

Avaya Solution & Interoperability Test Lab

### Application Notes for AudioCodes MP-202 Telephone Adaptor with Avaya SIP Enablement Services and Avaya Communication Manager - Issue 1.0

### Abstract

These Application Notes describe the procedure for configuring the AudioCodes MP-202 Telephone Adaptor with Avaya SIP Enablement Services and Avaya Communication Manager. The AudioCodes MP-202 Telephone Adaptor serves as a gateway between legacy analog endpoints and a VoIP infrastructure using the Session Initiation Protocol (SIP).

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 procedure for configuring the AudioCodes MP-202 Telephone Adaptor with Avaya SIP Enablement Services (SES) and Avaya Communication Manager.

The MP-202 is a two-line, Session Initiation Protocol (SIP) gateway allowing residential and small office / home office (SOHO) subscribers to connect ordinary plain old telephone service (POTS) telephones or fax machines. The MP-202 registers with the Avaya SES as a SIP endpoint for each analog endpoint connected to it. When a call is placed from an analog telephone, the MP-202 will send SIP signaling messages to the Avaya SES to setup the call. Once the call has been setup, the MP-202 converts the analog signal from the analog telephone to a series of voice samples sent in data packets over the data network using the Real Time Protocol (RTP). The MP-202 extension numbers are also configured as Off PBX Stations (OPS) on Avaya Communication Manager.



Figure 1: Test Configuration

# 2. Equipment and Software Validated

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

Equipment	Software/Firmware
	Avaya Communication Manager
Avaya S8500B Server	5.0 (R015x.00.0.825.4), patch
	15175
Avaya G650 Media Gateway	
C-LAN TN799DP	HW 1, FW24
Medpro TN2302AP	HW 20, FW116
Avaya SIP Enablement Services	5.0 (5.0.0.0-825.31), patch SP2d
Avaya C364T-PWR Converged Stackable Switch	4.3.12
Avaya 46XX Series IP Telephones (H.323)	2.8
Avaya 46XX Series IP Telephones (SIP)	2.3
Extreme Summit 400 24p Switch	Extremeware 7.5e.2.8
Analog Telephones	-
Analog Fax Machines	-
Windows PCs	Windows XP Professional
AudioCodes MP-202 Analog VoIP Gateway	2.6.0_Build2

# 3. Configure Avaya Communication Manager

The communication between Avaya Communication Manager and Avaya SES is via a SIP trunk group. All SIP signaling for calls between Avaya Communication Manager and the MP-202 passes through Avaya SES via this trunk group. This section describes the configuration of stations as OPS stations, which is required for each analog telephone, and fax machine connected to the MP-202.

Step	Description		
1.	Use the display system-parameters customer-options command to v	verify th	at sufficient
	SIP trunk capacity exists. On Page 2, verify that the number of SIP tru	unks sur	ported by the
	system is sufficient for the number of SIP trunks needed. Each SIP ca	ll betwe	en two SIP
	endpoints (whether internal or external) requires two SIP trunks for the	e durati	on of the call
	The license file installed on the system controls the maximum permitte	ad If a	required feature
	is not anabled or there is insufficient appealty, contact on outhorized A		
	is not enabled of there is insufficient capacity, contact an authorized A	lvaya sa	les
	representative to make the appropriate changes.		
	display system-parameters customer-options Page	2 of	10
	OPTIONAL FEATURES		UCED
	Maximum Administered H 323 Trunks.	800	05ED
	Maximum Concurrently Registered IP Stations:	2400	5
	Maximum Administered Remote Office Trunks:	0	0
	Maximum Concurrently Registered Remote Office Stations:	0	0
	Maximum Concurrently Registered IP eCons:	20	0
	Max Concur Registered Unauthenticated H.323 Stations:	2400	0
	Maximum Video Capable H.323 Stations:	2400	0
	Maximum Video Capable IP Softphones:	2400	0
	Maximum Administered SIP Trunks:	800	35
	Maximum Number of DC1 Beards with Eabo Cancellation:	0	0
	Maximum TN2501 VAL Poarda:	10	0
	Maximum Media Gateway VAL Sources:	250	0
	Maximum TN2602 Boards with 80 VoIP Channels:	128	0
	Maximum TN2602 Boards with 320 VoIP Channels:	128	1
	Maximum Number of Expanded Meet-me Conference Ports:	300	0
	Maximum Number of Expanded Meet-me Conference Ports:	300	0

Step		Description
2.	All SIP stations are configured as C	PS stations on Avaya Communication Manager. This
	includes the analog telephones, and	fax machine connected to the MP-202, which appear as
	SIP stations to Avava Communicati	on Manager. Use the <b>display system-parameters</b>
	customer-options command to ver	ify Avava Communication Manager has sufficient OPS
	capacity available to add the OPS st	tations needed for the SID and analog and noints. If there
	capacity available to add the OFS s	ations needed for the SIF and analog endpoints. If there
	is insufficient capacity, contact an a	utnorized Avaya sales representative or business partner
	to make the appropriate changes.	
	display system-parameters cu	astomer-options Page 1 of 10
	C2 Morgion: M14	OPTIONAL FEATURES
	Location: 2	REA System ID (SID): 1
	Platform: 12	RFA Module ID (MID): 1
		AIT MOULLE ID (MID). I
		USED
		Platform Maximum Ports: 3200 483
		Maximum Stations: 2400 253
		Maximum XMOBILE Stations: 2400 0
	Maximum	Off-PBX Telephones - EC500: 2400 0
	Maximum	Off-PBX Telephones - OPS: 2400 35
	Maximum	Ott-PBX Telephones - PBFMC: 0 0
	Maximum	OII-PBX Telephones - PVFMC: 0 0
	Maximum	OII-PBX TETEPHONES - SCCAN: 2400 0
5.	can be listed in priority order to allo The example below shows the value	by the codec to be negotiated during call establishment. es used in the compliance test.
	change ip-codec-set 1	Page 1 of 2
	Le Codeg Cot: 1	2 Codec Set
	Audio Silence	Frames Dacket
	Codec Suppression	n Per Pkt Size(ms)
	1: G.711A n	2 20
	2: G.729AB n	2 20
4	On Page 2 the <b>FAX Mode</b> field m	ist be set to <b>t 38-standard</b> to support the fav machines
	The <b>Modem</b> field should be set to c	<b>ff</b> The screen below shows the setting used for the fax
	tosting	<b>II</b> . The screen below shows the setting used for the fax
	testing.	
	change ip-codec-set 1	Page 2 of 2
	II	P Codec Set
		Allow Direct-IP Multimedia? n
	Mode	Redundancy
	FAX t.38-sta	andard 0
	Modem off	0
	TDD/TTY US	3
	Clear-channel n	U

Solution & Interoperability Test Lab Application Notes ©2008 Avaya Inc. All Rights Reserved.

Step	Descri	ption
5.	To add a station, use the <b>add station</b> <i>n</i> comman Use the default value of <b>6408D</b> + for the <b>Type</b> fi indicates a station is being added without identit Enter a descriptive name in the <b>Name</b> field. The fields.	d where $n$ is an unused extension number. eld. Enter an $X$ in the <b>Port</b> field. This fying a physical port for the station to use. e default values may be retained for all other
	add station 10053	Page 1 of 5 STATION
	Extension: 10053 Type: 6408D+ Port: X Name: AudioCodes	Lock Messages? n BCC: 0 Security Code: TN: 1 Coverage Path 1: COR: 1 Coverage Path 2: COS: 1 Hunt-to Station:
	STATION OPTIONS Loss Group: 2 I Data Module? n Speakerphone: 2-way Display Language: english	Time of Day Lock Table: Personalized Ringing Pattern: 1 Message Lamp Ext: 10053 Mute Button Enabled? y
	Survivable COR: internal Survivable Trunk Dest? y	Media Complex Ext: IP SoftPhone? n
6.	<ul> <li>Map the Avaya Communication Manager extendefined in Section 4, Step 8 with the add off-ph Enter the values as shown below:</li> <li>Station Extension: Avaya Communicat:</li> <li>Application: OPS</li> <li>Phone Number: Avaya SES media serv</li> <li>Trunk Selection: The SIP trunk group r</li> <li>Configuration Set: Enter a valid config configuration set 1 which contained the optimization of the section of the sectio</li></ul>	sion to the Avaya SES media server extension ox-telephone station-mapping command. ion Manager extension er extension number uration set. The compliance test used default values.
	add off-pbx-telephone station-mapping STATIONS WITH OFF-PP	Page 1 of 2 BX TELEPHONE INTEGRATION
	Extension Prefix 10053 OPS -	SelectionSet10053301
7.	Repeat Steps 5 and 6 for the remaining MP-202	endpoint.

# 4. Configure Avaya SES

It is assumed that the connectivity between Avaya SES and Avaya Communication Manager has already been established. For information on the configuration setup between Avaya SES and Avaya Communication Manager, refer to Section 10.

otep			Description	
1.	Access the Avaya	SES administrati	on web interface by ente	ering
	http://< <i>ip-addr</i> >/ad address of the Ava select the <b>Launch</b>	dmin as the URL ya SES server. L Administration	in an Internet browser, wo og in with the appropriat <b>Web Interface</b> link from	where <i><ip-addr></ip-addr></i> is the IF te credentials and then m the main page as shown
	Delow.			
	AVAYA		Stan	dard Management Solutions
	Help Log Off		Stan	Integrated Management dard Management Solutions
	Help Log Off	Administration	Stan The Administration Web Interface allows you to administer this SES Server.	Launch Administration Web

Step		Descri	ption
2.	A user must be added on A	vaya SES for eacl	h MP-202 endpoint and also be created in
	Avaya Communication Man	nager in Section 3	3, Step 5. From the left pane, select <b>Users</b>
	$\rightarrow$ Add. Enter the values a	as shown below.	
	<ul> <li>Primary Handle: E</li> </ul>	Enter the extension	n for this user.
	• <b>UserID</b> : Enter a des	scriptive name for	the User ID.
	• <b>Password</b> : Enter a v	valid password fo	r logging into the SIP endpoint.
	<ul> <li>Confirm Password</li> </ul>	Re-enter the pas	ssword.
	• <b>Host</b> : Select the Av	aya SES server fr	om the pull-down menu.
	First Name: Any de	escriptive name.	L
	• Last Name: Any de	escriptive name.	
	, , , , , , , , , , , , , , , , , , ,	<b>I</b>	
	Check the Add Media Som	vor Extonsion ch	ackbox Click the <b>Add</b> button to proceed
	A confirmation window will		Sentimes on this new needs to messed
	A confirmation window will	li appear. Click	<b>Continue</b> on this new page to proceed.
	Тор	Add User	
		Add User	
		Primary Handle*	10053
	Search	User ID	10053
	Edit	Password*	•••••
	Delete	Confirm Password*	
	Password	Host*	10 1 10 22 💌
	Default Profile	First Name*	10053
	Registered Users	Last Name*	AudioCodes
	Conferences	Last Name	AddioCodes
	Media Server Extensions	Address 1	
	Emergency Contacts	Auuress 2	
	Hosts	Uffice	
	Media Servers	City	
	Aduress Map Priorities	State	
	<ul> <li>Adjance Systems</li> <li>Trusted Hosts</li> </ul>	Country	
	Services	Zip	
	Server Configuration	Add Media Server	
	E Certificate Management	Fields marked * are	required.
	IM logs		
	Trace Logger	Add	
	Export/Import to ProVision		

Step		Description
<b>Step</b> 3.	The Add Media Server Extersion used in the prosent same extension used in the prosent select the name of the pre-comextension configured will be a operation. In the bottom left here are a select sel	Description msion page will appear. In the Extension field, enter the evious step. From the pull down Media Server field, afigured Avaya Communication Manager CLAN that the inked with. Click the Add button to complete the hand pane click Update. Add Media Server Extension Add Media Server extension for user 10053. Extension 10053 Media Server clan1a-DC1 Fields marked * are required.
	Delete Password Default Profile Registered Users Conferences Media Server Extensions Emergency Contacts Hosts Hosts Media Servers Address Map Priorities Adjunct Systems Trusted Hosts Services Services Services Server Configuration Certificate Management IM logs Trace Logger Export/Import to ProVision Update	Add
4.	Repeat Steps 2 and 3 for the r	emaining MP-202 endpoint.

# 5. Configure the MP-202 Telephone Adaptor

This section describes the procedures for configuring the MP-202. The configuration of the MP-202 is done via a Web browser.



Step	Description
3.	From the left menu click on Quick Setup. For the WAN Ethernet connection enter an IP
	address, subnet mask and default gateway that can access the SES Server. Default values
	may be retained for all other values
	may be retained for an other values.
	MP 202 Management Console - Microsoft Internet Explorer
	Carl Back - Co - R C Co Search + Favorites I Co - Co II Co K
	Links @ Avaya - Support @ Products A-Z - internal @ DevConnect @ DevCon Support Response @ Calendar @ Teamtrack @ Interop [Home]
	AudioCodes WP-202 PXS
	🤌 Quick Setup
	4 Home
	Violity     V
	Network Connections     Connection Type: Manual P Address Ethernet Connection
	Security     IP Address:     10     1     10     56
	◆ QoS Subnet Mask: 255 255 0
	Advanced      Default Gateway:      10      1      10      1      1
	Secondary DNS Server: 0 µ0 µ0
	Administrator
	MP202's Hostname: mp202
	E-Mail:
	✓ OK TAPPIY
	Internet
4	From the left menu select Voice Over IP and then select the Signaling and Protocol tab
••	For the SID Provy and Pagistrer settings, shack the Use SID Provy shack how and anter the
	For the SIF Floxy and Registral settings, check the Use SIF Floxy check box and enter the
	SES IP address in the Proxy IP Address or Host Name field. Check the Use SIP Proxy IP
	and Port Registration check box. Default values may be retained for all other fields. Click
	Apply.
	AudioCodes MP-202 FXS
	Voice Over IP
	Home     Ouick Setup     Simpling     Madia     Voice     Line     Snad     Telephone
	Network Connections     Protocol     Dialing
	Security     A Vales Quest II
	Signaling Protocol     Solution
	Advanced SIP Proxy and Registrar
	System Monitoring     Use SIP Proxy     Logout
	Proxy IP Address or Host Name: 10.1.10.22
	Proxy Port: 5060
	Maximum Number of Authentication Retries: 4
	Use SIP Proxy IP and Port for Registration
	Register Expires: 3600 Seconds
	Sip Security: Allow All SIP traffic 🗸
	V OK T Apply X Cancel Advanced >>
	By America and America
	<u> </u>

Solution & Interoperability Test Lab Application Notes ©2008 Avaya Inc. All Rights Reserved.

11 of 20 AudioCodes\_202

Step		]	Description		
5.	Select the <b>Media Stream</b> be used by the MP-202 w the least preferred. This I Communication Manager menu under the <b>Support</b> the example below. <i>G.71</i> Default values were retain	ing tab. In the strict the most pro- tist must have a strin Section 3, Section 3, Section 3, Section 3, Section 3, Section 3, Section 2, Section 3, Sectio	screen below, sele eferred codec at the n overlap with the tep 3. The codec codec list used for lected as the most r fields. Click <b>Ap</b>	ect the list of the top and we list provide is selected for the compl preferred for <b>ply</b> .	F preferred codecs to orking downward to ed on Avaya From the pull-down iance test is shown in ollowed by <b>G.729</b> .
					MP-202 FXS
	<ul> <li>Home</li> <li>Quick Setup</li> <li>Network Connections</li> <li>Security</li> </ul>	ng Dialing Media Streaming	Voice and Fax Services Settings	Over IP Speed Telephone Dial Interface	
	Voice Over IP	Codecs Priority	Supported Codecs	Packetiza	tion Time (milliseconds)
	<ul> <li>QoS</li> <li>Advanced</li> </ul>	1st Codec	G.711, 64kbps, A-Law 👻	20 👻	
	✓ System Monitoring	2nd Codec	G.711, 64kbps, u-Law 💽	20 🛩	
	✓ Logout	3rd Codec	G.729, 8kbps 💉	20 🛩	
		4th Codec	G.723, 5.3/6.3kbps 🛛 👻	30 🛩	
		5th Codec	G.726, 16kbps	20 🛩	
		6th Codec	G.726, 32kbps	20 🛩	
			/ OK	X Cancel A	dvanced >>

Step		Description
6.	Select the Voice and Fax	tab. With silence suppression enabled, the MP-202 uses the
	equivalent of a G.729AB	codec. For the G.729 codec, check the Enable Silence
	<b>Suppression</b> check box.	
	For the Fax and Modem	Settings.
	<ul> <li>Select T.38 Relay</li> </ul>	for the <b>Fax Transport Mode</b> to support faxing across the data
	WAN.	
	<ul> <li>Select <i>Bypass</i> for</li> </ul>	the <b>Modem Transport Mode</b> to support modem calls over SIP.
	Default values may be m	stained for all other fields. Click Apply
	Default values may be re	stained for all other fields. Click Apply.
	AudioCodes	MP-202 FXS
		C Voice Ouer ID
	4 Union	
	◆ Quick Setup	ng Media Voice Line Speed Telephone
	Network Connections     Protoc	of Dialing Streaming and Services Settings Dial Interface
	<ul> <li>Security</li> <li>Voice Over IP</li> </ul>	Line 1 Voice Volume (-31 to +31 db): 0
	♦ QoS	Line 2 Voice Volume (-31 to +31 db):
	Advanced	
	<ul> <li>System Monitoring</li> <li>Logout</li> </ul>	Silence Compression
		Fax and Modem Settings
		Fax Transport Mode: T.38 Relay
		Modem Transport Mode: Bypass
		✓ OK ? Apply X Cancel Advanced >>

Step		Description	
7.	Select Services tab. Configu Call Waiting is enabl Call forward was disa	re the parameters as described below. ed by default. abled by default but enabled during testi	ng.
	<ul> <li>Check the Enabled c compliance MWI wa</li> </ul>	s only tested for stutter dial tone.	on (MWI). For the
	Default values may be retain	ed for all other fields. Scroll to the botto	om and click <b>Apply</b> .
			MP-202 FXS
	✓ Home	💮 Voice Over IP	
	Quick Setup     Network Connections     Security	Dialing Media and and Services Settings Dial Interface	
	4 Voice Over IP	Call Waiting	
	<ul> <li>✓ QoS</li> <li>✓ Advanced</li> </ul>	✓ Enabled	
	System Monitoring     Logout	Call Waiting SIP Reply: Queued 💌	
		Call Forward	
		3 Way Conference	
		3 Way Conference Mode:	
		Message Waiting Indication	
		✓ Enabled	
	Torally, the second sec	Subscribe To MWI	
8.	Select the Line Settings tab	and click on the Action icon for Line 1.	MP-202 FXS
	T C AudioCodes		
	♦ Home	Woice Over IP	
	Quick Setup     Signaling     Protocol	Dialing Media Voice and Services Line Speed Telephone Streaming Fax	
	* Security	line licer ID Dicplay Name	Action
	Voice Over IP	✓1         0000001         Line 1	Action
	<ul> <li>QoS</li> <li>Advanced</li> </ul>	✓ 2 0000002 Line 2	
	<ul> <li>System Monitoring</li> <li>Logout</li> </ul>	√ OK T Apply X Can	cel

	Description		
In the User ID field enter Authentication User N configured on Avaya SE presently supported. Det	er the user ID configured on ame and Authentication Pa ES in Section 3, Step 2. Block fault values may be retained	the SES Section 4, 5 ssword that matche k caller ID is left und for all other fields.	Step 2. Enter s the values checked, as it Click <b>OK</b> .
AudioCode	25		MP-202 FX
		Line Settings	
♦ Home	Line Number:	1	
Quick Setup	User ID:	10053	
<ul> <li>Network Connections</li> <li>Security</li> </ul>	Block Caller ID		
♦ Voice Over IP	Display Name:	Line 1	
▲ QoS			
<ul> <li>Advanced</li> <li>System Monitoring</li> </ul>	SIP Proxy		
▲ Logout	Authentication User Name:	10053	
	Authentication Password:	•••••	
Repeat the previous step	o for the remaining MP-202 e	endpoint and click C	OK.
AudioCode	25		MP-202 FXS
⊀ Home	Ð	> Voice Over IP	
<ul> <li>Quick Setup</li> <li>Network Connections</li> </ul>	aling Dialing Media Control Co	ine Speed Telephone Dial Interface	
Security     Vaice Over ID	Line User ID	Display Name	Action
◆ QoS	☑1 10053 Line	e 1	<b></b>
4 Advanced	☑ 2 10054 Line	e 2	<b></b>
<ul> <li>♦ System Monitoring</li> <li>♦ Logout</li> </ul>	√ ок	f Apply 🕺 Cancel	

### 6. Interoperability Compliance Testing

This section describes the compliance testing used to verify the interoperability between the AudioCodes MP-202, Avaya SIP Enablement Services (SES) 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 to/from the analog telephones connected through the MP-202 using various codec settings and exercising common PBX features such as hold, transfer and conference. This testing included the analog telephones, Avaya SIP telephones and Avaya H323 telephones.

#### 6.2. Test Results

The AudioCodes MP-202 successfully passed compliance testing. The following features and functionality were verified using an MP-202 analog endpoint.

- Calls to/from the MP-202 analog telephones
- Calls to/from the PSTN
- Intra-branch calls
- G.711A and G.729AB codec support
- Proper recognition of DTMF transmissions
- Hold/Retrieve
- Transfer
- Call Waiting
- Call Forwarding.
- 3-Way Conferencing
- Proper operation of voicemail with message waiting indicators (MWI). For the analog phones, MWI was provided via stutter dial tone.
- Extended telephony features using Avaya Communication Manager Feature Name Extensions.
- T.38 fax support
- Proper system recovery after a MP-202 restart

The following observations were made during the compliance test:

- When using Avaya Communication Manager Feature Access Codes (FAC), from an MP-202 analog endpoint the user is required to wait a couple of seconds before hanging up after hearing the feature confirmation tones, otherwise the FAC will not be activated.
- MP-202 analog endpoint cannot use # to enable or disable FACs. Compliance testing was carried out using \*XX to enable and disable FACs.

# 7. Verification Steps

The following steps may be used to verify the configuration:

Step		Description			
1.	<ul> <li>From the Avaya command to ve</li> <li>From the Avaya command to ve</li> <li>Verify that calls</li> </ul>	a Communication Manager SA rify that the SIP signaling grou a Communication Manager SA rify that the SIP trunk group is s can be placed to/from the MI	T, use the <b>status signaling-gr</b> p is in-service. T, use the <b>status trunk-group</b> in-service. P-202 analog endpoints.	o <b>up</b> )	
2.	From the Avaya SES w Verify that all endpoin	veb administration interface mo ts behind the MP-202 are regis	enu, select Users $\rightarrow$ Registered tered with the Avaya SES.	d Users.	
	AVAYA Integrated Manag SIP Server Mana				
	Help Exit		Server: 10.	1.10.22	
	Top ■ Users List Add Search	Registered Users on 10.1.10.22      Registered and Provisioned Users   Registered Users   Provisioned Users   Search   Refresh        Showing 1 to 5 of 5 registered contacts.			
	Edit Delete	Handle and Name	Address		
1	Password Default Profile	10050@devconuk.avaya.com 10050, 1005	0 sip:10050@10.1.50.21:5060		
	Registered Users	10051@devconuk.avaya.com 10051, 1005	1		
	Conferences		sip: 10051@10.1.50.20:5060		
	Emergency Contacts	IOUS2@devConuk.avaya.com SIP IOUS2, .	.uusz sin: 10052@10.1.50.19:5060		
	Hosts	<ul> <li>10053@devconuk.avaya.com AudioCodes,</li> </ul>	10053		
	Media Servers		sip:10053@10.1.10.56:5060		
	Address Map Priorities	10054@devconuk.avaya.com AudioCodes,	10054		
	Trusted Hosts		sip:10054@10.1.10.56:5060		

Description							
From the MP-202 web administration menu, select System Monitoring and then select							
Tra	<b>Traffic</b> tab. Verify the WAN Ethernet is <b>Connected</b> and packets are sent and received						
	Audio C	Codes		MP-202 FXS			
	<ul> <li>Home</li> <li>Quick Setup</li> <li>Network Connections</li> </ul>	Connections Traffic System System Voice Over					
	<ul> <li>Security</li> </ul>	Name	WAN Ethernet	LAN Ethernet			
	🔹 Voice Over IP	Device Name	eth0	eth1			
	4 QoS	Status	Connected	Disconnected			
	<ul> <li>Advanced</li> <li>System Monitoring</li> <li>Logout</li> </ul>	Network	WAN	LAN			
		Connection Type	Ethernet	Ethernet			
1		IP Address	10.1.10.56				
		Received Packets	118081	0			
1		Sent Packets	17449	0			
		Received Bytes	9670266	0			
		Sent Bytes	14807137	0			
				0			
		Receive Errors	U	8			
		Receive Errors Receive Drops	0	0			
		Receive Errors Receive Drops Time Span	0 22:17:52	0 22:17:52			
	property the document	Receive Errors Receive Drops Time Span	0 0 22:17:52 ✔ Close Automatic Refresh Off	0 22:17:52 Refresh			
Fror Voi	n the MP-202 well ce Over IP tab. V	Receive Errors Receive Drops Time Span	Automatic Refresh Off	nitoring and then sele			
Fror Voi	n the MP-202 well ce Over IP tab. V	Receive Errors Receive Drops Time Span b administration me erify both MP-202 Codes	enu, select <b>System Mor</b> endpoints are registered	a o 22:17:52 Refresh attoring and then seld d. MP-202 FXS			
Fror Void	n the MP-202 well ce Over IP tab. V Cover IP tab. V Cover Security	Receive Errors Receive Drops Time Span  D administration me erify both MP-202  Codes  Connections Traffic System Log Line	enu, select <b>System Mor</b> endpoints are registered	a o o o o o o o o o o o o o o o o o o o			
Fror Void	n the MP-202 well ce Over IP tab. V AudioC + Home + Quick Setup + Network Connections + Security + Voice Over IP	Receive Errors Receive Drops Time Span D administration me erify both MP-202 Codes Connections Traffic System Line Phone State	enu, select <b>System Mor</b> endpoints are registered voice ystem Voice IP Line 1 On Hook	a c c c c c c c c c c c c c c c c c c c			
Fror Void	n the MP-202 well ce Over IP tab. V Home Quick Setup Network Connections Security Yoice Over IP Qos	Receive Errors Receive Drops Time Span D administration me erify both MP-202 Codes Connections Traffic System Line Phone State SIP registration	enu, select System Mor endpoints are registered System Voice IP Line 1 On Hook Registered	g U U U U U U U U U U U U U U U U U U U			
Fror Void	n the MP-202 well ce Over IP tab. V Home Quick Setup Network Connections Security Voice Over IP Qos Advanced	Receive Errors Receive Drops Time Span D administration mo erify both MP-202 Codes Connections Traffic System Line Phone State SIP registration State	enu, select System Mor endpoints are registered vice vice vice vice vice vice vice vice	g U U U U U U U U U U U U U U U U U U U			
From Void	n the MP-202 well ce Over IP tab. V Home Quick Setup Network Connections Security Voice Over IP QoS Advanced System Monitoring	Receive Errors Receive Drops Time Span D administration mo erify both MP-202 Codes Connections Traffic System Line Phone State SIP registration State Origin	view view view view view view view view	g U U U U U U U U U U U U U U U U U U U			

### 8. Support

Technical support for the AudioCodes MP-202 Telephone Adaptor can be obtained from AudioCodes. See the Support link at <u>www.audiocodes.com</u> for contact information.

# 9. Conclusion

These Application Notes describe the configuration steps required for AudioCodes MP-202 to successfully interoperate with Avaya SIP Enablement Services 5.0 and Avaya Communication Manager 5.0. AudioCodes MP-202 Telephone Adaptor can successfully register to Avaya SIP Enablement Services, place/receive calls and utilize telephony features of Avaya Communication Manager.

### 10. Additional References

This section references the Avaya and AudioCodes product documentation that are relevant to these Application Notes.

The following documentation is available at: <u>http://support.avaya.com.</u>

- Documentation for Avaya Communication Manager (4.0), Media Gateways and Servers, Document ID 03-300151, Issue 6, February 2007.
- Installing and Administering SIP Enablement Services, Document ID 03-600768, Issue May 2007.

The following documentation is available on request from AudioCodes: <u>www.audiocodes.com</u>

- MP-202 Telephone Adapter User's Manual: Version 2.4.0: Document: LTRT-50604
- MP-202 Telephone Adapter Quick Installation Guide: Document LTRT-50404

#### ©2008 Avaya Inc. All Rights Reserved.

Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by <sup>®</sup> and <sup>TM</sup> are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

Please e-mail any questions or comments pertaining to these Application Notes along with the full title name and filename, located in the lower right corner, directly to the Avaya DevConnect Program at <u>devconnect@avaya.com</u>.