



Avaya Solution & Interoperability Test Lab

Application Notes for MVOX Electronics MV100 and MV900 with Avaya IP Softphones - Issue 1.0

Abstract

These Application Notes describe a compliance-tested configuration comprised of the MVOX Electronics MV100 and MV900 with Avaya IP Softphones and Avaya Communication Manager. The MVOX Electronics MV100 and MV900 are high quality and portable USB speakerphones with DSP voice processing technologies. The MV100 and MV900 are designed for Internet telephony applications such as Instant Messenger and Voice over IP Softphone. The MV100 and MV900 speakerphones are the ideal communication solution for any mobile worker or IM chatter to engage in hands-free conversations or conference calls.

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

1. Introduction

These Application Notes describe a compliance-tested configuration comprised of the MVOX Electronics MV100 and MV900 with Avaya IP Softphones and Avaya Communication Manager. The MVOX Electronics MV100 and MV900 are high quality and portable USB speakerphones with DSP voice processing technologies. The MV100 and MV900 are designed for Internet telephony applications such as Instant Messenger and Voice over IP Softphone. The MV100 and MV900 are the ideal communication solution for any mobile worker or IM chatter to engage in hands-free conversations or conference calls.

The overall objective of this interoperability compliance testing is to verify that the MVOX MV100 and MV900 properly integrate with Avaya IP Softphone. For this compliance testing, an MV100 and MV900 are connected to Avaya IP Softphones that are connected to Avaya S8700 Media Server. Another MV100 is connected to Avaya IP Softphone that is connected to Avaya S8300 Media Server. Communication between the two media servers is accomplished through an IP trunk.

Figure 1 illustrates the network configuration used to verify the MVOX solution. The configuration provided in these Application Notes focus on the Avaya IP Softphone and the MV100 and MV900.

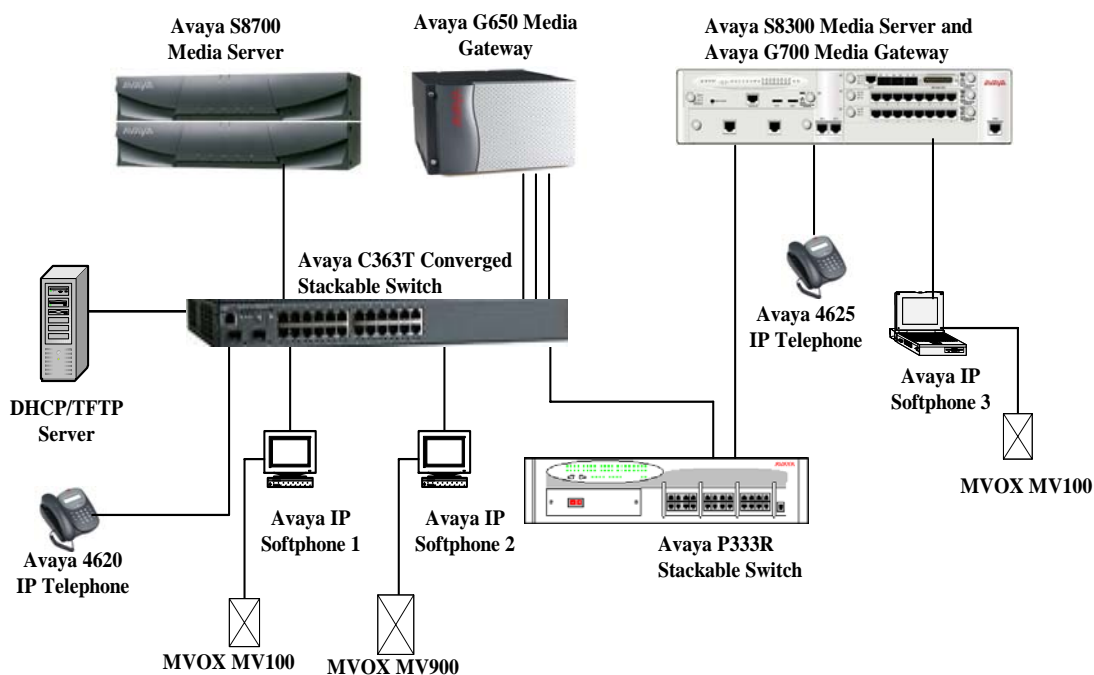


Figure 1. Test configuration of the MVOX MV100 and MV900 with Avaya IP Softphones

2. Equipment and Software Validated

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

Equipment	Software
Avaya S8700 Media Server with Avaya G650 Media Gateway	Communication Manager 3.0.1 (R013x.00.1.346.0)
Avaya S8300 Media Server with Avaya G700 Media Gateway	Communication Manager 3.0.1 (R013x.00.1.346.0)
Avaya C363T PWR Converged Stackable Switch	4.5.14
Avaya P333R Stackable Switch	4.0.8
Avaya IP Telephones 4620 4625	2.2.3 2.5
Avaya IP Softphone running on Desktop PC (Windows 2000 Professional installed)	5.2.4.20
Avaya IP Softphone running on Desktop PC (Windows 2003 Server installed)	5.2.4.20
Avaya IP Softphone running on Laptop (Windows XP installed)	5.2.4.20
MVOX Electronics MV100	1.0
MVOX Electronics MV900	1.0

3. Configure Avaya Communication Manager

The following sections show the relevant configuration screens for Avaya Communication Managers. **The screen shots included in this section focused only on the configuration of the Avaya IP Softphone station and ip-codec-set.** From the Avaya Communication Manager System Access Terminal (SAT), use the **add station xxxxx** command, where **xxxxx** is the 5-digit extension of an IP Softphone. To create an IP Softphone station, the following information should be provided:

- **Type:** The IP Telephone type that IP Softphone will emulate.
- **Security Code:** Password to access the IP Softphone.
- **IP SoftPhone?:** y

display station 50007		Page 1 of 4
STATION		
Extension: 50007	Lock Messages? n	BCC: 0
Type: 4620	Security Code: *	TN: 1
Port: S00010	Coverage Path 1:	COR: 1
Name: Softphone 1	Coverage Path 2:	COS: 1
	Hunt-to Station:	
STATION OPTIONS		
Loss Group: 19	Personalized Ringing Pattern: 1	
	Message Lamp Ext: 50007	
Speakerphone: 2-way	Mute Button Enabled? y	
Display Language: english	Expansion Module? n	
Survivable GK Node Name:		
Survivable COR: internal	Media Complex Ext:	
Survivable Trunk Dest? y	IP SoftPhone? y	
	IP Video Softphone? n	

The following screen shows the codec set configuration that was used during the test. To configure the codec set, use the **change ip-codec-set** command to add an audio codec to be used for VoIP traffic.

```
display ip-codec-set 1
```

IP Codec Set				
Codec Set: 1				
Audio Codec	Silence Suppression	Frames Per Pkt	Packet Size(ms)	
1: G.711MU	n	2	20	
2: G.729	n	2	20	
3: G.723-6.3K	n	1	30	
4:				

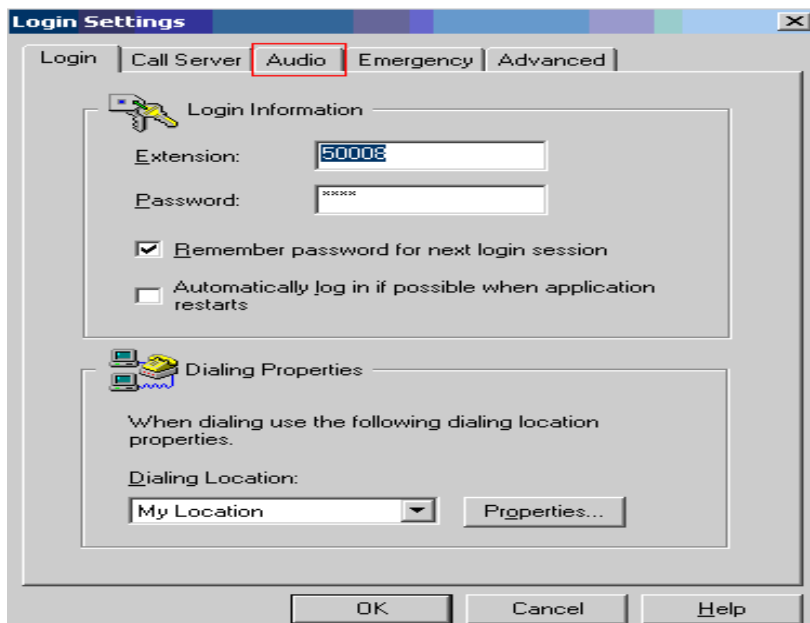
4. Configure the Avaya IP Softphones

Navigate to the **Start → Programs → Avaya IP Softphone → Avaya IP Softphone** page, and the **Login** screen should appear. In the Login screen, provide the following information:

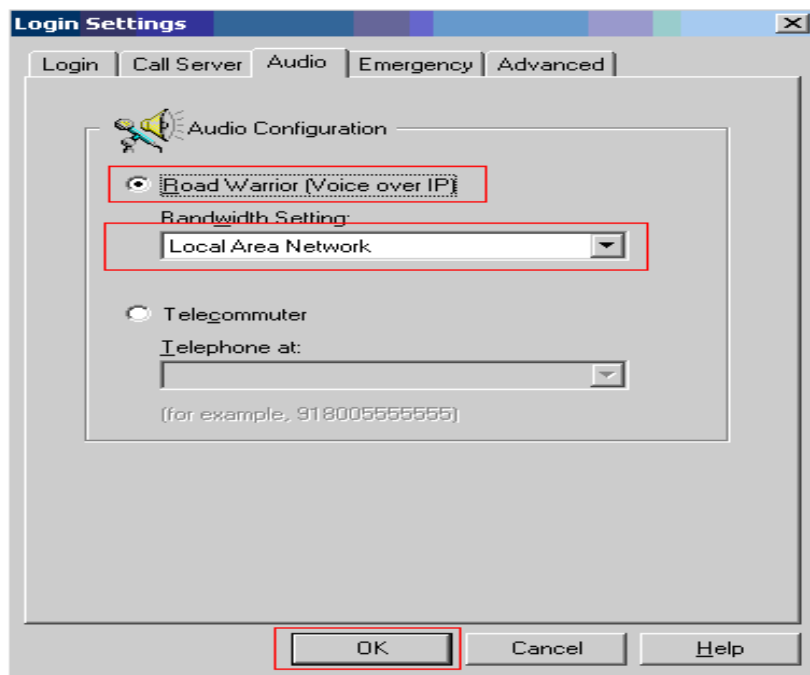
- **Extension:** Extension of the Avaya IP Softphone – extension was specified during installation of the IP Softphone software on the PC.
- **Password:** The Security Code in the station setting – password was specified during installation of the IP Softphone software on the PC.
- **Configuration:** Type of configuration that the IP Softphone will be used for. During the compliance test, the **Road Warrior** configuration was utilized.
- **Call Server Address:** IP Address of the C-LAN board
- **Bandwidth Setting:** During the compliance test, the **Local Area Network** was utilized for the bandwidth setting.

Click the **Settings** button to modify the above parameters and audio configuration.

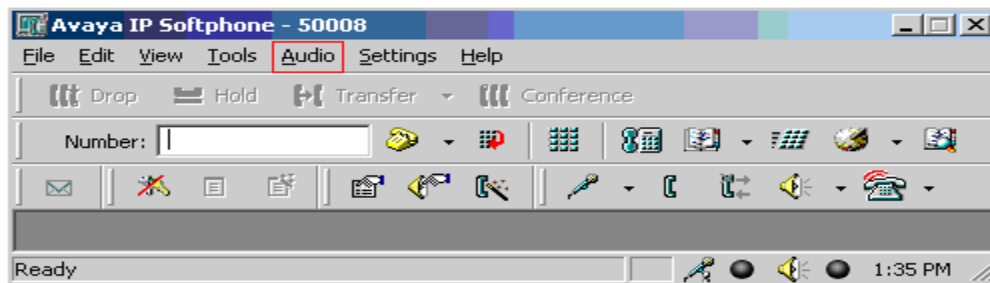
The following shows the **Login Settings** screen. Modify the Extension and Password if necessary, and then click the **Audio** tab to configure the audio setting.



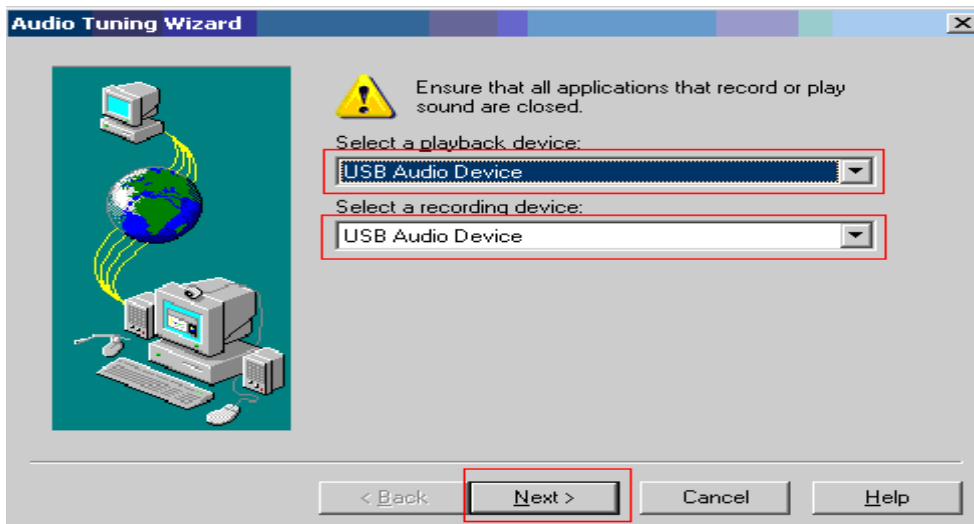
The following shows the **Audio Configuration** screen. Since the focus of the test was on the speakerphone quality of the VoIP traffic, select **Road Warrior (Voice over IP)** and select **Local Area Network** from the Bandwidth Setting drop down list. After the configuration changes were made, click the **OK** button to go to the Avaya IP Softphone screen.



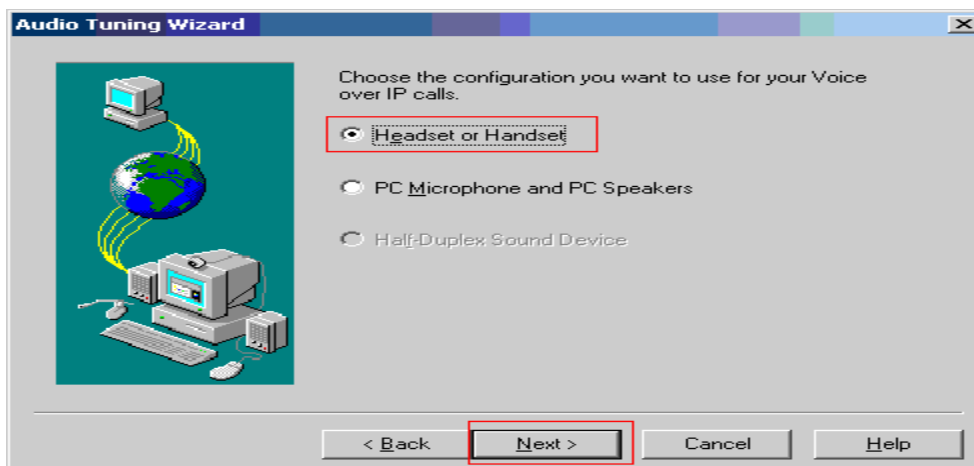
The following shows the **Avaya IP Softphone** screen. Select the **Audio → Tuning Wizard** menu to configure the MVOX MV100 and MV900.



The following screens show the steps to correctly configure the audio tuning. Since MV100 and MV900 are the plug and play USB devices, select **USB Audio Device** as the playback and recording devices.



To fully utilize the full duplex feature of MVOX mv100 and MV900, select **Headset or Handset**. Click the **Next** button, and follow the remaining procedures to tune the audio.



5. Configure MVOX MV100 and MV900

The MV100 and MV900 are USB plug and play devices, and do not require any driver software. Therefore, no installation was needed. The MV100 and MV900 are compatible with Windows 98SE, Windows ME, Windows 2000 and Windows XP.

6. Verification Steps

Use the **ping command** to verify connectivity (From the DHCP/TFTP Server to the Avaya IP Telephones and IP Softphones).

7. Interoperability Compliance Testing

Interoperability compliance testing covered connectivity and feature functionality. Feature functionality testing verified that the MVOX MV100 and MV900 communicate with Avaya IP Softphones reliably.

7.1. General Test Approach

All test cases were performed manually. The following features and functionality were verified:

- Basic calls (Intra-Switch and Inter-Switch) and verified talk path, from the MV100 and MV900, was good.
- Transfer calls (Intra-Switch and Inter-Switch) and verified talk path, from the MV100 and MV900, was good.
- Conference calls (Intra-Switch and Inter-Switch) and verified talk path, from the MV100 and MV900, was good.
- Full Duplex (Verified from the IP Softphone window).
- Long calls (10 minutes, 1 hour) and verified calls did not drop.

7.2. Test Results

All test cases passed. The MVOX Electronics MV100 and MV900 worked reliably with Avaya IP Softphones.

8. Support

For technical support on the MVOX Electronics MV100 and MV900, call MVOX Electronics Customer Support at (408) 984-8884 or send email to support@mvox.com.

9. Conclusion

These Application Notes describe the configuration steps required for integrating the MVOX Electronics MV100 and MV900 with Avaya IP Softphones. The products interoperated successfully, providing a suitable communication for any mobile worker to engage in hand-free conversations or conference calls.

10. References

This section references the Avaya and MVOX Electronics documentation that are relevant to these Application Notes.

The following Avaya product documentation can be found at <http://support.avaya.com>.

- [1] *Administration for Network Connectivity for Avaya Communication Manager*, Issue 8, June 2004, Document Number 555-233-504.
- [2] *Administrator's Guide for Avaya Communication Manager*, Issue 8, June 2004, Document Number 555-233-506.
- [3] *IP Softphone Release 5.2 Online Reference*, Issue Jul 2005.

The following MVOX Electronics product documentation is provided. For additional product and company information, visit <http://www.mvox.com>.

- [4] *MiniVox MV100 Owner's Manual*, Version 1.0.
- [5] *MVOX MV900 Owner's Manual*, Version 1.0.

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