



Avaya Solution & Interoperability Test Lab

Application Notes for Amtelco Infinity SIP Attendant Console with Avaya Aura® Session Manager – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Amtelco Infinity SIP Attendant Console to interoperate with Avaya Aura® Communication Manager and Avaya Aura® Session Manager using SIP trunks. Amtelco Infinity SIP Attendant Console is a SIP-based soft phone solution that provides phone and operator state controls during call handling.

In the compliance testing, Amtelco Infinity SIP Attendant Console used the SIP trunks interface from Avaya Aura® Session Manager to provide attendant consoles for Avaya Aura® Communication 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 Amtelco Infinity SIP Attendant Console to interoperate with Avaya Aura® Communication Manager and Avaya Aura® Session Manager using SIP trunks. Amtelco Infinity SIP Attendant Console is a SIP-based soft phone solution that provides phone and operator state controls during call handling.

In the compliance testing, Amtelco Infinity SIP Attendant Console used the SIP trunks interface from Avaya Aura® Session Manager to provide attendant consoles for Avaya Aura® Communication Manager.

The Amtelco Infinity SIP Attendant Console solution consists of an Infinity server and attendants with desktop computers running Amtelco Infinity Telephone Agent. The Infinity server controls routing of calls to/from the attendants, and with all attendant related activities such as answer/drop calls performed from Amtelco Infinity Telephone Agent.

2. General Test Approach and Test Results

The feature test cases were performed manually. Calls were placed manually with necessary attendant actions such as hold and transfer performed from the attendant desktops to verify various call scenarios. The serviceability test cases were performed manually by disconnecting/reconnecting the Ethernet connection to the Infinity server and to the attendants.

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 included feature and serviceability testing.

The feature testing included G.711, G.729, codec negotiation, DTMF, hold/resume, drop, display, blind transfer, attended conference, inbound, outbound, multiple calls, and multiple agents.

The serviceability testing focused on verifying the ability of Infinity to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet connections to the Infinity server and to the attendants.

2.2. Test Results

All test cases were executed and passed. The following were observations on Infinity from the compliance testing.

- Infinity does not support media shuffling.
- The Infinity XDS VoIP card requires a Gigabit network connection.

2.3. Support

Technical support on Infinity can be obtained through the following:

- **Phone:** (800) 553-7679
- **Email:** service@amtelco.com
- **Web:** www.amtelco.com/Welcome.htm

3. Reference Configuration

As shown in **Figure 1**, attendants are running the Infinity Telephone Agent soft phone application on the desktops, and the administrator is running the Infinity Supervisor.

SIP trunks are used between Infinity SIP Attendant Console and Session Manager. A five digit Uniform Dial Plan was used to facilitate dialing with Infinity. Calls to extensions 52xxx are routed over the SIP trunks to Infinity. In particular, internal users on Communication Manager will dial 52222 to reach Infinity, and calls from external users will be routed with digits 52000 to Infinity. Infinity will route the received call to an available attendant, and populate the answering attendant with pertinent information for the call.

The detailed administration of connectivity between Communication Manager and Session Manager are not the focus of these Application Notes and will not be described.

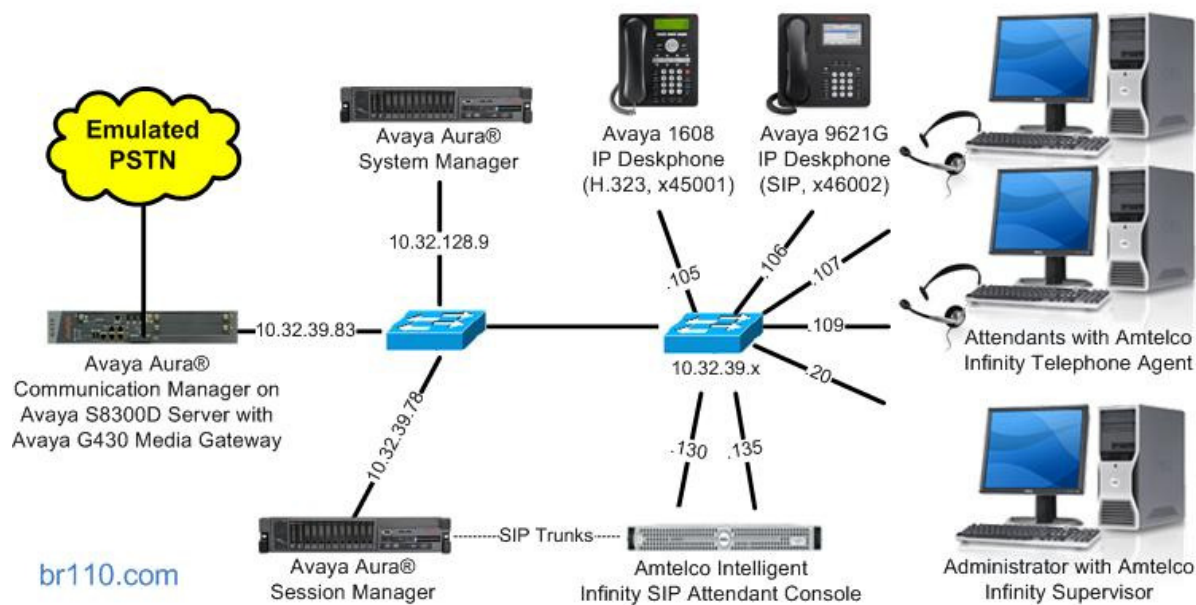


Figure 1: Compliance Testing Configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Communication Manager on Avaya S8300D Server with Avaya G430 Media Gateway	6.3 (R016x.03.0.124.0-20756)
Avaya Aura® Session Manager	6.3 SP2
Avaya Aura® System Manager	6.3.2
Avaya 1608 IP Deskphone (H.323)	1.3.3
Avaya 9621G IP Deskphone (SIP)	6.2.2
Amtelco Infinity Intelligent SIP Attendant Console <ul style="list-style-type: none">• XDS VoIP Card	5.61.06 Patch 1 4.47
Amtelco Infinity Supervisor	5.60.0020
Amtelco Infinity Telephone Agent	5.60.4769.08

5. Configure Avaya Aura® Communication Manager

This section provides the procedures for configuring Communication Manager. The procedures include the following areas:

- Verify license
- Administer system parameters features
- Administer SIP trunk group
- Administer SIP signaling group
- Administer SIP trunk group members
- Administer IP network region
- Administer IP codec set
- Administer route pattern
- Administer private numbering
- Administer uniform dial plan
- Administer AAR analysis

In the compliance testing, a separate set of codec set, network region, trunk group, and signaling group were used for integration with Infinity.

5.1. Verify License

Log into the System Access Terminal (SAT) to verify that the Communication Manager license has proper permissions for features illustrated in these Application Notes. Use the “display system-parameters customer-options” command. Navigate to **Page 2**, and verify that there is sufficient remaining capacity for SIP trunks by comparing the **Maximum Administered SIP Trunks** field value with the corresponding value in the **USED** column.

The license file installed on the system controls the maximum permitted. If there is insufficient capacity, contact an authorized Avaya sales representative to make the appropriate changes.

display system-parameters customer-options		Page 2 of 11
OPTIONAL FEATURES		
IP PORT CAPACITIES		USED
Maximum Administered H.323 Trunks:	4000	66
Maximum Concurrently Registered IP Stations:	2400	2
Maximum Administered Remote Office Trunks:	4000	0
Maximum Concurrently Registered Remote Office Stations:	2400	0
Maximum Concurrently Registered IP eCons:	68	0
Max Concur Registered Unauthenticated H.323 Stations:	100	0
Maximum Video Capable Stations:	2400	0
Maximum Video Capable IP Softphones:	2400	6
Maximum Administered SIP Trunks:	4000	40
Maximum Administered Ad-hoc Video Conferencing Ports:	4000	0
Maximum Number of DS1 Boards with Echo Cancellation:	80	0

5.2. Administer System Parameters Features

Use the “change system-parameters features” command to allow for trunk-to-trunk transfers.

For ease of interoperability testing, the **Trunk-to-Trunk Transfer** field was set to “all” to enable all trunk-to-trunk transfers on a system wide basis. Note that this feature poses significant security risk, and must be used with caution. For alternatives, the trunk-to-trunk feature can be implemented on the Class of Restriction or Class of Service levels. Refer to [1] for more details.

```
change system-parameters features                               Page 1 of 20
      FEATURE-RELATED SYSTEM PARAMETERS
      Self Station Display Enabled? n
      Trunk-to-Trunk Transfer: all
      Automatic Callback with Called Party Queuing? n
      Automatic Callback - No Answer Timeout Interval (rings): 3
      Call Park Timeout Interval (minutes): 10
      Off-Premises Tone Detect Timeout Interval (seconds): 20
      AAR/ARS Dial Tone Required? y

      Music (or Silence) on Transferred Trunk Calls? no
      DID/Tie/ISDN/SIP Intercept Treatment: attendant
      Internal Auto-Answer of Attd-Extended/Transferred Calls: transferred
      Automatic Circuit Assurance (ACA) Enabled? n

      Abbreviated Dial Programming by Assigned Lists? n
      Auto Abbreviated/Delayed Transition Interval (rings): 2
      Protocol for Caller ID Analog Terminals: Bellcore
      Display Calling Number for Room to Room Caller ID Calls? n
```

5.3. Administer SIP Trunk Group

Use the “add trunk-group n” command, where “n” is an available trunk group number, in this case “52”. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Group Type:** “sip”
- **Group Name:** A descriptive name.
- **TAC:** An available trunk access code.
- **Service Type:** “tie”

add trunk-group 52		Page 1 of 21	
TRUNK GROUP			
Group Number: 52	Group Type: sip	CDR Reports: y	
Group Name: SIP Trunks to Infinity	COR: 1	TN: 1	TAC: 1052
Direction: two-way	Outgoing Display? n		
Dial Access? n	Night Service:		
Queue Length: 0			
Service Type: tie	Auth Code? n		
	Member Assignment Method: auto		
	Signaling Group:		
	Number of Members: 0		

Navigate to **Page 3**, and enter “private” for **Numbering Format**.

add trunk-group 52		Page 3 of 21	
TRUNK FEATURES			
ACA Assignment? n	Measured: none	Maintenance Tests? y	
Numbering Format: private		UUI Treatment: service-provider	
		Replace Restricted Numbers? n	
		Replace Unavailable Numbers? n	
Modify Tandem Calling Number: no			
Show ANSWERED BY on Display? y			

5.4. Administer SIP Signaling Group

Use the “add signaling-group n” command, where “n” is an available signaling group number, in this case “52”. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Group Type:** “sip”
- **Transport Method:** “tcp”
- **Near-end Node Name:** An existing C-LAN node name or “procr” in this case.
- **Far-end Node Name:** The existing Session Manager node name.
- **Near-end Listen Port:** An available port for integration with Infinity.
- **Far-end Listen Port:** The same port number as in **Near-end Listen Port**.
- **Far-end Network Region:** An existing network region to use with Infinity.
- **Far-end Domain:** The applicable domain name for the network.

For **Direct IP-IP Audio Connections**, enter “n” since Infinity does not support shuffling.

add signaling-group 52		Page 1 of 2
SIGNALING GROUP		
Group Number: 52	Group Type: sip	
IMS Enabled? n	Transport Method: tcp	
Q-SIP? n		
IP Video? n	Enforce SIPS URI for SRTP? y	
Peer Detection Enabled? y	Peer Server: Others	
Prepend '+' to Outgoing Calling/Alerting/Diverting/Connected Public Numbers? n		
Remove '+' from Incoming Called/Calling/Alerting/Diverting/Connected Numbers? y		
Near-end Node Name: procr	Far-end Node Name: NJ-SM-Sig	
Near-end Listen Port: 5052	Far-end Listen Port: 5052	
	Far-end Network Region: 7	
Far-end Domain: br110.com	Far-end Secondary Node Name:	
	Bypass If IP Threshold Exceeded? n	
Incoming Dialog Loopbacks: eliminate	RFC 3389 Comfort Noise? n	
DTMF over IP: rtp-payload	Direct IP-IP Audio Connections? n	
Session Establishment Timer(min): 3	IP Audio Hairpinning? n	
Enable Layer 3 Test? n	Alternate Route Timer(sec): 6	

5.5. Administer SIP Trunk Group Members

Use the “change trunk-group n” command, where “n” is the trunk group number from **Section 5.3**. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Signaling Group:** The signaling group number from **Section 5.4**.
- **Number of Members:** The desired number of members, in this case “10”.

```
change trunk-group 52                                     Page 1 of 21

                                TRUNK GROUP

Group Number: 52                Group Type: sip           CDR Reports: y
Group Name: SIP Trunks to Infinity COR: 1                TN: 1          TAC: 1052
Direction: two-way             Outgoing Display? n
Dial Access? n                 Night Service:
Queue Length: 0
Service Type: tie              Auth Code? n
                                Member Assignment Method: auto
                                Signaling Group: 52
                                Number of Members: 10
```

5.6. Administer IP Network Region

Use the “change ip-network-region n” command, where “n” is the existing far-end network region number used by the SIP signaling group from **Section 5.4**.

For **Authoritative Domain**, enter the applicable domain for the network. Enter a descriptive **Name**. Enter “no” for **Intra-region IP-IP Direct Audio** and **Inter-region IP-IP Direct Audio**, as shown below. For **Codec Set**, enter an available codec set number for integration with Infinity.

change ip-network-region 7		Page 1 of 20	
IP NETWORK REGION			
Region: 7			
Location:		Authoritative Domain: br110.com	
Name: Infinity		Stub Network Region: n	
MEDIA PARAMETERS		Intra-region IP-IP Direct Audio: no	
Codec Set: 7		Inter-region IP-IP Direct Audio: no	
UDP Port Min: 2048		IP Audio Hairpinning? n	
UDP Port Max: 3329			
DIFFSERV/TOS PARAMETERS			
Call Control PHB Value: 46			
Audio PHB Value: 46			
Video PHB Value: 26			

Navigate to **Page 4**, and specify this codec set to be used for calls with the network region used by the Avaya endpoints and with the PSTN. In the compliance testing, network region “1” is used by the Avaya endpoints and trunk to the PSTN.

change ip-network-region 7										Page		4 of		20																																																					
Source Region: 7										Inter Network Region Connection Management										I		M																																													
																				G		A		t																																											
dst codec direct										WAN-BW-limits										Video										Intervening										Dyn		A		G		c																					
rgn set										WAN										Units										Total Norm										Prio Shr										Regions										CAC		R		L		e	
1										7										y										NoLimit																				n						t											
2																																																																			
3																																																																			

5.7. Administer IP Codec Set

Use the “change ip-codec-set n” command, where “n” is the codec set number from **Section 5.6**. Update the audio codec types in the **Audio Codec** fields as necessary. Note that Infinity supports the G.711 and G.729 codec variants. The codec shown below were used in the compliance testing.

change ip-codec-set 7

Page 1 of 2

IP Codec Set

Codec Set: 7

	Audio Codec	Silence Suppression	Frames Per Pkt	Packet Size(ms)
1:	G.711MU	n	2	20
2:	G.729AB	n	2	20
3:				
4:				
5:				

5.8. Administer Route Pattern

Use the “change route-pattern n” command, where “n” is an existing route pattern number to be used to reach Infinity, in this case “52”. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Pattern Name:** A descriptive name.
- **Grp No:** The SIP trunk group number from **Section 5.3**.
- **FRL:** A level that allows access to this trunk, with 0 being least restrictive.

change route-pattern 52												Page	1 of	3			
Pattern Number: 52												Pattern Name: Infinity					
SCCAN? n												Secure SIP? n					
Grp	FRL	NPA	Pfx	Hop	Toll	No.	Inserted					DCS/	IXC				
No			Mrk	Lmt	List	Del	Digits					QSIG					
Dgts												Intw					
1:	52	0											n	user			
2:												n	user				
3:												n	user				
4:												n	user				
5:												n	user				
6:												n	user				
BCC VALUE												TSC	CA-TSC	ITC BCIE Service/Feature PARM		No. Numbering	LAR
0		1	2	M	4	W	Request						Dgts Format				
												Subaddress					
1:	y	y	y	y	y	n	n	rest				none					

5.9. Administer Private Numbering

Use the “change private-numbering 0” command, to define the calling party number to send to Infinity. Add an entry for the trunk group defined in **Section 5.3**. In the example shown below, all calls originating from a 5-digit extension beginning with 4 and routed to trunk group 52 will result in a 5-digit calling number. The calling party number will be in the SIP “From” header.

change private-numbering 0					Page 1 of 2
NUMBERING - PRIVATE FORMAT					
Ext	Ext	Trk	Private	Total	
Len	Code	Grp(s)	Prefix	Len	
5	4	52		5	Total Administered: 1
					Maximum Entries: 540

5.10. Administer Uniform Dial Plan

This section provides a sample AAR routing used for routing calls with dialed digits 52xxx to Infinity. Note that other methods of routing may be used. Use the “change uniform-dialplan 0” command, and add an entry to specify the use of AAR for routing digits 52xxx, as shown below.

change uniform-dialplan 0					Page 1 of 2
UNIFORM DIAL PLAN TABLE					
					Percent Full: 0
Matching			Insert	Node	
Pattern	Len	Del	Digits	Net Conv Num	
52	5	0		aar n	

5.11. Administer AAR Analysis

Use the “change aar analysis 0” command, and add an entry to specify how to route calls to 52xxx. In the example shown below, calls with digits 52xxx will be routed as an AAR call using route pattern “52” from **Section 5.8**.

change aar analysis 0							Page 1 of 2
AAR DIGIT ANALYSIS TABLE							
Location: all					Percent Full: 2		
	Dialed	Total		Route	Call	Node	ANI
	String	Min	Max	Pattern	Type	Num	Reqd
52		5	5	52	unku		n

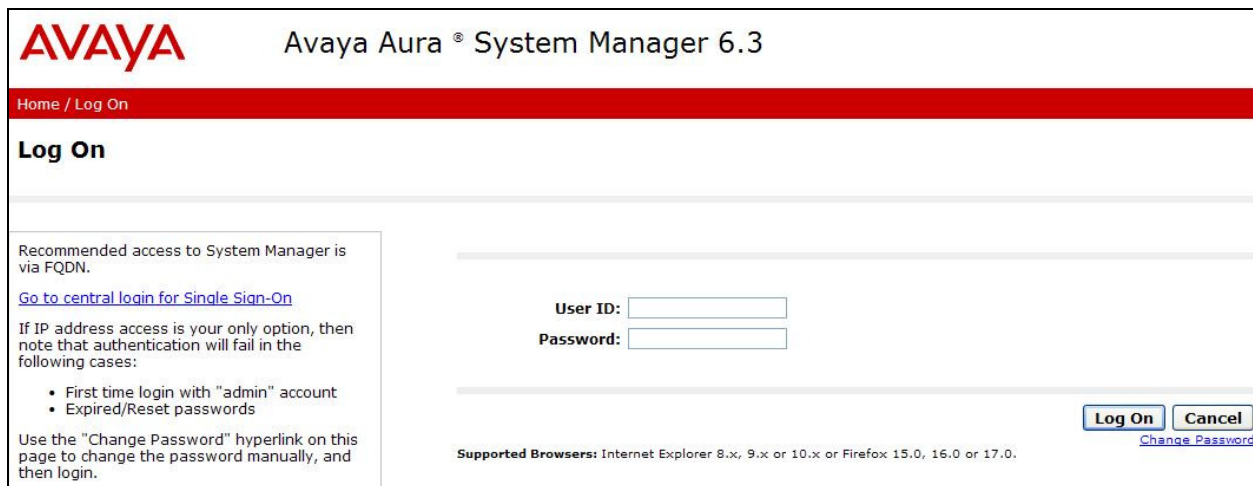
6. Configure Avaya Aura® Session Manager

This section provides the procedures for configuring Session Manager. The procedures include the following areas:

- Launch System Manager
- Administer locations
- Administer adaptations
- Administer SIP entities
- Administer entity links
- Administer routing policies
- Administer dial patterns

6.1. Launch System Manager

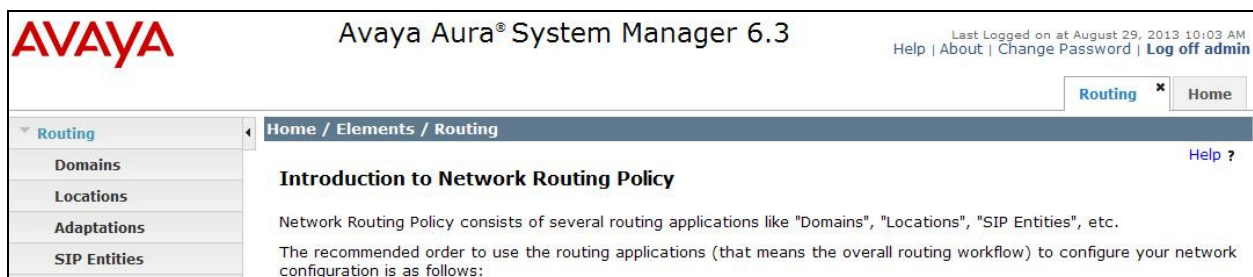
Access the System Manager web interface by using the URL “https://ip-address” in an Internet browser window, where “ip-address” is the IP address of the System Manager server. Log in using the appropriate credentials.



The screenshot shows the Avaya Aura System Manager 6.3 login page. At the top, the Avaya logo is on the left, and the text 'Avaya Aura® System Manager 6.3' is on the right. Below this is a red navigation bar with 'Home / Log On'. The main heading is 'Log On'. On the left, there is a text block with instructions: 'Recommended access to System Manager is via FQDN. Go to central login for Single Sign-On. If IP address access is your only option, then note that authentication will fail in the following cases: • First time login with "admin" account • Expired/Reset passwords. Use the "Change Password" hyperlink on this page to change the password manually, and then login.' In the center, there are input fields for 'User ID:' and 'Password:'. On the right, there are 'Log On' and 'Cancel' buttons, and a 'Change Password' link. At the bottom, it says 'Supported Browsers: Internet Explorer 8.x, 9.x or 10.x or Firefox 15.0, 16.0 or 17.0.'

6.2. Administer Locations

In the subsequent screen (not shown), select **Elements → Routing** to display the **Introduction to Network Routing Policy** screen below. Select **Routing → Locations** from the left pane, and click **New** in the subsequent screen (not shown) to add a new location for Infinity.



The screenshot shows the 'Introduction to Network Routing Policy' page in the Avaya Aura System Manager 6.3 interface. The top header includes the Avaya logo, 'Avaya Aura® System Manager 6.3', and a user status bar showing 'Last Logged on at August 29, 2013 10:03 AM' and links for 'Help | About | Change Password | Log off admin'. Below the header is a navigation pane on the left with a tree view showing 'Routing' expanded, with sub-items 'Domains', 'Locations', 'Adaptations', and 'SIP Entities'. The main content area has a breadcrumb trail 'Home / Elements / Routing' and a heading 'Introduction to Network Routing Policy'. The text below the heading states: 'Network Routing Policy consists of several routing applications like "Domains", "Locations", "SIP Entities", etc. The recommended order to use the routing applications (that means the overall routing workflow) to configure your network configuration is as follows:'.

The **Location Details** screen is displayed. In the **General** sub-section, enter a descriptive **Name** and optional **Notes**. In the **Location Pattern** sub-section, click **Add** and enter the applicable **IP Address Pattern** for the Infinity IP board from **Section 7.2**, as shown below. Retain the default values in the remaining fields.

Avaya Aura® System Manager 6.3

Last Logged on at August 29, 2013 10:03 AM
[Help](#) | [About](#) | [Change Password](#) | [Log off admin](#)

Routing

Domains
Locations
Adaptations
SIP Entities
Entity Links
Time Ranges
Routing Policies
Dial Patterns
Regular Expressions
Defaults

Home / Elements / Routing / Locations

Commit

Cancel

Help ?

Location Details

General

* Name:

Infinity-Loc

Notes:

Amtelco Infinity

Dial Plan Transparency in Survivable Mode

Enabled:

☐

Listed Directory Number:

Associated CM SIP Entity:

Overall Managed Bandwidth

Managed Bandwidth Units:

Kbit/sec

Total Bandwidth:

Multimedia Bandwidth:

Audio Calls Can Take Multimedia Bandwidth:

☒

Per-Call Bandwidth Parameters

Maximum Multimedia Bandwidth (Intra-Location):

1000

Kbit/Sec

Maximum Multimedia Bandwidth (Inter-Location):

1000

Kbit/Sec

* Minimum Multimedia Bandwidth:

64

Kbit/Sec

* Default Audio Bandwidth:

80

Kbit/sec

Alarm Threshold

Overall Alarm Threshold:

80

%

Multimedia Alarm Threshold:

80

%

* Latency before Overall Alarm Trigger:

5

Minutes

* Latency before Multimedia Alarm Trigger:

5

Minutes

Location Pattern

Add

Remove

1 Item

Refresh

Filter: Enable

<input type="checkbox"/>	IP Address Pattern	Notes
<input type="checkbox"/>	* 10.32.39.135	

Select : All, None

6.3. Administer Adaptations

Select **Routing** → **Adaptations** from the left pane, and click **New** in the subsequent screen (not shown) to add a new adaptation for Infinity.

The **Adaptation Details** screen is displayed. In the **General** sub-section, enter a descriptive **Adaptation name**. For **Module name**, select “DigitConversionAdapter”.

For **Module parameter**, enter “osrcd=br110.com odstcd=br110.com, where “br110.com” is the applicable domain. This will set the source and destination domains for all incoming and outgoing calls for Infinity.

The screenshot shows the Avaya Aura System Manager 6.3 interface. The left navigation pane is expanded to 'Routing', and 'Adaptations' is selected. The main content area displays the 'Adaptation Details' screen for the 'DigitConversionAdapter' module. The 'General' tab is active, showing fields for 'Adaptation name' (Infinity-Adaptation), 'Module name' (DigitConversionAdapter), and 'Module parameter' (osrcd=br110.com odstcd=br110.com). Below this, there are sections for 'Digit Conversion for Incoming Calls to SM' and 'Digit Conversion for Outgoing Calls from SM', each with an 'Add' button and a table of matching patterns.

Avaya Aura® System Manager 6.3

Last Logged on at August 29, 2013 10:03 AM
Help | About | Change Password | Log off admin

Routing * Home

Home / Elements / Routing / Adaptations

Adaptation Details

Commit Cancel

General

* Adaptation name: Infinity-Adaptation

Module name: DigitConversionAdapter

Module parameter: osrcd=br110.com odstcd=br110.com

Egress URI Parameters:

Notes:

Digit Conversion for Incoming Calls to SM

Add Remove

0 Items Refresh

Matching Pattern	Min	Max	Phone Context	Delete Digits	Insert Digits	Address to modify	Adaptation Data	Notes
------------------	-----	-----	---------------	---------------	---------------	-------------------	-----------------	-------

Filter: Enable

Digit Conversion for Outgoing Calls from SM

Add Remove

0 Items Refresh

Matching Pattern	Min	Max	Phone Context	Delete Digits	Insert Digits	Address to modify	Adaptation Data	Notes
------------------	-----	-----	---------------	---------------	---------------	-------------------	-----------------	-------

Filter: Enable

6.4. Administer SIP Entities

Add two new SIP entities, one for Infinity, and another for the new SIP trunks for Communication Manager.

6.4.1. SIP Entity for Infinity

Select **Routing** → **SIP Entities** from the left pane, and click **New** in the subsequent screen (not shown) to add a new SIP entity for Infinity.

The **SIP Entity Details** screen is displayed. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Name:** A descriptive name.
- **FQDN or IP Address:** The IP address of the Infinity IP board from **Section 7.2**.
- **Type:** “Other”
- **Adaptation:** Select the Infinity adaptation name from **Section 6.3**.
- **Location:** Select the Infinity location name from **Section 6.2**.
- **Time Zone:** Select the applicable time zone.

The screenshot shows the Avaya Aura System Manager 6.3 interface. The top header includes the Avaya logo, the title "Avaya Aura® System Manager 6.3", and a user status bar indicating "Last Logged on at August 29, 2013 10:03 AM" with links for "Help", "About", "Change Password", and "Log off admin". A navigation breadcrumb trail shows "Home / Elements / Routing / SIP Entities". The left sidebar contains a menu with "Routing" selected, and sub-items: "Domains", "Locations", "Adaptations", "SIP Entities", "Entity Links", "Time Ranges", "Routing Policies", "Dial Patterns", "Regular Expressions", and "Defaults". The main content area is titled "SIP Entity Details" and includes "Commit" and "Cancel" buttons. The "General" tab is active, showing fields for: "Name" (Infinity), "FQDN or IP Address" (10.32.39.135), "Type" (Other), "Notes" (Amtelco Infinity), "Adaptation" (Infinity-Adaptation), "Location" (Infinity-Loc), and "Time Zone" (America/New_York). There is an unchecked checkbox for "Override Port & Transport with DNS SRV". Below this are fields for "SIP Timer B/F (in seconds)" (4), "Credential name" (empty), "Call Detail Recording" (none), and "CommProfile Type Preference" (empty). The "Loop Detection" section shows "Loop Detection Mode" set to "Off". The "SIP Link Monitoring" section shows "SIP Link Monitoring" set to "Use Session Manager Configuration".

6.4.2. SIP Entity for Communication Manager

Select **Routing** → **SIP Entities** from the left pane, and click **New** in the subsequent screen (not shown) to add a new SIP entity for Communication Manager. Note that this SIP entity is used for integration with Infinity.

The **SIP Entity Details** screen is displayed. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Name:** A descriptive name.
- **FQDN or IP Address:** The IP address of an existing CLAN or the processor interface.
- **Type:** “CM”
- **Notes:** Any descriptive notes.
- **Adaptation:** Select the applicable adaptation for Communication Manager.
- **Location:** Select the applicable location for Communication Manager.
- **Time Zone:** Select the applicable time zone.

AVAYA Avaya Aura® System Manager 6.3 Last Logged on at August 29, 2013 10:03 AM
[Help](#) | [About](#) | [Change Password](#) | [Log off admin](#)

Routing * **Home**

Routing | Domains | Locations | Adaptations | **SIP Entities** | Entity Links | Time Ranges | Routing Policies | Dial Patterns | Regular Expressions | Defaults

Home / Elements / Routing / SIP Entities Help ?

SIP Entity Details Commit Cancel

General

* **Name:** BR110-G430-5052

* **FQDN or IP Address:** 10.32.39.83

Type: CM

Notes: G430 Port 5052 (Infinity)

Adaptation: BR110-G430-Adaptation

Location: BR-1C110

Time Zone: America/New_York

Override Port & Transport with DNS SRV: ☐

* **SIP Timer B/F (in seconds):** 4

Credential name:

Call Detail Recording: none

Loop Detection

Loop Detection Mode: Off

SIP Link Monitoring

SIP Link Monitoring: Use Session Manager Configuration

Supports Call Admission Control: ☐

Shared Bandwidth Manager: ☐

Primary Session Manager Bandwidth Association:

Backup Session Manager Bandwidth Association:

Entity Links

6.5. Administer Entity Links

Add two new entity links, one for Infinity and one for Communication Manager.

6.5.1. Entity Link for Infinity

Select **Routing** → **Entity Links** from the left pane, and click **New** in the subsequent screen (not shown) to add a new entity link for IPC. The **Entity Links** screen is displayed. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Name:** A descriptive name.
- **SIP Entity 1:** The Session Manager entity name, in this case “BR110-SMH”.
- **Protocol:** “UDP”
- **Port:** “5060”
- **SIP Entity 2:** The Infinity entity name from **Section 6.4.1**.
- **Port:** “5060”
- **Connection Policy:** “trusted”

The screenshot shows the Avaya Aura System Manager 6.3 interface. The top navigation bar includes the Avaya logo, the title "Avaya Aura® System Manager 6.3", and a user status bar indicating "Last Logged on at August 29, 2013 10:03 AM" with links for "Help", "About", "Change Password", and "Log off admin". The left sidebar contains a tree view with "Routing" expanded, showing sub-items like Domains, Locations, Adaptations, SIP Entities, Entity Links (highlighted), Time Ranges, Routing Policies, Dial Patterns, Regular Expressions, and Defaults. The main content area is titled "Entity Links" and includes a breadcrumb trail "Home / Elements / Routing / Entity Links". It features a table with one item, "BR110-SMH2Infinity", and a "Filter: Enable" option. The table columns are Name, SIP Entity 1, Protocol, Port, SIP Entity 2, Port, Connection Policy, and Deny New Service. The values for the first row are: Name: BR110-SMH2Infinity, SIP Entity 1: BR110-SMH, Protocol: UDP, Port: 5060, SIP Entity 2: Infinity, Port: 5060, Connection Policy: trusted, and Deny New Service: unchecked. There are "Commit" and "Cancel" buttons at the top right and bottom right of the table area.

	Name	SIP Entity 1	Protocol	Port	SIP Entity 2	Port	Connection Policy	Deny New Service
<input type="checkbox"/>	*BR110-SMH2Infinity	*BR110-SMH	UDP	*5060	*Infinity	*5060	trusted	<input type="checkbox"/>

6.5.2. Entity Link for Communication Manager

Select **Routing** → **Entity Links** from the left pane, and click **New** in the subsequent screen (not shown) to add a new entity link for Communication Manager. The **Entity Links** screen is displayed. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Name:** A descriptive name.
- **SIP Entity 1:** The Session Manager entity name, in this case “BR110-SMH”.
- **Protocol:** The signaling group transport method from **Section 5.4**.
- **Port:** The signaling group listen port number from **Section 5.4**.
- **SIP Entity 2:** The Communication Manager entity name from **Section 6.4.2**.
- **Port:** The signaling group listen port number from **Section 5.4**.
- **Connection Policy:** “trusted”

Avaya Aura® System Manager 6.3

Last Logged on at August 29, 2013 10:03 AM
Help | About | Change Password | Log off admin

Routing x Home

Home / Elements / Routing / Entity Links

Entity Links

Commit Cancel

1 Item Refresh Filter: Enable

<input type="checkbox"/>	Name	SIP Entity 1	Protocol	Port	SIP Entity 2	Port	Connection Policy	Deny New Service
<input type="checkbox"/>	*BR110-SMH2G430-5052	*BR110-SMH	TCP	*5052	*BR110-G430-5052	*5052	trusted	<input type="checkbox"/>

Select : All, None

Commit Cancel

6.6. Administer Routing Policies

Add two new routing policies, one for Infinity and one for Communication Manager.

6.6.1. Routing Policy for Infinity

Select **Routing** → **Routing Policies** from the left pane, and click **New** in the subsequent screen (not shown) to add a new routing policy for Infinity.

The **Routing Policy Details** screen is displayed. In the **General** sub-section, enter a descriptive **Name**.

In the **SIP Entity as Destination** sub-section, click **Select** and select the Infinity entity name from **Section 6.4.1** in the listing (not shown).

Retain the default values in the remaining fields.

Avaya Aura® System Manager 6.3

Last Logged on at August 29, 2013 10:03 AM
Help | About | Change Password | Log off admin

Routing × Home

Home / Elements / Routing / Routing Policies

Routing Policy Details

Commit Cancel

Help ?

General

* Name: To-Infinity

Disabled: ☐

* Retries: 0

Notes:

SIP Entity as Destination

Select

Name	FQDN or IP Address	Type	Notes
Infinity	10.32.39.130	Other	Amtelco Infinity

Time of Day

Add Remove View Gaps/Overlaps

1 Item Refresh Filter: Enable

Ranking	Name	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Start Time	End Time	Notes
0	24/7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	00:00	23:59	Time Range 24/7

Select : All, None

6.6.2. Routing Policy for Communication Manager

Select **Routing** → **Routing Policies** from the left pane, and click **New** in the subsequent screen (not shown) to add a new routing policy for Communication Manager.

The **Routing Policy Details** screen is displayed. In the **General** sub-section, enter a descriptive **Name**.

In the **SIP Entity as Destination** sub-section, click **Select** and select the Communication Manager entity name from **Section 6.4.2** in the listing (not shown).

Retain the default values in the remaining fields.

Avaya Aura® System Manager 6.3

Last Logged on at August 29, 2013 10:03 AM
Help | About | Change Password | Log off admin

Routing * Home

Home / Elements / Routing / Routing Policies

Routing Policy Details

Commit Cancel

General

* Name: To-BR110-G430-5052

Disabled: ☐

* Retries: 0

Notes:

SIP Entity as Destination

Select

Name	FQDN or IP Address	Type	Notes
BR110-G430-5052	10.32.39.83	CM	G430 Port 5052 (Infinity)

Time of Day

Add Remove View Gaps/Overlaps

1 Item Refresh Filter: Enable

Ranking	Name	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Start Time	End Time	Notes
<input type="checkbox"/> 0	24/7	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	00:00	23:59	Time Range 24/7

Select : All, None

6.7. Administer Dial Patterns

Add a new dial pattern for Infinity, and update the existing dial pattern for Communication Manager.

6.7.1. Dial Pattern for Infinity

Select **Routing** → **Dial Patterns** from the left pane, and click **New** in the subsequent screen (not shown) to add a new dial pattern to reach Infinity. The **Dial Pattern Details** screen is displayed. In the **General** sub-section, enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Pattern:** A dial pattern to match.
- **Min:** The minimum number of digits to be matched.
- **Max:** The maximum number of digits to be matched.
- **SIP Domain:** The signaling group domain name from **Section 5.4**.
- **Notes:** Any desired description.

In the **Originating Locations and Routing Policies** sub-section, click **Add** and create a new policy for reaching Infinity. In the compliance testing, the policy allowed for call origination from the Communication Manager location “BR-1C110”, and the Infinity routing policy from **Section 6.6.1** was selected as shown below.

Avaya Aura® System Manager 6.3

Last Logged on at August 29, 2013 10:03 AM
Help | About | Change Password | Log off admin

Routing * Home

Home / Elements / Routing / Dial Patterns

Dial Pattern Details

Commit Cancel

General

* Pattern: 52

* Min: 5

* Max: 5

Emergency Call: ☐

Emergency Priority: 1

Emergency Type:

SIP Domain: br110.com

Notes: Amtelco Infinity

Originating Locations and Routing Policies

Add Remove

1 Item Refresh

	Originating Location Name	Originating Location Notes	Routing Policy Name	Rank	Routing Policy Disabled	Routing Policy Destination	Routing Policy Notes
<input type="checkbox"/>	BR-1C110		To-Infinity	0	<input type="checkbox"/>	Infinity	

Select : All, None

6.7.2. Dial Pattern for Communication Manager

Select **Routing** → **Dial Patterns** from the left pane, and click on the existing dial pattern for Communication Manager in the subsequent screen, in this case dial pattern “4” (not shown). The **Dial Pattern Details** screen is displayed.

In the **Originating Locations and Routing Policies** sub-section, click **Add** and create a new policy as necessary for calls from Infinity. In the compliance testing, the new policy allowed for call origination from the Infinity location from **Section 6.2**, and the Communication Manager routing policy from **Section 6.6.2** was selected as shown below. Retain the default values in the remaining fields.

Follow the procedures in this section to make similar changes to the applicable Communication Manager dial pattern to reach the PSTN.

The screenshot shows the Avaya Aura System Manager 6.3 interface. The left navigation pane is expanded to 'Routing', and 'Dial Patterns' is selected. The main content area is titled 'Dial Pattern Details' and includes a 'General' tab. The 'General' tab contains the following fields:

- * Pattern: 4
- * Min: 5
- * Max: 5
- Emergency Call: ☐
- Emergency Priority: 1
- Emergency Type:
- SIP Domain: br110.com
- Notes:

Below the 'General' tab is the 'Originating Locations and Routing Policies' section. It includes an 'Add' button and a 'Remove' button. Below these buttons is a table with 2 items. The table has the following columns: 'Originating Location Name', 'Originating Location Notes', 'Routing Policy Name', 'Rank', 'Routing Policy Disabled', 'Routing Policy Destination', and 'Routing Policy Notes'. The table contains two rows of data:

Originating Location Name	Originating Location Notes	Routing Policy Name	Rank	Routing Policy Disabled	Routing Policy Destination	Routing Policy Notes
BR-1C110		To-BR110-G430	0	<input type="checkbox"/>	BR110-G430	
Infinity-Loc	Amtelco Infinity	To-BR110-G430-5052	0	<input type="checkbox"/>	BR110-G430-5052	

At the bottom of the table, there is a 'Select' dropdown menu with the value 'All, None'.

7. Configure Amtelco Infinity Intelligent SIP Attendant Console

This section provides the procedures for configuring Infinity. The procedures include the following areas:

- Launch Infinity Supervisor
- Administer billing number and board settings
- Administer SIP route
- Administer clients
- Administer system settings

7.1. Launch Infinity Supervisor

From a PC running the Amtelco Infinity Supervisor application, select **Start → All Programs → AMTELCO → Infinity Supervisor** to display the **Infinity Supervisor Login** screen below.

Upon initial log in, prior to entering the credentials, press the **Ctrl** and **F12** key.



The screenshot shows a Windows-style dialog box titled "Infinity Supervisor v5.60.0020 Login". The dialog has a blue title bar and a light beige background. Inside, there is a yellow key icon to the left of the text "Please enter your Infinity Supervisor name and password." Below this text are two input fields: "Login name:" and "Password:". At the bottom of the dialog are three buttons: "Login", "Quit", and "Help".

The **Setup Control Panel** screen is displayed. For **Server Name**, enter the IP address of the Infinity server that interfaces with attendants, in this case “20.32.39.130”. Retain the default values in the remaining fields.

The **Infinity Supervisor Login** screen shown earlier is displayed again. Log in using the appropriate credentials.

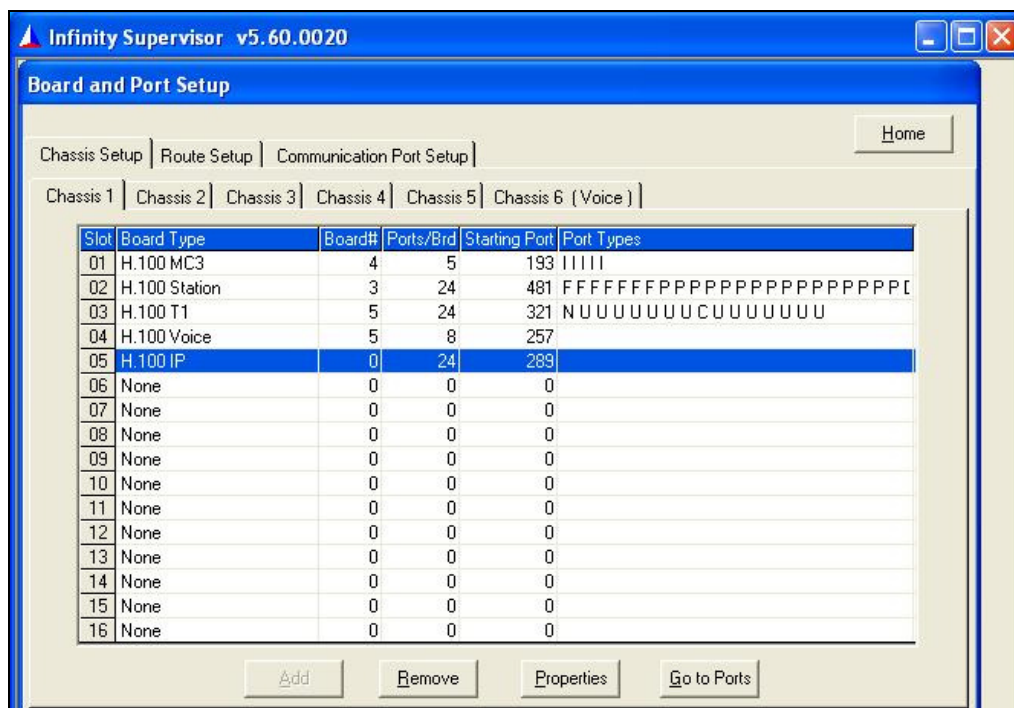
The screenshot shows the 'Setup Control Panel' dialog box with a blue title bar. It contains several tabs: 'Capture', 'Network', 'Options', 'File Locations', and 'About'. The 'Network' tab is selected. Inside the dialog, there are several configuration fields: 'Adapter' is set to '0' with a dropdown arrow; 'Network Type' is set to 'TCP/IP' with a dropdown arrow; 'Server Name' is '20.32.39.130' and 'Port' is '5010' (with a note '(Base Port + Strn#)'); 'Client Name' is empty and 'Port' is '0'; 'Op See Port' is '1000'. A checkbox labeled 'Replace permanent settings by writing these values to registry' is checked, with the registry path 'HKEY_LOCAL_MACHINE\Software\Amtelco\Inf5xSupervisor\0000' displayed below it. An 'Advanced' button is located at the bottom left of the main content area. At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

7.2. Administer Billing Number and Board Settings

The **Infinity Supervisor** screen is displayed next. Select **BOARDS and PORTS**.



The **Board and Port Setup** screen pops up. Select the **H.100 IP** entry, and click **Properties**.



The **Board Properties** screen pops up next. For **Billing#**, enter the applicable number to use for outbound calls for billing purposes, and click **More**.

Infinity Supervisor v5.60.0020

Board Properties

Existing Board: H.100 IP Chassis: 01 Slot: 05 Port Range: 0001 to 0257

Step 1: Board Type:

Select the type of board for the above chassis and slot from the list of boards below. You can use the filter buttons to only display boards of a particular type.

H.100 IP Filter for: ☒ All ☐ MVIP ☐ APiB ☐ Voice

Step 2: Board Properties

Brd ID: 0 Each board must be assigned a unique hardware number that matches the physical switch setting made on the board itself. (Range: 0-15)

Ports/Board: 24 Select the number of ports for this board. The list reflects the possible setting for this type of board.

Starting Port #: 289 Select a starting port for this board. For a map of ports for this chassis press the "... " button. The map shows all ports and their current usage.

Billing#: 9088452000

More >> H.100 IP parameter settings

The **Board Properties** screen is updated with the **H.100 IP Board Settings** sub-section. For **Port**, enter “32768”. Enter the pertinent network information for the remaining fields.

Infinity Supervisor v5.60.0020

Board Properties

Existing Board: H.100 IP Chassis: 01 Slot: 05 Port Range: 0001 to 0257

Step 1: Board Type:

Select the type of board for the above chassis and slot from the list of boards below. You can use the filter buttons to only display boards of a particular type.

H.100 IP Filter for: ☒ All ☐ MVIP ☐ APiB ☐ Voice

Step 2: Board Properties

Brd ID: 0

Ports/Board: 24

Starting Port #: 289

Billing#: 9088452000

More >>

H.100 IP Board Settings

Port: 32768

IP Address: 20.32.39.135

Mask: 255.255.255.0

Gateway: 20.32.39.1

DNS: 0.0.0.0

7.3. Administer SIP Route

The **Board and Port Setup** screen is displayed next. Select the **Route Setup** → **SIP** tab, followed by the **General** sub-tab.

Under **Options**, check **Send Options for Register**.

For **Register Time**, enter a desired interval for the Options message.

Infinity Supervisor v5.60.0020

Board and Port Setup

Chassis Setup | Route Setup | Communication Port Setup

Properties | Port Selection | Options | SIP

Route List

Name	Rte
SIPout	R0
	R1
	R2
	R3
	R4
	R5
	R6
	R7
DO NOT USE/P	R8
	R9
	R10
	R11
	R12
	R13
	R14

Edit Route Name

Save Undo

General Domains

SIP User Authentication

User: Password:

Miscellaneous Options

Register Time: 30 DNS:

☐ No Alert
☒ Send Options for Register
☐ Assert

Select the **Domains** sub-tab. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **To Domain:** IP address of the Session Manager signaling interface.
- **From Domain:** IP address of the IP board from **Section 7.2**.
- **Contact Domain:** IP address of the IP board from **Section 7.2**.
- **URI Port:** Infinity SIP entity port number from **Section 6.5.1**.
- **URI Domain:** IP address of the Session Manager signaling interface.

Infinity Supervisor v5.60.0020

Board and Port Setup

Chassis Setup | Route Setup | Communication Port Setup | Home

Properties | Port Selection | Options | SIP

Route List

Name	Rte
SIPout	R0
	R1
	R2
	R3
	R4
	R5
	R6
	R7
DO NOT USE/P	R8
	R9
	R10
	R11
	R12
	R13
	R14

Edit Route Name

Save Undo

General Domains

To
Number: Domain: 10.32.39.78

From
Number: Domain: 10.32.39.135

Contact
Number: Domain: 10.32.39.135

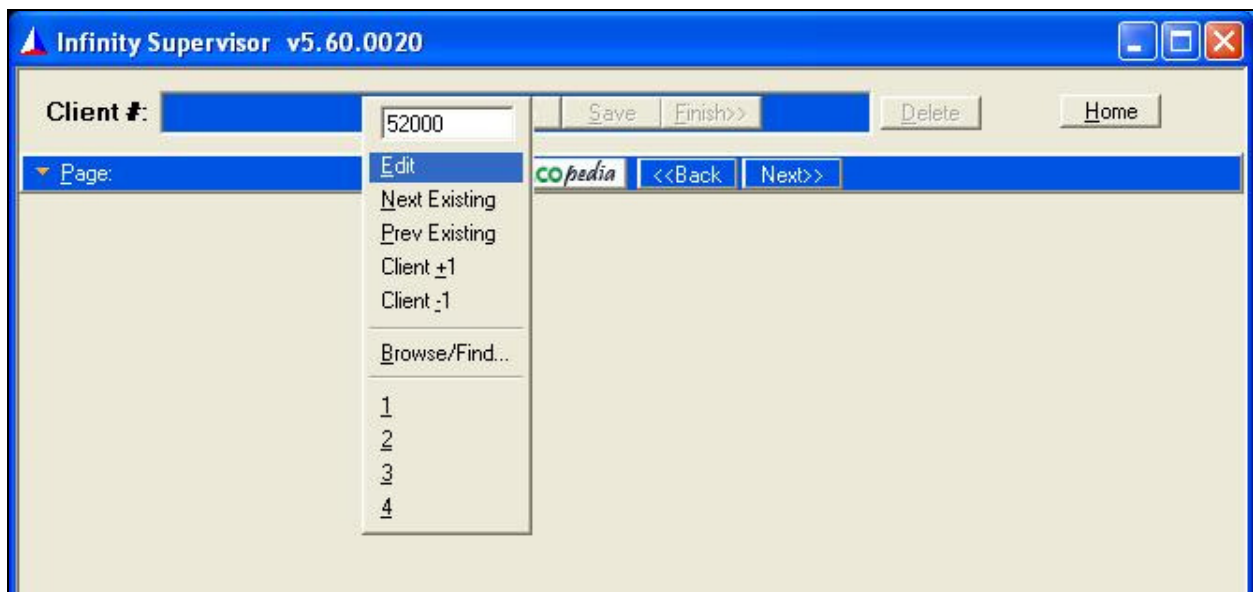
URI
Port: 5060 Default Domain: 10.32.39.78

7.4. Administer Clients

From the **Infinity Supervisor** screen shown below, select **CLIENT**.



The screen below is displayed. Enter an available client number, in this case "52000". Confirm adding a new client in the next pop-up dialog box (not shown).



The screen is updated as shown below. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Name:** Name to display to the attendant when answering calls to this client.
- **Answer Phrase:** Guidance phrase for what to say when answering calls to this client.
- **Source ID:** The phone number identification for this client.

Repeat this section to administer all needed clients. In this compliance testing, calls from the PSTN will be routed with digits 52000 to Infinity, and calls from internal users on Communication Manager will be routed with digits 52222 to Infinity. Therefore two clients were created.

The screenshot displays the 'Infinity Supervisor v5.60.0020' application window. At the top, the 'Client #' is set to '52000'. Below this, there are buttons for 'Edit', 'Copy', 'Save', 'Finish>>', a timer showing '00:02:48', 'Delete', and 'Home'. The main menu bar includes 'Page: General Information', the 'amtelco.pedia' logo, '<<Back' and 'Next>>' buttons, and the system time '11:36A 5/21/2013 SYS'.

The 'General Info' section contains the following fields and options:

- Name:** 'Infinity for External' (with a tooltip: 'The name of the client. It is displayed along with the client number on the operator screen call line.')
- Answer Phrase:** 'This is Amtelco Infinity, how may I redirect your call' (with a tooltip: 'Enter what should be said when answering calls for this client.' and a link to 'More answer phrase options').
- Billing Number:** '0' (with a tooltip: 'A number used for billing purposes that may be different than the client number.')
- PBX Setup** (a link).
- ☐ **This Client is a Template?** (with a tooltip: 'Client templates can only be edited by Supervisors with permission.')

The 'Client Identity' section contains the following fields and options:

- Source:** A dropdown menu set to 'ID' and a text field containing '52000' (with a link to 'Make Inactive').
- Secondary Sources:** A grid of five text fields labeled '2)', '3)', '4)', and '5)'.

The 'Client's Status' section contains the following field and options:

- Current Status:** 'No Status' (with a tooltip: 'Client's current status (read only - set by client or oper)').

7.5. Administer System Settings

From the **Infinity Supervisor** screen shown below, select **SYSTEM SETTINGS**.



The screen below is displayed. For **Window**, select **System Options** from the drop-down list.

Select the **Telephony** tab, and enter a valid account number for **Reg. Account**.

Reboot the Infinity server.

The screenshot shows the 'Infinity Supervisor v5.60.0020' application window. The title bar includes the application name and version. Below the title bar is a 'Window:' dropdown menu set to 'System Options' and a 'Home' button. A tabbed interface at the top shows 'Calls', 'Op / Station', 'Telephony' (selected), 'Voice Mail', 'Peripherals', 'Purge/Backup', 'Reports / Printouts', and 'MSM'. The 'Telephony' tab contains several configuration fields with descriptions:

- Direct SMDI:** A dropdown menu set to 'Called'. Description: 'Select the SMDI line interface between Infinity and the PBX.'
- Direct VBPC:** A dropdown menu set to 'Called'. Description: 'Select the VBPC line interface between Infinity and the PBX.'
- Default Music Port:** A text box containing '264'. Description: 'Select the default port to be used for Music on Hold and for Auto-Answer Music.'
- Off Hook Time:** A text box containing '800' followed by 'ms'. Description: 'Set how long to wait after sensing an off-hook to ensure it really is an off-hook.'
- Flash Hook Time:** A text box containing '0' followed by 'ms'. Description: 'Set the duration of the flash-hook.'
- Flash Hook Delay:** A text box containing '0' followed by 'ms'. Description: 'Set the length of time to wait after a flash-hook before continuing.'
- Flash Guard Time:** A text box containing '0' followed by 'ms'. Description: 'Set flash guard time.'
- Dialout Guard Time:** A text box containing '0' followed by 'ms'. Description: 'Set dialout guard time.'
- QSIG Timeout:** A text box containing '0' followed by 'ms'. Description: 'Set QSIG path replacement timeout.'
- Reg. Account:** A text box containing '1'. Description: 'SIP Registration account.'

Below these fields are two sections with dashed lines:

- XDS & Voice Ports**
 - Run in ALAW?** A checkbox. Description: 'Check for E1 (European) ISDN. (Requires a restart to enable)'
- Digital Ports**
 - Display Names?** A checkbox. Description: 'Use a disk file to fill the Calling, Called, and Reason fields.'
 - Display Sources?** A checkbox. Description: 'Parses the digital phone display to fill in the Called and Calling fields.'

8. Verification Steps

This section provides tests that can be performed to verify proper configuration of Communication Manager, Session Manager, and Infinity.

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 **Section 5.3**. Verify that all trunks are in the “in-service/idle” state as shown below.

```
status trunk 52
```

TRUNK GROUP STATUS			
Member	Port	Service State	Mtce Connected Ports Busy
0052/001	T00011	in-service/idle	no
0052/002	T00012	in-service/idle	no
0052/003	T00013	in-service/idle	no
0052/004	T00014	in-service/idle	no
0052/005	T00015	in-service/idle	no
0052/006	T00016	in-service/idle	no
0052/007	T00017	in-service/idle	no
0052/008	T00018	in-service/idle	no
0052/009	T00019	in-service/idle	no
0052/010	T00020	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 **Section 5.4**. Verify that the signaling group is “in-service” as indicated in the **Group State** field shown below.

```
status signaling-group 52
```

STATUS SIGNALING GROUP	
Group ID:	52
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 the Infinity entity name from **Section 6.4.1**.

AVAYA Avaya Aura® System Manager 6.3

Last Logged on at August 29, 2013 5:33 PM
Help | About | Change Password | Log off admin

Session Manager x Home

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

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

4 Items | Refresh Filter: Enable

Session Manager	Type	Monitored Entities					Deny	Total
		Down	Partially Up	Up	Not Monitored			
<input type="checkbox"/> BR110-SM	Core	0	0	3	0	0	3	
<input type="checkbox"/> BR110-SMH	Core	0	0	3	0	0	3	

Select: All, None

All Monitored SIP Entities

Run Monitor

21 Items | Refresh Filter: Enable

SIP Entity Name
<input type="checkbox"/> BR110-G430-5052
<input checked="" type="checkbox"/> Infinity

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 August 29, 2013 5:33 PM
Help | About | Change Password | Log off admin

Session Manager x Home

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

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: Infinity

Summary View

Status Details for the selected Session Manager:

1 Items | Refresh Filter: Enable

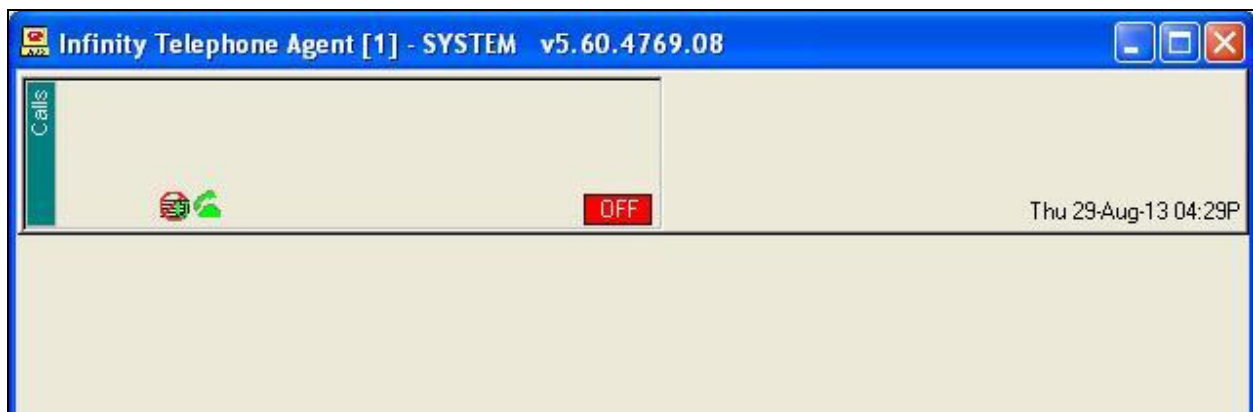
Session Manager Name	SIP Entity Resolved IP	Port	Proto.	Deny	Conn. Status	Reason Code	Link Status
<input checked="" type="radio"/> BR110-SMH	20.32.39.135	5060	UDP	FALSE	UP	200 OK	UP

8.3. Verify Infinity Intelligent SIP Attendant Console

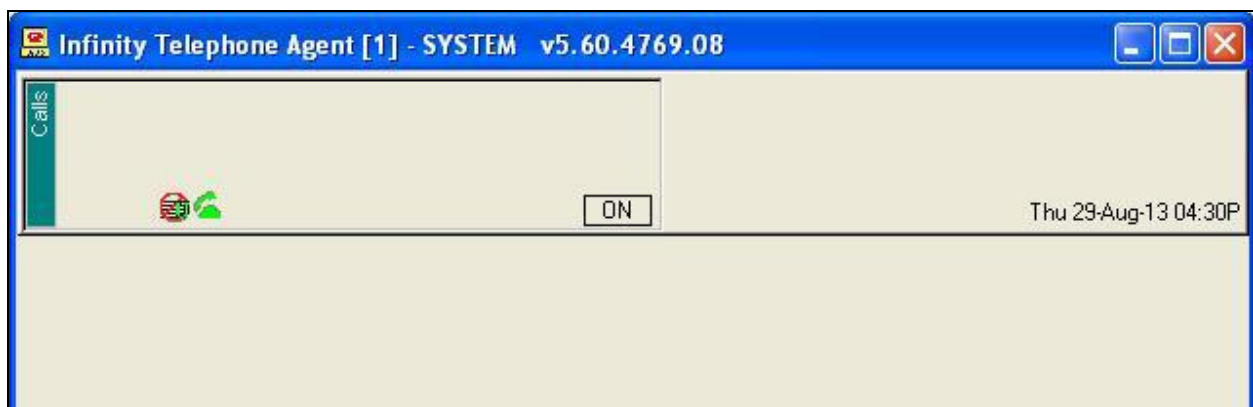
From an attendant PC running the Amtelco Infinity Telephone Agent application, select **Start → All Programs → AMTELCO → Infinity Telephone Agent** to display the **Infinity Telephone Agent** screen below. Log in using the appropriate credentials.



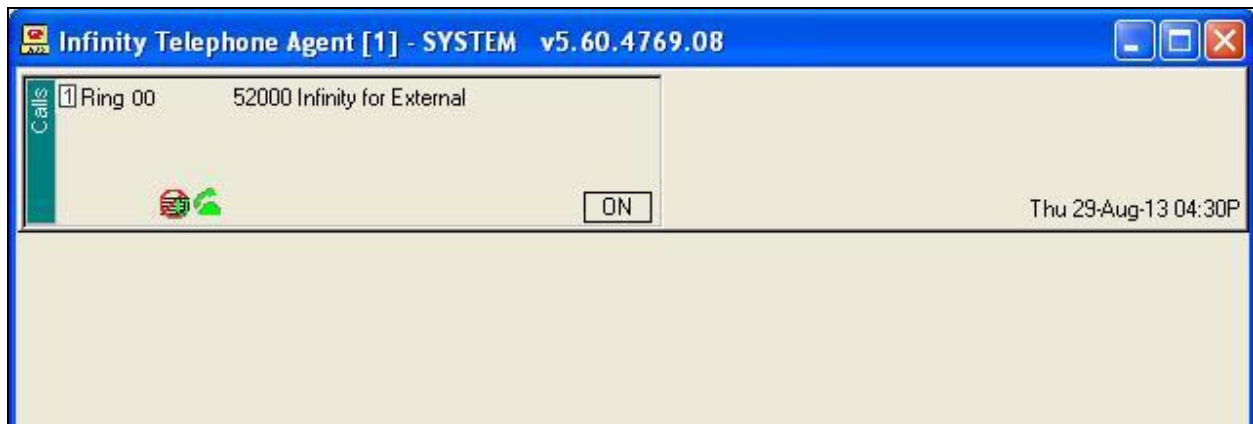
The screen below is displayed next. Click **OFF** to toggle into available.



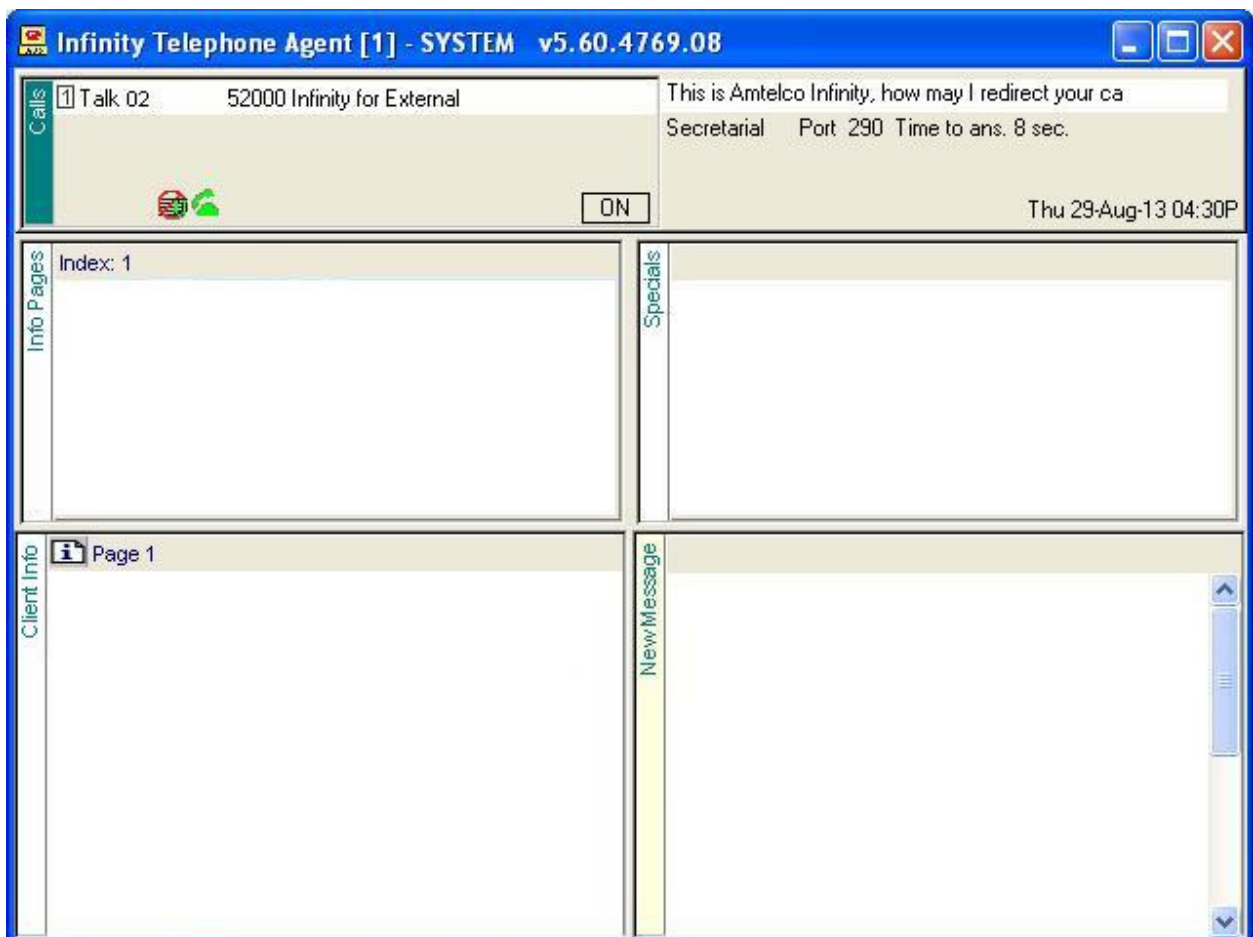
Verify the status is updated to **ON**, as shown below.



Make an incoming call from the PSTN to reach Infinity. Verify that an available attendant hears the alerting tone, and that the attendant screen is updated showing the alerting call. Also verify that the display information reflects the proper client ID and name from **Section 7.4**.



Press **F1** to answer the call. Verify that the attendant is connected to the PSTN with two-way talk paths, and that the screen is updated with the proper guidance phrase from **Section 7.4**.



9. Conclusion

These Application Notes describe the configuration steps required for Amtelco Infinity Intelligent SIP Attendant Console to successfully interoperate with 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*, Document 03-300509, Issue 8, Release 6.3, May 2013, available at <http://support.avaya.com>.
2. *Administering Avaya Aura® Session Manager*, Release 6.3, June 2013, available at <http://support.avaya.com>.
3. *Administering Avaya Aura® System Manager*, Release 6.3, May 2013, available at <http://support.avaya.com>.
4. *Infinity Supervisor Reference Guide*, Version 232M072, November 2012, available at <http://service.amtelco.com>.

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