



Avaya Solution & Interoperability Test Lab

Application Notes for Algo 8036 SIP Multimedia Intercom with Avaya IP Office – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Algo 8036 SIP Multimedia Intercom to interoperate with Avaya IP Office. Algo 8036 SIP Multimedia Intercom is a SIP-based device that can register with Avaya IP Office as SIP endpoints and enables video conversations and remote entry using door release 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 configuration steps required for Algo 8036 SIP Multimedia Intercom to interoperate with Avaya IP Office. Algo 8036 SIP Multimedia Intercom is a SIP-based device that can register with Avaya IP Office as SIP endpoints.

The 8036 is a multimedia SIP endpoint combining the functionality of an IP phone, security camera, and interactive kiosk. The 8036 is designed for outdoor or public access locations to provide enhanced communication and support for guests and visitors. Applications include audio intercom with video security, lobby intercom, enhanced courtesy phone, multi-tenant gate or entrance, guest service, and visitor assistance kiosk. Graphic icons with multilingual menus and SIP based speech, text, or video communication make the 8036 ideal for serving international, multilingual, or hearing impaired clients. Static displayed or scroll list menus are easily created using the web tools provided or custom applications may be created to display photos, maps, directions, sub-directories and more using QT based QML script language.

2. Interoperability Testing

The focus of this interoperability compliance testing was to verify if the 8036 can register as a SIP endpoint on IPO and able to make a video call to and from a telephone on the IPO and able to open the door when the key is pressed on the phone.

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

2.1. Test Description and Coverage

Compliance testing verified that the 8036 was able to interoperate with the telephones residing on the IPO system. The following interoperability areas were covered:

- 8036 can register to the IPO as a SIP endpoint.
- 8036 can make a call to a telephone on the IPO and establish a clear speech and video path.
- A telephone on the IPO can call the extension assigned to the 8036 and establish speech/video path between the telephone and the 8036 SIP Multimedia Intercom.
- Telephones on the IPO can send required DTMF tones and therefore ensure the remote door release features work successfully.
- 8036 can successfully re-register if the network connection drops and connects back again.

2.2. Test Results and Observations

The feature test cases were performed manually. The objectives outlined in section 2.1 were executed and passed.

The serviceability test cases were performed manually by disconnecting and reconnecting the LAN cable to Algo 8036 SIP Multimedia Intercom.

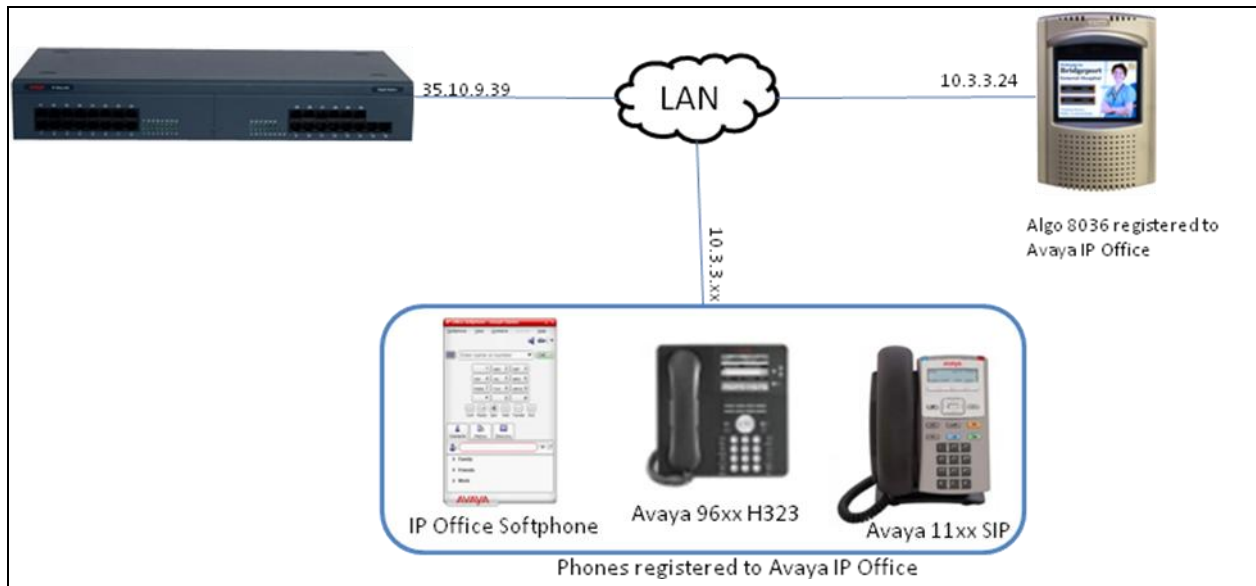
The following observations were made during the compliance testing:

- In order for Algo 8036 to send and receive video call to a telephone on IPO, a SIP user of Algo 8036 on IPO needs to have “Allow Direct Media” option unchecked.

3. Reference Configuration

In the compliance testing, Algo 8036 SIP Multimedia Intercom registered with Avaya IP Office as SIP end point and the extension is 29227 is used for the testing.

The configuration used for the compliance testing is shown below.



4. Equipment and Software Validated

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

Equipment	Software
Avaya IP Office IP500 V2	8.1 (52)
Avaya 1608 Digital phone	N/A
Avaya IP Office Softphone	3.2.3.48
Avaya 9630 G (H323 firmware)	HAXXUA3_1_04_S.bin
Algo 8036 SIP Multimedia Intercom	00.11.8

Note: Testing was performed with IP Office 500 v2 R8.1, but it also applies to IP Office Server Edition R8.1 (single site configuration only).

5. Configure Avaya IP Office

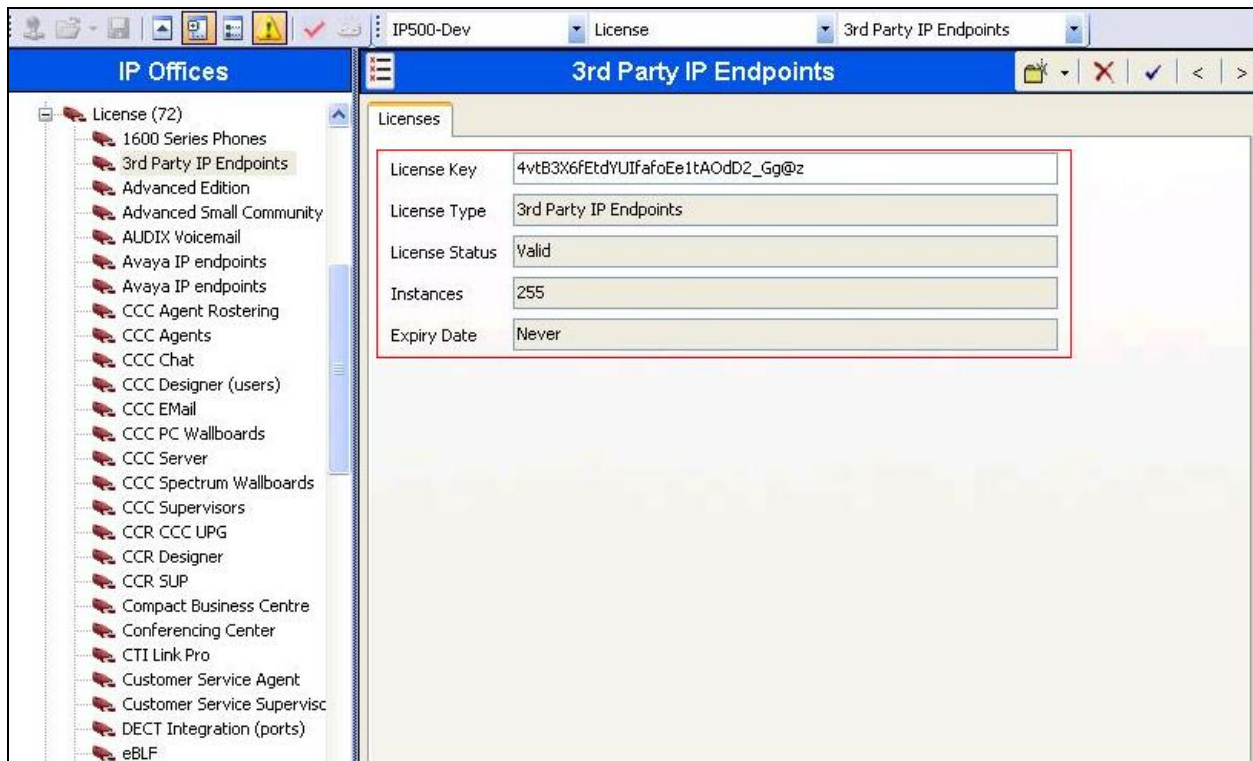
This section provides the procedures for configuring Avaya IP Office. The procedures include the following areas:

- Verify IP Office license
- Obtain LAN IP address
- Administer SIP registrar
- Administer SIP extensions
- Administer SIP users
- Administer Internal Twinning

5.1. Verify IP Office License

From a PC running the Avaya IP Office Manager application, select **Start** → **Programs** → **IP Office** → **Manager** to launch the Manager application. Select the proper IP Office system, and log in using the appropriate credentials.

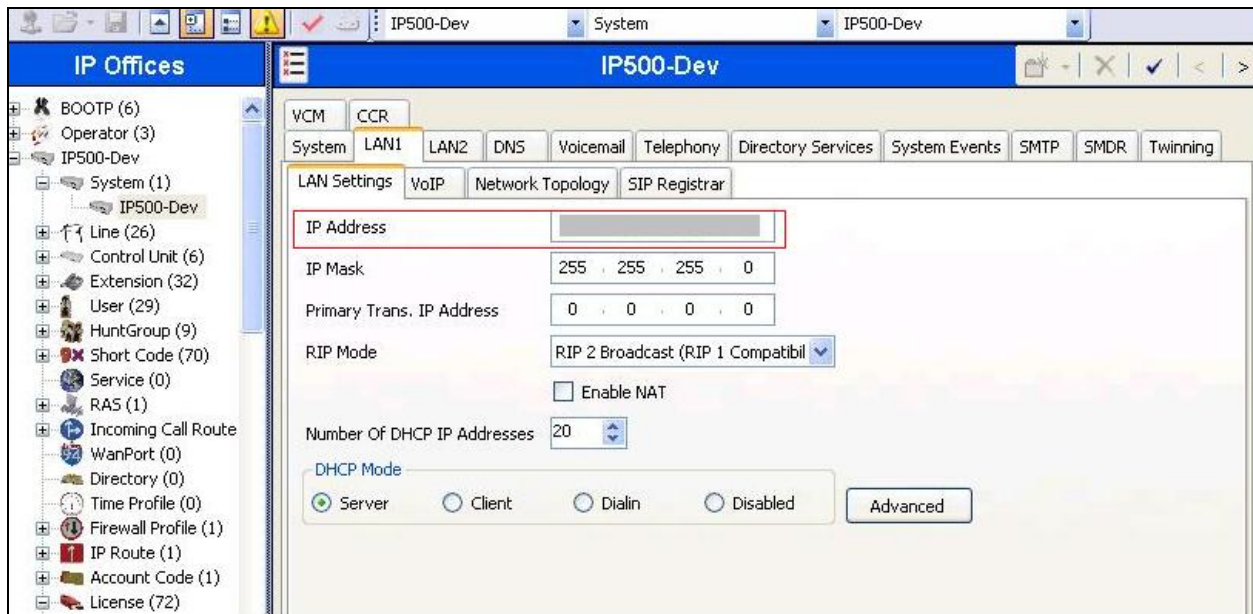
The **Avaya IP Office R6 Manager** screen is displayed. From the configuration tree in the left pane, select **License** → **3rd Party IP Endpoints** to display the **3rd Party IP Endpoints** screen in the right pane. Verify that the **License Status** is “Valid”.



5.2. Obtain LAN IP Address

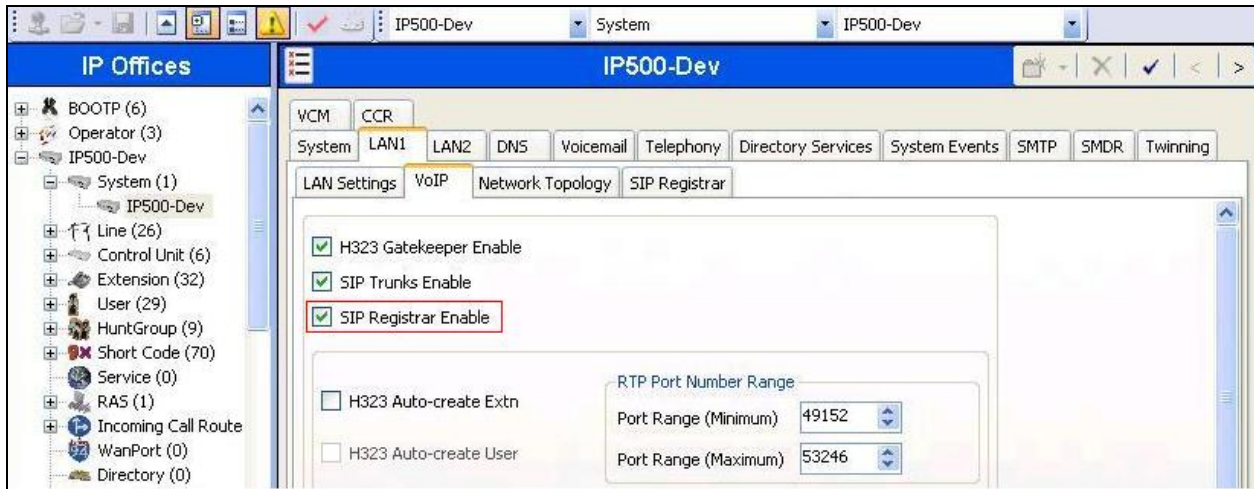
From the configuration tree in the left pane, select **System** to display the **IP500-Dev** screen in the right pane. Select the **LAN1** tab, followed by the **LAN Settings** sub-tab in the right pane. Make a note of the **IP Address**, which will be used later to configure Algo.

Note: IP Office can support SIP extensions on the LAN1 and/or LAN2 interfaces, and the compliance testing used the LAN1 interface.

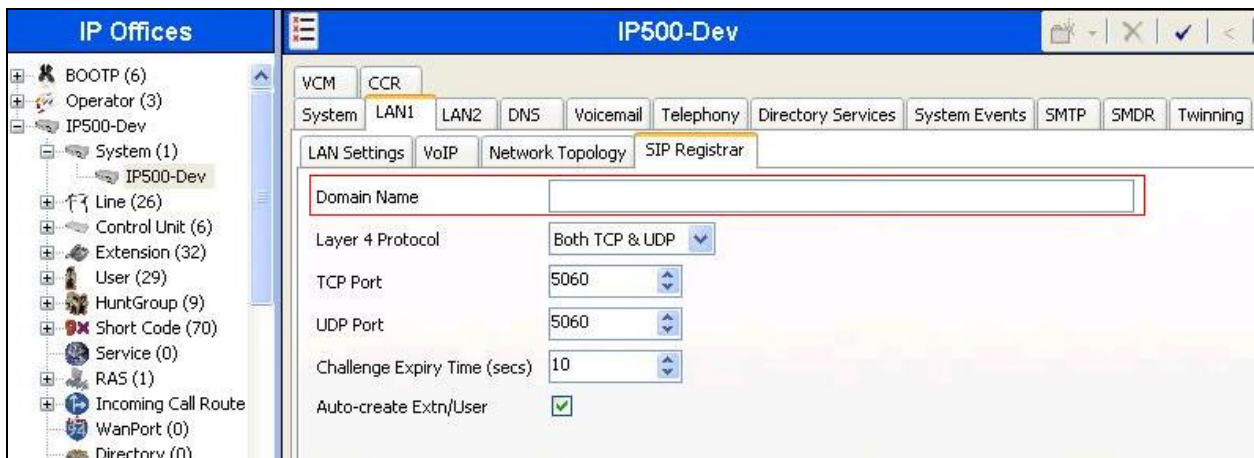


5.3. Administer SIP Registrar

Select the **VoIP** sub-tab. Make certain that **SIP Registrar Enable** is checked, as shown below.

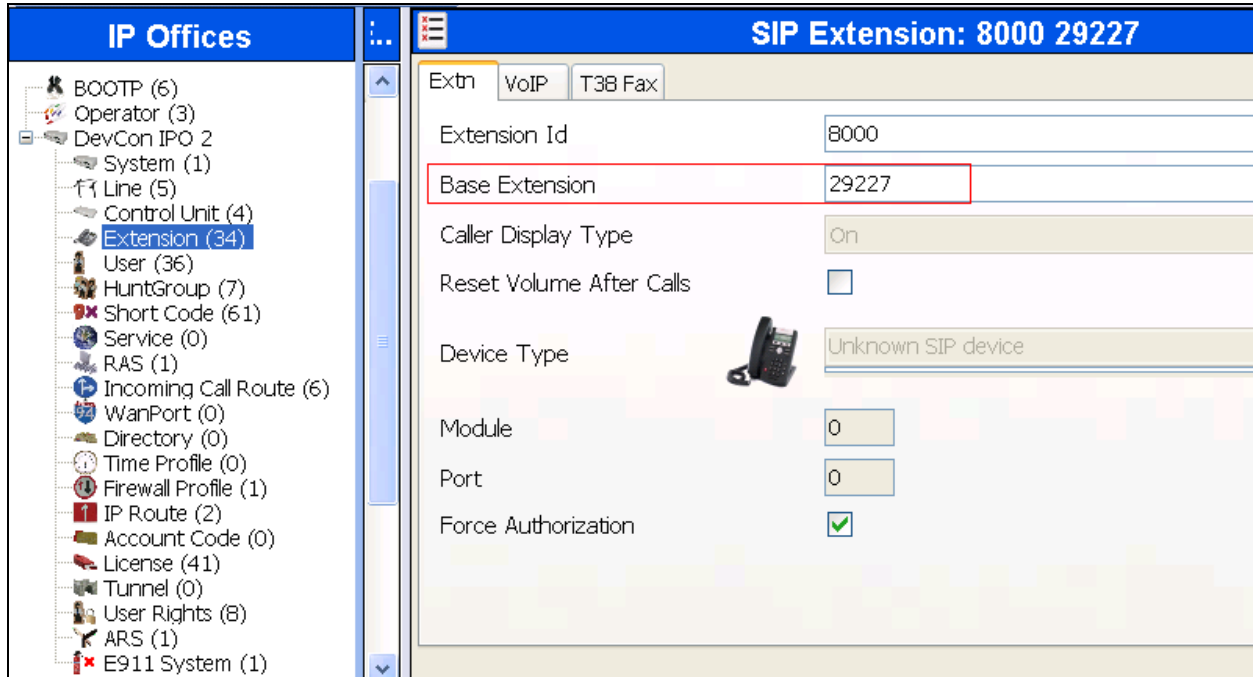


Select the **SIP Registrar** sub-tab, and enter a valid **Domain Name** for SIP endpoints to use for registration with IP Office. In the compliance testing, the **Domain Name** was left blank, so the SIP endpoints used the LAN IP address for registration.



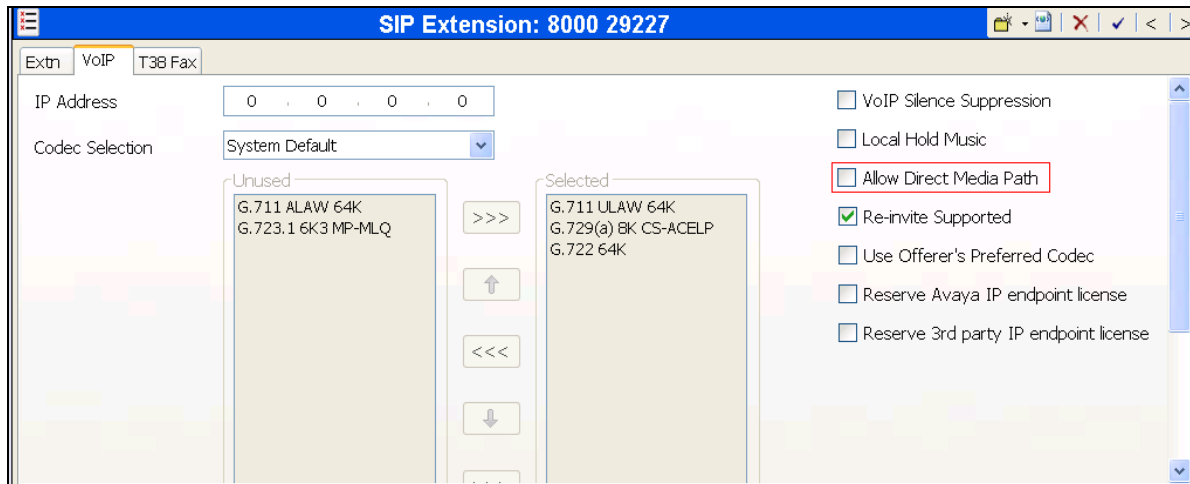
5.4. Administer SIP Extensions

From the configuration tree in the left pane, right-click on **Extension** and select **New → SIP Extension** from the pop-up list to add a new SIP extension. For **Base Extension**, enter Algo extension which mentioned in **Section 3**. Retain the default values in the remaining fields.



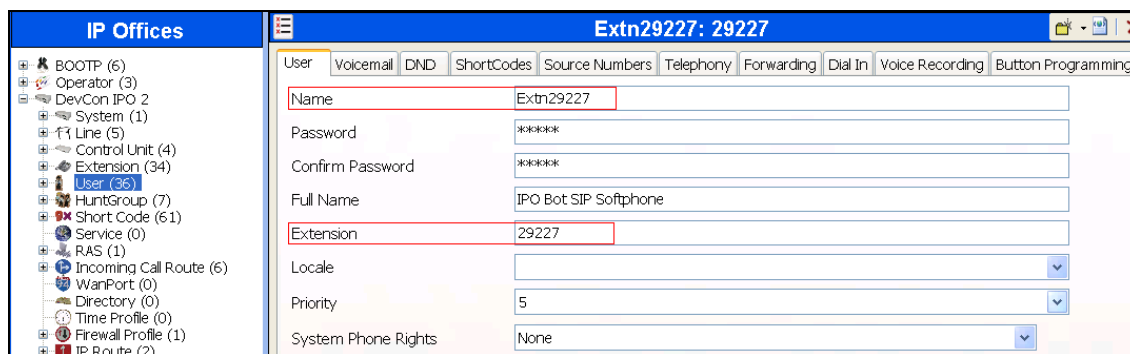
Select the **VoIP** tab, make sure to uncheck **Allow Direct Media Path** option this step to make sure that video is send during video call. And retain the default values in all fields.

Repeat this section to add additional SIP extensions as desired. In the compliance testing, one SIP extension “29234” was created for IP Office Softphone user.

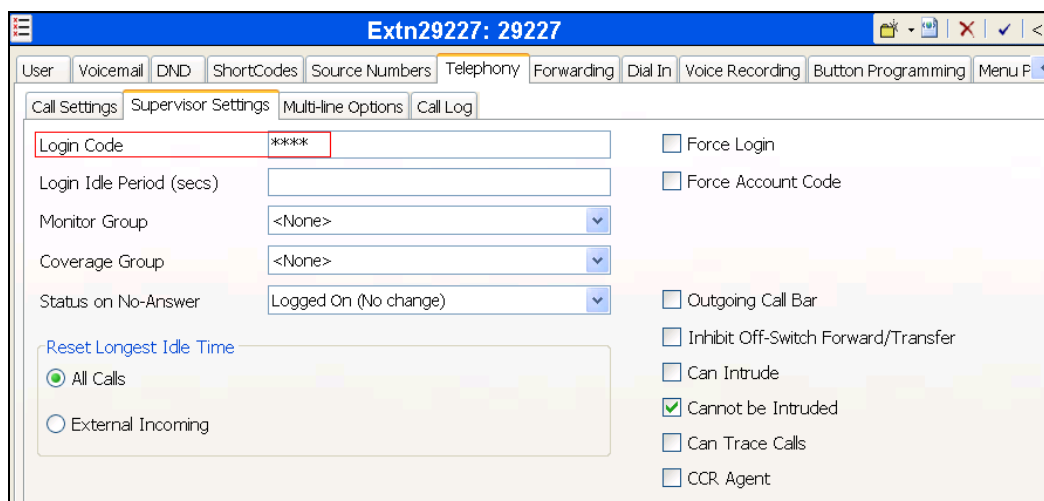


5.5. Administer SIP Users

From the configuration tree in the left pane; right-click on **User** tab and select **New** from the pop-up list. Enter desired values for **Name**. For **Extension**, enter the Algo extension from **Section 5.4** . Remember these values as they will be needed to register Algo to IPO. Enter desired values for **Password**, this password is used when user want to login IPO Softphone



Select the **Telephony** tab, followed by the **Supervisor Settings** sub-tab, and enter a desired **Login Code**. Repeat this section to add a new user for each SIP extension from **Section 5.4**. In the compliance testing, user “Extn29227” was created for Algo, and user “Extn29234” was created for IP Office video Softphone. This **Login Code** is needed to register Algo 8036 to IPO.



6. Configure Algo 8036 SIP Multimedia Intercom

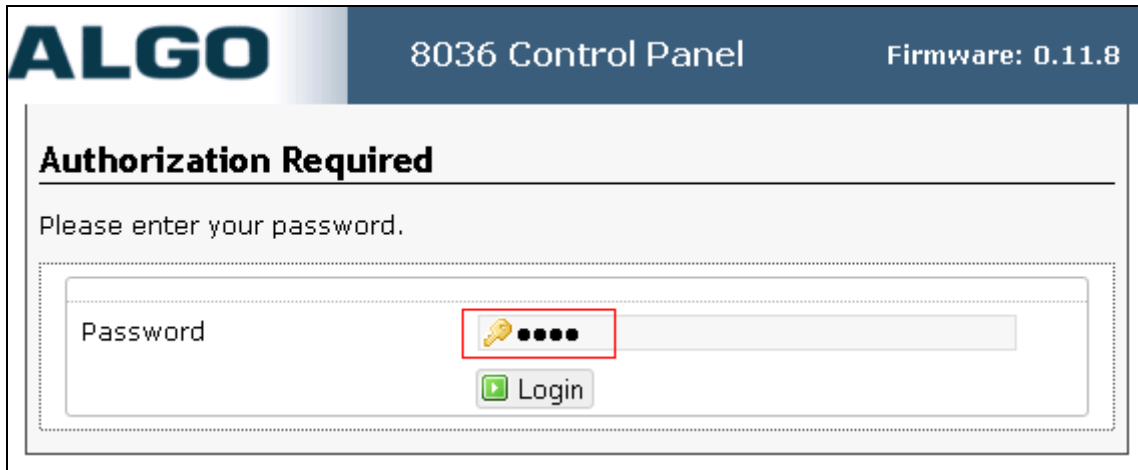
This section provides the procedures for configuring Algo 8036 SIP Multimedia Intercom. The procedures include the following areas:

- Launch web interface
- Administer configuration

6.1. Launch Web Interface

Access the SIP Multimedia Intercom web-based interface by using the URL “http://ip-address” in an Internet browser window, where “ip-address” is the IP address of the SIP Multimedia Intercom. This IP address can obtain from the touch screen during reboot process. The **Authorization Required** screen is displayed, as shown below. Log in using the appropriate credentials.

Note: The default IP address of the SIP Multimedia Intercom is 192.168.1.111.



The screenshot displays the ALGO 8036 Control Panel web interface. The header includes the ALGO logo, the text "8036 Control Panel", and the firmware version "Firmware: 0.11.8". The main content area is titled "Authorization Required" and contains the instruction "Please enter your password." Below this is a password input field with a "Password" label on the left. The input field contains a key icon, five black dots, and a red rectangular box highlights the key icon and the first two dots. A "Login" button with a green arrow icon is positioned below the input field.

6.2. Administer Configuration

Select **Setting** from the top menu, to display the screen below. Configure the **SIP Account**, enter the following values for the specified fields, and retain the default values in the remaining fields.

- **Sip Domain:** The LAN IP address from **Section 5.2**.
- **User:** The SIP base extension from **Section 5.4**.
- **Authentication ID:** The SIP user name from **Section 5.5**.
- **Authentication password:** The SIP user login code from **Section 5.5**.

The screenshot displays the 'SIP Account' configuration page in the ALGO 8036 Control Panel. The page title is 'SIP Account' and it includes a sub-header 'Here you can configure the basic SIP settings.' The configuration fields are as follows:

Field	Value
SIP domain	135.10.97.39
User	29227
Authentication ID	Extn29227
Authentication password	•••••
Enable inbound call	<input checked="" type="checkbox"/>

At the bottom right of the form, there are two buttons: 'Reset' (with a red 'X' icon) and 'Save' (with a green checkmark icon).

6.3. Administer Dialing Extension

Select **Screen** from the top menu, to display the screen below. Configure the **Dialing Extension** by scroll down toward the end, click on + **Page 1**, enter designated extension that will ring when user touch the screen. During testing extension that login IPO Softphone is used to verify the voice/video call.

ALGO 8036 Control Panel

Status Settings **Screen** Network System Logout

Overview Global Settings

Create Pages

Number of pages to be created: 1

Page Type: button directory

Upload Image / Addressbook

Select the file:

List of pages

You can configure individual pages.

Page 1 -

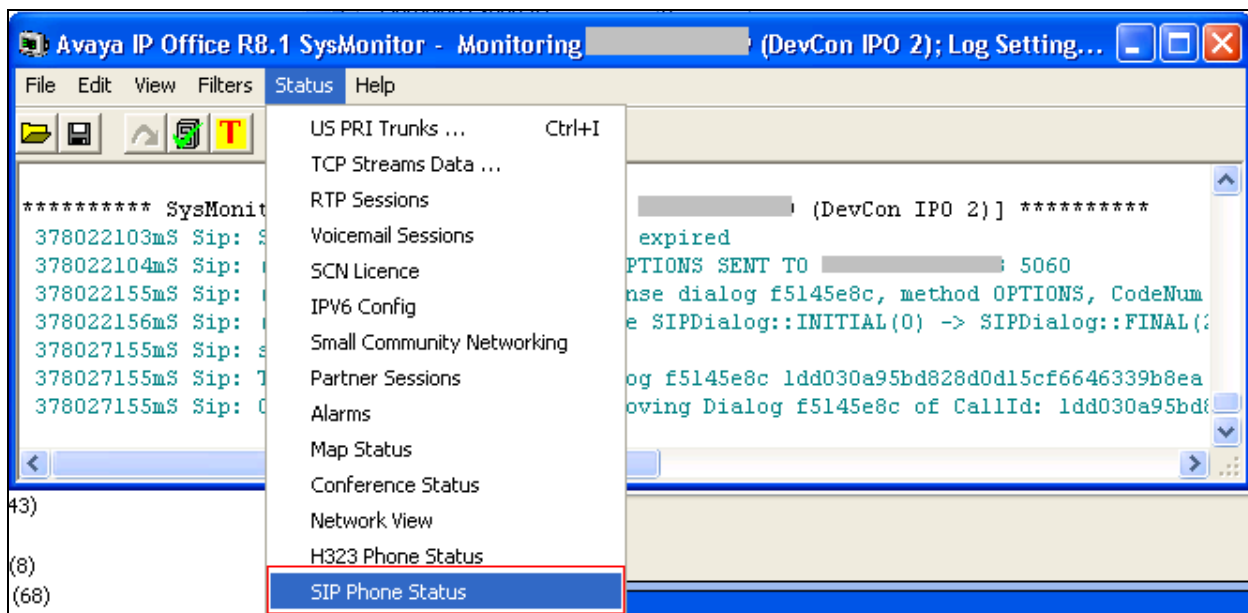
	Page Description	<input type="text"/>
	Background Image	avaya-test.png
	Button Configuration	None
	Back Button	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
	Home Button	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
	When touched outside button(s)	Call
		Dialing Extension 29234

7. Verification Steps

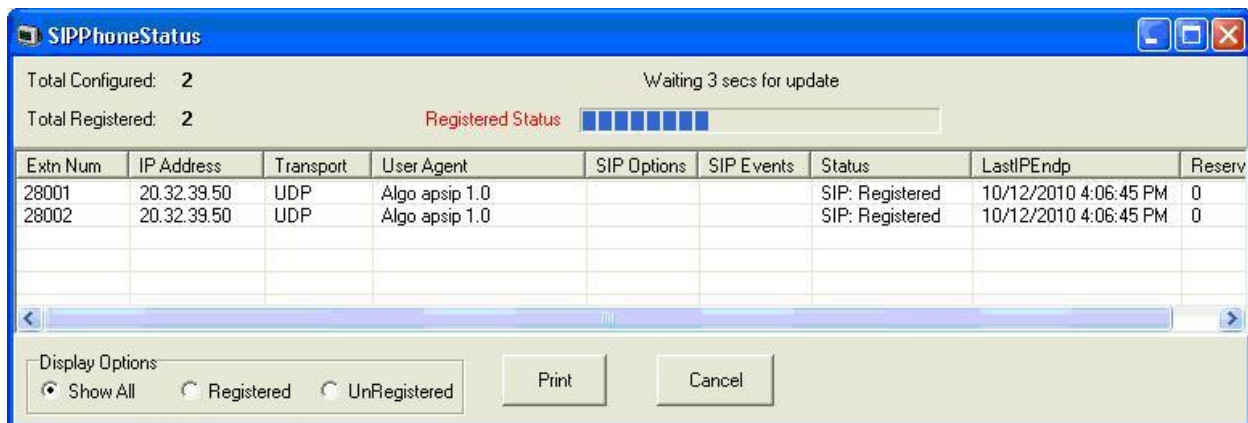
This section provides the tests that can be performed to verify proper configuration of Avaya IP Office and Algo 8036 SIP Multimedia Intercom.

7.1. Verify Avaya IP Office

From a PC running the Avaya IP Office Monitor application, select **Start** → **Programs** → **IP Office** → **Monitor** to launch the application. The **Avaya IP Office R6 SysMonitor** screen is displayed, as shown below. Select **Status** → **SIP Phone Status** from the top menu.



The **SIPPhoneStatus** screen is displayed. Verify that there is an entry for each SIP extension from **Section 5.5**, that the **User Agent** is “Algo”, and that the **Status** is “SIP: Registered”, as shown below.



7.2. Login IP Office Softphone

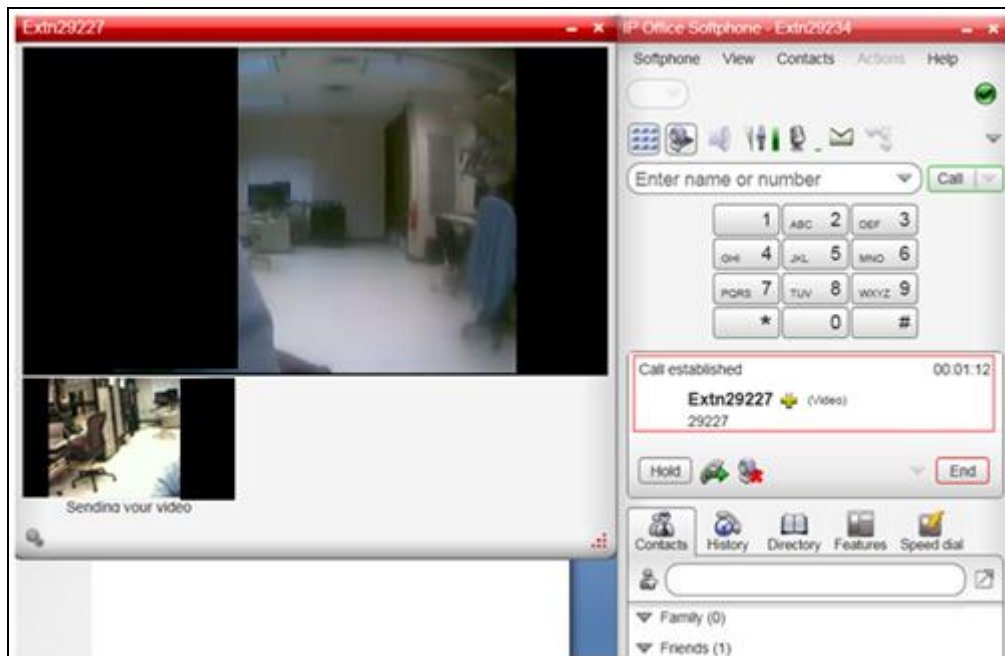
Select **Start** → **Programs** → **IP Office** → **Softphone** enters the following values for the specified fields, and retains the default values in the remaining fields.

- **Sip Domain:** The Login Server is IP address from **Section 5.2**.
- **User Name:** The SIP user name from **Section 5.4**
- **Password:** The password of **User** tab from **Section 5.5**.



7.3. Make a video call from Algo 8036 SIP to IPO Softphone

Touch the screen to initiate video call to IPO Softphone, the Softphone is ringing then clicks on the answer button to establish the call. Verify that the video call is established with a good quality of voice and video. Below is a screenshot of video call capture from IPO Softphone.



8. Conclusion

These Application Notes describe the configuration steps required for Algo 8036 SIP Multimedia Intercom to successfully interoperate with Avaya IP Office. All feature and serviceability test cases were completed.

9. Additional References

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

1. *IP Office R8.1 Manager 10.1*, August 2012, available at <http://support.avaya.com>.
2. *Algo 8036 SIP Multimedia Intercom User Guide* available at <http://www.algosolutions.com>.

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