



Avaya Solution & Interoperability Test Lab

Application Notes for Speakerbus iD808 *i* turret with Avaya SIP Enablement Services and Avaya Communication Manager - Issue 1.0

Abstract

These Application Notes describe the steps required to connect Speakerbus iD808 *i* turret to a SIP infrastructure consisting of Avaya SIP Enablement Services and Avaya Communication Manager. Also described is how Avaya Communication Manager features can be made available to the standard features supported in the iD808 deskstations. In this configuration, the Off-PBX Station (OPS) feature set is extended from Avaya Communication Manager to the Speakerbus iD808 *i* turret, providing the iD808 deskstations with enhanced calling features.

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 steps required to connect Speakerbus iD808 *i* turret to a SIP infrastructure consisting of Avaya SIP Enablement Services (SES) server and Avaya S8730 Servers with G650 Media Gateway running Avaya Communication Manager. Also described is how Avaya Communication Manager features can be made available in addition to the standard features supported in the *i* turret. In this configuration, the Off-PBX Stations (OPS) feature set is extended from Avaya Communication Manager to the Speakerbus iD808 *i* turret¹, providing the iD808 deskstation with enhanced calling features. The configuration steps described are also applicable to other Linux-based Avaya Servers and Media Gateways running Avaya Communication Manager.

The following table provides a summary of the supported features available on the *i* turret with the Avaya SIP offer. Some features are supported locally in the *i* turret, while others are only available with Avaya SIP Enablement Services and Avaya Communication Manager with OPS. In addition to basic calling capabilities, the Internet Engineering Task Force (IETF) has defined a supplementary set of calling features, often referred to as the SIPPING-19 [7]. This provides a useful framework to describe product capabilities and compare features supported by various equipment vendors. Additional features beyond the SIPPING-19 can be extended to the *i* turret using OPS.

Some OPS features listed in the following table can be invoked by dialing a Feature Name Extension (FNE). A speed dial button on the *i* turret can also be programmed to an FNE. Avaya Communication Manager automatically handles many other standard features via OPS, such as call coverage, trunk selection using Automatic Alternate Routing (AAR) and Automatic Route Selection (ARS), Class Of Service/Class Of Restriction (COS/COR), and voice messaging. Details on operation and administration of OPS can be found in References [2] [3]. The Avaya SIP solution requires all SIP telephones to be configured in Avaya Communication Manager as OPS.

¹ In these Application Notes, *i turret* and *iD808 deskstation* will be used interchangeably to refer to the Speakerbus iD808 *i* turret.

| FEATURE | Supported | | COMMENTS |
|--|----------------------|----------------------|--|
| | Locally at the Phone | With Avaya SIP Offer | |
| Basic Calling Features | | | |
| Extension to Extension Call | Yes | Yes | |
| Basic Call to legacy phones | No | Yes | |
| Speed Dial Buttons | Yes | Yes | |
| Message Waiting Support | Yes | Yes | |
| SIPPING-19 Features | | | |
| Call Hold | Yes | Yes | |
| Consultation Hold | Yes | Yes | |
| Unattended Transfer | Yes | Yes | |
| Attended Transfer | Yes | Yes | |
| Call Forward All | Yes | Yes | Local admin or OPS FNE |
| Call Forward Busy/No Answer | Yes | Yes | Local admin or OPS FNE |
| Call Forward Cancel | Yes | Yes | Local admin or OPS FNE |
| 3-way conferencing – 3 rd party added | Yes | Yes | |
| 3-way conferencing – 3 rd party joins | Yes | Yes | |
| Find-Me | No | Yes | Via OPS Coverage Paths |
| Incoming Call Screening | No | Yes | Via OPS Class Of Restriction |
| Outgoing Call Screening | No | Yes | Via OPS Class Of Restriction |
| Call Park/Unpark | No | Yes | Via OPS FNE |
| Call Pickup | No | Yes | Via OPS FNE |
| Automatic Redial | No | Yes | Via OPS FNE |
| OPS– Selected Additional Station-Side Features | | | |
| Automatic Call Back | No | Yes | Via OPS FNE |
| Automatic Call-Back Cancel | No | Yes | Via OPS FNE |
| Conference on Answer | No | Yes | Via OPS FNE |
| Directed Call Pick-Up | No | Yes | Via OPS FNE |
| Drop Last Added Party | No | Yes | Via OPS FNE |
| Exclusion/Privacy | Yes | Yes | Via OPS FNE, Local hard key on <i>i</i> turret |
| Last Number Dialed | Yes | Yes | Via OPS FNE |
| Priority Call | Yes | Yes | Via OPS FNE, <i>i</i> turret does not support distinctive ring indication; also local at phone |
| Send All Calls | No | Yes | Via OPS FNE |
| Send All Calls Cancel | No | Yes | Via OPS FNE |
| Transfer to Voice Mail | No | Yes | Via OPS FNE |
| Whisper Page | No | Yes | Via OPS FNE |

Table 1: SIP Features Table

The configuration used as an example in these Application Notes is shown in **Figure 1**. The diagram illustrates an enterprise site with an Avaya SIP-based network, including Avaya SIP Enablement Services, a pair of Avaya S8730 Servers with a G650 Media Gateway running Avaya Communication Manager, and Avaya IP and digital endpoints. Avaya Modular Messaging provides voice mail service. The enterprise site also contains three Speakerbus iD808 *i* turret deskstations that register with Avaya SIP Enablement Services and are configured as OPS stations on Avaya Communication Manager. Avaya Communication Manager extends the telephony functionality that is supported by the SIP-based iD808 devices through the use of Feature Name Extensions (FNEs). The *i* cms server contains the *i* manager application for configuring the iD808 deskstations.

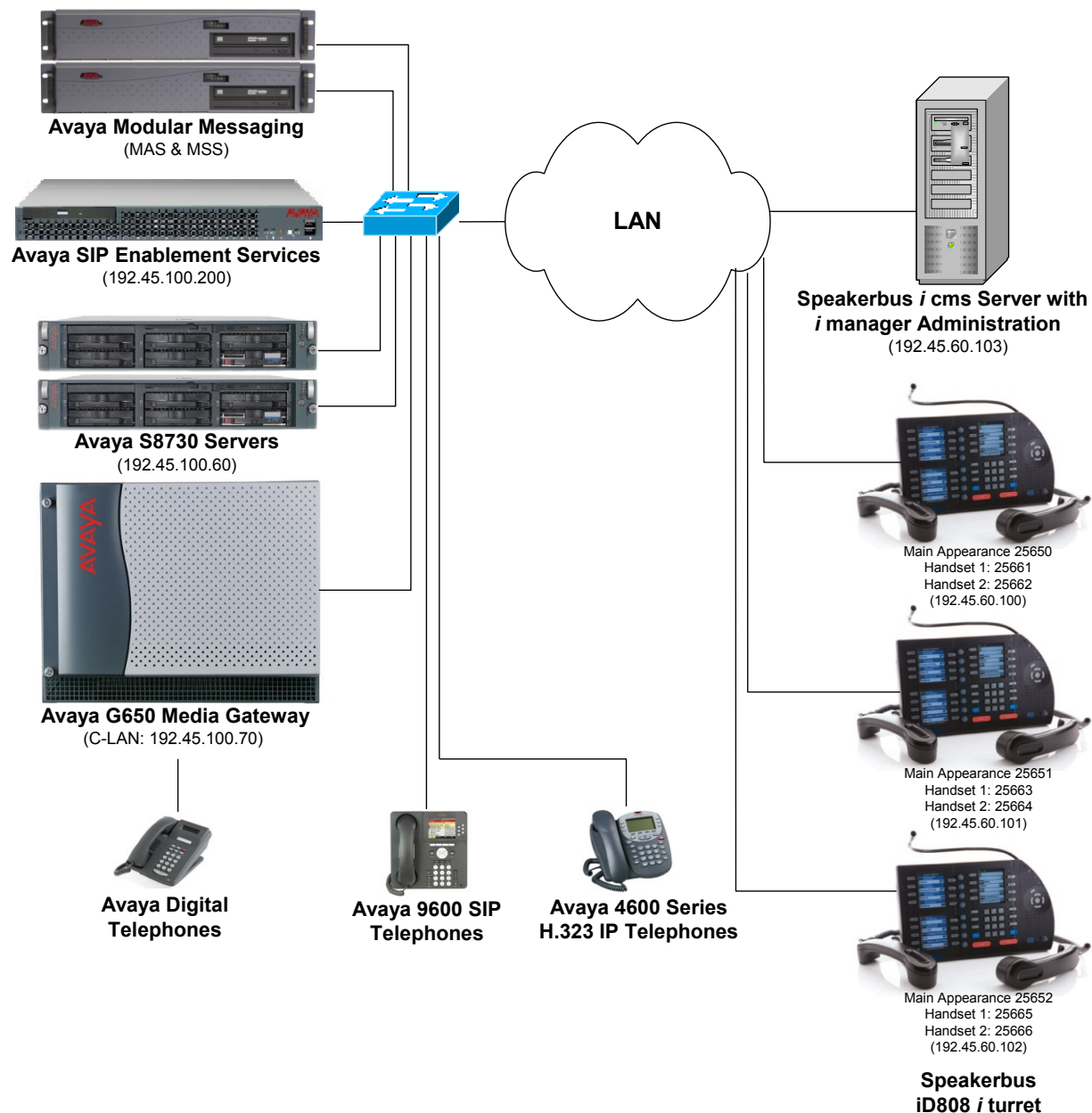


Figure 1: Speakerbus iD808 *i* turret with Avaya SIP Solution

2. Equipment and Software Validated

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

| Hardware Component | Version |
|---|--|
| Avaya S8730 Servers | Communication Manager 5.1.1 (R015x.01.1.415.1) with Service Pack 1 (Patch 16402) |
| Avaya G650 Media Gateway TN2302AP Media Processor | HW11 FW118 |
| Avaya SIP Enablement Services | 5.1 (SES-5.1.1.0-415.1) |
| Avaya Modular Messaging | 4.0 |
| Avaya 4600 Series IP Telephone | 2.8 (H.323) |
| Avaya 9600 Series IP Telephones | 2.0.5 (SIP) |
| Avaya Digital Telephones | -- |
| Speakerbus iD808 <i>i</i> turret | 1.0.14.0 |
| Speakerbus <i>i</i> cms Server with <i>i</i> manager Administration on Windows 2003 Server | 1.100.11.0 |

3. Configure Avaya Communication Manager

This section describes the steps for configuring the Speakerbus iD808 i turret as an Off-PBX Station (OPS), administering support for the OPS features indicated in **Table 1**, and configuring a SIP trunk between Avaya Communication Manager and Avaya SIP Enablement Services. For complete SIP documentation, see References [2] [3]. Use the System Access Terminal (SAT) to configure Avaya Communication Manager. Log in with the appropriate credentials.

3.1. Verify OPS and SIP Trunk Capacity

Using the SAT, verify that the Off-PBX Telephones (OPS) and SIP Trunks features are enabled on the **System-Parameters Customer-Options** form. The license file installed on the system controls these options. If a required feature is not enabled, contact an authorized Avaya sales representative. On Page 1, verify that the number of OPS stations allowed in the system is sufficient. One OPS station is required per iD808 device.

| | | | |
|---|----------------------------|-----------|-----------|
| display system-parameters customer-options | | Page | 1 of 11 |
| OPTIONAL FEATURES | | | |
| G3 Version: V15 | Software Package: Standard | | |
| Location: 1 | RFA System ID (SID): 1 | | |
| Platform: 6 | RFA Module ID (MID): 1 | | |
| | | USED | |
| Platform Maximum Ports: | | 48000 | 746 |
| Maximum Stations: | | 36000 | 258 |
| Maximum XMOBILE Stations: | | 0 | 0 |
| Maximum Off-PBX Telephones - EC500: | | 0 | 0 |
| Maximum Off-PBX Telephones - OPS: | | 50 | 33 |
| Maximum Off-PBX Telephones - PBFMC: | | 0 | 0 |
| Maximum Off-PBX Telephones - PVFMC: | | 0 | 0 |
| Maximum Off-PBX Telephones - SCCAN: | | 0 | 0 |
| (NOTE: You must logoff & login to effect the permission changes.) | | | |

On Page 2 of the **System-Parameters Customer-Options** form, verify that the number of SIP trunks supported by the system is sufficient.

| | | | |
|---|--|------------|-----------|
| display system-parameters customer-options | | Page | 2 of 11 |
| OPTIONAL FEATURES | | | |
| IP PORT CAPACITIES | | USED | |
| Maximum Administered H.323 Trunks: | | 5000 | 228 |
| Maximum Concurrently Registered IP Stations: | | 12000 | 6 |
| Maximum Administered Remote Office Trunks: | | 0 | 0 |
| Maximum Concurrently Registered Remote Office Stations: | | 0 | 0 |
| Maximum Concurrently Registered IP eCons: | | 0 | 0 |
| Max Concur Registered Unauthenticated H.323 Stations: | | 10 | 0 |
| Maximum Video Capable H.323 Stations: | | 0 | 0 |
| Maximum Video Capable IP Softphones: | | 0 | 0 |
| Maximum Administered SIP Trunks: | | 555 | 80 |
| Maximum Administered Ad-hoc Video Conferencing Ports: | | 0 | 0 |
| Maximum Number of DS1 Boards with Echo Cancellation: | | 0 | 0 |
| Maximum TN2501 VAL Boards: | | 128 | 1 |
| Maximum Media Gateway VAL Sources: | | 0 | 0 |
| Maximum TN2602 Boards with 80 VoIP Channels: | | 128 | 0 |
| Maximum TN2602 Boards with 320 VoIP Channels: | | 128 | 0 |
| Maximum Number of Expanded Meet-me Conference Ports: | | 0 | 0 |
| (NOTE: You must logoff & login to effect the permission changes.) | | | |

3.2. Define System Features

Use the **change system-parameters features** command to administer system wide features for SIP endpoints. Those related to features listed in **Table 1** are shown in bold. These are all standard Avaya Communication Manager features that are also available to OPS stations.

| | | |
|---|--------------------------------|---------|
| change system-parameters features | Page | 4 of 17 |
| FEATURE-RELATED SYSTEM PARAMETERS | | |
| Reserved Slots for Attendant Priority Queue: 5 | | |
| Time before Off-hook Alert: 10 | | |
| Emergency Access Redirection Extension: | | |
| Number of Emergency Calls Allowed in Attendant Queue: 5 | | |
| Maximum Number of Digits for Directed Group Call Pickup:4 | | |
| Call Pickup on Intercom Calls? y | Call Pickup Alerting? y | |
| Temporary Bridged Appearance on Call Pickup? y | Directed Call Pickup? y | |
| Extended Group Call Pickup: none | | |
| Deluxe Paging and Call Park Timeout to Originator? y | | |
| Controlled Outward Restriction Intercept Treatment: tone | | |
| Controlled Termination Restriction (Do Not Disturb): tone | | |
| Controlled Station to Station Restriction: tone | | |
| AUTHORIZATION CODE PARAMETERS | Authorization Codes Enabled? n | |
| Controlled Toll Restriction Replaces: none | | |

FEATURE-RELATED SYSTEM PARAMETERS

INTERCEPT TREATMENT PARAMETERS

Invalid Number Dialed Intercept Treatment: tone
 Invalid Number Dialed Display:
 Restricted Number Dialed Intercept Treatment: tone
 Restricted Number Dialed Display:
 Intercept Treatment On Failed Trunk Transfers? n

WHISPER PAGE

Whisper Page Tone Given To: all

6400/8400/2420J LINE APPEARANCE LED SETTINGS

Station Putting Call On Hold: green wink
 Station When Call is Active: steady
 Other Stations When Call Is Put On Hold: green wink
 Other Stations When Call Is Active: green
 Ringing: green flash
 Idle: steady
 Display Information With Bridged Call? n
 Pickup On Transfer? y

3.3. Define the Dial Plan

Use the **change dialplan analysis** command to define the dial plan formats used in the system. This includes all telephone extensions, OPS Feature Name Extensions (FNEs), and Feature Access Codes (FACs). To define the FNEs for the OPS features listed in **Table 1**, a Feature Access Code (FAC) must also be specified for the corresponding feature. In the sample configuration, telephone extensions are five digits long and begin with 2 and 3, FNEs are five digits beginning with 2, and the FACs have formats as indicated with **Call Type** “fac”.

DIAL PLAN ANALYSIS TABLE

Location: all

Percent Full: 1

| Dialed String | Total Length | Call Type | Dialed String | Total Length | Call Type | Dialed String | Total Length | Call Type |
|------------------|-----------------|--------------|------------------|-----------------|--------------|------------------|-----------------|--------------|
| 1 | 3 | dac | 773 | 5 | aar | | | |
| 2 | 4 | ext | 8 | 1 | fac | | | |
| 2 | 5 | ext | 9 | 1 | fac | | | |
| 3 | 5 | ext | * | 3 | fac | | | |
| 4 | 5 | ext | # | 3 | fac | | | |
| 5 | 5 | ext | | | | | | |
| 52 | 5 | aar | | | | | | |
| 54 | 5 | aar | | | | | | |
| 55 | 5 | aar | | | | | | |
| 57 | 5 | aar | | | | | | |
| 59 | 5 | aar | | | | | | |
| 6 | 4 | ext | | | | | | |
| 6 | 5 | ext | | | | | | |
| 7 | 5 | ext | | | | | | |
| 74 | 4 | aar | | | | | | |

3.4. Define Feature Access Codes (FACs)

Use change feature-access-codes to define the access codes for the OPS FNEs, shown in bold.

| | |
|---|-------------|
| change feature-access-codes | Page 1 of 8 |
| FEATURE ACCESS CODE (FAC) | |
| Abbreviated Dialing List1 Access Code: | |
| Abbreviated Dialing List2 Access Code: | |
| Abbreviated Dialing List3 Access Code: | *85 |
| Abbreviated Dial - Prgm Group List Access Code: | |
| Announcement Access Code: | *20 |
| Answer Back Access Code: | *35 |
| Attendant Access Code: | |
| Auto Alternate Routing (AAR) Access Code: | 8 |
| Auto Route Selection (ARS) - Access Code 1: | 9 |
| Automatic Callback Activation: | *21 |
| Call Forwarding Activation Busy/DA: | *24 |
| All: | *25 |
| Deactivation: | #25 |
| Call Forwarding Enhanced Status: | Act: |
| Call Park Access Code: | *33 |
| Call Pickup Access Code: | *34 |
| CAS Remote Hold/Answer Hold-Unhold Access Code: | |
| CDR Account Code Access Code: | |
| Change COR Access Code: | |
| Change Coverage Access Code: | |
| Contact Closure Open Code: | Close Code: |

| | |
|--|---------------|
| change feature-access-codes | Page 2 of 8 |
| FEATURE ACCESS CODE (FAC) | |
| Contact Closure Pulse Code: | |
| Data Origination Access Code: | |
| Data Privacy Access Code: | |
| Directed Call Pickup Access Code: | *42 |
| Directed Group Call Pickup Access Code: | |
| Emergency Access to Attendant Access Code: | |
| EC500 Self-Administration Access Codes: | |
| Enhanced EC500 Activation: | Deactivation: |
| Enterprise Mobility User Activation: | Deactivation: |
| Extended Call Fwd Activate Busy D/A All: | Deactivation: |
| Extended Group Call Pickup Access Code: | |
| Facility Test Calls Access Code: | |
| Flash Access Code: | |
| Group Control Restrict Activation: | Deactivation: |
| Hunt Group Busy Activation: | Deactivation: |
| ISDN Access Code: | |
| Last Number Dialed Access Code: | *40 |
| Leave Word Calling Message Retrieval Lock: | |
| Leave Word Calling Message Retrieval Unlock: | |

| | |
|--|--------------------------|
| change feature-access-codes | Page 3 of 8 |
| FEATURE ACCESS CODE (FAC) | |
| Leave Word Calling Send A Message: *10 | |
| Leave Word Calling Cancel A Message: #10 | |
| Limit Number of Concurrent Calls Activation: | Deactivation: |
| Malicious Call Trace Activation: | Deactivation: |
| Meet-me Conference Access Code Change: | |
| PASTE (Display PBX data on Phone) Access Code: | |
| Personal Station Access (PSA) Associate Code: | Dissociate Code: |
| Per Call CPN Blocking Code Access Code: *26 | |
| Per Call CPN Unblocking Code Access Code: #26 | |
| Priority Calling Access Code: 119 | |
| Program Access Code: | |
| Refresh Terminal Parameters Access Code: | |
| Remote Send All Calls Activation: | Deactivation: |
| Self Station Display Activation: | |
| Send All Calls Activation: 124 | Deactivation: 125 |
| Station Firmware Download Access Code: | |

| | |
|---|------------------|
| change feature-access-codes | Page 4 of 8 |
| FEATURE ACCESS CODE (FAC) | |
| Station Lock Activation: | Deactivation: |
| Station Security Code Change Access Code: | |
| Station User Admin of FBI Assign: | Remove: |
| Station User Button Ring Control Access Code: | |
| Terminal Dial-Up Test Access Code: | |
| Terminal Translation Initialization Merge Code: | Separation Code: |
| Transfer to Voice Mail Access Code: 167 | |
| Trunk Answer Any Station Access Code: | |
| User Control Restrict Activation: | Deactivation: |
| Voice Coverage Message Retrieval Access Code: | |
| Voice Principal Message Retrieval Access Code: | |
| Whisper Page Activation Access Code: *41 | |

3.5. Define Feature Name Extensions (FNEs)

The FNEs can be defined using the **change off-pbx-telephone feature-name-extensions** command.

```
change off-pbx-telephone feature-name-extensions set 1          Page 1 of 2
EXTENSIONS TO CALL WHICH ACTIVATE FEATURES BY NAME
Set Name: SIP Endpoint FNEs

Active Appearance Select: 25900
Automatic Call Back: 25901
Automatic Call-Back Cancel: 25902
Call Forward All: 25903
Call Forward Busy/No Answer: 25904
Call Forward Cancel: 25905
Call Park: 25906
Call Park Answer Back: 25907
Call Pick-Up: 25908
Calling Number Block: 25909
Calling Number Unblock: 25910
Conference on Answer: 25911
Directed Call Pick-Up: 25912
Drop Last Added Party: 25913
Exclusion (Toggle On/Off): 25914
Extended Group Call Pickup:
Held Appearance Select: 25916
```

```
change off-pbx-telephone feature-name-extensions set 1          Page 2 of 2
EXTENSIONS TO CALL WHICH ACTIVATE FEATURES BY NAME

Idle Appearance Select: 25917
Last Number Dialed: 25918
Malicious Call Trace:
Malicious Call Trace Cancel:
Off-Pbx Call Enable:
Off-Pbx Call Disable:
Priority Call: 25923
Send All Calls: 25924
Send All Calls Cancel: 25925
Transfer On Hang-Up: 25926
Transfer to Voice Mail: 25927
Whisper Page Activation: 25928
```

3.6. Specify Class of Service (COS)

Use the **change cos** command to set the appropriate service permissions to support OPS features (shown in bold). For the example, a COS of 1 was used. Priority call indication (e.g., distinctive ring) is not supported on the *i* turret when using the Priority FNE. However, the iD808 does support a distinctive-ring/alerting mechanism locally on the phone, not covered in testing.

| | | | | | | | | | | | | | | | | |
|-------------------------------|-------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| change cos | Page 1 of 2 | | | | | | | | | | | | | | | |
| CLASS OF SERVICE | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| Auto Callback | n | y | y | n | y | n | y | n | y | n | y | n | y | n | y | n |
| Call Fwd-All Calls | n | y | n | y | y | n | n | y | y | n | n | y | y | n | n | y |
| Data Privacy | n | n | n | n | n | y | y | y | y | n | n | n | n | y | y | y |
| Priority Calling | n | y | n | n | n | n | n | n | n | y | y | y | y | y | y | y |
| Console Permissions | y | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n |
| Off-hook Alert | y | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n |
| Client Room | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n |
| Restrict Call Fwd-Off Net | y | n | y | y | y | y | y | y | y | y | y | y | y | y | y | y |
| Call Forwarding Busy/DA | n | y | n | n | n | n | n | n | n | n | n | n | n | n | n | n |
| Personal Station Access (PSA) | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n |
| Extended Forwarding All | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n |
| Extended Forwarding B/DA | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n |
| Trk-to-Trk Transfer Override | y | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n |
| QSIG Call Offer Originations | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n |
| Contact Closure Activation | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n | n |

3.7. Specify Class of Restriction (COR)

Use the **change cor** command to enable applicable calling features. To use the Directed Call Pickup feature, the **Can Be Picked Up By Directed Call Pickup** and **Can Use Directed Call Pickup** fields must be set to “y” for the affected stations. In the sample configuration, the *i* turrets were assigned to COR 1. Note that Page 3 can be used to implement a form of centralized call screening for groups of stations and trunks.

| | | |
|---|--------------------------------------|--|
| change cor 1 | Page 1 of 23 | |
| CLASS OF RESTRICTION | | |
| COR Number: 1 | | |
| COR Description: | | |
| FRL: 7 | APLT? y | |
| Can Be Service Observed? y | Calling Party Restriction: none | |
| Can Be A Service Observer? y | Called Party Restriction: none | |
| Partitioned Group Number: 1 | Forced Entry of Account Codes? n | |
| Priority Queuing? n | Direct Agent Calling? y | |
| Restriction Override: all | Facility Access Trunk Test? n | |
| Restricted Call List? n | Can Change Coverage? n | |
| Access to MCT? y | Fully Restricted Service? n | |
| Group II Category For MFC: 7 | Hear VDN of Origin Annc.? n | |
| Send ANI for MFE? n | Add/Remove Agent Skills? n | |
| MF ANI Prefix: | Automatic Charge Display? n | |
| Hear System Music on Hold? y | PASTE (Display PBX Data on Phone)? n | |
| Can Be Picked Up By Directed Call Pickup? y | | |
| Can Use Directed Call Pickup? y | | |
| Group Controlled Restriction: inactive | | |

3.8. Add Coverage Path

Configure the coverage path to one used for the voice messaging hunt group, which is group “h90” in the sample configuration. The default values shown for **Busy**, **Don’t Answer**, and **DND/SAC/Goto Cover** can be used for the **Coverage Criteria**.

| | | | |
|--|-------------|------------------------|--------------------|
| add coverage path 33 | | Page 1 of 1 | |
| COVERAGE PATH | | | |
| Coverage Path Number: 33 | | | |
| Cvg Enabled for VDN Route-To Party? n | | Hunt after Coverage? n | |
| Next Path Number: | | Linkage | |
| COVERAGE CRITERIA | | | |
| Station/Group Status | Inside Call | Outside Call | |
| Active? | n | n | |
| Busy? | y | y | |
| Don't Answer? | y | y | Number of Rings: 2 |
| All? | n | n | |
| DND/SAC/Goto Cover? | y | y | |
| Holiday Coverage? | n | n | |
| COVERAGE POINTS | | | |
| Terminate to Coverage Pts. with Bridged Appearances? n | | | |
| Point1: h90 | Rng: | Point2: | |
| Point3: | | Point4: | |

3.9. Add Stations

Use the **add station** command to add a station for each *i* turret to be supported. The Speakerbus iD808 *i* turret requires up to three stations for each device. The first station is referred to as the default appearance. The second and third stations are needed when privacy is required on the handsets/headsets. If the privacy feature is not needed, then only the first station is required. To configure the default appearance, use “9630” for the **Station Type** and include the **Coverage Path** for voice messaging, if applicable. Use the **COS** and **COR** values administered in the previous sections. The **Name** field is optional and is shown on the display of Avaya non-SIP telephones when receiving calls from this station. Use defaults for the other fields on Page 1.

| | | | |
|----------------------------|---------------------------------|---------------|--|
| add station 25650 | | Page 1 of 6 | |
| STATION | | | |
| Extension: 25650 | Lock Messages? n | BCC: 0 | |
| Type: 9630 | Security Code: | TN: 1 | |
| Port: IP | Coverage Path 1: 33 | COR: 1 | |
| Name: iturret 25650 | Coverage Path 2: | COS: 1 | |
| | Hunt-to Station: | | |
| STATION OPTIONS | | | |
| Time of Day Lock Table: | | | |
| Loss Group: 19 | Personalized Ringing Pattern: 1 | | |
| | Message Lamp Ext: 25650 | | |
| Speakerphone: 2-way | Mute Button Enabled? y | | |
| Display Language: english | Button Modules: 0 | | |
| Survivable GK Node Name: | Media Complex Ext: | | |
| Survivable COR: internal | IP SoftPhone? n | | |
| Survivable Trunk Dest? y | Customizable Labels? y | | |

On Page 2, note the following:

- If this *i* turret will have a bridged appearance for another telephone (see Page 4 for this station), then **Bridged Call Alerting** should be set to “y”, so that this *i* turret will ring when the other telephone is called.
- By default, the last call appearance is reserved for outgoing calls from the *i* turret. Set the **Restrict Last Appearance** field to “y”.
- Set the **MWI Served User Type** field to the appropriate value to allow message waiting indication to be sent to the *i* turret.

| | | |
|---------------------------------------|--|-------------|
| add station 25650 | | Page 2 of 6 |
| STATION | | |
| FEATURE OPTIONS | | |
| LWC Reception: spe | Auto Select Any Idle Appearance? n | |
| LWC Activation? y | Coverage Msg Retrieval? y | |
| LWC Log External Calls? n | Auto Answer: none | |
| CDR Privacy? n | Data Restriction? n | |
| Redirect Notification? y | Idle Appearance Preference? n | |
| Per Button Ring Control? n | Bridged Idle Line Preference? n | |
| Bridged Call Alerting? y | Restrict Last Appearance? y | |
| Active Station Ringing: single | EMU Login Allowed? n | |
| H.320 Conversion? n | Per Station CPN - Send Calling Number? | |
| Service Link Mode: as-needed | | |
| Multimedia Mode: enhanced | | |
| MWI Served User Type: qsig-mwi | Display Client Redirection? n | |
| | Select Last Used Appearance? n | |
| | Coverage After Forwarding? s | |
| | Direct IP-IP Audio Connections? y | |
| Emergency Location Ext: 25650 | Always Use? n IP Audio Hairpinning? n | |

On Page 4 under the heading **BUTTON ASSIGNMENTS**, fill in the number of call appearances that are to be supported for the *i* turret. In this example, the first station for the *i* turret was configured with four call appearances. Locally, the *i* turret will actually be configured with 3 call appearances since the last appearance is restricted as configured on Page 2.

| | | |
|---------------------|----------------|-------------|
| add station 25650 | | Page 4 of 6 |
| STATION | | |
| SITE DATA | | |
| Room: | Headset? n | |
| Jack: | Speaker? n | |
| Cable: | Mounting: d | |
| Floor: | Cord Length: 0 | |
| Building: | Set Color: | |
| ABBREVIATED DIALING | | |
| List1: | List2: | List3: |
| BUTTON ASSIGNMENTS | | |
| 1: call-appr | 5: brdg-appr | B:1 E:25661 |
| 2: call-appr | 6: brdg-appr | B:1 E:25662 |
| 3: call-appr | 7: auto-cback | |
| 4: call-appr | 8: no-hld-cnfr | |
| voice-mail Number: | | |

Under the same heading, enter the function button names, if required, for OPS FNEs that will be used at the *i* turret. Only the FNEs shown in the table below require the station to have a corresponding function button.

| FNE Name | Function Button |
|--|-----------------|
| Automatic Callback, Automatic Callback Cancel | auto-cback |
| Conference on Answer | no-hld-cnf |

In the sample configuration, four call appearances were administered for extension 25650. Two bridged appearances were for second and third stations corresponding to two handsets. Note that these stations are configured below and these bridged appearance buttons cannot be configured until those stations have been added. If privacy is not needed for this *i* turret, then these bridged appearances are not required.

Page 1 of the second station for handset 1 is configured as follows. A coverage path is not required for this station.

| | | |
|---------------------------|---------------------------------|---------------|
| add station 25661 | | Page 1 of 6 |
| STATION | | |
| Extension: 25661 | Lock Messages? n | BCC: 0 |
| Type: 9630 | Security Code: | TN: 1 |
| Port: IP | Coverage Path 1: | COR: 1 |
| Name: HS1 of 25650 | Coverage Path 2: | COS: 1 |
| | Hunt-to Station: | |
| STATION OPTIONS | | |
| Loss Group: 19 | Time of Day Lock Table: | |
| | Personalized Ringing Pattern: 1 | |
| Speakerphone: 2-way | Message Lamp Ext: 25661 | |
| Display Language: english | Mute Button Enabled? y | |
| Survivable GK Node Name: | Button Modules: 0 | |
| Survivable COR: internal | Media Complex Ext: | |
| Survivable Trunk Dest? y | IP SoftPhone? n | |
| | Customizable Labels? y | |

On Page 2, the **Bridged Call Alerting** and **Restrict Last Appearance** fields should be set to “y”.

| add station 25661 | | Page 2 of 6 |
|---------------------------------|--|-------------|
| STATION | | |
| FEATURE OPTIONS | | |
| LWC Reception: spe | Auto Select Any Idle Appearance? n | |
| LWC Activation? y | Coverage Msg Retrieval? y | |
| LWC Log External Calls? n | Auto Answer: none | |
| CDR Privacy? n | Data Restriction? n | |
| Redirect Notification? y | Idle Appearance Preference? n | |
| Per Button Ring Control? n | Bridged Idle Line Preference? n | |
| Bridged Call Alerting? y | Restrict Last Appearance? y | |
| Active Station Ringing: single | EMU Login Allowed? n | |
| H.320 Conversion? n | Per Station CPN - Send Calling Number? | |
| Service Link Mode: as-needed | | |
| Multimedia Mode: enhanced | | |
| MWI Served User Type: | Display Client Redirection? n | |
| AUDIX Name: | Select Last Used Appearance? n | |
| | Coverage After Forwarding? s | |
| | Direct IP-IP Audio Connections? y | |
| Emergency Location Ext: 25661 | Always Use? n IP Audio Hairpinning? n | |

On Page 4 of the second station for handset 1, one call appearance should be configured, one feature button for the Exclusion feature (required for privacy), and bridged appearances for each call appearance of the first station (default appearance) configured below.

| add station 25661 | | Page 4 of 6 |
|--------------------------|----------------|-------------|
| STATION | | |
| SITE DATA | | |
| Room: | Headset? n | |
| Jack: | Speaker? n | |
| Cable: | Mounting: d | |
| Floor: | Cord Length: 0 | |
| Building: | Set Color: | |
| ABBREVIATED DIALING | | |
| List1: | List2: | List3: |
| BUTTON ASSIGNMENTS | | |
| 1: call-appr | 5: brdg-appr | B:3 E:25650 |
| 2: exclusion | 6: brdg-appr | B:1 E:25662 |
| 3: brdg-appr B:1 E:25650 | 7: | |
| 4: brdg-appr B:2 E:25650 | 8: | |
| voice-mail Number: | | |

Below is the configuration of the third station for handset 2.

| | | |
|---------------------------|---------------------------------|---------------|
| add station 25662 | | Page 1 of 6 |
| STATION | | |
| Extension: 25662 | Lock Messages? n | BCC: 0 |
| Type: 9630 | Security Code: | TN: 1 |
| Port: S00342 | Coverage Path 1: | COR: 1 |
| Name: HS2 of 25650 | Coverage Path 2: | COS: 1 |
| | Hunt-to Station: | |
| STATION OPTIONS | | |
| Loss Group: 19 | Time of Day Lock Table: | |
| | Personalized Ringing Pattern: 1 | |
| | Message Lamp Ext: 25662 | |
| Speakerphone: 2-way | Mute Button Enabled? y | |
| Display Language: english | Button Modules: 0 | |
| Survivable GK Node Name: | | |
| Survivable COR: internal | Media Complex Ext: | |
| Survivable Trunk Dest? y | IP SoftPhone? n | |
| | Customizable Labels? y | |

| | | |
|---------------------------------|--|-------------|
| add station 25662 | | Page 2 of 6 |
| STATION | | |
| FEATURE OPTIONS | | |
| LWC Reception: spe | Auto Select Any Idle Appearance? n | |
| LWC Activation? y | Coverage Msg Retrieval? y | |
| LWC Log External Calls? n | Auto Answer: none | |
| CDR Privacy? n | Data Restriction? n | |
| Redirect Notification? y | Idle Appearance Preference? n | |
| Per Button Ring Control? n | Bridged Idle Line Preference? n | |
| Bridged Call Alerting? y | Restrict Last Appearance? y | |
| Active Station Ringing: single | | |
| | EMU Login Allowed? n | |
| H.320 Conversion? n | Per Station CPN - Send Calling Number? | |
| Service Link Mode: as-needed | | |
| Multimedia Mode: enhanced | | |
| MWI Served User Type: | Display Client Redirection? n | |
| AUDIX Name: | Select Last Used Appearance? n | |
| | Coverage After Forwarding? s | |
| | Direct IP-IP Audio Connections? y | |
| Emergency Location Ext: 25662 | Always Use? n IP Audio Hairpinning? n | |

| | | |
|--------------------------|--------------|----------------|
| add station 25662 | STATION | Page 4 of 6 |
| SITE DATA | | |
| Room: | | Headset? n |
| Jack: | | Speaker? n |
| Cable: | | Mounting: d |
| Floor: | | Cord Length: 0 |
| Building: | | Set Color: |
| ABBREVIATED DIALING | | |
| List1: | List2: | List3: |
| BUTTON ASSIGNMENTS | | |
| 1: call-appr | 5: brdg-appr | B:3 E:25650 |
| 2: exclusion | 6: brdg-appr | B:1 E:25661 |
| 3: brdg-appr B:1 E:25650 | 7: | |
| 4: brdg-appr B:2 E:25650 | 8: | |
| voice-mail Number: | | |

Note: If a bridged appearance is required for another *i* turret or telephone, a bridged appearance button must be added to all three stations corresponding to the *i* turret device.

Use the **change off-pbx-telephone station-mapping** command to map the Avaya Communication Manager extensions (25650, 25661, and 25662) to the same SIP Enablement Services Communication Manager extension. Enter the field values shown. For the sample configuration, the **Trunk Selection** value indicates the SIP trunk group between Avaya Communication Manager and Avaya SIP Enablement Services. The SIP trunk group is configured in **Section 3.10**. The **Configuration Set** value can reference a set that has the default settings.

| change off-pbx-telephone station-mapping 25650 | | | | | | Page | 1 of | 2 |
|--|-------------|----------------|----|--------------|--------------------|---------------|------|---|
| STATIONS WITH OFF-PBX TELEPHONE INTEGRATION | | | | | | | | |
| Station Extension | Application | Dial Prefix | CC | Phone Number | Trunk Selection | Config Set | | |
| 25650 | OPS | - | | 25650 | 702 | 1 | | |
| 25661 | OPS | - | | 25661 | 702 | 1 | | |
| 25662 | OPS | - | | 25662 | 702 | 1 | | |

On Page 2, change the **Call Limit** to match the number of “call-appr” entries in the station form. Also, verify that **Mapping Mode** is set to “both” (the default value for a newly added station). It is recommended that 10 be used for the primary stations call limit as this is the Avaya maximum and would not have to be subsequently changed if bridged appearances are added to the user.

| change off-pbx-telephone station-mapping 25650 | | | | | | Page | 2 of | 2 |
|--|---------------|-----------------|------------------|------------------|----------|------|------|---|
| STATIONS WITH OFF-PBX TELEPHONE INTEGRATION | | | | | | | | |
| Station Extension | Call Limit | Mapping Mode | Calls Allowed | Bridged Calls | Location | | | |
| 25650 | 4 | both | all | none | | | | |
| 25661 | 2 | both | all | none | | | | |
| 25662 | 2 | both | all | none | | | | |

3.10. Configure SIP Trunk

In the **IP Node Names** form, assign an IP address and host name for the C-LAN board in the Avaya G650 Media Gateway and for Avaya SIP Enablement Services at the enterprise site. The host names will be used throughout the other configuration screens of Avaya Communication Manager.

| | | |
|---|-----------------------|-------------|
| change node-names ip | | Page 1 of 2 |
| IP NODE NAMES | | |
| Name | IP Address | |
| clan2 | 192.45.100.70 | |
| default | 0.0.0.0 | |
| medpro2 | 192.45.100.71 | |
| SIPserver1 | 192.45.100.200 | |
| (4 of 4 administered node-names were displayed) | | |
| Use 'list node-names' command to see all the administered node-names | | |
| Use 'change node-names ip xxx' to change a node-name 'xxx' or add a node-name | | |

In the **IP Network Region** form, the **Authoritative Domain** field is configured to match the domain name configured on Avaya SIP Enablement Services. In this configuration, the domain name is *example.com*. By default, **IP-IP Direct Audio** (shuffling) is enabled to allow audio traffic to be sent directly between IP endpoints without using media resources in the Avaya G650 Media Gateway. The **IP Network Region** form also specifies the **IP Codec Set** to be used for calls routed over the SIP trunk to Avaya SIP Enablement Services. This codec set is used when its corresponding network region (i.e., IP Network Region '1') is specified in the SIP signaling group.

| | | |
|--|--|---|
| change ip-network-region 1 | | Page 1 of 19 |
| IP NETWORK REGION | | |
| Region: 1 | | |
| Location: 1 Authoritative Domain: example.com | | |
| Name: Avaya region | | |
| MEDIA PARAMETERS | | |
| Codec Set: 1 | | Intra-region IP-IP Direct Audio: yes |
| | | Inter-region IP-IP Direct Audio: yes |
| UDP Port Min: 2048 | | IP Audio Hairpinning? n |
| UDP Port Max: 65531 | | |
| DIFFSERV/TOS PARAMETERS | | RTCP Reporting Enabled? y |
| Call Control PHB Value: 34 | | RTCP MONITOR SERVER PARAMETERS |
| Audio PHB Value: 46 | | Use Default Server Parameters? y |
| Video PHB Value: 26 | | |
| 802.1P/Q PARAMETERS | | |
| Call Control 802.1p Priority: 7 | | |
| Audio 802.1p Priority: 6 | | |
| Video 802.1p Priority: 5 | | AUDIO RESOURCE RESERVATION PARAMETERS |
| H.323 IP ENDPOINTS | | RSVP Enabled? n |
| H.323 Link Bounce Recovery? y | | |
| Idle Traffic Interval (sec): 20 | | |
| Keep-Alive Interval (sec): 5 | | |
| Keep-Alive Count: 5 | | |

In the **IP Codec Set** form, select the audio codec type supported for calls routed over the SIP trunk to the *i* turret deskstations. The form is accessed via the **change ip-codec-set 1** command. Note that IP codec set '1' was specified in IP Network Region '1' shown above. The default settings of the **IP Codec Set** form are shown below. However, the **IP Codec Set** form may specify multiple codecs, including G.711 and G.729, which are supported by the iD808 deskstations.

Note: G.729B calls between an *i* turret and an Avaya SIP telephone are not shuffled. However, G.729B calls between two *i* turret deskstations and an *i* turret and Avaya H.323 telephone are shuffled.

change ip-codec-set 1

Page 1 of 2

IP Codec Set

Codec Set: 1

| | Audio Codec | Silence Suppression | Frames Per Pkt | Packet Size(ms) |
|----|----------------|------------------------|-------------------|--------------------|
| 1: | G.711MU | n | 2 | 20 |
| 2: | | | | |
| 3: | | | | |
| 4: | | | | |
| 5: | | | | |
| 6: | | | | |
| 7: | | | | |

Prior to configuring a SIP trunk group for communication with Avaya SIP Enablement Services, a SIP signaling group must be configured. Configure the Signaling Group form shown as follows:

- Set the **Group Type** field to *sip*.
- The **Transport Method** field will default to *tls* (Transport Layer Security).
- Specify the C-LAN board in the G650 Media Gateway and the Avaya SIP Enablement Services Server as the two ends of the signaling group in the **Near-end Node Name** field and the **Far-end Node Name** field, respectively. These field values are taken from the **IP Node Names** form shown above.
- Ensure that the recommended TLS port value of *5061* is configured in the **Near-end Listen Port** and the **Far-end Listen Port** fields.
- The preferred codec for the call will be selected from the IP codec set assigned to the IP network region specified in the **Far-end Network Region** field.
- Enter the domain name of Avaya SIP Enablement Services in the **Far-end Domain** field. In this configuration, the domain name is *example.com*. This domain is specified in the Uniform Resource Identifier (URI) of the “SIP To Address” in the INVITE message. Mis-configuring this field may prevent calls from being successfully established to other SIP endpoints or to the PSTN.
- If calls to/from SIP endpoints are to be shuffled, then the **Direct IP-IP Audio Connections** field must be set to ‘y’.
- The **DTMF over IP** field should be set to the default value of *rtp-payload*. Avaya Communication Manager supports DTMF transmission using RFC 2833. The default values for the other fields may be used.

| | | |
|-------------------------------------|--------------------------------------|--|
| add signaling-group 702 | | Page 1 of 1 |
| SIGNALING GROUP | | |
| Group Number: 702 | Group Type: sip | |
| | Transport Method: tls | |
| Near-end Node Name: clan2 | Far-end Node Name: SIPserver1 | |
| Near-end Listen Port: 5061 | Far-end Listen Port: 5061 | |
| | Far-end Network Region: 1 | |
| Far-end Domain: example.com | | |
| | Bypass If IP Threshold Exceeded? n | |
| DTMF over IP: rtp-payload | | Direct IP-IP Audio Connections? y |
| | IP Audio Hairpinning? y | |
| Enable Layer 3 Test? n | | |
| Session Establishment Timer(min): 3 | | Alternate Route Timer(sec): 6 |

Configure the **Trunk Group** form as shown below. This trunk group is used for calls to the *i* turret deskstations. Set the **Group Type** field to *sip*, set the **Service Type** field to *tie*, specify the signaling group associated with this trunk group in the **Signaling Group** field, and specify the **Number of Members** supported by this SIP trunk group. Configure the other fields in bold and accept the default values for the remaining fields.

| | | | |
|------------------------------|------------------------|----------------|-----------------|
| add trunk-group 702 | | Page 1 of 21 | |
| TRUNK GROUP | | | |
| Group Number: 702 | Group Type: sip | CDR Reports: y | |
| Group Name: To SIPserver1 | COR: 1 | TN: 1 | TAC: 176 |
| Direction: two-way | Outgoing Display? n | | |
| Dial Access? n | Night Service: | | |
| Queue Length: 0 | | | |
| Service Type: tie | Auth Code? n | | |
| | | | |
| Signaling Group: 702 | | | |
| Number of Members: 20 | | | |

On Page 3 of the trunk group form, set the **Numbering Format** field to *public*. This field specifies the format of the calling party number sent to the far-end.

| | | | |
|---------------------------------|----------------|---------------------------------|--|
| add trunk-group 702 | | Page 3 of 21 | |
| TRUNK FEATURES | | | |
| ACA Assignment? n | Measured: none | Maintenance Tests? y | |
| | | | |
| Numbering Format: public | | UII Treatment: service-provider | |
| | | | |
| Replace Restricted Numbers? n | | | |
| Replace Unavailable Numbers? n | | | |
| | | | |
| Show ANSWERED BY on Display? y | | | |

Configure the **Public/Unknown Numbering Format** form to send the calling party number to the far-end. Add an entry so that local stations with a 5-digit extension beginning with '2' and whose calls are routed over SIP trunk group '702' have the number sent to the far-end for display purposes.

| | | | | | |
|-----------------------------------|----------|------------|--------|----------|-----------------------|
| change public-unknown-numbering 0 | | | | | Page 1 of 2 |
| NUMBERING - PUBLIC/UNKNOWN FORMAT | | | | | |
| Ext | Ext | Trk | CPN | Total | |
| Len | Code | Grp(s) | Prefix | CPN | |
| | | | | Len | |
| 5 | 2 | 702 | | 5 | Total Administered: 1 |
| | | | | | Maximum Entries: 9999 |

4. Configure Avaya SIP Enablement Services

This section covers the administration of Avaya SIP Enablement Services (SES). Avaya SIP Enablement Services is configured via an Internet browser using the Administration web interface. To access the Administration web interface, enter *http://<ip-addr>/admin* as the URL in an Internet browser, where *<ip-addr>* is the IP address of Avaya SIP Enablement Services. Log in with the appropriate credentials and then select the *Launch SES Administration Interface* link in the next screen. The main screen is displayed as shown below.

| Top | |
|---|--|
| Manage Users | Add and delete Users. |
| Manage Address Map Priorities | Adjust Address Map Priorities. |
| Manage Adjunct Systems | Add and delete Adjunct Systems. |
| Manage Event Aggregators | Add/Delete Event Aggregators. |
| Certificate Management | Manage Certificates. |
| Manage Conferencing | Add and delete Conference Extensions. |
| Manage Emergency Contacts | Add and delete Emergency Contacts. |
| Export Import to ProVision | Export and import data using ProVision on this host. |
| Manage Hosts | Add and delete Hosts. |
| IM logs | Download IM Logs. |
| Manage Communication Manager Servers | Add and delete Communication Manager Servers. |
| Manage Communication Manager Extensions | Add and delete Communication Manager Extensions. |
| Server Configuration | View Properties of the system. |
| Manage SIP Phone Settings | Add/Delete Phone Settings |
| Manage Survivable Call Processors | Add and delete Survivable Call Processors. |
| System Status | View System Status. |
| Trace Logger | Manage SIP Trace Logs. |
| Manage Trusted Hosts | Add and delete Trusted Hosts. |

From the left pane of the Administration web interface, expand the **Server Configuration** option and select **System Properties**. In the **System Properties** screen, enter the domain name assigned to the Avaya SIP-based network and the SIP License Host. For the **SIP License Host** field, enter the fully qualified domain name or the IP address of the SES server that is running the WebLM application and has the associated license file installed. This entry should always correspond to the localhost unless the WebLM server is not co-resident with this server. After configuring the **System Properties** screen, click the **Update** button.

AVAYA Integrated Management SIP Server Management
 Help Exit Server: 192.45.100.200

Top

- Users
 - Address Map Priorities
- Adjunct Systems
- Aggregator
- Certificate Management
- Conferences
 - Emergency Contacts
- Export/Import to ProVision
- Hosts
 - IM logs
- Communication Manager Servers
- Communication Manager Extensions
- Server Configuration
 - Admin Setup
 - IM Log Settings
 - License
 - SNMP Configuration
 - System Properties
- SIP Phone Settings
- Survivable Call Processors
 - System Status
- Trace Logger
- Trusted Hosts

View System Properties

SES Version SES-5.1.1.0-415.1
 System Configuration Simplex
 Host Type SES combined home-edge

SIP Domain*
 Note that the DNS domain is example.com
 If you are unsure about this field, most often the SIP domain should be the root level DNS domain. For example, for a DNS domain of eastcoast.example.com, the SIP domain would likely be configured to example.com. This allows SIP calls and instant messages to users with handles of the format handle@example.com

SIP License Host*

DiffServ/TOS Parameters

Call Control PHB Value*

802.1 Parameters

Priority Value*

Management System Access Login

Management System Access Password

DB Log Level

Update

After setting up the domain in the **System Properties** screen, create a host entry for Avaya SIP Enablement Services. The following example shows the **Edit Host** screen since the host had already been configured. Enter the IP address of Avaya SIP Enablement Services in the **Host IP Address** field. The **Profile Service Password** was specified during the system installation. Next, verify the **Host Type** field. In this example, the host server was configured as an *SES combined home/edge* during the initial setup. The default values for the other fields may be used as shown below.

AVAYA Integrated Management SIP Server Management
Server: 192.45.100.200

Help Exit

Top

- Users
 - Address Map Priorities
- Adjunct Systems
- Aggregator
- Certificate Management
- Conferences
 - Emergency Contacts
- Export/Import to ProVision
- Hosts
 - IM logs
- Communication Manager Servers
- Communication Manager Extensions
- Server Configuration
- SIP Phone Settings
- Survivable Call Processors
- System Status
- Trace Logger
- Trusted Hosts

Edit Host

Host IP Address* 192.45.100.200

Profile Service Password*

Host Type SES combined home-edge

Parent none

Listen Protocols ☒ UDP ☒ TCP ☒ TLS

Link Protocols ☐ UDP ☐ TCP ☒ TLS

Access Control Policy (Default) ☐ Allow All ☒ Deny All

Emergency Contacts Policy ☒ Allow ☐ Deny

Minimum Registration (seconds) 7200

Registration Expiration Timer (seconds)* 86400

Subscription Expiration Timer (seconds)* 86400

Line Reservation Timer (seconds) 30

Outbound Routing Allowed ☒ Internal ☒ External

From

OutboundProxy Port ☐ UDP ☐ TCP ☐ TLS

Outbound Direct Domains

Default Ringer Volume* 5

Default Ringer Cadence 2

Default Receiver Volume* 5

Default Speaker Volume* 5

VMM Server Address

VMM Server Port 5005

VMM Report Period 5

Fields marked * are required.

Update

Under the **Communication Manager Servers** option in the Administration web interface, select **Add** to add the Avaya Media Server in the enterprise site since a SIP trunk is required between Avaya Communication Manager and Avaya SIP Enablement Services. The screen below shows the Edit Communication Manager Server Interface screen since the server has already been added. In this screen, enter the following information:

- A descriptive name in the **Communication Manager Server Interface Name** field (e.g., pbx31-clan).
- Select the home server in the **Host** field.
- Select *TLS* (Transport Link Security) for the **Link Type**.
- Enter the IP address of the C-LAN board in the Avaya G650 Media gateway in the **SIP Trunk IP Address** field.

Refer to [3] for additional information on configuring the remaining fields.

The screenshot displays the Avaya Integrated Management SIP Server Management web interface. The top header includes the Avaya logo, the title 'Integrated Management SIP Server Management', and the server IP '192.45.100.200'. A left-hand navigation menu lists various system components like Users, Address Map Priorities, Adjunct Systems, Aggregator, Certificate Management, Conferences, Emergency Contacts, Export/Import to ProVision, Hosts, IM logs, Communication Manager Servers, Extensions, Server Configuration, SIP Phone Settings, Survivable Call Processors, System Status, Trace Logger, and Trusted Hosts. The main content area is titled 'Edit Communication Manager Server Interface' and contains several configuration sections:

- Communication Manager Server Interface Name***: A text field containing 'pbx31-clan'.
- Host**: A text field containing '192.45.100.200'.
- SIP Trunk** section:
 - SIP Trunk Link Type**: Radio buttons for TCP and TLS, with TLS selected.
 - SIP Trunk IP Address***: A text field containing '192.45.100.70'.
- Communication Manager Server** section:
 - Communication Manager Server Admin Address***: A text field containing '192.45.100.60'.
 - Communication Manager Server Admin Port***: A text field containing '5022'.
 - Communication Manager Server Admin Login***: A text field containing 'ses'.
 - Communication Manager Server Admin Password***: A masked password field.
 - Communication Manager Server Admin Password Confirm***: A masked password field.
- SMS Connection Type**: Radio buttons for SSH, Telnet, and Not Available, with SSH selected.

A note at the bottom right states: 'Note: If the Communication Manager Server connection type is changed and the admin port value is not also changed, changing connection type to SSH will change the admin port to 5022 when Add or Update is clicked and changing connection type to Telnet will change admin port to 5023 when Add or Update is clicked.' Below this note, a message says 'Fields marked * are required.' and an 'Update' button is visible.

Add three users for each Speakerbus iD808 i turret registering with Avaya SIP Enablement Services. Three users are required, one for the main appearance and two for the handset appearances. The handset appearances are required to support privacy with Avaya Communication Manager. If fewer than 2 handsets are used, or Privacy is not enabled on the iD808, then it is not necessary to enable three users via Avaya SIP Enablement Services. In the **Add User** screen, enter the extension of the SIP endpoint in the **Primary Handle** field. Enter a user password in the **Password** and **Confirm Password** fields. In the **Host** field, select the Avaya SIP Enablement Services server hosting the domain (*example.com*) for this user. Enter the **First Name** and **Last Name** of the user. To associate the extension for this user with a Communication Manager extension, select the **Add Communication Manager Extension** checkbox. Calls from this user will always be routed through Avaya Communication Manager over the SIP trunk. The **Add Communication Manager Extension** screen is displayed next after adding this user profile by clicking on the **Add** button.

AVAYA Integrated Management
SIP Server Management
Server: 192.45.100.200

Help Exit

Top

- Users
 - Address Map Priorities
- Adjunct Systems
- Aggregator
- Certificate Management
- Conferences
- Emergency Contacts
- Export/Import to ProVision
- Hosts
- IM logs
- Communication Manager Servers
- Communication Manager Extensions
- Server Configuration
- SIP Phone Settings
- Survivable Call Processors
- System Status
- Trace Logger
- Trusted Hosts

Add User

Primary Handle* 25650

User ID

Password*

Confirm Password*

Host* 192.45.100.200

First Name* iTurret

Last Name* 25650

Address 1 307 Middletown-Lincroft Rd

Address 2

Office

City Lincroft

State NJ

Country USA

Zip 07738

Survivable Call Processor none

Add Communication Manager Extension ☒

Fields marked * are required.

Add

In the **Add Communication Manager Extension** screen, enter the **Extension** configured in Avaya Communication Manager for the previously added user. Usually, the Communication Manager extension and the user extension are the same (recommended). Click the **Add** button.

The screenshot shows the Avaya Integrated Management SIP Server Management web interface. The header includes the Avaya logo, the title 'Integrated Management SIP Server Management', and the server IP '192.45.100.200'. A left-hand navigation menu lists various system management options. The main content area is titled 'Add Communication Manager Extension' and contains a form for adding a new extension for a specific user.

AVAYA Integrated Management SIP Server Management
Help Exit Server: 192.45.100.200

Top

- Users
 - Address Map Priorities
- Adjunct Systems
- Aggregator
- Certificate Management
- Conferences
 - Emergency Contacts
- Export/Import to ProVision
- Hosts
 - IM logs
- Communication Manager Servers
- Communication Manager Extensions
- Server Configuration
- SIP Phone Settings
- Survivable Call Processors
- System Status
- Trace Logger
- Trusted Hosts

Add Communication Manager Extension

Add Communication Manager extension for user 25650.

Extension

Communication Manager Server

Fields marked * are required.

Add

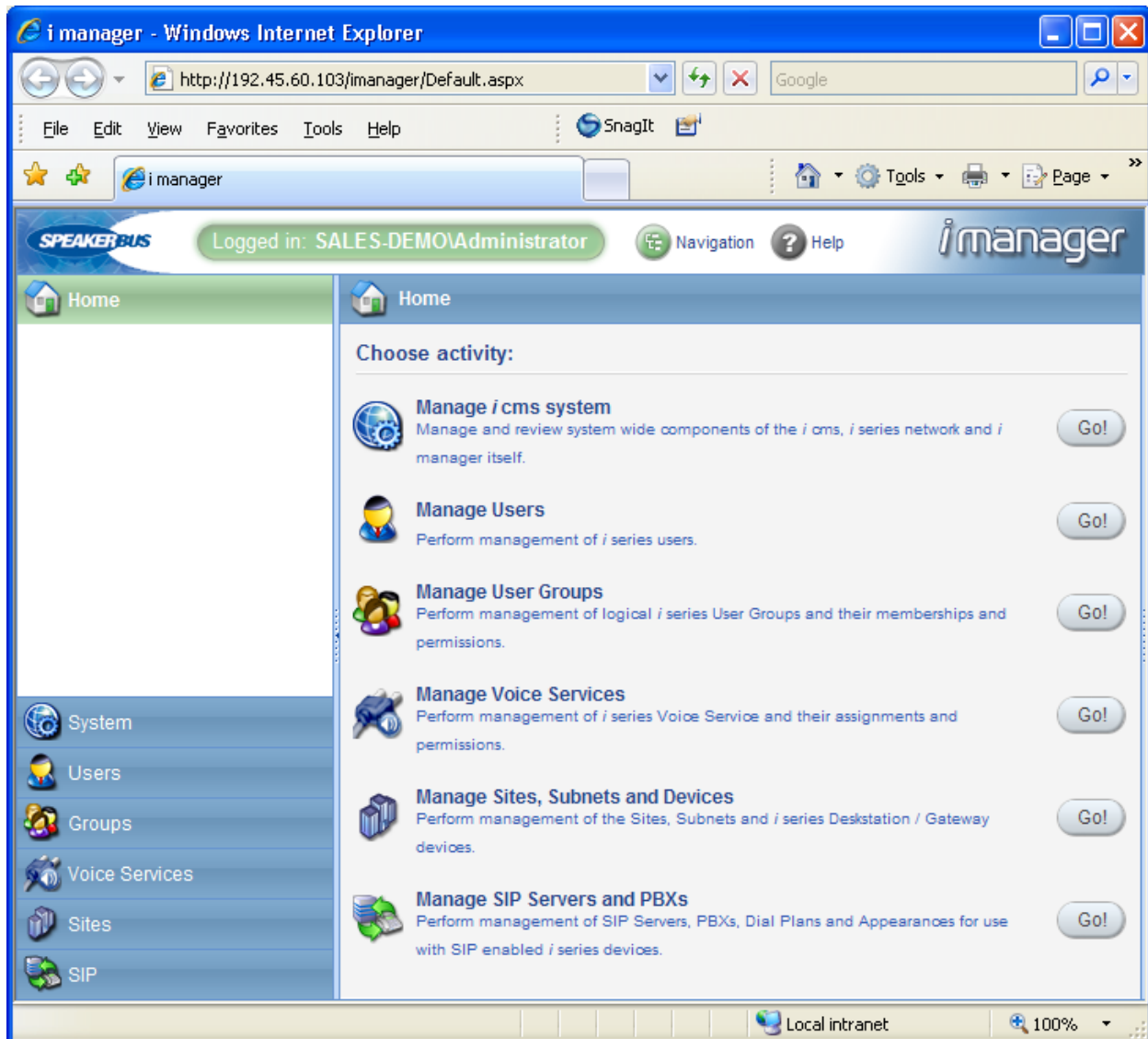
5. Speakerbus iD808 *i* turret Configuration

This section provides the procedure for configuring the Speakerbus iD808 *i* turret using *i* manager Administration. *i* manager allows users to manage the iD808 *i* turret devices from a single workstation through a point-and-click interface using a web browser. The procedures for configuring the *i* turret fall into the following areas:

- Launch *i* manager
- Verify Product Key
- Create Site
 - Create Subnet
 - Create Deskstations
- Create SIP Server
 - Create PBX
 - Create Dial Plan
 - Create Appearances
- Create Users
- Create Groups
- Assign Ownership of Appearances to Users
- Assign Default Call Appearance for each User
- Program Feature Name Extensions (FNEs)
- Program iD808 Buttons
 - Create Home Page
 - Create FNEs Page
 - Create Page Links Page
- Synchronize Deskstations

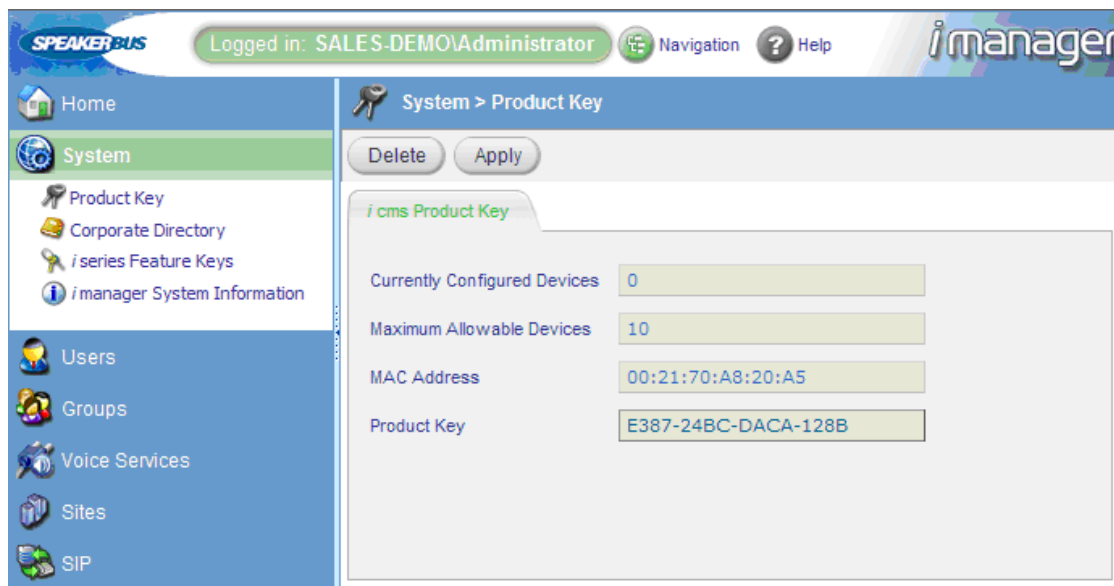
5.1. Launch *i* manager

To access the *i* manager software interface, open a web browser and type the *i* manager web address, for example, <http://192.45.60.103/imanager>. Press the **Enter** key. At the *i* manager logon page enter the appropriate credentials. The *i* manager home page is displayed as shown below.



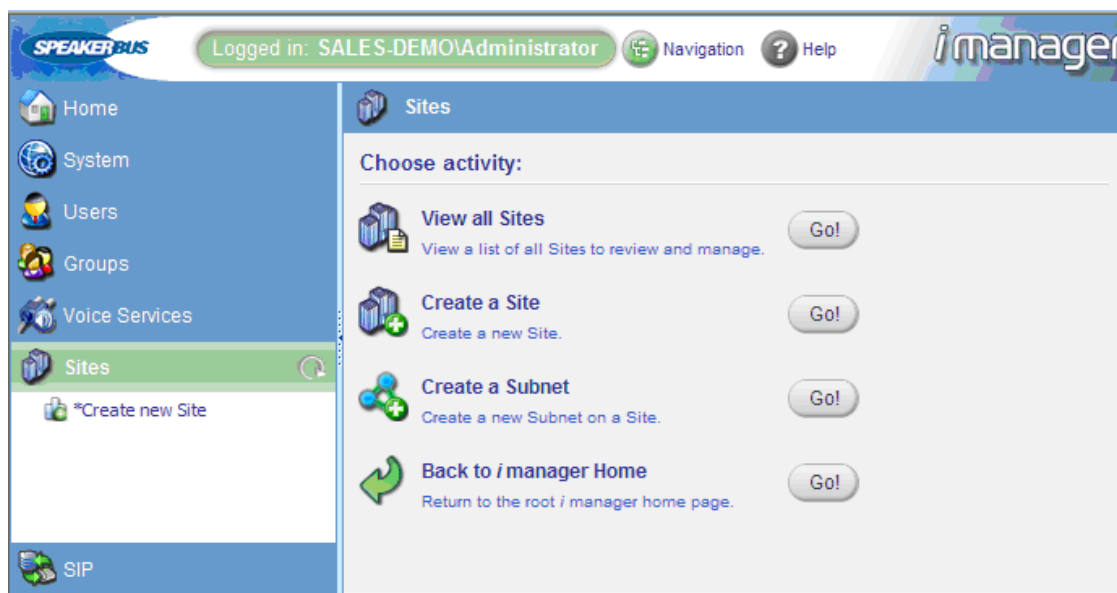
5.2. Verify Product Key

Navigate to System→Product Key to verify that a valid key is installed and sufficient devices are allowed.

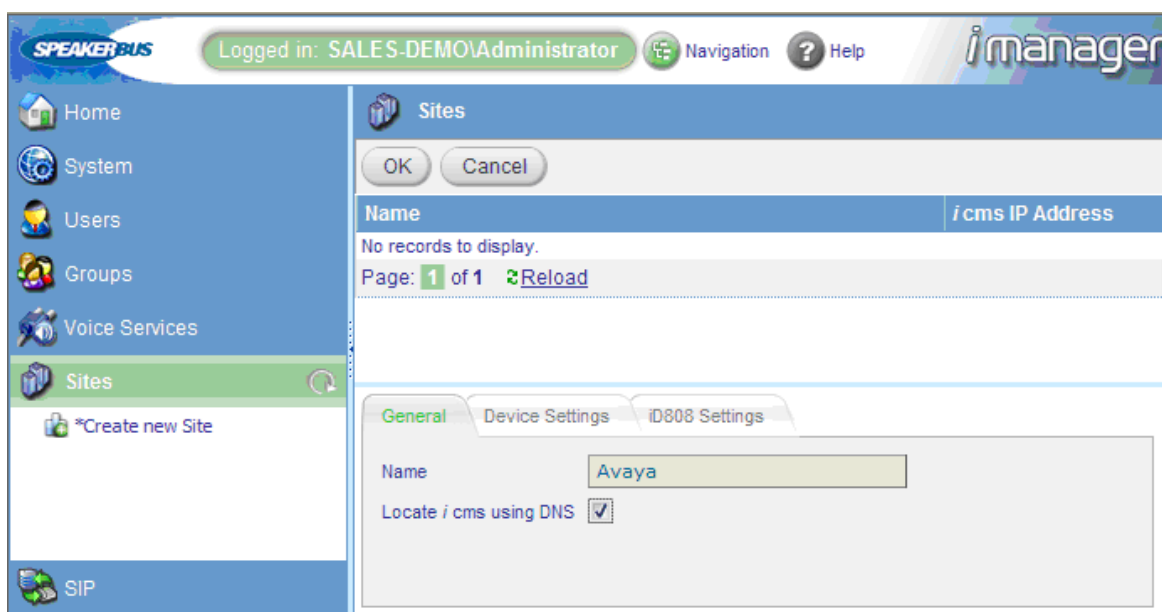


5.3. Create Site

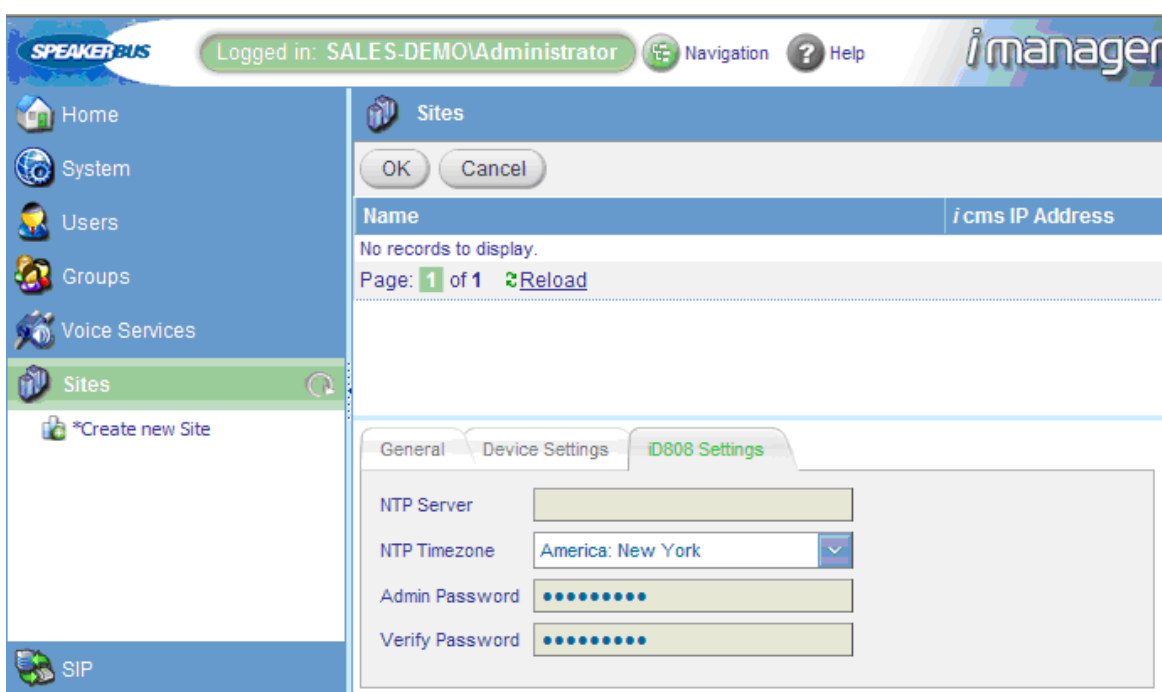
Configure a site representing the location where the Speakerbus iD808 devices are installed. Under **Sites** in the left pane, click on **Create new Site**. The **Sites** page is displayed.



In the **General** tab of the **Sites** page, set the **Name** field to a descriptive name and select the **Locate i cms using DNS** checkbox. When this option is selected, the i turret will use the DNS server to locate the i cms server IP address. Refer to [6] for correct configuration of DNS.



In the **iD808 Settings** tab, set the network time protocol timezone and configure the password for logging into the iD808 deskstation. The **NTP Server** field may be set to the IP address of the NTP server if one is used. Click **OK**. The “Avaya” site will be now listed under **Sites**.



5.4. Create Subnet

To create a subnet, click on **Create new Subnet** under the newly configured “Avaya” site. In the **General** tab, provide a descriptive name for the subnet and configure the **Subnet Address** and **Default Gateway Address**.

Note: A Service Locator Record (SRV) needs to be added to the DNS server in order to allow the iD808 to locate and register to *i cms*. Refer to [5] for more details.

The screenshot shows the iManager web interface. The top navigation bar includes the 'SPEAKERBUS' logo, a login status 'Logged in: SALES-DEMO\Administrator', and links for 'Navigation' and 'Help'. The left sidebar contains a tree view with 'Home', 'System', 'Users', 'Groups', 'Voice Services', 'Sites', and 'SIP'. The 'Sites' folder is expanded, showing 'Avaya' and a link to '*Create new Subnet'. The main content area is titled 'Sites > Avaya' and contains a table with columns 'Subnet', 'Site', and 'Subnet Address'. The table is empty, with a message 'No records to display.' and 'Page: 1 of 1' with a 'Reload' link. Below the table, the 'General' tab is selected, showing fields for 'Name' (192.45.60.x), 'Site' (Avaya), 'Subnet Address' (192.45.60.0), and 'Default Gateway Address' (192.45.60.1).

In the **SbRTP** tab, set the **Compatibility** field to “Version 3.0”. Click **OK**.

The screenshot shows the iManager web interface, similar to the previous one, but with the 'SbRTP' tab selected. The 'General' tab is still visible, showing the same fields. The 'SbRTP' tab is active, showing fields for 'RTP Payload Code' (96), 'DSCP Value' (0), and 'Compatibility' (Version 3.0). The 'Compatibility' field is a dropdown menu with a blue arrow indicating it is open.

5.5. Create Deskstations

Once the site and subnet exist, the iD808 devices can be created. The network was set up using DNS without DHCP so IP configuration was manually performed on the iD808 devices. The deskstations then registered to *i* manager through DNS. After the iD808 devices are synchronized with *i* cms, they should automatically be created in *i* manager. To create a device, select the **Sites** directory tree and expand the sites directory. Click on **Deskstations** to display the device list. The newly created devices are automatically displayed in the list. Verify that the deskstations are automatically created as shown below.

The screenshot shows the iManager web interface. The top navigation bar includes the 'SPEAKERBUS' logo, a login status 'Logged in: SALES-DEMO\Administrator', and links for 'Navigation' and 'Help'. The left sidebar contains a directory tree with 'Home', 'System', 'Users', 'Groups', 'Voice Services', 'Sites', and 'SIP'. The 'Sites' directory is expanded, showing 'Avaya' and '192.45.60.x'. The '192.45.60.x' directory is further expanded, showing 'Gateways' and 'Deskstations'. The main content area displays the 'Deskstations' list for the '192.45.60.x' site. The breadcrumb path is 'Sites > Avaya > 192.45.60.x > Deskstations'. Below the breadcrumb, there are tabs for 'General', 'Channels', 'Connections', and 'Recording Streams'. The 'General' tab is active, showing a table of deskstations. The table has columns: Name, Type, IP Address, MAC Address, Firmware, Seated User, and Status. There are three rows of data, each representing an iD808 device. Below the table, there is a 'Page: 1 of 1' indicator and a 'Reload' button. At the bottom of the main content area, there are tabs for 'General', 'Network', 'Feature Key', 'SbRTP', 'Deskstation', 'Gateway', and 'Test Tones'. The 'General' tab is active, showing a large empty box.

| Name | Type | IP Address | MAC Address | Firmware | Seated User | Status |
|---------|-------|---------------|-------------------|----------|-------------|--------|
| Device1 | iD808 | 192.45.60.100 | 00:05:83:FF:FF:E4 | 1.0.14.0 | | |
| Device2 | iD808 | 192.45.60.101 | 00:05:83:00:14:1A | 1.0.14.0 | | |
| Device3 | iD808 | 192.45.60.102 | 00:05:83:00:14:0C | 1.0.14.0 | | |

Select a device and change the name to a more descriptive one in the **General** tab.

The screenshot shows the iManager web interface. The top navigation bar includes the 'SPEAKERBUS' logo, a login status 'Logged in: SALES-DEMO\Administrator', and links for 'Navigation' and 'Help'. The left sidebar contains a tree view with categories like Home, System, Users, Groups, Voice Services, and Sites. Under 'Sites', there is a folder 'Avaya' containing '192.45.60.x', 'Gateways', and 'Deskstations'. The main content area shows the breadcrumb 'Sites > Avaya > 192.45.60.x > Deskstations'. Below this is a tabbed interface with 'General', 'Channels', 'Connections', and 'Recording Streams'. The 'General' tab is active, displaying a table of devices. The table has columns: Name, Type, IP Address, MAC Address, Firmware, Seated User, and Status. Three devices are listed: Device1, Device2, and Device3. Below the table, there are buttons for 'New', 'Delete', 'Apply', 'Seat...', 'Unseat', 'Synchronise', and 'Firmware...'. The bottom section of the 'General' tab contains a form for editing the selected device, 'iTurret 1'. The form fields include Name, MAC Address, Type, Firmware Version, Site, Subnet, and Location.

| Name | Type | IP Address | MAC Address | Firmware | Seated User | Status |
|---------|-------|---------------|-------------------|----------|-------------|--------|
| Device1 | iD808 | 192.45.60.100 | 00:05:83:FF:FF:E4 | 1.0.14.0 | | |
| Device2 | iD808 | 192.45.60.101 | 00:05:83:00:14:1A | 1.0.14.0 | | |
| Device3 | iD808 | 192.45.60.102 | 00:05:83:00:14:0C | 1.0.14.0 | | |

Page: 1 of 1 [Reload](#) [Deselect \(1\) Device1](#)

General | Network | Media | Deskstation

Name: iTurret 1
MAC Address: 00:05:83:FF:FF:E4
Type: iD808
Firmware Version: 1.0.14.0
Site: Avaya
Subnet: 192.45.60.x
Location:

In the **Network** tab, verify the IP settings. Set the **DNS Server IP Address** and **Local Domain Name** fields, if necessary.

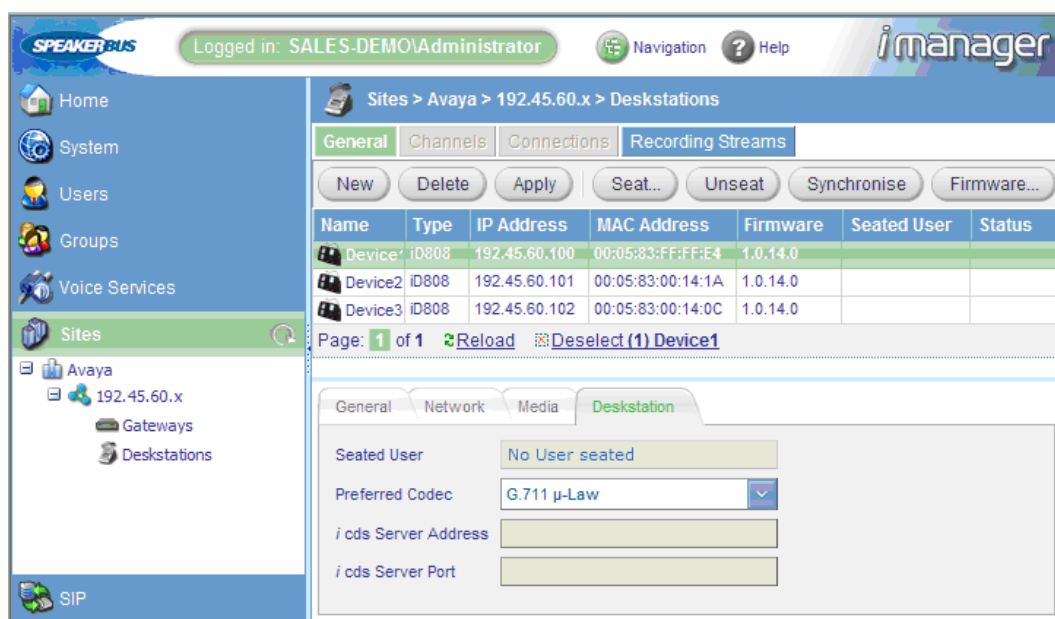
The screenshot shows the iManager interface for a Speakerbus system. The user is logged in as SALES-DEMO\Administrator. The navigation pane on the left shows the hierarchy: Home, System, Users, Groups, Voice Services, Sites, and SIP. The main content area shows the configuration for a device under the path Sites > Avaya > 192.45.60.x > Deskstations. The 'General' tab is selected, and the 'Network' sub-tab is active. The network configuration fields are as follows:

| Name | Type | IP Address | MAC Address | Firmware | Seated User | Status |
|---------|-------|---------------|-------------------|----------|-------------|--------|
| Device1 | ID808 | 192.45.60.100 | 00:05:83:FF:FF:E4 | 1.0.14.0 | | |
| Device2 | ID808 | 192.45.60.101 | 00:05:83:00:14:1A | 1.0.14.0 | | |
| Device3 | ID808 | 192.45.60.102 | 00:05:83:00:14:0C | 1.0.14.0 | | |

Below the table, the 'Network' configuration is shown with the following fields:

- Obtain IP Address using DHCP: ☐
- IP Address: 192.45.60.100
- Subnet Mask: 255.255.255.0
- Default Gateway: 192.45.60.1
- DNS Server IP Address: 192.45.60.103
- Local Host Name: id808-FFFFE4
- Local Domain Name: example.com
- Enable SNMP: ☐
- Ethernet negotiation: Auto-negotiate

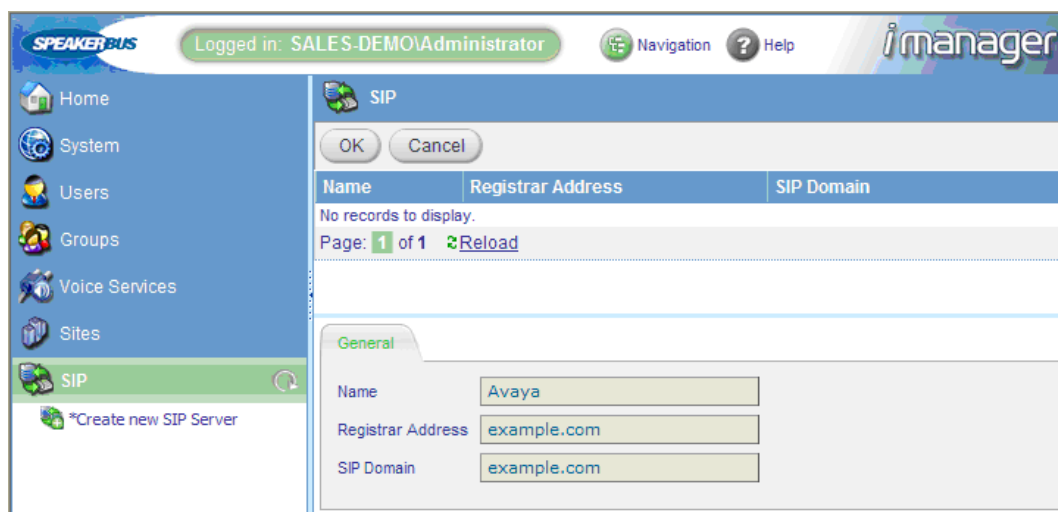
In the **Deskstation** tab, select preferred codec. In this configuration, G.711mu-law is the preferred codec. Click **Apply**. Repeat these steps for all deskstations.



5.6. Create SIP Server

To create a SIP Server, click **Create a new SIP Server** under the **SIP** directory in the left pane. Provide a descriptive name for the SIP server and set the **Registrar Address** and **SIP Domain** fields to “example.com”, which in this configuration DNS resolves the domain name to 192.45.100.200, the Avaya SES IP address. Click **OK**. After the SIP server is created, the **Port** field will be displayed on this page with the default value of 5060. The default value was used in this configuration.

Note: Create a server locator record (SRV) for registrar address and SIP domain on DNS. Refer to [5] for more details.



5.7. Create PBX

Select the **SIP** directory and click **Create new PBX**. Provide a descriptive name/text for the PBX in the **Name** and **Version** fields and set the **Type** field to “Avaya”. The **Outbound** and **Inbound** tabs are left with their default values. Click **OK**.

The screenshot shows the iManager web interface. The left navigation pane has 'SIP' selected, with a sub-item 'Avaya' and a link '*Create new PBX'. The main content area is titled 'SIP > Avaya' and contains a form with 'OK' and 'Cancel' buttons. Below the buttons is a table with columns 'Name', 'Type', and 'Version'. The table is empty, showing 'No records to display.' and 'Page: 1 of 1' with a 'Reload' link. Below the table are three tabs: 'General' (selected), 'Outbound', and 'Inbound'. The 'General' tab contains three input fields: 'Name' with the value 'Avaya', 'Type' with a dropdown menu showing 'Avaya', and 'Version' with the value '5.1.1'.

5.8. Create Dial Plan

Under the **SIP** directory, click **Dial Plan** and then the **New** button to add a dial rule. Dial rules specify the valid digit formats that the iD808 devices are allowed to dial, otherwise the user will have to press OK after entering the dial string on the iD808 device. In this configuration, 5-digit extensions beginning with “25” were used to dial other iD808 devices and Avaya telephones. A dial rule is also required for the voice mail pilot number which was a 5-digit extension beginning with “33”. The example below corresponds to 5-digit extensions beginning with “25”. The X’s in the dial rule match any digit. Note that the X must be a capital letter. Click **OK**. Repeat this for all valid extension formats.

The screenshot shows the iManager web interface. The left navigation pane has 'SIP' selected, with sub-items 'Avaya', 'Dial Plan', and 'Appearances'. The 'Dial Plan' sub-item is selected. The main content area is titled 'SIP > Avaya > Avaya > Dial Plan' and contains a form with 'OK' and 'Cancel' buttons. Below the buttons is a table with columns 'Dial Rule'. The table is empty, showing 'No records to display.' and 'Page: 1 of 1' with a 'Reload' link. Below the table is a tab labeled 'General'. The 'General' tab contains a single input field labeled 'Dial Rule' with the value '25XXXX'.

5.9. Create Call and Handset Appearances

Three call appearances need to be created for each iD808 device for the main appearance, handset 1 appearance, and handset 2 appearance. As previously mentioned, three extensions are also required on Avaya Communication Manager and Avaya SIP Enablement Services. To create the main appearance, click **Appearances** under the “Avaya” PBX under the **SIP** directory. Click the **New** button on the next page to add a new appearance. In the **General** tab, provide a descriptive name for the appearance in the **Name** field, such as the extension or user’s name. Set the **Long Label** field to the label that will be displayed for the call appearance button on the iD808 deskstation. In this example, the label was set to the main appearance extension 25650. The **Address** field should also be set to the appearance extension. Set the **Type** field to “Call Appearance”.

The screenshot shows the iManager web interface. The top navigation bar includes the 'SPEAKERBUS' logo, a login status 'Logged in: SALES-DEMO\Administrator', and links for 'Navigation' and 'Help'. The left sidebar contains a tree view with categories: Home, System, Users, Groups, Voice Services, Sites, and SIP. Under the 'SIP' category, there are sub-items: Avaya, Avaya, Dial Plan, and Appearances. The main content area is titled 'SIP > Avaya > Avaya > Appearances'. It features three tabs: 'General' (selected), 'User Permissions', and 'Group Permissions'. Below the tabs are 'OK' and 'Cancel' buttons. A table with columns 'Name (Short Label)', 'Type', 'Status', 'Address', and 'Long Label' is shown, with a message 'No records to display.' and pagination 'Page: 1 of 1' with a 'Reload' link. Below the table, there are two sub-tabs: 'General' (selected) and 'Advanced'. The 'General' sub-tab contains several form fields: 'Name' (value: 25650), 'Long Label' (value: 25650), 'Address' (value: 25650), 'Type' (dropdown menu showing 'Call Appearance'), 'Owner' (empty field), and 'Scheme' (dropdown menu showing 'SIP').

In the **Advanced** tab, set the **Maximum Appearances** field to “3”. This field should be set to the number of call appearances configured on the station in Avaya Communication Manager minus one since the last call appearance is restricted. See the button assignment section of the station form and the second page of the Off-PBX-Telephone Station-Mapping form in Section 3.9 as an example. The number of call appearance button dictates the number of calls on the system the user can have directed to them. When all of a user’s call appearances are in-use (not idle) the user is considered busy and no further calls can be routed to them. Up to a maximum of 10 call appearances may be configured on Avaya Communication Manager for each iD808 deskstation. Select the **Message Indication** checkbox for voice mail purposes. The **Authentication Name** and **Authentication Password** fields should be set to the extension and password, respectively, configured on Avaya SIP Enablement Services. These are the credentials that the iD808 deskstation will use to authenticate and register with Avaya SIP Enablement Services. Use the default values for the other fields as shown below. Click **OK**.

The screenshot shows the iManager web interface. The top navigation bar includes 'SPEAKERBUS', a login status 'Logged in: SALES-DEMO\Administrator', and links for 'Navigation' and 'Help'. The left sidebar contains a tree view with categories like Home, System, Users, Groups, Voice Services, Sites, and SIP. Under the 'SIP' category, 'Avaya' is expanded, showing 'Avaya', 'Dial Plan', and 'Appearances'. The main content area is titled 'SIP > Avaya > Avaya > Appearances' and has tabs for 'General', 'User Permissions', and 'Group Permissions'. The 'General' tab is active, showing a table with columns 'Name (Short Label)', 'Type', 'Status', 'Address', and 'Long Label'. Below the table, it says 'No records to display.' and 'Page: 1 of 1' with a 'Reload' link. Below the table is a form with two tabs: 'General' and 'Advanced'. The 'Advanced' tab is selected, showing the following fields:

- Group Number: 0
- Maximum Appearances: 3
- Latched: ☒
- Allow Outbound Calls: ☒
- Message Indication: ☒
- Authentication Name: 25650
- Authentication Password: masked with dots
- Verify password: masked with dots

Next, this procedure will be repeated for the two handset appearances.

Click the **New** button to add another appearance. In the **General** tab, set the **Name**, **Long Label**, and **Address** fields to the extension of handset 1. In this example, the extension is 25661. Review the previous section for a description of these fields. Set the **Type** field to “Handset 1 Appearance”.

Logged in: SALES-DEMO\Administrator

Navigation ? Help

SIP > Avaya > Avaya > Appearances

General User Permissions Group Permissions

OK Cancel

| Name (Short Label) | Type | Status | Address | Long Label |
|--------------------|-----------------|--------|---------|------------|
| 25650 | Call Appearance | | 25650 | 25650 |

Page: 1 of 1 Reload

General Advanced

Name: 25661

Long Label: 25661

Address: 25661

Type: Handset 1 Appearance

Owner:

Scheme: SIP

In the **Advanced** tab, configure the **Authentication Name** and **Authentication Password** fields with the credentials for registering with Avaya SIP Enablement Services. For the handset appearances, the **Maximum Appearances** field should be set to “0” since no calls will be made to the handset appearances directly. The **Message Indication** checkbox does not need to be enabled since the handset appearances are not voice mail subscribers. Handset appearances are hidden on the iD808 deskstation and need to be defined in order for privacy to work on the iD808 with Avaya Communication Manager. Click **OK**.

The screenshot shows the iManager web interface. The top navigation bar includes the 'SPEAKERBUS' logo, a login status 'Logged in: SALES-DEMO\Administrator', and links for 'Navigation' and 'Help'. The left sidebar contains a tree view with categories like Home, System, Users, Groups, Voice Services, and Sites. Under 'SIP', there is a sub-tree for 'Avaya' containing 'Avaya', 'Dial Plan', and 'Appearances'. The main content area is titled 'SIP > Avaya > Avaya > Appearances'. It has three tabs: 'General' (selected), 'User Permissions', and 'Group Permissions'. Below the tabs are 'OK' and 'Cancel' buttons. A table lists the configured appearances:

| Name (Short Label) | Type | Status | Address | Long Label |
|--------------------|-----------------|--------|---------|------------|
| 25650 | Call Appearance | | 25650 | 25650 |

Below the table, it says 'Page: 1 of 1' and provides a 'Reload' link. The 'Advanced' tab is also visible, showing the following configuration fields:

- Group Number: 0
- Maximum Appearances: 0
- Latched: ☒
- Allow Outbound Calls: ☒
- Message Indication: ☐
- Authentication Name: 25661
- Authentication Password: [masked with dots]
- Verify password: [masked with dots]

Repeat the above procedure to add the handset 2 appearance.

The three call appearances for the previously configured iD808 deskstation are listed below.

SPKBRUS Logged in: SALES-DEMO\Administrator Navigation ? Help iManager

SIP > Avaya > Avaya > Appearances

General User Permissions Group Permissions

New Delete Apply Assign Ownership... Clear Ownership

| Name (Short Label) | Type | Status | Address | Long Label |
|--------------------|----------------------|--------|---------|------------|
| 25650 | Call Appearance | | 25650 | 25650 |
| 25661 | Handset 1 Appearance | | 25661 | 25661 |
| 25662 | Handset 2 Appearance | | 25662 | 25662 |

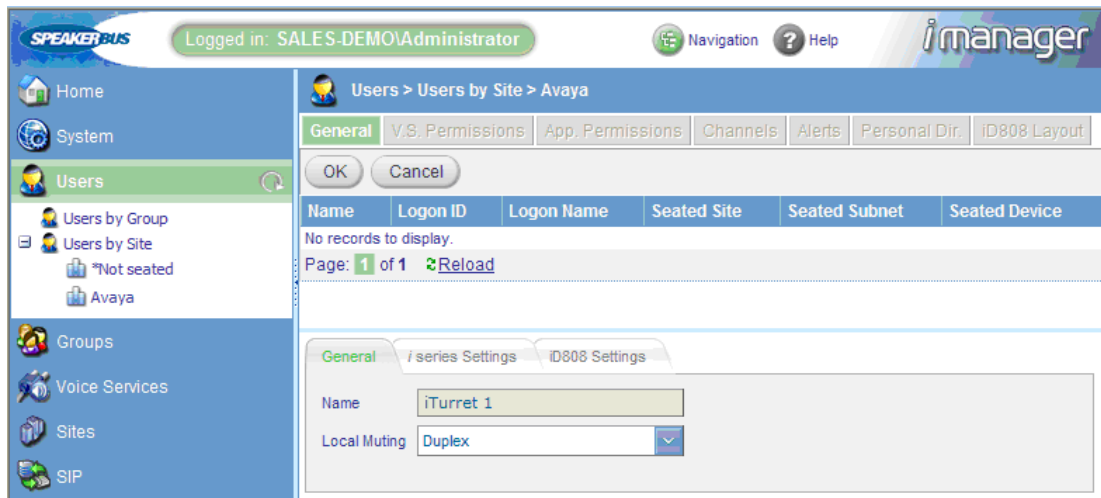
Page: 1 of 1 Reload

General Advanced

Repeat the above procedure for adding the main and handset appearances for each iD808 deskstation.

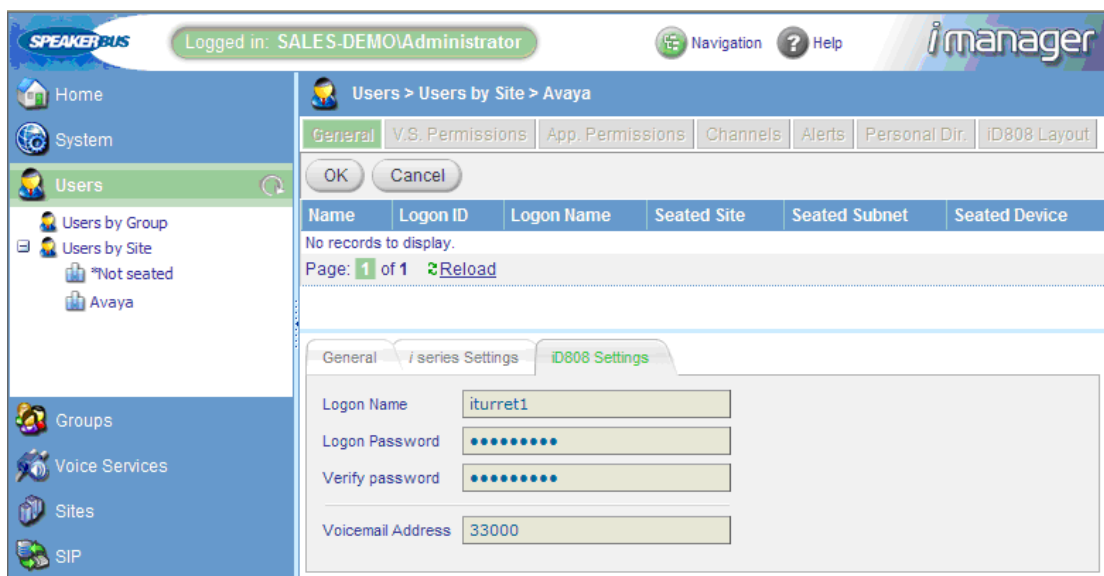
5.10. Create Users

In this section, the users are created. In the **Users** directory tree, click on the “Avaya” link, followed by the **New** button on the next page to add a new user. In the **General** tab, provide a descriptive name in the **Name** field.



The screenshot shows the iManager web interface. The top navigation bar includes 'SPEAKERBUS', 'Logged in: SALES-DEMO\Administrator', 'Navigation', 'Help', and the 'iManager' logo. The left sidebar contains a tree view with 'Home', 'System', 'Users', 'Groups', 'Voice Services', 'Sites', and 'SIP'. The 'Users' section is expanded, showing 'Users by Group', 'Users by Site', 'Not seated', and 'Avaya'. The main content area is titled 'Users > Users by Site > Avaya' and has tabs for 'General', 'V.S. Permissions', 'App. Permissions', 'Channels', 'Alerts', 'Personal Dir.', and 'ID808 Layout'. The 'General' tab is active, showing 'OK' and 'Cancel' buttons, a table with columns 'Name', 'Logon ID', 'Logon Name', 'Seated Site', 'Seated Subnet', and 'Seated Device', and a message 'No records to display.' Below the table is a 'Page: 1 of 1' and a 'Reload' link. At the bottom, there are tabs for 'General', 'i series Settings', and 'ID808 Settings'. The 'General' tab is active, showing a 'Name' field with the value 'iTurret 1' and a 'Local Muting' dropdown menu set to 'Duplex'.

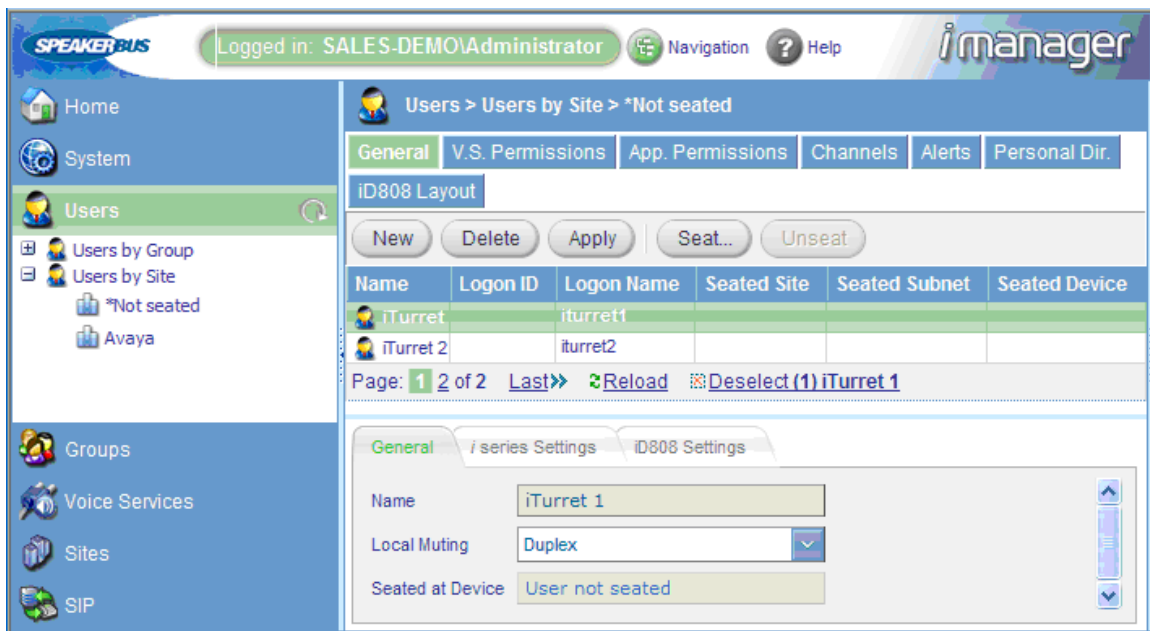
In the **ID808 Settings** tab, provide the logon credentials for the user to log into their iD808 deskstation. This page will be revisited later in **Section 5.13** to configure the default call appearance for this deskstation. Click **OK**.



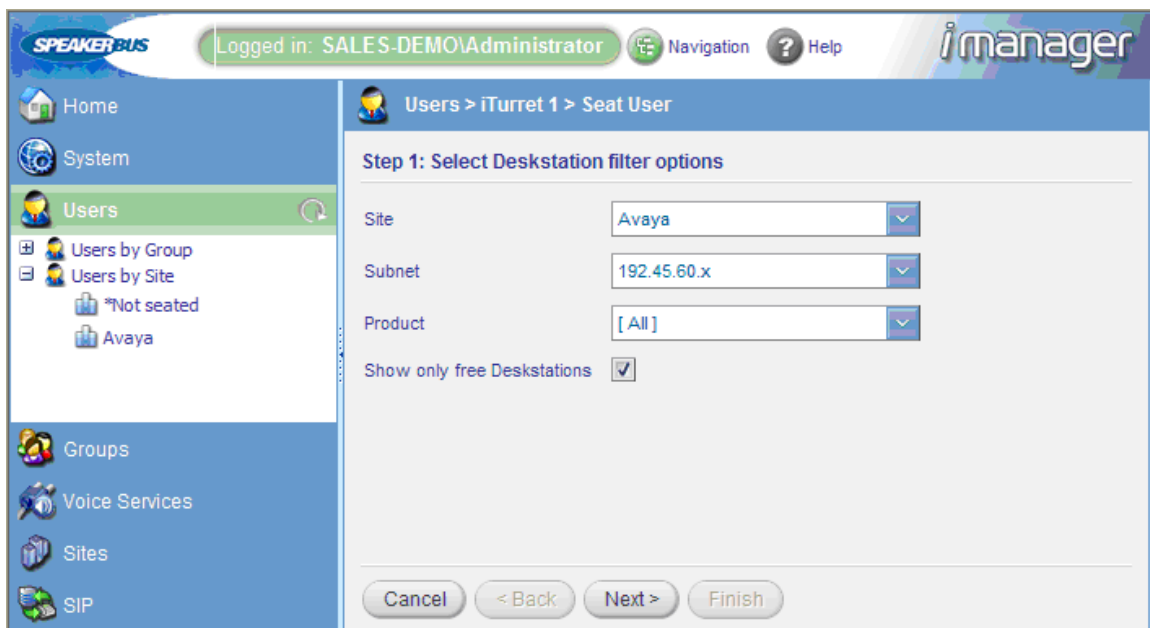
The screenshot shows the iManager web interface, similar to the previous one, but with the 'ID808 Settings' tab active. The 'General' tab is still selected, showing the 'Name' field with 'iTurret 1' and the 'Local Muting' dropdown set to 'Duplex'. The 'ID808 Settings' tab is active, showing fields for 'Logon Name' (value: 'iturret1'), 'Logon Password' (masked with dots), 'Verify password' (masked with dots), and 'Voicemail Address' (value: '33000').

Repeat the previous procedure to add more users.

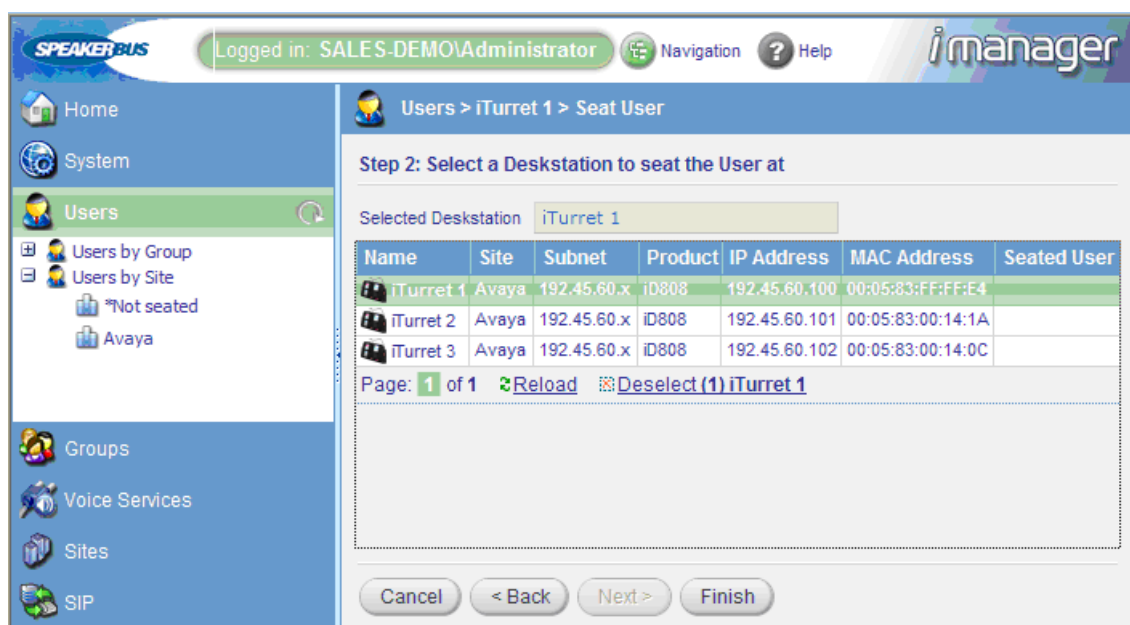
After a user has been created, the user needs to be “seated” on an iD808 deskstation. In the **Users** directory tree, click on the “Avaya” link to display the list of users. Select the user previously configured (i.e., *i turret 1*) and click on the **Seat...** button.



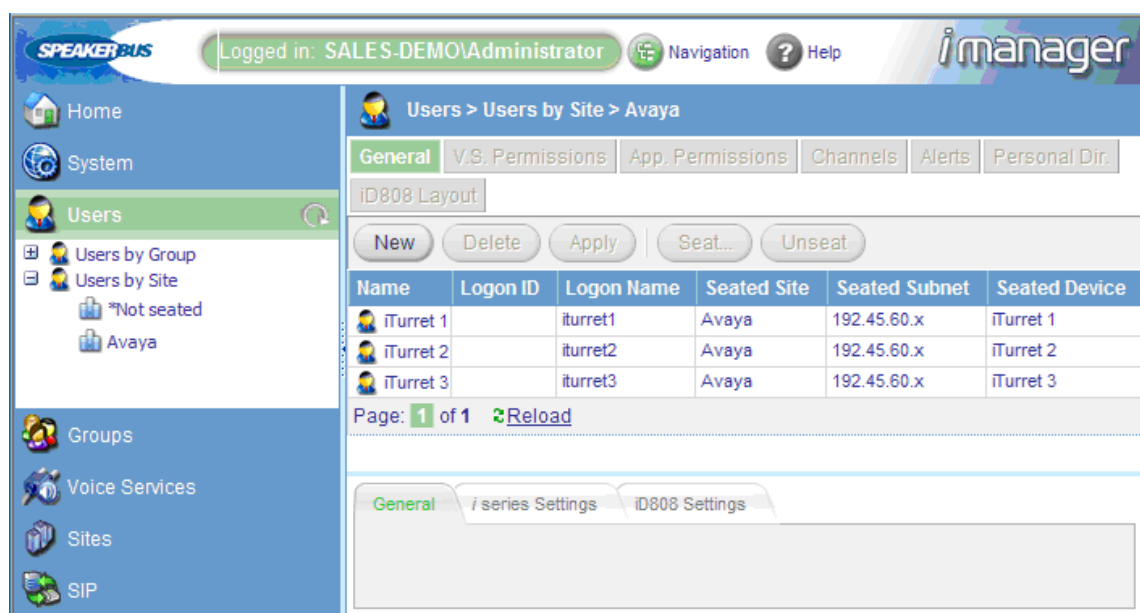
On the next page, filter options are presented. Filter deskstations in the “Avaya” site and in the “192.45.60.x” subnet as shown below. The user will be seated on an iD808 deskstation with these properties. Click **Next**.



In the following deskstation list, select the iD808 deskstation where the selected user will be seated. In this example, the user will be seated on the “i turret 1” deskstation. Select “i turret 1” in the list and click **Finish**.

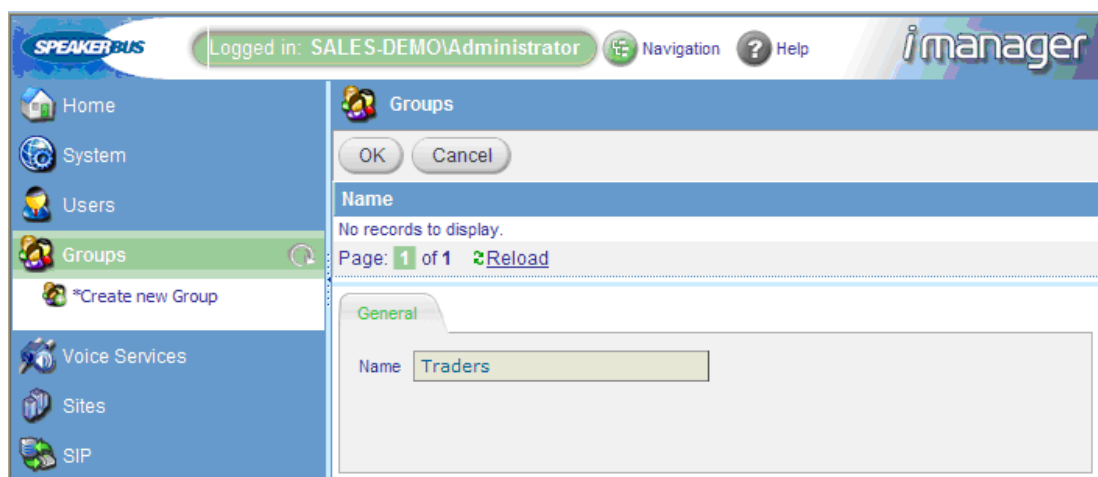


The user has been successfully seated as indicated by the deskstation displayed in the **Seated Device** column on the following page. Repeat this procedure for seating other users.

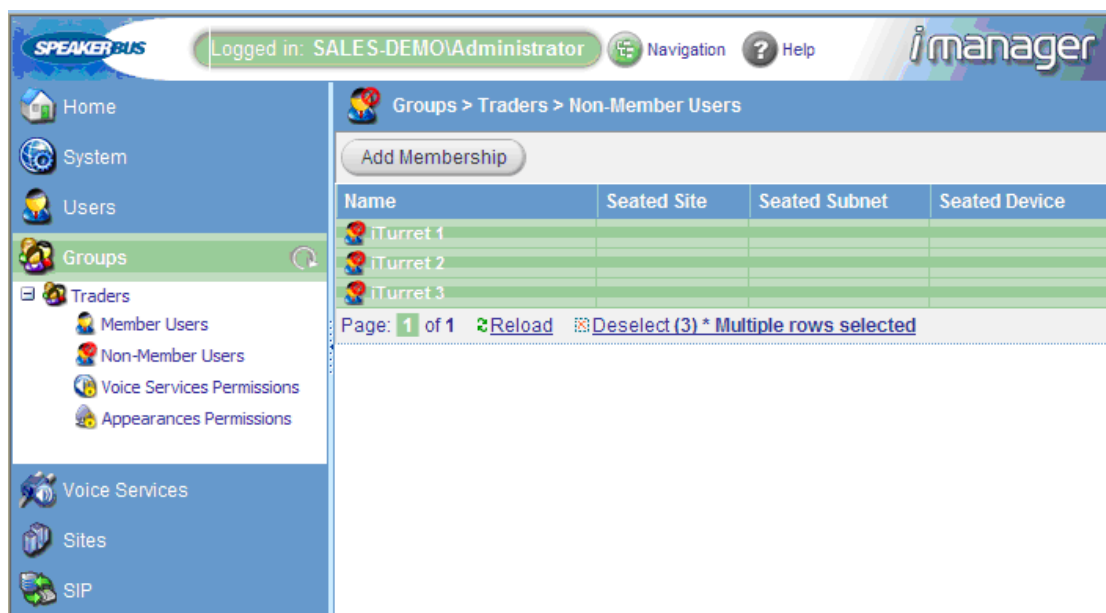


5.11. Create Group

To create a group, click on **Create new Group** in the **Groups** directory tree. In the **General** tab, provide a descriptive name in the **Name** field, such as “Traders”. Click **OK**. The “Traders” group has been successfully added. Next, the user will be added to this new group.



In the **Groups** directory tree, expand “Traders” and click on **Non-Member Users**. A list of non-member users is displayed. Select all the users to be added to the “Traders” group as shown below and then click **Add Membership**.



Next, select the main call appearance to assign permissions for it to the group as shown below. For example, 25650 is the main call appearance for *i* turret 1. Do not assign the handset appearances. Set the **Permission** field to “Allow” and click **Apply**. The **Permission** column for 25650 will be changed to “Allow”. This procedure should be performed for all main call appearances. It is recommended that groups are not given permission to the call-appearances since call-appearances are analogous to an extension and is not shared by a group. Therefore, it is suggested that only the intended owner of the call-appearances and selected others who bridge this call would have their permissions set to “allow”.

Logged in: SALES-DEMO\Administrator Navigation Help **iManager**

Groups > Traders > Appearances Permissions

Apply

| Short Label | Long Label | PBX | Permission |
|-------------|------------|-------|------------|
| 25650 | 25650 | Avaya | Deny |
| 25661 | 25661 | Avaya | Deny |
| 25662 | 25662 | Avaya | Deny |

Page: 1 of 1 Reload Deselect (1) 25650

General

Permission:

The next step will be to assign handset appearances permissions to users. In the **SIP** directory tree, click on **Appearances** under “Avaya”. Select the “Handset 1 Appearance” for *i* turret 1 (i.e., 25661) and click on **User Permissions**.

The screenshot shows the iManager interface. The left sidebar has a tree view with 'SIP' expanded, then 'Avaya', then 'Avaya', then 'Appearances'. The main pane shows a table of SIP appearances. The row for '25661' with type 'Handset 1 Appearance' is highlighted. Below the table, the 'General' tab is active, showing fields for Name (25661), Long Label (25661), Address (25661), Type (Handset 1 Appearance), Owner, and Scheme (SIP).

| Name (Short Label) | Type | Status | Address | Long Label |
|--------------------|----------------------|--------|---------|------------|
| 25650 | Call Appearance | | 25650 | 25650 |
| 25661 | Handset 1 Appearance | | 25661 | 25661 |
| 25662 | Handset 2 Appearance | | 25662 | 25662 |

Page: 1 of 1 [Reload](#) [Deselect \(1\) 25661](#)

General | Advanced

Name: 25661
 Long Label: 25661
 Address: 25661
 Type: Handset 1 Appearance
 Owner:
 Scheme: SIP

Select the user on the next page to which handset appearance permissions will be assigned. Set the **Permission** field to “Allow” as shown below. Click **Apply**. Assign “Handset 2 Appearance” permissions to this user by following the previous procedure.

The screenshot shows the iManager interface. The left sidebar has a tree view with 'SIP' expanded, then 'Avaya', then 'Avaya', then 'Appearances'. The main pane shows a table of user permissions for the selected appearance. The row for 'iTurret 1' with permission 'Use group' is highlighted. Below the table, the 'General' tab is active, showing the 'Permission' field set to 'Allow'.

| Name | Permission | Seated Site | Seated Subnet | Seated Device |
|-----------|------------|-------------|---------------|---------------|
| iTurret 1 | Use group | | | |
| iTurret 2 | Use group | | | |
| iTurret 3 | Use group | | | |

Page: 1 of 1 [Reload](#) [Deselect \(1\) iTurret 1](#)

General

Permission: Allow

5.12. Assign Ownership

Assign ownership of the appearances to a user. In the **SIP** directory tree, click on **Appearances** to display the appearances list as shown below. In the **General** tab, select the main call appearance and click on the **Assign Ownership** button.

The screenshot shows the iManager web interface for managing SIP appearances. The top navigation bar includes the 'SPEAKERBUS' logo, a login status 'Logged in: SALES-DEMO\Administrator', and links for 'Navigation' and 'Help'. The left sidebar contains a tree view with 'SIP' selected, showing sub-items like 'Avaya', 'Avaya', 'Dial Plan', and 'Appearances'. The main content area is titled 'SIP' and has three tabs: 'General' (selected), 'User Permissions', and 'Group Permissions'. Below the tabs are buttons for 'New', 'Delete', 'Apply', 'Assign Ownership...', and 'Clear Ownership'. A table lists three appearances:

| Name (Short Label) | Type | Status | Address | Long Label |
|--------------------|----------------------|--------|---------|------------|
| 25650 | Call Appearance | | 25650 | 25650 |
| 25661 | Handset 1 Appearance | | 25661 | 25661 |
| 25662 | Handset 2 Appearance | | 25662 | 25662 |

Below the table, it says 'Page: 1 of 1' with links for 'Reload' and 'Deselect (1) 25650'. The 'General' tab for the selected appearance (25650) shows fields for Name, Long Label, Address, Type, Owner, and Scheme. The 'Scheme' dropdown is set to 'SIP'.

The next page displays filter options. Filter users by selecting the “Avaya” site and the “Traders” group and click **Next**.

Step 1: Select User filter options

Show only unseated users ☐

Filter by Site:

Filter by Group:

Filter by Name:

Buttons: Cancel, < Back, Next >, Finish

On the next page, select the user to which ownership will be assigned to the main call appearance. In this example, the main call appearance 25650 will be assigned to *i* turret 1. Click **Finish**.

Step 2: Select a User to assign ownership to

Selected User:

| Name | Seated Site | Seated Subnet | Seated Device |
|-----------|-------------|---------------|---------------|
| iTurret 1 | Avaya | 192.45.60.x | iTurret 1 |
| iTurret 2 | Avaya | 192.45.60.x | iTurret 2 |
| iTurret 3 | Avaya | 192.45.60.x | iTurret 3 |

Page: 1 of 1 [Reload](#) [Deselect \(1\) iTurret 1](#)

Buttons: Cancel, < Back, Next >, Finish

Repeat this procedure to assign “Handset 1 Appearance” and “Handset 2 Appearance” to *i* turret 1.

5.13. Assign Default Call Appearance

In the **Users** directory tree, click on the “Avaya” link to display the users list. Set the **Default Appearance** field to the main call appearance (e.g., 25650). Click **Apply**.

The screenshot shows the iManager web interface. The top navigation bar includes the SPEAKERBUS logo, a login status of 'SALES-DEMO\Administrator', and links for Navigation and Help. The left sidebar contains a directory tree with 'Users' selected, showing sub-items like 'Users by Group', 'Users by Site', 'Not seated', and 'Avaya'. The main content area displays 'Users > Users by Site > Avaya'. It features a tabbed interface with 'General', 'V.S. Permissions', 'App. Permissions', 'Channels', 'Alerts', 'Personal Dir.', and 'iD808 Layout'. Below the tabs are buttons for 'New', 'Delete', 'Apply', 'Seat...', and 'Unseat'. A table lists three users: iturret1, iturret2, and iturret3, all seated at the Avaya site. Below the table, it indicates 'Page: 1 of 1' and provides links for 'Reload' and 'Deselect (1) iturret 1'. The bottom section shows the configuration for the selected user 'iturret1' under the 'iD808 Settings' tab. Fields include 'Logon Name' (iturret1), 'Voicemail Address' (33000), 'Appearance Type' (Call Appearance), and 'Default Appearance' (25650). A 'Change Password...' button is also present.

| Name | Logon ID | Logon Name | Seated Site | Seated Subnet | Seated Device |
|-----------|----------|------------|-------------|---------------|---------------|
| iTurret 1 | iturret1 | iturret1 | Avaya | 192.45.60.x | iTurret 1 |
| iTurret 2 | iturret2 | iturret2 | Avaya | 192.45.60.x | iTurret 2 |
| iTurret 3 | iturret3 | iturret3 | Avaya | 192.45.60.x | iTurret 3 |

Page: 1 of 1 [Reload](#) [Deselect \(1\) iTurret 1](#)

Configuration for iturret1:

- Logon Name: iturret1
- Voicemail Address: 33000
- Appearance Type: Call Appearance
- Default Appearance: 25650

5.14. Program Feature Name Extensions (FNEs)

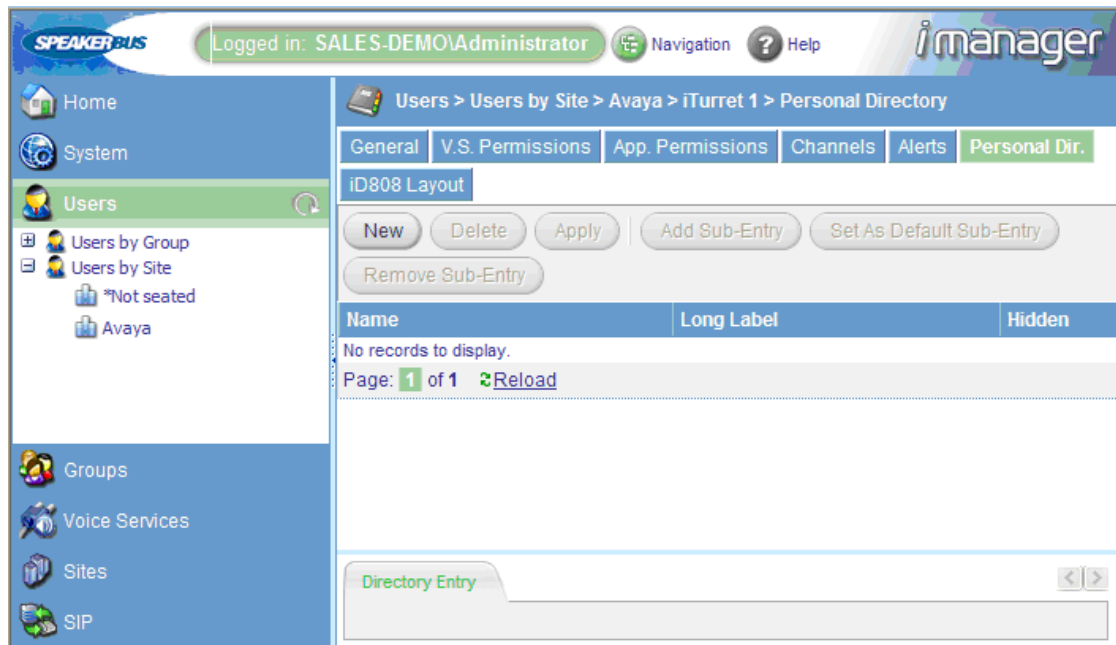
In this section, the Feature Name Extensions (FNEs) are configured. FNEs can be created in the Corporate directory or Personal directory. In this example, the FNEs are created under the Personal directory of an iD808 deskstation. This makes the FNE available to this deskstation only as opposed to the whole corporation.

In the **Users** directory tree, click on the “Avaya” link and then select a user (e.g., *i turret 1*). Click on **Personal Dir.**

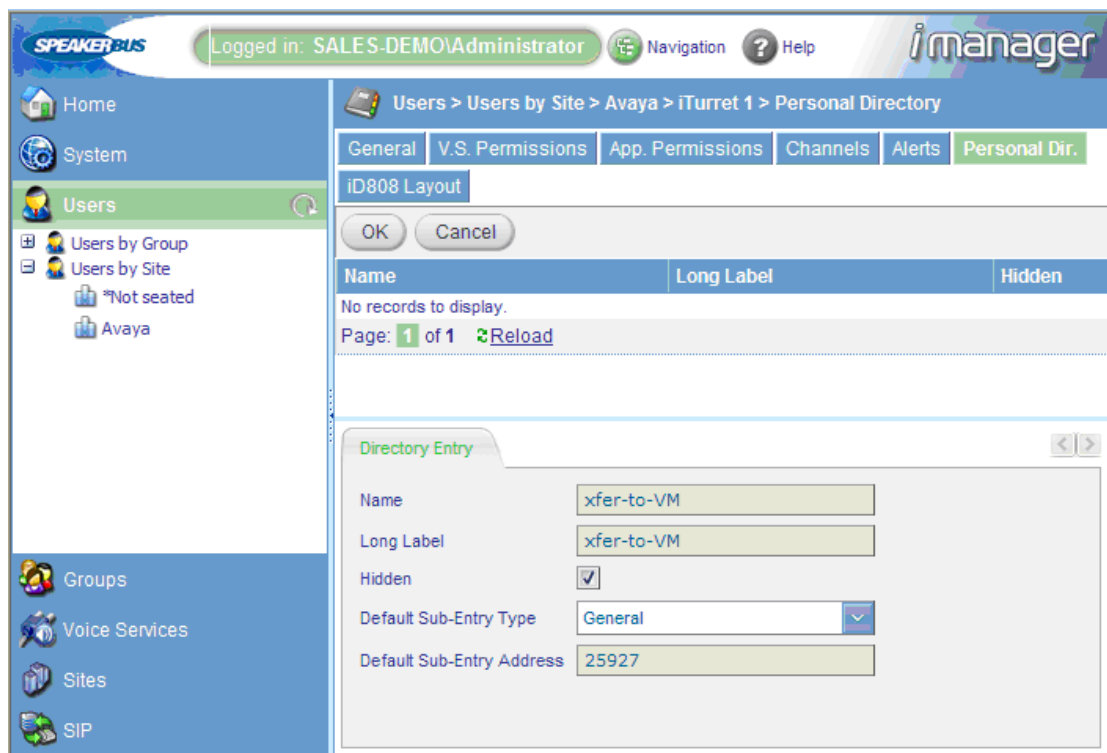
The screenshot shows the iManager web interface. The top navigation bar includes the SPEAKERBUS logo, a login status of 'SALES-DEMO\Administrator', and links for Navigation and Help. The left sidebar contains a tree view with categories: Home, System, Users, Groups, Voice Services, Sites, and SIP. Under the 'Users' category, there are sub-items: 'Users by Group', 'Users by Site', '*Not seated', and 'Avaya'. The main content area is titled 'Users > Users by Site > Avaya'. It features a tabbed interface with 'General', 'V.S. Permissions', 'App. Permissions', 'Channels', 'Alerts', and 'Personal Dir.'. The 'General' tab is active, showing an 'iD808 Layout' section with buttons for 'New', 'Delete', 'Apply', 'Seat...', and 'Unseat'. Below this is a table with columns: Name, Logon ID, Logon Name, Seated Site, Seated Subnet, and Seated Device. The table lists three users: iTurret 1, iTurret 2, and iTurret 3, all seated at the Avaya site with subnet 192.45.60.x. The page indicates 'Page: 1 of 1' and includes a 'Reload' button and a 'Deselect (1) iTurret 1' link. Below the table, there are tabs for 'General', 'i series Settings', and 'iD808 Settings'. The 'General' tab is selected, showing fields for Name (iTurret 1), Local Muting (Duplex), Seated at Site (Avaya), Seated at Subnet (192.45.60.x), and Seated at Device (iTurret 1).

| Name | Logon ID | Logon Name | Seated Site | Seated Subnet | Seated Device |
|-----------|----------|------------|-------------|---------------|---------------|
| iTurret 1 | iturret1 | iturret1 | Avaya | 192.45.60.x | iTurret 1 |
| iTurret 2 | iturret2 | iturret2 | Avaya | 192.45.60.x | iTurret 2 |
| iTurret 3 | iturret3 | iturret3 | Avaya | 192.45.60.x | iTurret 3 |

On the next page, click the **New** button to add an FNE in the personal directory.



In the **Directory Entry** tab, provide the name of the FNE in the **Name** and **Long Label** fields and set the **Default Sub-Entry Address** to the FNE extension configured in **Section 3.5**. In this example, the transfer-to-voicemail FNE is added. Click **OK**. Repeat for other FNEs of interest.



5.15. Program iD808 Deskstation Keys

This section describes how to create iD808 deskstation keys. The following keys can be created using the iD808 layout page: Dynamic, Appearance, Shortcut, Soft Function, and Speed Dial amongst others. In this configuration, each user will be configured with three Dynamic keys, two Soft Function keys, and one Shortcut key. Although the configuration may vary, this configuration is suitable for most users.

In the **Users** directory tree, click on the “Avaya” link to display a list of users in the “Avaya” site. Select a user (e.g., *i turret 1*) and click **iD808 Layout** to display the iD808 key layout for this user.

The screenshot shows the iManager web interface. The top navigation bar includes the 'SPEAKERBUS' logo, a login status 'Logged in: SALES-DEMO\Administrator', and links for 'Navigation' and 'Help'. The left sidebar contains a tree view with 'Home', 'System', 'Users', 'Groups', 'Voice Services', 'Sites', and 'SIP'. The 'Users' section is expanded, showing 'Users by Group' and 'Users by Site'. Under 'Users by Site', there are links for 'Not seated' and 'Avaya'. The main content area is titled 'Users > Users by Site > Avaya' and contains tabs for 'General', 'V.S. Permissions', 'App. Permissions', 'Channels', 'Alerts', and 'Personal Dir.'. The 'General' tab is active, showing the 'iD808 Layout' section. This section includes buttons for 'New', 'Delete', 'Apply', 'Seat...', and 'Unseat'. Below these buttons is a table with the following data:

| Name | Logon ID | Logon Name | Seated Site | Seated Subnet | Seated Device |
|-----------|----------|------------|-------------|---------------|---------------|
| iTurret1 | iturret1 | Avaya | 192.45.60.x | iTurret 1 | |
| iTurret 2 | iturret2 | Avaya | 192.45.60.x | iTurret 2 | |
| iTurret 3 | iturret3 | Avaya | 192.45.60.x | iTurret 3 | |

Below the table, it says 'Page: 1 of 1' with links for 'Reload' and 'Deselect (1) iTurret 1'. The bottom section of the interface has tabs for 'General', 'i series Settings', and 'iD808 Settings'. The 'iD808 Settings' tab is active, showing fields for 'Name' (iTurret 1), 'Local Muting' (Duplex), 'Seated at Site' (Avaya), 'Seated at Subnet' (192.45.60.x), and 'Seated at Device' (iTurret 1).

In the iD808 key layout, click on the key highlighted below under Handset 2. In the **Key Entry** tab, set the **Type** field to “Dynamic”. Click **OK**.

Users > Users by Site > Avaya > iTurret 1 > iD808 Key Layout

General V.S. Permissions App. Permissions Channels Alerts Personal Dir. **iD808 Layout**

Apply Page Set Key As Paging Clear Key Paging OK Cancel

Page 1[1]

Handset 1
Handset 2

Page

Page Number:
Page Sub-page
1 1 →

Name Page 1

Read-only ☐

Key Entry Advanced

Type Dynamic

Three Dynamic keys will be added so repeat this step for the next two keys. The iD808 layout will appear as shown below once the three dynamic keys have been added.

Next, configure two Soft Function keys. Select the next available key under the last Dynamic key. In the **Key Entry** tab, set the Type field to “Soft Function” and click **OK**. Repeat this step for the second Soft Function key.

Users > Users by Site > Avaya > iTurret 1 > iD808 Key Layout

General V.S. Permissions App. Permissions Channels Alerts Personal Dir. **iD808 Layout**

Apply Page Set Key As Paging Clear Key Paging OK Cancel

Page 1[1]

Handset 1
Handset 2
Dynamic
Dynamic
Dynamic

Page Number: 1 1 →

Name Page 1

Read-only ☐

Key Entry Advanced

Type Soft Function

Settings:
Soft Function Type General

Once the two Soft Function keys have been created, the iD808 layout will be appear as shown below.

Finally, add a Shortcut key under the last Soft Function key. In the **Key Entry** tab, set the **Type** field to “Shortcut”. Set the **Shortcut** field to “Page 100”. This deskstation page will contain shortcuts to the “Home Page”, which will contain the call appearances, and “FNEs” page, which will contain speed dial keys for FNEs. Click **OK**.

Users > Users by Site > Avaya > iTurret 1 > iD808 Key Layout

General V.S. Permissions App. Permissions Channels Alerts Personal Dir. **iD808 Layout**

Apply Page Set Key As Paging Clear Key Paging OK Cancel

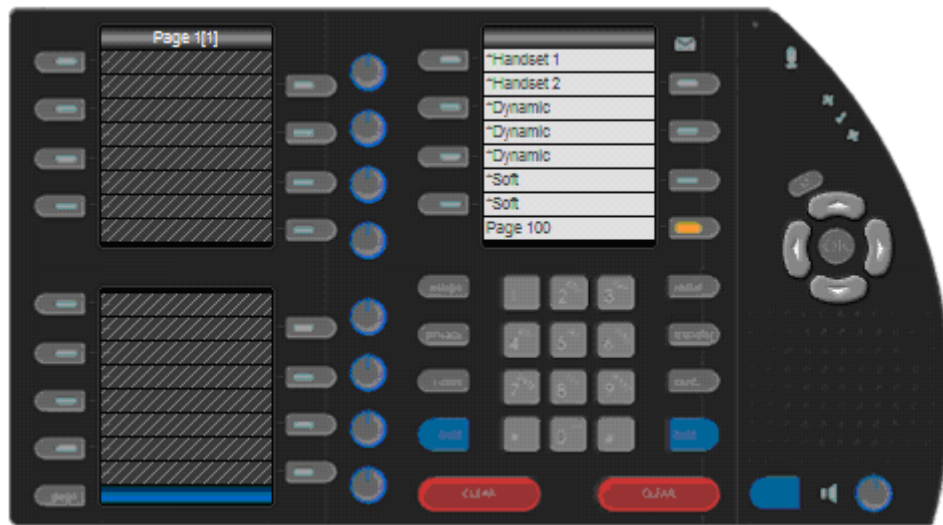
Page 1[1]

*Handset 1
*Handset 2
*Dynamic
*Dynamic
*Soft
*Soft

Page Number:
Page Sub-page
1 1 →
Name Page 1
Read-only ☐

Key Entry Advanced
Type Shortcut
Settings:
Shortcut Type Page Shortcut
Shortcut Page 100

After all of the iD808 keys have been created on the deskstation, the iD808 layout will appear as shown below.



5.15.1. Create Home Page

In the iD808 key layout page, go to Page 1 of the deskstation by setting the **Page** field to “1” in the **Page** tab and clicking the arrow key to the right. Set the **Name** field to “Home Page” to rename Page 1. Note that Page 1 is the “Home Page”. Click **Apply Page**.

Users > Users by Site > Avaya > iTurret 1 > iD808 Key Layout

General V.S. Permissions App. Permissions Channels Alerts Personal Dir. **iD808 Layout**

Apply Page Set Key As Paging Clear Key Paging Delete Key Apply Key Synchronise

Page 1[1]

*Handset 1
*Handset 2
*Dynamic
*Dynamic
*Soft
*Soft
Page 100

Page Number: Page Sub-page
1 1 →

Name Home Page

Read-only ☐

Key Entry Advanced

Type Shortcut

Settings:
Shortcut Type Page Shortcut
Shortcut Page 100

In the “Home Page”, select the next available key as highlighted by the red box below. The next three keys on this page will be assigned to call appearances. In the **Key Entry** tab, set the **Type** field to “Appearance”. In the **Settings** section, set the **Appearance Type** field to “Call Appearance” and the **Appearance** field to the main call appearance extension (e.g., 25650). Select the **Alert Enabled** checkbox so the deskstation rings when a call is received on this call appearance. The **Alert Profile** field is set to a particular ring type specified in “Profile 1”. Click **OK**. Repeat this procedure to add the next two call appearances to the “Home Page”.

Users > Users by Site > Avaya > iTurret 1 > iD808 Key Layout

General V.S. Permissions App. Permissions Channels Alerts Personal Dir. **iD808 Layout**

Apply Page Set Key As Paging Clear Key Paging OK Cancel

Home Page(1)

Handset 1
Handset 2
Dynamic
Dynamic
Soft
Soft
Page Links

Page

Page Number:

Page Sub-page

1 1 →

Name Home Page

Read-only ☐

Key Entry Advanced

Type Appearance

Settings:

Appearance Type Call Appearance

Appearance 25650

Alert Enabled ☒

Alert Profile Profile 1

64 of 75
Speakerbus

5.15.2. Create FNEs Page

In the iD808 key layout page, go to Page 99 of the deskstation by setting the **Page** field to “99” in the **Page** tab and clicking the arrow key to the right. This page will contain the speed dial keys for FNEs. Set the **Name** field to “FNEs” to rename Page 99. Note that Page 99 *is* the “FNEs” page. Click **Apply Page**.

The screenshot displays the 'iD808 Key Layout' configuration page. The breadcrumb trail at the top reads: 'Users > Users by Site > Avaya > iTurret 1 > iD808 Key Layout'. The navigation tabs include 'General', 'V.S. Permissions', 'App. Permissions', 'Channels', 'Alerts', 'Personal Dir.', and 'iD808 Layout' (which is highlighted). Below the tabs are several action buttons: 'Apply Page', 'Set Key As Paging', 'Clear Key Paging', 'Delete Key', 'Apply Key', and 'Synchronise'.

The main area shows a graphical representation of the iD808 deskstation. The 'Page 99(1)' tab is active, showing a grid of speed dial keys. To the right of the grid is a list of speed dial entries: '*Handset 1', '*Handset 2', '*Dynamic', '*Dynamic', '*Dynamic', '*Soft', '*Soft', and 'Page Links'.

Below the deskstation graphic are two panels. The left panel, titled 'Page', contains the following fields: 'Page Number' (with sub-fields for 'Page' and 'Sub-page'), 'Name', and 'Read-only'. The 'Page' field is set to '99' and the 'Sub-page' field is set to '1'. The 'Name' field is set to 'FNEs'. The 'Read-only' checkbox is unchecked. The right panel, titled 'Key Entry', has an 'Advanced' tab selected, but it is currently empty.

Select the next available key in the “FNEs” page. In the **Key Entry** tab, set the **Type** field to “Speed Dial” and the **Speed Dial Type** field to “Personal Directory”. The **Directory Entry** field may be set to the transfer-to-voicemail FNE created in **Section 5.14**. The **Sub-Entry** field is set to the FNE extension. The **Appearance Type** field is set to “Call Appearance” and the **Appearance** field is set to the main call appearance for this deskstation (e.g., 25650). Click **OK**. Repeat this procedure to create speed dial buttons for other FNEs.

Users > Users by Site > Avaya > iTurret 1 > iD808 Key Layout

General | V.S. Permissions | App. Permissions | Channels | Alerts | Personal Dir. | **iD808 Layout**

Apply Page | Set Key As Paging | Clear Key Paging | OK | Cancel

FNEs

Handset 1
Handset 2
Dynamic
Dynamic
Dynamic
Soft
Soft
Page Links

Page

Page Number:

Page Sub-page

99 1

Name FNEs

Read-only ☐

Key Entry Advanced

Type Speed Dial

Settings:

Speed Dial Type Personal Directory

Directory Entry xfer-to-VM

Sub-Entry 25927 (General)

Appearance Type Call Appearance

Appearance 25650

After the FNE is added to the “FNEs” page, the iD808 layout will appear as follows.



5.15.3. Create a “Page Links” Page

In the iD808 key layout page, go to Page 100 of the deskstation by setting the **Page** field to “100” in the **Page** tab and clicking the arrow key to the right. This page will contain shortcuts to the “Home Page” and “FNEs” page. Set the **Name** field to “Page Links” to rename Page 100. Note that Page 99 is the “FNEs” page. Click **Apply Page**.

The screenshot displays the 'iD808 Key Layout' configuration page within a web interface. The breadcrumb trail at the top reads: 'Users > Users by Site > Avaya > iTurret 1 > iD808 Key Layout'. The 'iD808 Layout' tab is selected among others like 'General', 'V.S. Permissions', 'App. Permissions', 'Channels', 'Alerts', and 'Personal Dir.'. Below the tabs are several action buttons: 'Apply Page', 'Set Key As Paging', 'Clear Key Paging', 'Delete Key', 'Apply Key', and 'Synchronise'. The main area shows a virtual representation of the iD808 deskset. The 'Page 100[1]' tab is active, showing a grid of keys. A list on the right side of the deskset shows the following assignments: *Handset 1, *Handset 2, *Dynamic, *Dynamic, *Dynamic, *Soft, *Soft, and Page 100. Below the deskset image, there are two panels. The 'Page' panel on the left contains fields for 'Page Number' (with 'Page' and 'Sub-page' sub-labels), where '100' is entered in the 'Page' field and '1' in the 'Sub-page' field, followed by a right-pointing arrow button. Below this is a 'Name' field containing 'Page Links' and a 'Read-only' checkbox which is unchecked. The 'Key Entry' panel on the right has an 'Advanced' sub-tab and is currently empty.

In “Page Links” page, select an available key to create a shortcut to the “Home Page” containing call appearances. In the **Key Entry** tab, set the **Type** field to “Shortcut” and the **Shortcut** field to “Home Page”. Click **OK**.

Users > Users by Site > Avaya > iTurret 1 > iD808 Key Layout

General V.S. Permissions App. Permissions Channels Alerts Personal Dir. iD808 Layout

Apply Page Set Key As Paging Clear Key Paging OK Cancel

Page Links(1)

Handset 1
Handset 2
Dynamic
Dynamic
Dynamic
Soft
Soft
Page Links

Page Number: 100 Sub-page: 1 →

Name: Page Links

Read-only ☐

Key Entry Advanced

Type: Shortcut

Settings:

Shortcut Type: Page Shortcut

Shortcut: Home Page

In “Page Links” page, select the next available key to create a shortcut to the “FNEs” page containing speed dial keys for FNEs. In the **Key Entry** tab, set the **Type** field to “Shortcut” and set the **Shortcut** field to “FNEs”. Click **OK**.

Users > Users by Site > Avaya > iTurret 1 > iD808 Key Layout

General V.S. Permissions App. Permissions Channels Alerts Personal Dir. **iD808 Layout**

Apply Page Set Key As Paging Clear Key Paging OK Cancel

Page Links[i]

Home Page

Handset 1

Handset 2

Dynamic

Dynamic

Dynamic

Soft

Soft

Page Links

Page

Page Number:

Page Sub-page

100 1 →

Name Page Links

Read-only ☐

Key Entry Advanced

Type Shortcut

Settings:

Shortcut Type Page Shortcut

Shortcut FNEs

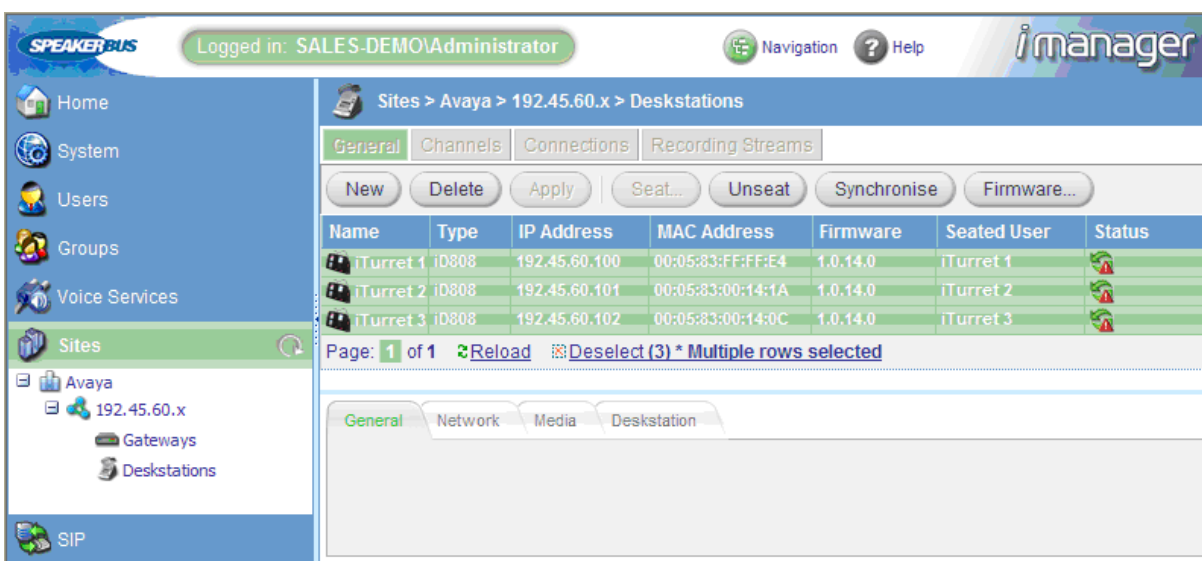
Once the “Home Page” and “FNEs” page shortcuts have been added, the “Page Links” page will appear as follows. The “Page Links” page is now accessible by clicking on the **Page links** shortcut key highlighted below.



5.16. Synchronize Deskstations

To send the new configuration to the iD808 deskstations, the deskstations need to be synchronized with *i cms*. In the **Sites** directory tree, click on **Deskstations** to display the deskstation list. Select the deskstations as shown below and click the **Synchronise** button. The iD808 deskstation will indicate that they are being synchronized on their displays. After the deskstations have been synchronized, the status icons on the iD808 deskstations corresponding to the network, *i cms*, and SIP registrar status should be green.

Note: Active calls will be dropped.



6. Interoperability Compliance Testing

This section describes the compliance testing used to verify the interoperability of Speakerbus iD808 *i* turret with Avaya SIP Enablement Services and Avaya Communication Manager. This section covers the general test approach and the test results.

6.1. General Test Approach

The general test approach was to make calls between iD808 deskstations and Avaya SIP, H.323, and digital stations using various codec settings and exercising common PBX features.

6.2. Test Results

Speakerbus iD808 *i* turret passed compliance testing. The following features and functionality were verified.

- Successful registration of the *i* turret with Avaya SIP Enablement Services.
- Calls between the *i* turret and Avaya SIP, H.323, and digital stations.
- G.711u and G.729B codec support.
- Proper recognition of DTMF transmissions by navigating voicemail menus.
- Proper operation of voicemail with message waiting indicators (MWI).
- PBX features including Multiple Call Appearances, Hold, Transfer, and Conference.
- Extended telephony features using Avaya Communication Manager Feature Name Extensions (FNEs) such as Call Forwarding, Conference On Answer, Call Park, Call Pickup, Automatic Redial and Send All Calls. See **Table 1** for the complete list of features. For more information on FNEs, please refer to [2].
- Exclusion/Privacy using the AST Exclusion FNU.
- Proper system recovery after an *i* turret restart and loss of IP connection.

Observation(s): G.729B calls between an *i* turret and an Avaya SIP telephone are not shuffled. However, G.729B calls between two *i* turrets or between an *i* turret and an Avaya H.323 telephone are shuffled.

7. Verification Steps

All features shown in **Table 1** were tested using the sample configuration. The following steps can be used to verify and/or troubleshoot installations in the field.

1. On the Speakerbus iD808 *i* turret, verify that the status icons are green. These status icons indicate whether the *i* turret is connected to the network, *i* cms server, and SIP registrar (i.e., Avaya SIP Enablement Services). Refer to [6] for more details.
2. Verify that the iD808 deskstations have successfully registered with Avaya SIP Enablement Services. Each iD808 deskstation contains three extensions on Avaya SIP Enablement Services for one main appearance and two handset appearances.
3. Verify basic feature set administration by making calls from one *i* turret to another *i* turret and phones. Test supported features according to **Table 1** and feature deployment plans at the site.
4. Verify that speed dials defined locally at the *i* turret are correct. If any are missing or are inoperative, use *i* manager administration to re-check the configuration.
5. Verify extended OPS features by selecting the speed dial button for the feature or dialing the FNE. If busy or intercept tone is heard, check Avaya Communication Manager administration for the correct FNE, proper permissions under COS/COR, and the proper station button assignment to support the feature.
6. Call an *i* turret that currently has no voice messages, and leave a message. Verify that the message waiting indicator illuminates on the called *i* turret. Press the **Message** soft key on that *i* turret and verify that the voice messaging system is called. Use the voice messaging menus to retrieve and delete the voice message, verifying that DTMF is interpreted correctly by the system, and that the message waiting indicator extinguishes.

8. Support

For technical support of Speakerbus products contact the Speakerbus Service Desk:

Web: <http://www.speakerbus.com>

Email: info@speakerbus.com

Telephone: (646) 289-4700 in North America

+44 (0) 870 240 7252 in Europe

+65 6222 4577 in Asia

9. Conclusion

These Application Notes have described the administration steps required to use Speakerbus iD808 *i* turret with Avaya SIP Enablement Services and Avaya Communication Manager. Both basic and extended feature sets were covered as shown in **Table 1**. The extended set includes features not yet available to SIP telephones via the current IETF standards.

10. References

This section references the Avaya documentation relevant to these Application Notes. The following Avaya product documentation is available at <http://support.avaya.com>.

- [1] *Administrator Guide for Avaya Communication Manager*, January 2008, Issue 4, Document Number 03-300509.
- [2] *Avaya Extension to Cellular Guide*, January 2008, Issue 11, Document Number 210-100-700.
- [3] *SIP Support in Avaya Communication Manager Running on the Avaya S8xxx Servers*, January 2008, Issue 8, Document Number 555-245-206.
- [4] *Installing, Administering, Maintaining, and Troubleshooting SIP Enablement Services*, January 2008, Issue 5.0, Document Number 03-600768.
- [5] *Speakerbus i manager Administrator's Guide*, V1.1, Revision 3, July 2008.
- [6] *Speakerbus iD808 User Guide*, April 2008.
- [7] *Session Initiation Protocol Service Examples - draft-ietf-sipping-service-examples-14*, SIPING Working Group, Internet-Draft, 7/16/2007, available at <http://tools.ietf.org/wg/sipping/draft-ietf-sipping-service-examples/draft-ietf-sipping-service-examples-14.txt>.

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