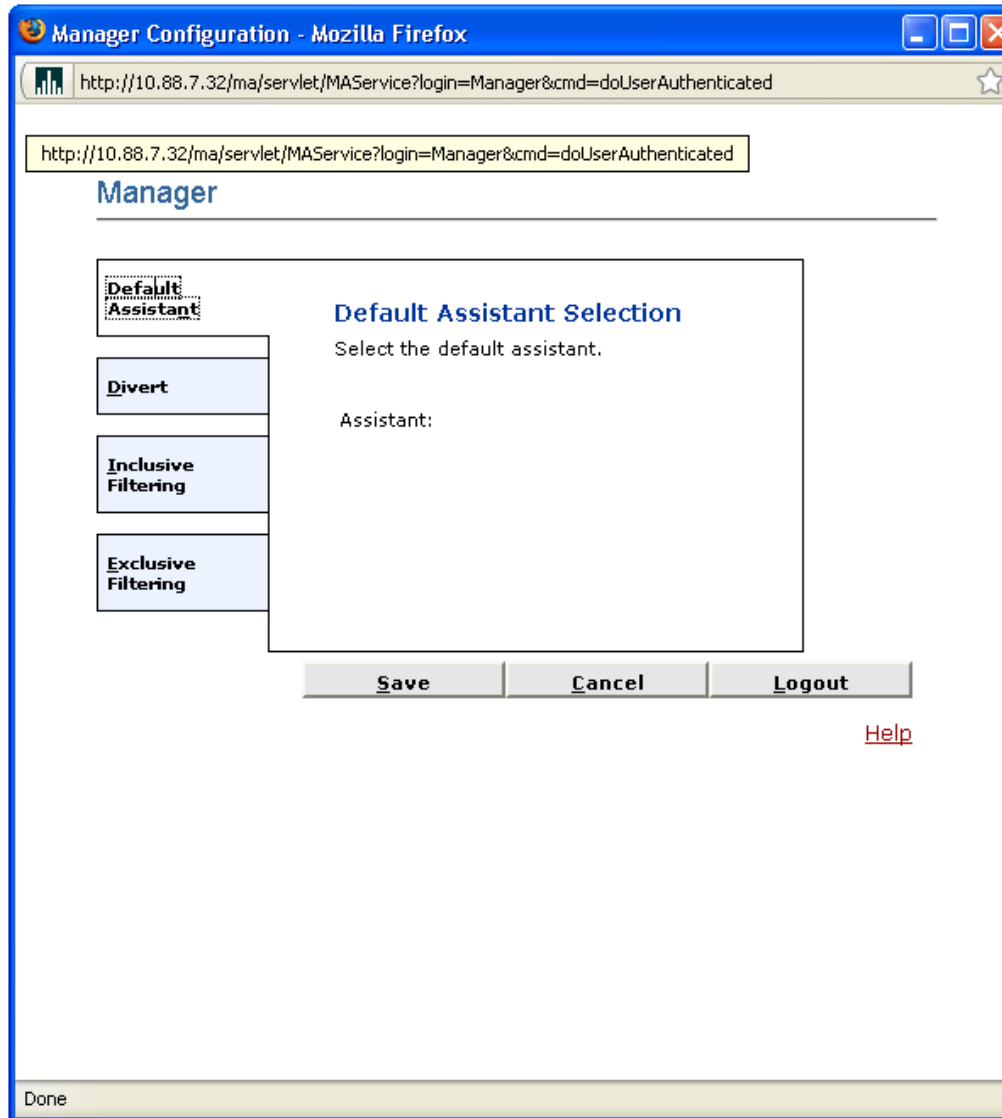
Call Control Up Online Connected

How to Access Manager Configuration

`http://<ip-address>/ma/desktop/maLogin.jsp`



Manager Configuration



Logs Needed for Troubleshooting

- CCM Detailed SDI and SDL
- IPMA Debug Trace
- CTI Manager Detailed SDI and SDL Traces