



Avaya Solution & Interoperability Test Lab

Application Notes for IPC Unigy V2 with Avaya Aura® Messaging 6.2 and Avaya Aura® Session Manager 6.3 in a Centralized Messaging Environment using SIP Trunks – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for IPC Unigy V2 to interoperate with Avaya Aura® Messaging 6.2 and Avaya Aura® Session Manager 6.3 in a centralized messaging environment using SIP trunks to Avaya Aura® Session Manager.

Information in these Application Notes has been obtained through DevConnect compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

1. Introduction

These Application Notes describe the configuration steps required for IPC Unigy V2 to interoperate with Avaya Aura® Messaging 6.2 and Avaya Aura® Session Manager 6.3 in a centralized messaging environment using SIP trunks to Avaya Aura® Session Manager.

IPC Unigy is a trading communication solution. In the compliance testing, IPC Unigy V2 used SIP trunks to Avaya Aura® Session Manager, for IPC turret users to obtain voice messaging services from Avaya Aura® Messaging. The Avaya Aura® messaging system in the Central site supported local subscribers from Avaya Aura® Communication Manager at the Central site, and from IPC turret users at the Remote site.

2. General Test Approach and Test Results

The feature test cases were performed manually. Calls were manually established among IPC turret users with Avaya SIP, Avaya H.323, PSTN users, and/or the Avaya Aura® Messaging voicemail pilot to verify various call scenarios.

The serviceability test cases were performed manually by disconnecting and reconnecting the LAN connection to the IPC Unigy V2 servers.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

2.1. Interoperability Compliance Testing

The interoperability compliance test consists of feature and serviceability testing.

The feature testing included subscriber login, greeting, voice message (leaving/retrieving), message waiting indicator, call forward, multiple call forward, personal operator, auto attendant, find me, call me, call sender, and transfer.

The serviceability testing focused on verifying the ability of IPC Unigy V2 to recover from adverse conditions, such as disconnecting/reconnecting the LAN connection to the IPC Unigy V2 server.

2.2. Test Results

All test cases were executed. The following were the observations from the compliance testing.

- IPC does not offer the Coverage feature, therefore coverage to voicemail for the turret users were accomplished by setting the Aura® Messaging pilot number as the Call Forwarding destination for the users.
- With shuffling on, the greeting stops in the middle of greeting during retrieving messages. Recommends shuffling to be OFF.
- Personal Attendant / Assistant / Operator / Live Attendant – Issues were observed when IPC turrets were “called” stations, or above functioned stations.
- Call Sender – Issues were observed when IPC turrets were calling station (Sender).

IPC does not expect their users to use these features, so the testing was passed. The issues are listed here for user awareness.

2.3. Support

Technical support on IPC Unigy V2 can be obtained through the following:

- **Phone:** (800) NEEDIPC, (203) 339-7800
- **Email:** systems.support@ipc.com

3. Reference Configuration

As shown in the test configuration below, **Figure 1**, IPC Unigy V2 consists of the Media Manager, Converged Communication Manager (HA system) and Turrets. SIP trunks are used from the Virtual IP (VIP) of Converged Communication Manager to Session Manager, to reach Avaya Aura® Messaging for voice messaging services.

The detailed administration of basic connectivity among Communication Manager, Session Manager, and Avaya Aura® Messaging is not the focus of these Application Notes and will not be described.

The configuration of Session Manager is performed via the web interface of System Manager.

The detailed administration of SIP trunks between Session Manager and IPC Unigy V2 to enable IPC turret users to reach users on Communication Manager and on the PSTN is assumed to be in place with details described in [4].

These Application Notes will focus on the additional configuration required to support IPC turret users as local subscribers on Avaya Aura® Messaging.

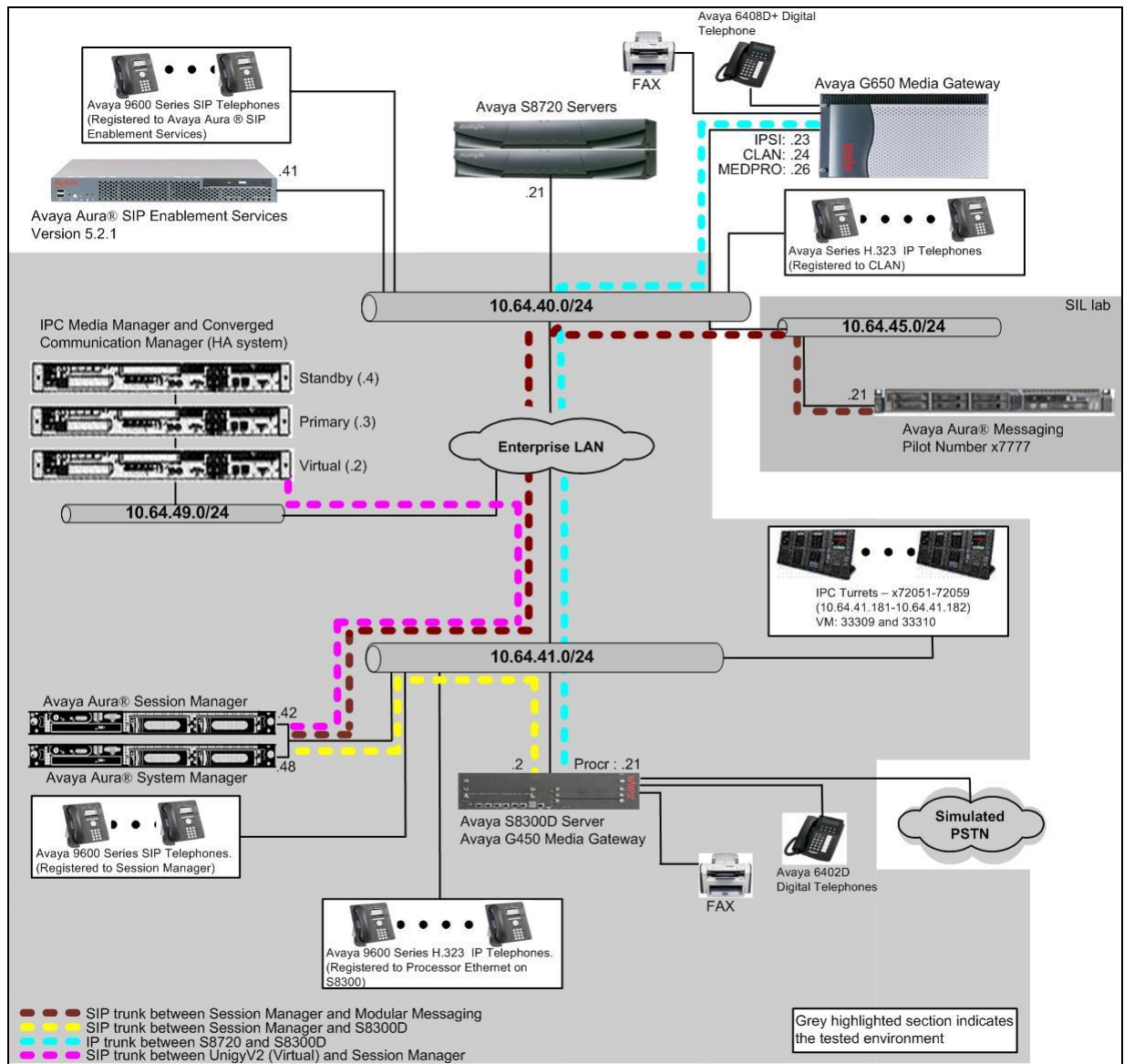


Figure 1: Test Configuration of IPC Unigy V2 with Avaya Aura® Messaging

4. Equipment and Software Validated

The following equipment and software were used for the sample configuration provided:

Equipment	Software
Avaya Aura® Messaging	MSG-02.0.823.0-109_0304
Avaya Aura® Communication Manager on Avaya S8300D Server	6.3.4 (R016x.03.0.124-21291)
Avaya Aura® Session Manager	6.3.5.0.635005
Avaya Aura® System Manager	6.3.5.5.2017
Avaya A175 Desktop Video Device (SIP)	Hardware – 2.0
Avaya 96xx IP Telephone (H.323)	3.1
Avaya 96xx IP Telephone (SIP)	2.6.4
IPC Unigy V2 <ul style="list-style-type: none">• Media Manager• Converged Communication Manager• Turrets	02.00.00.07.0025 02.00.00.07.0025 02.00.00.07.0025

5. Configure Avaya Aura® Messaging

This section provides the procedures for configuring IPC turret users as local subscribers on Avaya Aura® Messaging. The configuration procedures include the following areas:

- Launch messaging administration
- Administer subscriber extension ranges
- Administer subscribers

5.1. Launch Messaging Administration

Access the Avaya Aura® Messaging web interface by using the URL “http://ip-address” in an Internet browser window, where “ip-address” is the IP address of the Avaya Aura® Messaging server. The **Logon** screen is displayed. Log in using a valid user name and password. The **Password** field will appear after a value is entered into the **Username** field.

The screenshot shows the Avaya Aura® Messaging System Management Interface (SMI) web application. At the top right, the title "Avaya Aura® Messaging System Management Interface (SMI)" is displayed. Below the title, a red navigation bar contains the links "Help" and "Log Off". On the right side of the page, it says "This Server: aam1". The main content area features a "Logon" box with the following elements:

- The word "Logon" in a large, bold font.
- A label "Logon ID:" followed by a text input field.
- A "Logon" button located at the bottom right of the input box.

At the bottom of the page, the copyright notice "© 2001-2012 Avaya Inc. All Rights Reserved." is visible.

The **Messaging Administration** screen appears, as shown below. Navigate to **Administration** → **Messaging**.

Avaya Aura® Messaging
System Management Interface (SMI)

Help Log Off Administration This Server: aam1

System Management Interface

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5.2. Administer Subscriber Extension Ranges

On the Messaging Administration page (not shown) select **Server Settings (Storage)** → **Networked Servers** from the left pane, to display the **Manage Networked Servers** screen. Select the Avaya Aura® Messaging server from the table listing, and click **Edit the Selected Networked Server** toward the bottom right of the screen.

Avaya Aura® Messaging
System Management Interface (SMI)

Help Log Off Administration This Server: aam1

Administration / Messaging

Messaging System (Storage)

- User Management
- Class of Service
- Sites
- Topology
- Storage Destinations
- System Policies
- Enhanced List Management
- System Mailboxes
- System Ports and Access
- User Activity Log Configuration

Reports (Storage)

- Users
- Info Mailboxes
- Remote Users
- Uninitialized Mailboxes
- Login Failures
- Locked Out Users

Server Information

- System Status (Storage)
- System Status (Application)
- Alarm Summary
- Voice Channels (Application)
- Cache Statistics (Application)

Server Settings (Storage)

- External Hosts
- Trusted Servers
- Networked Servers**
- Request Remote Update

IMAP/SMTP Settings (Storage)

- General Options
- Mail Options
- IMAP/SMTP Status

Telephony Settings (Application)

- Telephony Integration

Server Settings (Application)

Manage Networked Servers

The Manage Networked Servers page is used to add change or delete the Networked servers used by the messaging feature.

Server Name	IP Address	Server Type	ID	Total Subs
aam1	10.64.45.21	local	0	17

Display Report of Servers

Add a New Networked Server

Display Network Snapshot

Help

Delete the Selected Networked Server

Edit the Selected Networked Server

Display Report of Server Ranges

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The **Edit Networked Machine** screen is displayed. Under the **MAILBOX NUMBER RANGES** section, locate an available entry line and enter the desired starting and ending mailbox numbers to be used for the IPC subscribers as necessary. In the compliance testing, the existing entry covered the 7205x extensions used by the IPC turret users.

Avaya Aura® Messaging
System Management Interface (SMI)

[Help](#) [Log Off](#) Administration

Administration / Messaging
This Server: aam1

Messaging System (Storage)

Reports (Storage)

Server Information

Server Settings (Storage)

IMAP/SMTP Settings (Storage)

Telephony Settings (Application)

Server Settings (Application)

Advanced (Application)

Utilities

Edit Networked Machine

The Edit Networked Server allows the changing or deletion of a networked server record.

Machine Name	<input type="text" value="aam1"/>	Password	<input type="password"/>
		Confirm Password	<input type="password"/>
IP Address	<input type="text" value="10.64.45.21"/>	Machine Type	<input type="text" value="tcpip"/>
Mailbox Number Length	<input type="text" value="5"/>	Default Community	<input type="text" value="1"/>
Updates In	<input type="text" value="yes"/>	Updates Out	<input type="text" value="yes"/>
Remote LDAP Port	<input type="text" value="56389"/>	Log Updates In	<input type="text" value="no"/>

MAILBOX NUMBER RANGES		
Prefix	Starting Mailbox Number	Ending Mailbox Number
<input type="text"/>	<input type="text" value="20000"/>	<input type="text" value="99999"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
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<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

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5.3. Administer Subscribers

Select **Messaging System (Storage) → User Management** from the left pane, to display the **User Management** screen. Click **Add** under the **Add a new user** section.

The screenshot shows the Avaya Aura® Messaging System Management Interface (SMI) for server 'aam1'. The left navigation pane is expanded to 'Messaging System (Storage)' and 'User Management' is selected. The main content area is titled 'User Management' and contains the following sections:

- License Status**: License mode: Normal
- Edit User/Info Mailbox**: Edit a user's properties. Possible identifiers are: mailbox number. Identifier:
- Add User/Info Mailbox**: Add a new user: Add a new Info Mailbox:

At the bottom of the interface, it says '© 2001-2012 Avaya Inc. All Rights Reserved.'

The **User Management > Properties for New User** screen is displayed next. Enter the desired string into the **First Name**, **Last Name**, and **Password** fields.

In the compliance testing, the same telephone extensions for the IPC subscribers were used for the **Mailbox Number** and **Extension** fields. Select the appropriate **Class of Service**, and retain the default values in the remaining fields.

Scroll down to the bottom of the screen and click **Save**.

The screenshot displays the Avaya Aura Messaging System Management Interface (SMI) for Administration. The main window is titled "User Management > Properties for New User". The left sidebar lists various system management options, including "User Management", "Reports (Storage)", "Server Information", "Server Settings (Storage)", "IMAP/SMTP Settings (Storage)", "Telephony Settings (Application)", "Server Settings (Application)", "Advanced (Application)", and "Utilities". The main form area contains the following fields and options:

- User Properties:**
 - First name: 72051
 - Last name: 72051
 - Display name: (empty)
 - ASCII name: (empty)
 - Site: Default (dropdown)
- Mailbox number:** 72051
- Extension:** 72051
- ☒ Include in Auto Attendant directory
- Additional extensions:** (empty)
- Class of Service:** Standard (dropdown)
- Pronounceable name:** (empty)
- MWI enabled:** Yes (dropdown)
- Miscellaneous 1:** (empty)
- Miscellaneous 2:** (empty)
- New password:** *****
- Confirm password:** *****
- ☐ User must change voice messaging password at next login
- ☐ Voice messaging password expired
- ☐ Locked out from voice messaging

At the bottom of the form, there are two buttons: **Save** and **Delete**. The **Save** button is highlighted with a red box.

Repeat this section to add all IPC subscribers. During the compliance test, 72051 and 72059 were used.

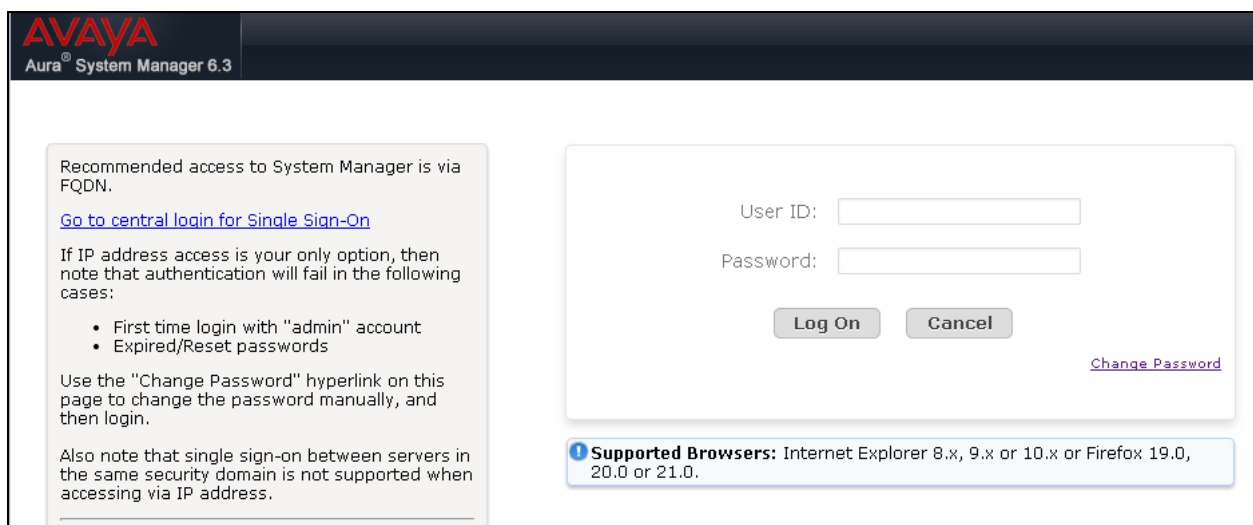
6. Configure Avaya Aura® Session Manager

This section provides the procedures for configuring Session Manager. All configuration on Session Manager to IPC Unigy V2 were already configured, and not discussed in these Application Notes. The procedures include the following areas:

- Launch System Manager
- Administer dial patterns

6.1. Launch System Manager

Access the System Manager web interface by using the URL “http://ip-address” in an Internet browser window, where “ip-address” is the IP address of the System Manager server. Log in using the appropriate credentials.



The screenshot shows the Avaya Aura System Manager 6.3 login interface. The header features the Avaya logo and the text "Aura® System Manager 6.3". The main content area is divided into two sections. On the left, a grey box contains instructions: "Recommended access to System Manager is via FQDN." followed by a link "Go to central login for Single Sign-On". Below this, it states "If IP address access is your only option, then note that authentication will fail in the following cases:" and lists two bullet points: "First time login with 'admin' account" and "Expired/Reset passwords". It also mentions "Use the 'Change Password' hyperlink on this page to change the password manually, and then login." and "Also note that single sign-on between servers in the same security domain is not supported when accessing via IP address." On the right, a white box contains the login form with fields for "User ID:" and "Password:", "Log On" and "Cancel" buttons, and a "Change Password" link. At the bottom right, a blue box lists "Supported Browsers: Internet Explorer 8.x, 9.x or 10.x or Firefox 19.0, 20.0 or 21.0."

6.2. Administer Dial Patterns

In the subsequent screen (not shown), select **Elements** → **Routing** to display the **Introduction to Network Routing Policy** screen (not shown). Click **Routing** → **Dial Patterns** from the left pane to display the **Dial Patterns** screen. Locate and click on the dial pattern that corresponds to the Aura® Messaging pilot number, in this case “7777”. The pilot number was configured prior to this solution test, and the following screen shows only for information purpose.

The screenshot displays the Avaya Aura System Manager 6.3 interface. The top header shows the Avaya logo and 'Aura® System Manager 6.3'. The right header indicates the user is logged in as 'admin' and shows the last login time as 'April 28, 2014 1:16 PM'. The left navigation pane is expanded, showing 'Routing' as the selected category, with 'Dial Patterns' highlighted. The main content area is titled 'Dial Patterns' and shows a table of 17 items. The table has columns for 'Pattern', 'Min', 'Max', 'Emergency Call', 'Emergency Type', 'Emergency Priority', 'SIP Domain', and 'Notes'. The pattern '7777' is highlighted in red in the original image.

Pattern	Min	Max	Emergency Call	Emergency Type	Emergency Priority	SIP Domain	Notes
*	3	3	<input type="checkbox"/>			-ALL-	
#	1	3	<input type="checkbox"/>			-ALL-	
1303	10	12	<input type="checkbox"/>			-ALL-	
21	5	5	<input type="checkbox"/>			-ALL-	To Tom's CM for MWI
2200	5	5	<input type="checkbox"/>			-ALL-	
23	5	5	<input type="checkbox"/>			-ALL-	To Tom's CM for MWI
2800	5	5	<input type="checkbox"/>			-ALL-	
303	10	12	<input type="checkbox"/>			avaya.com	
332	5	5	<input type="checkbox"/>			-ALL-	Alliance via SI
4200	5	5	<input type="checkbox"/>			-ALL-	
7200	5	5	<input type="checkbox"/>			avaya.com	
7205	5	5	<input type="checkbox"/>			-ALL-	
7207	4	5	<input type="checkbox"/>			-ALL-	
7776	4	4	<input type="checkbox"/>			-ALL-	
7777	4	4	<input type="checkbox"/>			-ALL-	

The **Dial Pattern Details** screen is displayed. In the **Originating Locations and Routing Policies** sub-section, add or modify the entry as desired to allow IPC turret users to reach Aura® Messaging. In the compliance testing, a new entry was created to allow for call origination from the existing IPC location, as shown below.

AVAYA
Aura® System Manager 6.3

Last Logged on at April 28, 2014 1:16 PM
Help | About | Change Password | Log off admin

Home Routing * x

Home / Elements / Routing / Dial Patterns

Dial Pattern Details Commit Cancel [Help ?](#)

General

* Pattern: 7777

* Min: 4

* Max: 4

Emergency Call: ☐

Emergency Priority: 1

Emergency Type:

SIP Domain: -ALL- ▼

Notes:

Originating Locations and Routing Policies

Add Remove

2 Items [Filter: Enable](#)

<input type="checkbox"/>	Originating Location Name ▲	Originating Location Notes	Routing Policy Name	Rank	Routing Policy Disabled	Routing Policy Destination	Routing Policy Notes
<input type="checkbox"/>	-ALL-		Route2MM		<input checked="" type="checkbox"/>	ModularMessaging	
<input type="checkbox"/>	-ALL-		Route2AAM62		<input type="checkbox"/>	AAM62	

7. Configure IPC Unigy V2 Converged Communication Manager

This section provides the procedures for configuring IPC Unigy V2 Converged Communication Manager. The procedures include the following areas:

- Launch Unigy V2 Management System
- Administer SIP trunks
- Administer trunk groups
- Administer route lists
- Administer dial patterns
- Administer route plans

The configuration of Converged Communication Manager is typically performed by IPC installation technicians. The procedural steps are presented in these Application Notes for informational purposes.

7.1. Launch Unigy V2 Management System

Access the UnigyV2 Management System web interface by using the URL “http://ip-address” in an Internet browser window, where “ip-address” is the IP address of VIP. Log in using the appropriate credentials.

The screen below is displayed. Enter the appropriate credentials. Check **I agree with the Terms of Use**, and click **Login**.

In the subsequent screen (not shown), click **Continue**.



The screenshot shows the login interface for the IPC Unigy V2 Management System. On the left is the Unigy logo, a blue circle with the word 'unigy' in white. To the right of the logo are two input fields: 'User Name:' and 'Password:'. Below these fields is a checkbox labeled 'I agree with the' followed by a link 'Terms of Use'. To the right of the checkbox is an empty box. Below the checkbox and link is a 'Login' button. At the bottom of the form, the following text is displayed: 'IPC Unigy™ Management System', 'Unigy™ Version 02.00.00.07.0025', 'COP Version 02.00.00.00.1888', and '© Copyright 2011-2013 IPC Systems, Inc. All rights reserved.'

The following screen (Tools -> Monitoring) displays. Navigate to **Configuration → Site**.

Configuration | System Designer | Alerts | Tools | About | Help 17:07 EDT-0400 | ipctech

Tools -> Monitoring

Enterprise

Summary

Instances


Instance	Total Devices	Devices i...
Default Instance	7	5

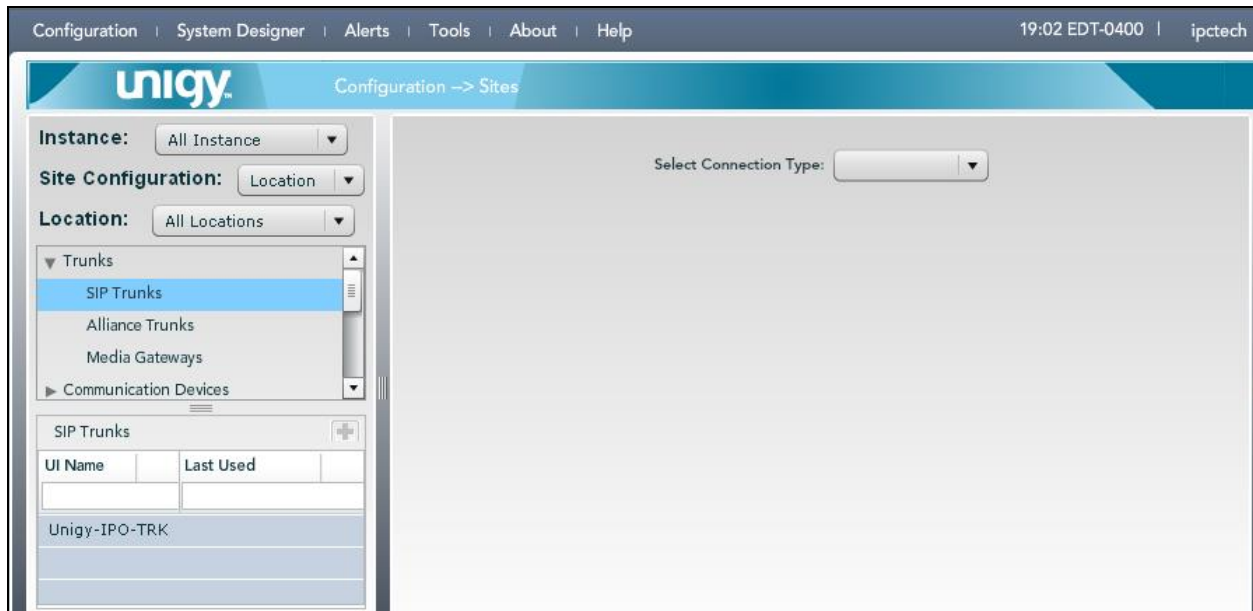
Locations

Location	Instance	Total D...	Devices in ... 1 ▼
Default Back Room	Default Instance	4	4
Default Front Room	Default Instance	3	1

Refresh

7.2. Administer SIP Trunks

Select **Trunks** → **SIP Trunks** in the left pane, and click the **Add** icon () in the lower left pane to add a new SIP trunk. Select “Dial Tone” from the **Select Connection Type** drop-down list.



The screen below is displayed next. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Trunk Name:** A descriptive name.
- **Destination Address:** Enter the IP address of the Session Manager signaling interface.
- **Destination Port:** Enter the port number.
- **Zone:** An available zone, in this case “Default Zone 1”.
- **Channels:** Enter the number of SIP trunk group members.
- **Reason Protocol** “SIP”
- **PBX Provider:** “Avaya”
- **Connected Party Update:** “UPDATE”

Retain the default values in the remaining fields.

The screenshot shows the Unigy configuration interface. The left sidebar contains a navigation tree with categories like Trunks, SIP Trunks, Alliance Trunks, Media Gateways, Communication Devices, Servers, Media Service, Prototype Devices, SNMP Forwarding, and Routing. The 'SIP Trunks' section is expanded, showing a table with columns 'UI Name' and 'Last Used'. The table lists 'Unigy-IPO-TRK' and 'Unigy-SIP-TRK-'. The main content area is titled 'Trunk: Unigy-SIP-TRK-SM63' and has tabs for 'Basic' and 'Advanced'. The 'Basic' tab is selected, showing the 'DialTone Trunk Configuration' form. The form contains the following fields and values:

Field	Value
Trunk Name	Unigy-SIP-TRK-SM63
Connection Type	Dial Tone
Destination Address	10.64.41.42
Destination Port	5060
Media Manager Profile	Safe
Zone	Default Zone 1
Channels	30
Reason Protocol	SIP
PBX Provider	Avaya
Connected Party Update	UPDATE
Subscribe to MWI	<input checked="" type="checkbox"/>
MWI Subscription Time	0
Vendor	
A/B Side	<input type="checkbox"/>
Distant End Name	
PBX Trunk Group Reference	
Trunk Info	
ReINVITE For Media Update	<input checked="" type="checkbox"/>
Options Supported	<input checked="" type="checkbox"/>
Equipped	<input checked="" type="checkbox"/>

At the bottom right of the form are buttons for 'Delete', 'Revert', and 'Save'.

Select the **Advanced** tab in the upper right. Enter the following values for the specified fields, and retain the default values for the remaining fields.


- **Diversion Header:** Select “History-Info”.
- **Outgoing Transport Type:** Select “UDP”.

Click the **Save** button at the bottom of this page.

The screenshot displays the Unigy configuration interface. The top header shows the Unigy logo, the navigation path "Configuration -> Sites", and the text "Powered by IPC". The main interface is divided into three sections:

- Left Sidebar:** Contains a tree view of configuration categories. Under "Trunks", "SIP Trunks" is selected. Below this, a list of SIP Trunks is shown, with "Unigy-SIP-TRK-SM63" highlighted in orange.
- Top Right:** Features two tabs: "Basic" and "Advanced". The "Advanced" tab is selected and highlighted with a red box.
- Main Configuration Area:** Titled "DialTone Trunk Configuration", it contains the following fields:
 - Trunk Name: * Unigy-SIP-TRK-SM63
 - Connection Type: Dial Tone
 - Destination Address: * 10.64.41.42
 - Destination Port: * 5060
 - Media Manager Profile: * Safe
 - Zone: * Default Zone 1
 - Channels: 30
 - Reason Protocol: * SIP
 - PBX Provider: * Avaya
 - Connected Party Update: * UPDATE
 - Subscribe to MWI: ☒
 - MWI Subscription Time: 0
 - Vendor:
 - A/B Side: ☐
 - Distant End Name:
 - PBX Trunk Group Reference:
 - Trunk Info:
 - Diversion Header: * History-Info
 - Indicate PRACK Support: ☒
 - Outgoing Transport Type: * UDP
- Bottom Bar:** Contains three buttons: "Delete", "Revert", and "Save". The "Save" button is highlighted with a red box.

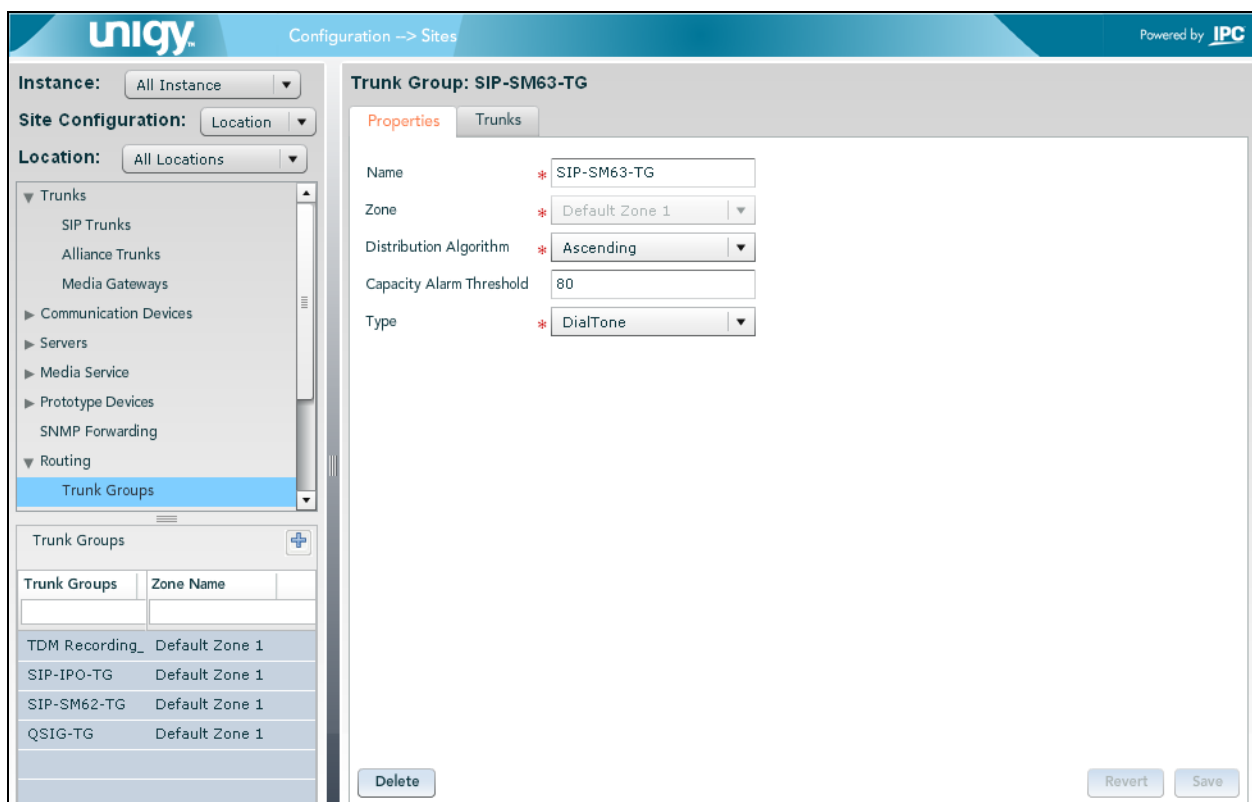
7.3. Administer Trunk Groups

Select **Routing** → **Trunk Groups** in the left pane, and click the **Add** icon () in the lower left pane to add a new trunk group.

The **Trunk Group** screen is displayed in the right pane. In the **Properties** (default) tab, enter a descriptive **Name**, select “Default Zone 1” for the **Zone** field, and select “Ascending” for the **Distribution Algorithm** field.

Click **Save**.

Select the **Trunks** tab in the right pane.



The screenshot shows the UniQy configuration interface. The left pane displays a tree view with 'Trunk Groups' selected under 'Routing'. The right pane shows the 'Trunk Group: SIP-SM63-TG' configuration screen. The 'Properties' tab is active, showing fields for Name, Zone, Distribution Algorithm, Capacity Alarm Threshold, and Type. Below the configuration fields is a table of existing trunk groups.

Trunk Groups	Zone Name
TDM Recording_	Default Zone 1
SIP-IPO-TG	Default Zone 1
SIP-SM62-TG	Default Zone 1
QSIG-TG	Default Zone 1

The screen is updated with three panes. In the rightmost pane, select the Trunks tab to display a list of trunks. Select the SIP trunk from **Section 7.2** in the rightmost pane and drag to the middle pane as shown below.

Click **Save**.


The screenshot displays the Unigy configuration interface with the following components:

- Header:** "unigy" logo, "Configuration -> Sites", and "Powered by IPC".
- Left Pane:**
 - Instance: All Instance
 - Site Configuration: Location
 - Location: All Locations
 - Navigation tree with "Trunk Groups" selected.
 - Trunk Groups list:

Trunk Groups	Zone Name
TDM Recording_	Default Zone 1
SIP-SM63-TG	Default Zone 1
SIP-IPO-TG	Default Zone 1
SIP-SM62-TG	Default Zone 1
QSIG-TG	Default Zone 1
- Middle Pane: Trunk Group: SIP-SM63-TG**
 - Tabs: Properties, **Trunks**
 - Table:

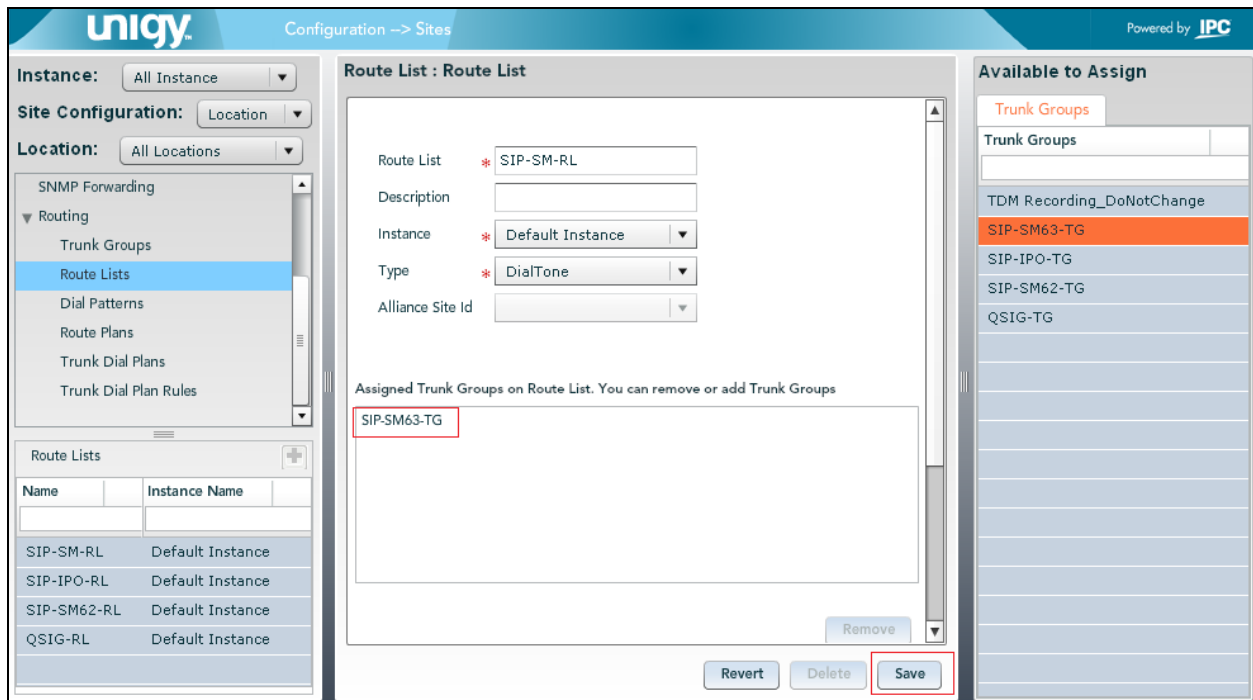
Name	Channels
Unigy-SIP-TRK-SM63	30
 - Buttons: Remove, Revert, Save
- Right Pane: Available to Assign**
 - Tabs: **Trunks**, MG Trunks
 - Table with headers: Name, Channels

7.4. Administer Route Lists

Select **Routing** → **Route Lists** in the left pane, and click the **Add** icon () in the lower left pane to add a new route list.

The **Route List** screen is displayed in the middle pane. For **Route List**, enter a descriptive name. In the right pane, select the trunk group from **Section 7.3** and drag into the **Assigned Trunk Groups on Route List** sub-section in the middle pane, as shown below.

Click **Save**.



The screenshot shows the UniGY configuration interface for Route Lists. The left pane displays the navigation menu with 'Route Lists' selected. The middle pane shows the 'Route List : Route List' configuration form. The right pane shows the 'Available to Assign' list of Trunk Groups.

Configuration Form:

- Instance: All Instance
- Site Configuration: Location
- Location: All Locations
- Route List: SIP-SM-RL
- Description:
- Instance: Default Instance
- Type: DialTone
- Alliance Site Id:

Assigned Trunk Groups on Route List:

- SIP-SM63-TG

Available to Assign:

- Trunk Groups
- TDM Recording_DoNotChange
- SIP-SM63-TG
- SIP-IPO-TG
- SIP-SM62-TG
- QSIG-TG

Buttons: Revert, Delete, Save

7.5. Administer Dial Patterns

Select **Routing → Dial Patterns** in the left pane, to display the **Dial Patterns** screen in the right pane. Click **Add New** in the right pane.

In the **Dial pattern Details** sub-section in the lower right pane, enter the desired **Name** and **Description**. For **Pattern String**, enter the dial pattern to match for Avaya endpoints, in this case “*” meaning any digits will be sent to Session Manager.

Click **Save**.

Once the **Save** button is clicked, the newly created Dial pattern should be displayed under the Dial Patterns section.

The screenshot displays the UniV2SM63AAM-SS configuration interface. The left sidebar shows the navigation menu with 'Dial Patterns' selected under the 'Routing' section. The main area is divided into two panes. The top pane, titled 'Dial Patterns', contains a table with columns: Name, Pattern String, Description, and Zone Name. The table is currently empty. Below the table are 'Add New' and 'Delete' buttons. The bottom pane, titled 'Dial pattern Details', shows the 'Properties' section with the following fields: Name (set to 'ALL Dial Pattern'), Zone (set to 'Default Zone 1'), Description (set to 'all'), and Pattern String (set to '*'). 'Revert' and 'Save' buttons are located at the bottom right of the details pane.

Name	Pattern String	Description	Zone Name
------	----------------	-------------	-----------

Dial pattern Details

Properties

Name * ALL Dial Pattern

Zone * Default Zone 1

Description * all

Pattern String * *

Revert Save

Repeat this section to add another dial pattern to reach the PSTN, and include any required prefix by Communication Manager.

7.6. Administer Route Plans

Select **Routing** → **Route Plans** in the left pane, and click **Add New** (not shown) in the right pane to create a new route plan.

The screen is updated with three panes, as shown below. In the **Route Plan** middle pane, enter a descriptive **UI Name** and optional **Description**. For **Calling Party**, enter “*” to denote any calling party from UnigyV2. For **Called Party**, select the dial pattern for Avaya endpoints from **Section 7.5**. Select “Forward” for **Action**.

Click **Save**.

The screenshot displays the Unigy Configuration -> Sites interface. The left pane shows the navigation menu with 'Route Plans' selected under the 'Routing' section. The middle pane, titled 'Route Plan', contains a 'Create New Route Plan' form with the following fields: 'UI Name' (Route2SM63), 'Description' (empty), 'Calling Party' (*), 'Destination' (*), 'Action' (Forward), and 'Instance' (Default Instance). Below these fields is a 'Route List' table with one empty row and a 'Remove' button. The right pane, titled 'Available to Assign', shows a 'Route Lists' section with a table containing the following entries: TDM Recording_DoNotChange, SIP-SM-RL, SIP-IPQ-RL, SIP-SM62-RL, and QSIG-RL. The bottom of the interface has 'Back', 'Revert', and 'Save' buttons.

Name
TDM Recording_DoNotChange
SIP-SM-RL
SIP-IPQ-RL
SIP-SM62-RL
QSIG-RL

The screen is updated with the newly created route plan. Select the route plan, and click **Edit** toward the bottom of the screen.

The screenshot shows the UniV2SM63AAM-SS configuration interface. The top bar displays the UniV2 logo and the title "Configuration -> Sites". The sidebar on the left contains a tree view of configuration options, with "Route Plans" selected under the "Routing" category. The main content area is titled "Route Plan" and contains a table of route plans. The table has columns for "UI Name", "Calling Party", "Destination", "Action", and "Instance Name". The row for "Route2SM63" is highlighted in blue. Below the table are buttons for "Delete", "Add New", "Revert", and "Save Sequence Change". The "Route Plan Details" section below the table shows the configuration for the selected route plan, including "Calling Party", "Destination", "Action", "RouteList", and "Trunk Group". The "Edit" button is located at the bottom right of the details section.

UI Name	Calling Party	Destination	Action	Instance Name
QSIG2CM601	*	*	FORWARD	Default Instance
Route-2-IPO	*	*	FORWARD	Default Instance
Route2SM62	*	*	FORWARD	Default Instance
Route2SM63	*	*	FORWARD	Default Instance

Route Plan Details

Calling Party : *

Destination : *

Action : FORWARD

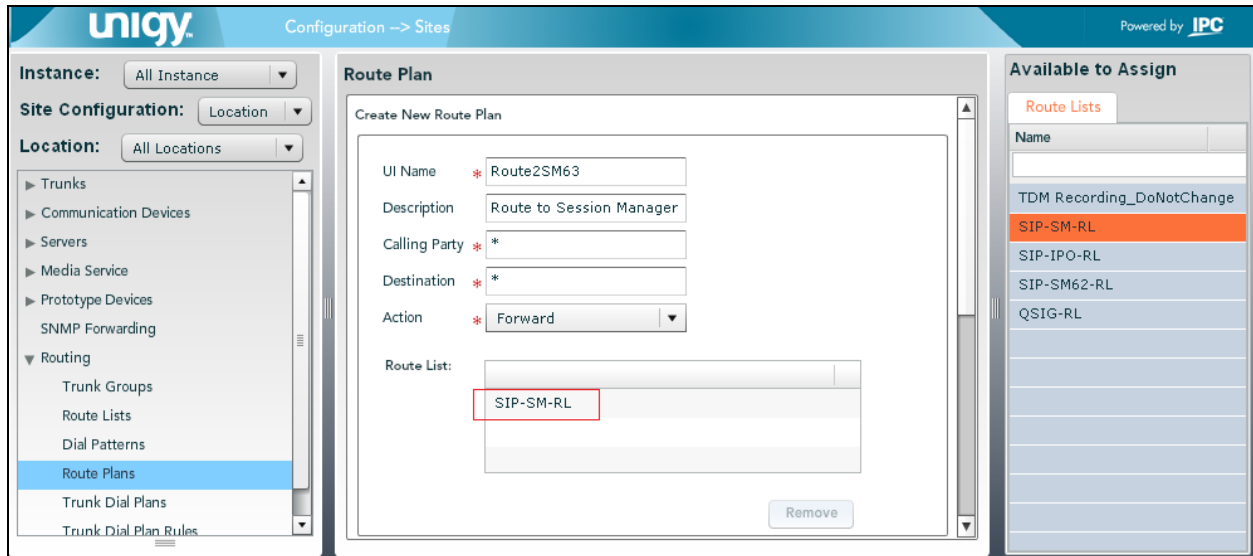
RouteList:

Trunk Group:

Edit

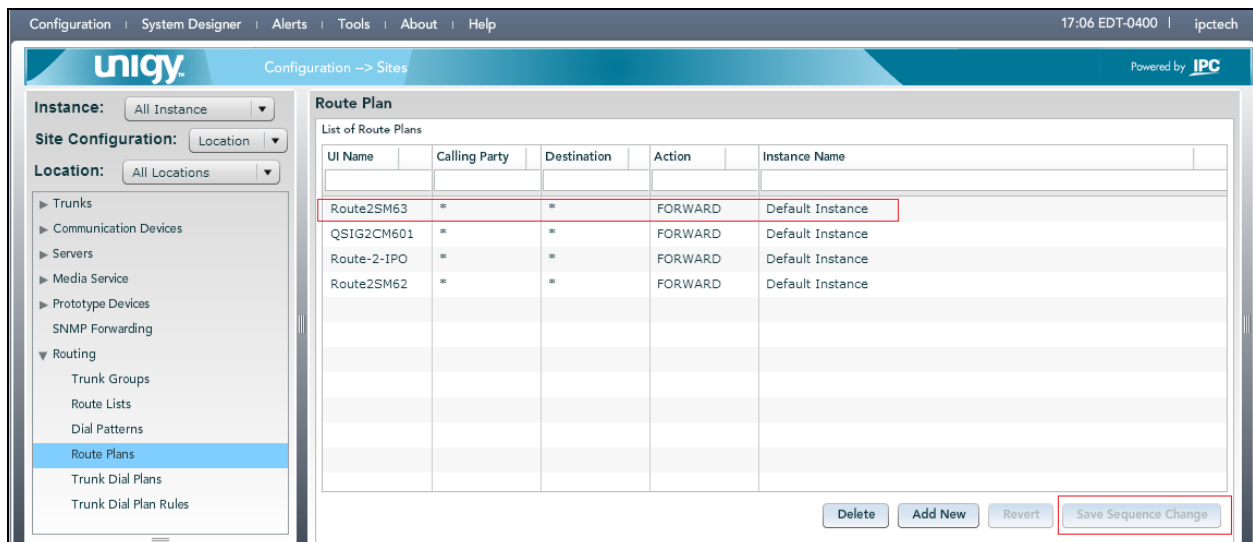
The screen is updated with three panes again, as shown below. In the right pane, select the route list from **Section 7.4** and drag into the **Route List** sub-section in the middle pane, as shown below.

Click **Save** (not shown).



Once the route plan configuration is completed, again select **Routing → Route Plans** in the left pane. List of route plans is displayed. Drag the latest route plan you've created, to the top.

Click the **Save Sequence Change** button to finish the Unigy V2 configuration.



8. Verification Steps

This section provides tests that may be performed to verify proper configuration of Communication Manager, Session Manager and IPC UnigyV2.

8.1. Verify Avaya Aura® Communication Manager

From the SAT interface, verify the status of the SIP trunk groups by using the “status trunk n” command, where “n” is the trunk group number administered in Communication Manager. Verify that all trunks are in the “in-service/idle” state as shown below.

```
status trunk 92
```

TRUNK GROUP STATUS			
Member	Port	Service State	Mtce Connected Ports Busy
0092/001	T00135	in-service/idle	no
0092/002	T00136	in-service/idle	no
0092/003	T00137	in-service/idle	no
0092/004	T00138	in-service/idle	no
0092/005	T00139	in-service/idle	no
0092/006	T00140	in-service/idle	no
0092/007	T00141	in-service/idle	no
0092/008	T00142	in-service/idle	no
0092/009	T00143	in-service/idle	no
0092/010	T00144	in-service/idle	no


Verify the status of the SIP signaling groups by using the “status signaling-group n” command, where “n” is the signaling group number administered in Communication Manager. Verify that the signaling group is “in-service” as indicated in the **Group State** field, shown below.

```
status signaling-group 92
```

STATUS SIGNALING GROUP	
Group ID:	92
Group Type:	sip
Group State:	in-service

8.2. Verify Avaya Aura® Session Manager

From the System Manager home page (not shown), select **Elements** → **Session Manager** to display the **Session Manager Dashboard** screen (not shown). Select **Session Manager** → **System Status** → **SIP Entity Monitoring** from the left pane to display the **SIP Entity Link Monitoring Status Summary** screen. Click on the IPC entity name, **IPC Unigy HA**.

Avaya Aura® System Manager 6.3

Last Logged on at October 19, 2013 9:06 PM
[Help](#) | [About](#) | [Change Password](#) | [Log off admin](#)

Session Manager ×Routing ×Session Manager ×Home

Home / Elements / Session Manager / System Status / SIP Entity Monitoring

Help ?

Session Manager

Dashboard

Session Manager

Administration

Communication Profile Editor

Network Configuration

Device and Location Configuration

Application Configuration

System Status

SIP Entity Monitoring

Managed Bandwidth Usage

Security Module Status

Registration Summary

User Registrations

Session Counts

System Tools

Performance

SIP Entity Link Monitoring Status Summary

This page provides a summary of Session Manager SIP entity link monitoring status.

SIP Entities Status for All Monitoring Session Manager Instances

Run Monitor

1 Items | RefreshFilter: Enable

<input type="checkbox"/>	Session Manager	Type	Monitored Entities					Deny	Total
			Down	Partially Up	Up	Not Monitored			
<input type="checkbox"/>	SM63	Core	3	2	6	0	0	11	

Select: All, None

All Monitored SIP Entities

Run Monitor

11 Items | RefreshFilter: Enable

<input type="checkbox"/>	SIP Entity Name
<input type="checkbox"/>	SB300D-G450-TLS
<input type="checkbox"/>	SB300D-G450-TCP
<input type="checkbox"/>	IPC Unigy HA

CRK; Reviewed:
SPOC 8/17/2014

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The **SIP Entity, Entity Link Connection Status** screen is displayed. Verify that **Conn. Status** and **Link Status** are “UP” as shown below.

AVAYA Avaya Aura® System Manager 6.3 Last Logged on at October 19, 2013 9:06 PM
Help | About | Change Password | **Log off**
admin

Session Manager x Routing x Session Manager x Home

Home / Elements / Session Manager / System Status / SIP Entity Monitoring Help ?

SIP Entity, Entity Link Connection Status

This page displays detailed connection status for all entity links from all Session Manager instances to a single SIP entity.

All Entity Links to SIP Entity: IPC Unigy HA

Summary View

Status Details for the selected Session Manager:

2 Items Refresh Filter: Enable

Session Manager I	SIP Entity Resolved IP	Port	Proto.	Deny	Conn. Status	Reason Code	Link Status
<input type="radio"/> SM63	10.64.49.2	5060	TCP	FALSE	UP	200 OK	UP
<input type="radio"/> SM63	10.64.49.2	5060	UDP	FALSE	UP	200 OK	UP

8.3. Verify IPC UnigyV2

Make a call from/to an IPC turret user to an Avaya endpoint. Verify that the call can be connected with two-way talk paths.

9. Conclusion

These Application Notes describe the configuration steps required for IPC Unigy V2 to successfully interoperate with Avaya Aura® Messaging 6.2 and Avaya Aura® Session Manager 6.3 in a centralized messaging environment using SIP trunks to Avaya Aura® Session Manager. All feature and serviceability test cases were completed with observations noted in **Section 2.2**.

10. Additional References

This section references the product documentation relevant to these Application Notes.

- [1] *Administering Avaya Aura® Communication Manager*, Release 6.3, June 2014, Issue 10, Document Number 03-300509
- [2] *Administering Avaya Aura® Session Manager*, Release 6.3, June 2014, Issue 5.
- [3] *Administering Avaya Aura® System Manager*, Release 6.3, November 2013.

The following document was provided by IPC

- [4] *Nexus Suite 2.0 SP1 Patch11 or Higher Deployment Guide*, Part Number B02200161, Revision Number 01, available upon request to IPC Support.

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