



Avaya Solution & Interoperability Test Lab

Application Notes for Mutare EVM Plus giSTT with Avaya IP Office 9.0 and Embedded Voicemail – Issue 1.0

Abstract

These Application Notes describe a compliance-tested configuration consisting of Avaya IP Office 9.0 with Embedded voicemail and Mutare EVM Plus giSTT.

Mutare's EVM Plus application is a unified messaging solution that seamlessly delivers voicemail messages to the user's email inbox. EVM Plus includes the giSTT speech to text gateway, allowing subscribers to have a text transcription of their voice message included in the EVM Plus delivery. EVM Plus accesses voice messages from IP Office Embedded voicemail from a collection email account.

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 a compliance-tested configuration consisting of Avaya IP Office with Embedded voicemail and Mutare EVM Plus giSTT.

2. General Test Approach and Test Results

The compliance test focused on the interoperability between Avaya IP Office and Mutare EVM Plus giSTT. Test calls were made from a variety of Avaya IP Office phones and from a simulated PSTN. Messages were left in Embedded voicemail mailboxes. IP Office was configured to send a copy of voice messages from all users to a collection email account.

EVM Plus retrieves the voice messages from the collection email account and sends the voice message to giSTT for speech to text conversion. When EVM receives the text back from giSTT it sends an email to the users email inbox.

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

2.1. Interoperability Compliance Testing

Testing consisted of typical call scenarios involving external endpoints using a simulated PSTN, and various Avaya endpoints. Messages were left for subscribers in their Embedded Voicemail mailboxes. Then it was verified that the end user received an email with the attached voice message along with the text version of the message as decoded by giSTT.

The feature testing included:

- Access to EVM and configuration
- Normal internal call message
- External call message
- Forward message
- Forward message with header message

Serviceability testing was also performed to verify the ability for EVM Plus to recover from loss of network connections and reboots. When EVM Plus was back online it was able to retrieve messages from the collection email account that were left when it was offline and correctly deliver them to users email accounts.

2.2. Test Results

The objectives described in **Section 2.1** were verified and all tests passed.

2.3. Support

Information, documentation and technical support for Mutare EVM Plus giSTT can be obtained at:

- Phone: 1-847-496-9000
- <http://www.mutare.com>

3. Reference Configuration

The configuration used for the compliance testing is shown below.

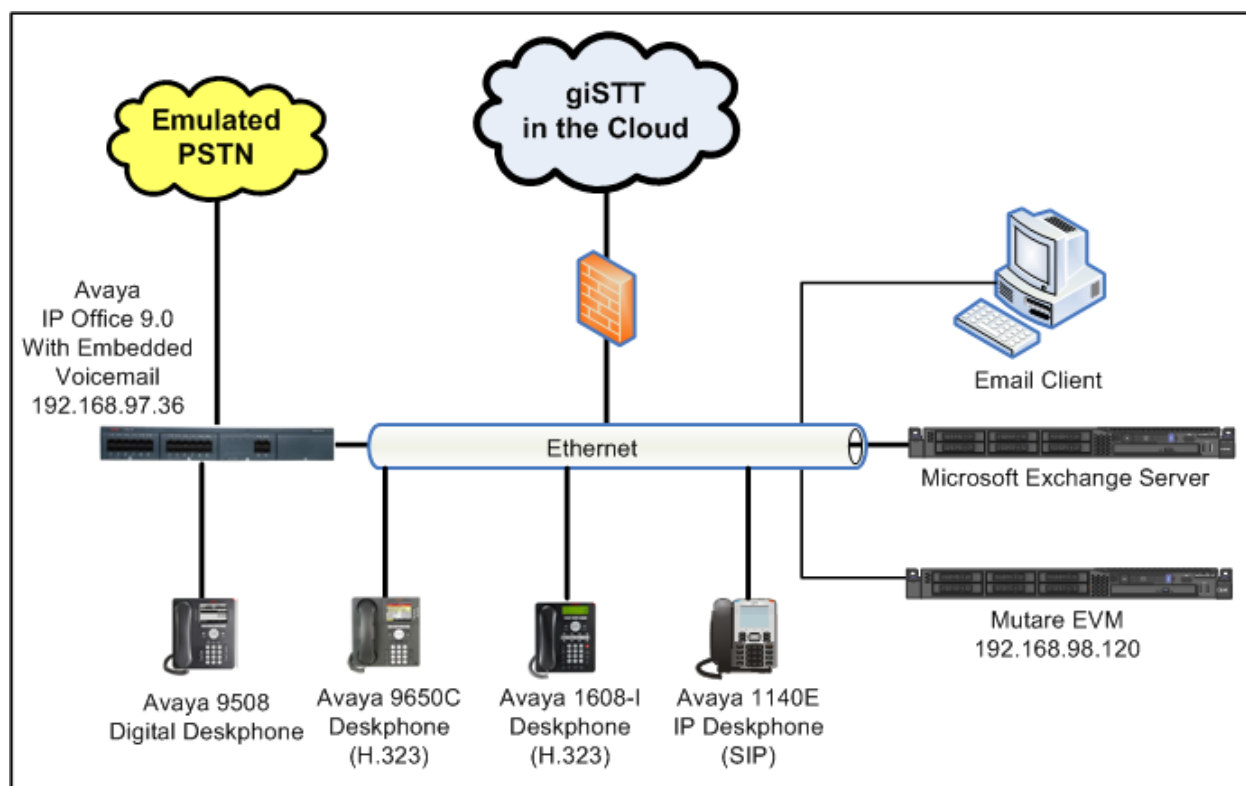


Figure 1 – DevConnect Sample Test configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya IP Office 500 V2 with Embedded Voicemail	9.0.0.829
Avaya 9650C Deskphone (H.323)	3.200
Avaya 1608-I Deskphone (H.323)	1.330D
Avaya 9508 Digital Deskphone	Rel:0.45
Avaya 1140E Deskphone (SIP)	04.03.18.00
Microsoft Office Professional Plus 2010	14.0.7015.1000
Microsoft Exchange 2010	14.3.174.4001
EVM Plus giSTT	version 2.4.1

Testing was performed with IP Office 500 R9.0, but it also applies to IP Office Server Edition R9.0. Note that IP Office Server Edition requires an Expansion IP Office 500 v2 R9.0 to support analog or digital endpoints or trunks.

5. Configure Avaya IP Office

This section describes the steps to configure IP Office with Embedded Voicemail to interoperate with EVM Plus giSTT. It is assumed that IP Office has already been installed and is functioning. For additional information on IP Office installation and configuration refer to documentation listed in **Section 9**.

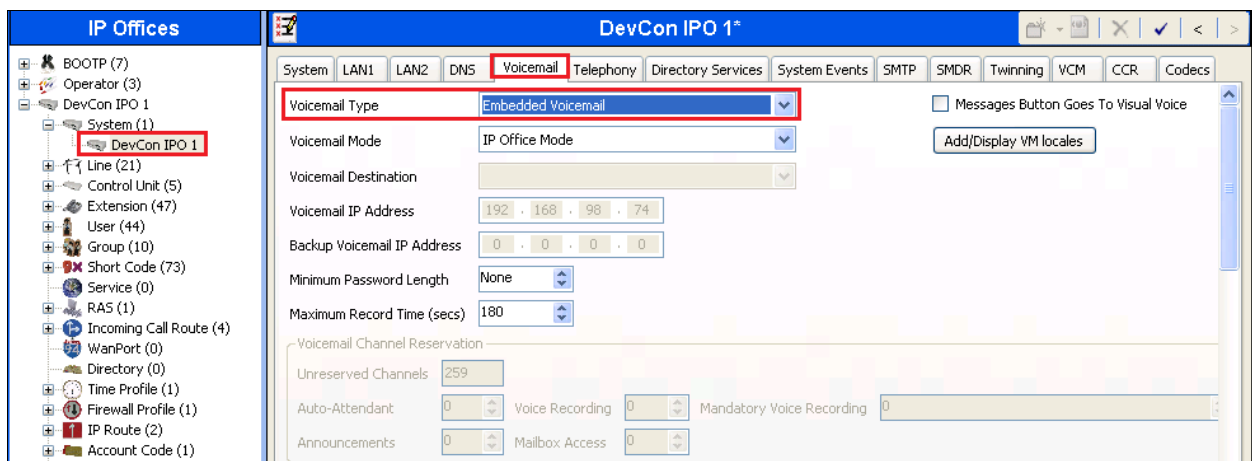
Summary of IP Office Configuration to interoperate with EVM Plus giSTT:

- Verify that IP Office is configured to use Embedded Voicemail
- Configure IP Office for SMTP
- User configuration to sent to the collection email address

5.1. Verify Voicemail Settings

This section explains the steps to verify that IP Office is configured to use Embedded Voicemail.

Navigate to **System** in the left window and then the appropriate system as shown below. Click on the **Voicemail** tab. In the **Voicemail Type** drop-down box, verify that **Embedded Voicemail** is selected.



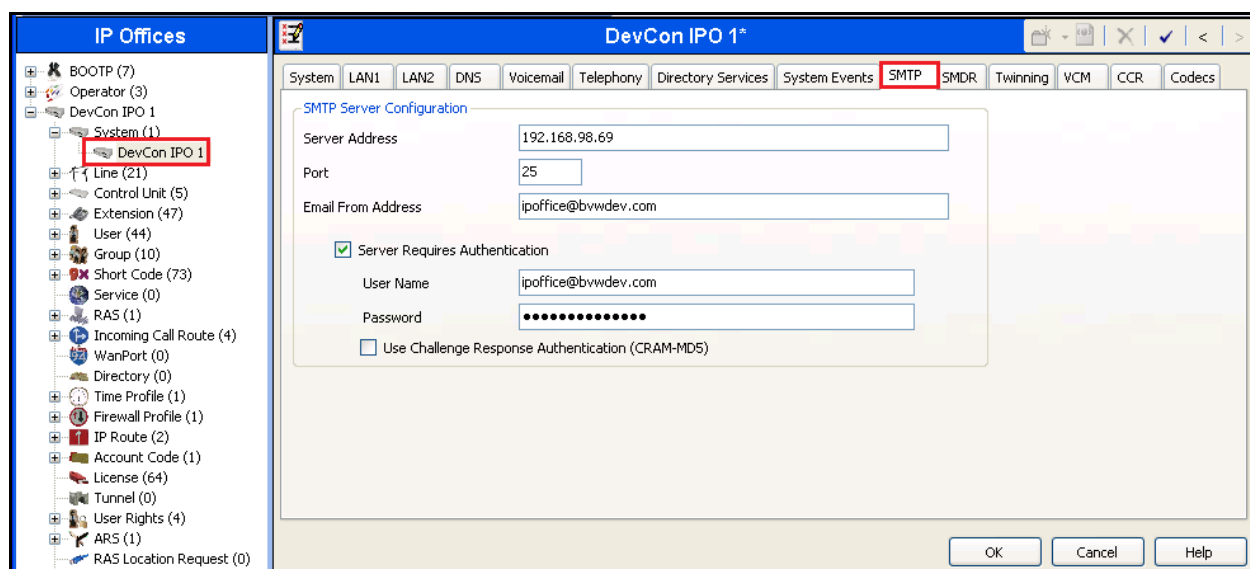
5.2. Configure SMTP

To enable IP Office to send email messages to the collection mailbox for EVM Plus, Simple Mail Transfer Protocol (SMTP) needs to be configured.

Navigate to **System** in the left window and then the appropriate system as shown below. Click on the **SMTP** tab. In the **SMTP Server Configuration** window configure the following:

- **IP Address** Enter the IP address of the SMTP server
- **Port** Enter the port number used by the SMTP server
- **Email From Address** Enter the email address that the IP Office emails will come from
- **Server Requires Authentication** If authentication is required by the SMTP server, then select the checkbox
- **User Name** Enter a valid username if using authentication
- **Password** Enter a valid password if using authentication
- **Use Challenge...** Select the checkbox if challenge response authentication is required by the SMTP server

Encryption of SMTP messages is not supported by IP Office. If IP Office needs to communicate with a SMTP server that requires Encryption a second SMTP server would need to be configured between IP Office and the target server to provide the Encryption.



5.3. Configure Users

This section describes how to configure the collection email address that will be used by all users using EVM Plus giSTT.

In the left panel navigate to **User** (not shown) and then select a User to edit. In the right panel navigate to the Voicemail tab. Verify that the **Voicemail On** checkbox is selected. In the **Voicemail email** box enter a valid email address that will be used as the collection mailbox. Now Select the **Copy** button. This will copy the voice message as an attachment in the email.

All users of EVM Plus on the IP Office will need to have the same email address configured. EVM Plus will use the header of the email to send the final email to the proper user.

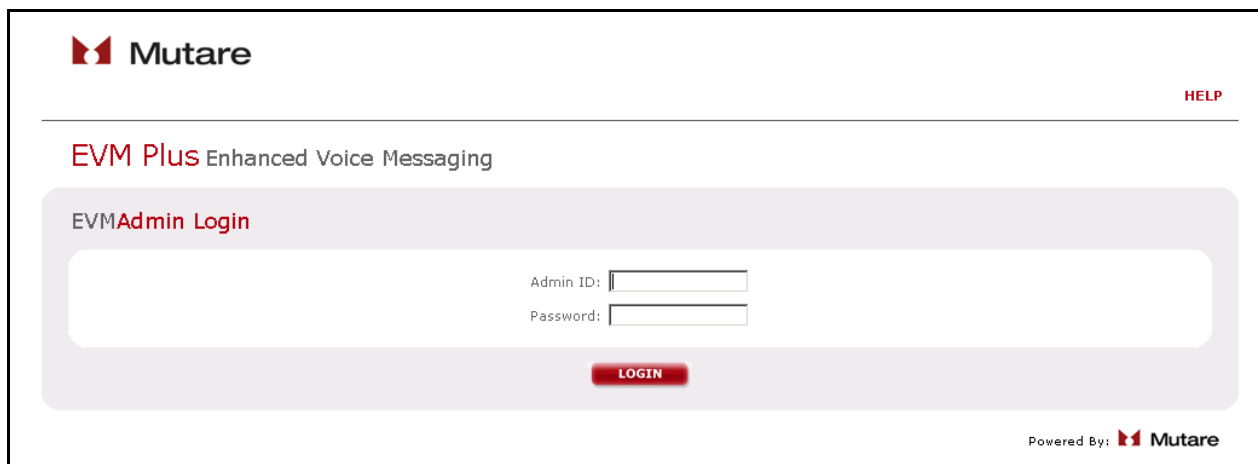
The screenshot shows the Avaya IP Office configuration window for user 'Extn28234: 28234*'. The left pane lists users, with '28234 Extn28234' selected. The right pane shows the 'Voicemail' tab. The 'Voicemail Code' and 'Confirm Voicemail Code' fields are masked with asterisks. The 'Voicemail Email' field is set to 'ipoevm@avaya.com'. The 'Voicemail On' checkbox is checked. Under 'Voicemail Email', the 'Copy' radio button is selected. The 'DTMF Breakout' section shows three dropdown menus, all set to 'System Default ()'. The 'OK', 'Cancel', and 'Help' buttons are at the bottom right.

6. Configure EVM Plus

These Application Notes assume that EVM Plus has already been installed on a server that meets the minimum requirements. For additional information on EVM Plus installation and configuration refer to documentation listed in **Section 9** or contact Mutare support.

6.1. Connect to EVM Plus

From a web browser, navigate to the EVM Administration web page at **http://127.0.0.1/admin.asp**. Replace 127.0.0.1 with the appropriate IP address or host name if connecting from a different server or PC. The following login screen will be displayed. Log in with the appropriate credentials.




The screenshot shows the EVM Plus Enhanced Voice Messaging Admin Login page. At the top left is the Mutare logo. At the top right is a red 'HELP' link. Below the header, the text 'EVM Plus Enhanced Voice Messaging' is displayed. The main content area is a light gray box with the title 'EVMAdmin Login'. Inside this box, there are two input fields: 'Admin ID:' and 'Password:'. Below these fields is a red 'LOGIN' button. At the bottom right of the page, it says 'Powered By: Mutare' with the Mutare logo.

6.2. Configure EVM Plus Settings

Settings can be added and configured by selecting the **SETTINGS** tab at the top of the page as shown below. The following settings were used in this sample configuration for compliance testing. Most of the settings were provided by Mutare to provide proper interoperation with the format of the email from IP Office. The settings that would need to change for a given setup would be as follows.

- **EmailFrom** Enter the from **email address**.
- **EVMURL** Enter the **URL** of EVM.
- **ServerIP** Enter the **IP** address or **FQDN** of email sever for the collection email.
- **ServerPort** Enter the port number for access to the collection email. **993** was used for this sample configuration.
- **SuperLogin** Enter the **username** to access the collection email.
- **SuperPwd** Enter the **password** to access the collection email. It is displayed encrypted.


Admin Name: System Admin

[USERS](#) | [ADMINS](#) | [DEVICES](#) | [DEVICE GROUPS](#) | [TOOLS](#) | [STATUS](#) | [SETTINGS](#) | [HELP](#) | [LOGOUT](#)

EVM Plus Enhanced Voice Messaging System: EVM

EVMSettings

Select	Setting	Value	Scope	
	<Select>		EVM	ADD
Help	AdjustTZ	Yes	EVM	DELETE
Help	BulkAuthField	M	EVM	DELETE
Help	CustomCLIDHdr	Subject	EVM	DELETE
Help	CustomCLIDRegEx	(\d+)\$	EVM	DELETE
Help	CustomNameHdr	Subject	EVM	DELETE
Help	CustomNameRegEx	(\w+)\>	EVM	DELETE
Help	CustomUserHdr	Subject	EVM	DELETE
Help	CustomUserRegEx	(\d+)\>	EVM	DELETE
Help	EmailFrom	evmadmin@avaya.com	EVM	DELETE
Help	EVMURL	http://192.168.98.120	EVM	DELETE
Help	RealTimeAuth	No	EVM	DELETE
Help	ServerAuth	0	EVM	DELETE
Help	ServerIP	imap.avaya.com	EVM	DELETE
Help	ServerPort	993	EVM	DELETE
Help	SuperLogin	ipoevm	EVM	DELETE
Help	SuperPwd	rtIS6r7Mv+ZDIZbFz/FLiogTfGQ==	EVM	DELETE
Help	UseSSL	Yes	EVM	DELETE

SAVE

6.3. Configure New Users

Navigate to the **Users** page by clicking on the **Users** tab. From this page users can be added, viewed and deleted.

To add a new user enter the following:

- **Mailbox** Enter a valid mailbox number (i.e., IP Office extension).
- **EVM Pwd** Enter a password. This can be used by a User to access their EVM settings page.
- **Full Name** Enter the name of the mailbox user.
- **Device Group** Select the required group.

When finished click on **ADD**.

The screenshot shows the Mutare EVM Plus Enhanced Voice Messaging Users management interface. At the top, the Mutare logo is on the left, and 'Admin Name: System Admin' is on the right. Below this is a navigation bar with links: USERS | ADMINS | DEVICES | DEVICE GROUPS | TOOLS | STATUS | SETTINGS | HELP | LOGOUT. The main heading is 'EVM Plus Enhanced Voice Messaging' with 'System: EVM Rename' on the right. Below the heading is a section titled 'EVM Users' with a 'View where' filter (Name, Begins With) and a 'SAVE' button. The main content area displays a table of existing users with columns for Mailbox, EVM Pwd, Full Name, and Device Group. Each row has a 'View' link and a 'DELETE' button. At the bottom, there is an 'ADD' form with fields for Mailbox, EVM Pwd, Full Name, and Device Group, and an 'ADD' button. The bottom status bar shows 'EVM Plus Licenses: 4 of 100' and 'giSTT Subscriptions: 4 of 100 (Exp: 6/1/2014)' with a 'SAVE' button.

	Mailbox	EVM Pwd	Full Name	Device Group	
View	28240	*****	1140E SIP Phone	Main	DELETE
View	28233	*****	Atest Mailbox	Main	DELETE
View	28244	*****	Test 4	Main	DELETE
View	28201	*****	Test Mailbox2	Main	DELETE

<input type="text" value="28234"/>	<input type="password" value="*****"/>	<input type="text" value="Test Mailbox"/>	<input type="text" value="Main"/>	ADD
------------------------------------	--	---	-----------------------------------	---------------------

EVM Plus Licenses: 4 of 100
giSTT Subscriptions: 4 of 100 (Exp: 6/1/2014)

The newly added user will now be displayed in the user list. Click on the **View** link for the new user (not shown). Now the **Settings** page for the user will be displayed. In the **Device Type** drop-down box select **Desktop EVM**.

Mutare Name: Test Mailbox
Mailbox: 28234

SETTINGS | EVM PASSWORD | HELP | CLOSE

EVM Plus Enhanced Voice Messaging

EVMSettings

Device Type: <Select>

☐ Active

ADD DEVICE

☐ Re-send me all messages in my mailbox

Updated: 3/25/14 3:01 PM

DELETE

TEST

SAVE

The page is then updated as in the following figure. Enter the following configuration:

- **Active** Select the check box
- **Email Address** Enter the email address where the emails will be sent
- **Send when I receive** Select the voice check box and **ALL** in the drop-down box
- **Speech to Text** Select this check box to activate giSTT
- **Audio format** Select **WAV** or **MP3** from the drop-down box

When finished click **Save**.

Mutare Name: Test Mailbox
Mailbox: 28234

SETTINGS | EVM PASSWORD | HELP | LOGOUT

EVM Plus Enhanced Voice Messaging

EVMSettings

Device Type: Desktop EVM

☒ Active

Email Address: test@avaya.com

Send when I receive: ☒ Voice ALL

☐ Fax

☒ Speech to Text

WAV Audio Format

None Fax Format

ADD DEVICE

☐ Re-send me all messages in my mailbox

Updated: 3/25/14 3:22 PM

DELETE

TEST

SAVE

6.4. Edit EVM Plus Email format

The format of the email sent by EVM can be customized. In this sample configuration links for features that are not compatible with IP Office Embedded Email were removed from the sent emails.

To customize the email select the **Devices** tab. Then click on the **CONFIG** button in the **Desktop EVM** section.

Mutare Admin Name: System Admin

USERS | ADMINS | **DEVICES** | DEVICE GROUPS | TOOLS | STATUS | SETTINGS | HELP | LOGOUT

EVM Plus Enhanced Voice Messaging System: EVM

EVMDevices

Device Name / Description	Msg Options	Delivery Method	giSTT	
Cellular EVM Cellular text message containing only basic message details.	Send: User Voice: None Fax: None	Cell: User	No	CONFIG DELETE
Desktop EVM Full-featured HTML email designed for desktop email clients.	Send: User Voice: User Fax: User	Email	User	CONFIG DELETE

Now the **EVM Device Email** page is displayed as follows.

Mutare Admin Name: System Admin

USERS | ADMINS | **DEVICES** | DEVICE GROUPS | TOOLS | STATUS | SETTINGS | HELP | LOGOUT

EVM Plus Enhanced Voice Messaging System: EVM

EVMDevice Email

Desktop EVM Copy from Device: <Select>

From Address: giSTTAuto@mutare.com TEST To:

Subject: [URGENT][PRIVATE][MESSAGE TYPE][VOICEFAX]Message from [SENDER] on [MESSAGE DATE] for [MAILBOX]

Body: HTML Format

```
<HTML>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<html><HEAD>
<META http-equiv="Content-Type" content="text/html; charset=Windows-1252">
<STYLE>
body {font: 12px/1.2 Arial, Helvetica, sans-serif; padding: 0 px; margin: 15 px;}
</STYLE>
</HEAD>
<BODY>
<p>[URGENT][PRIVATE][MESSAGE TYPE][VOICEFAX]Message from [SENDER] on [MESSAGE DATE]</p>
<p>[TRANSCRIBE]</p>
<p><strong>Attachment(s):</strong>
[MESSAGE1]
[MESSAGE2]
[MESSAGE3]
</p>
<p>
```

SAVE

The HTML in the body section of the above page was edited and saved as follows.

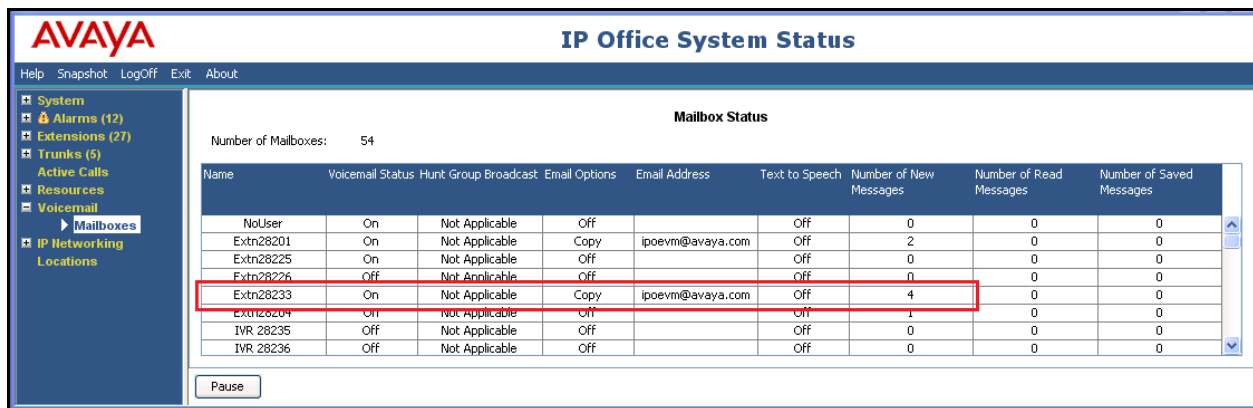
```
<HTML>
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<html><HEAD>
<META http-equiv="Content-Type" content="text/html; charset=Windows-1252">
<STYLE>
body {font: 12px/1.2 Arial, Helvetica, sans-serif; padding: 0 px; margin: 15 px;}
</STYLE>
</HEAD>
<BODY>
<p>[URGENT][PRIVATE][MESSAGETYPE][VOICEFAX]Message from [SENDER] on
[MESSAGEDATE]</p>
<p>[TRANSCRIBE]</p>
<p><strong>Attachment(s):</strong>
    [MESSAGE1]
    [MESSAGE2]
    [MESSAGE3]
</p>
<p>
<!-- <a href="[DELETE]">Delete this message from my Voice Mailbox</a><br> -->
<!-- <a href="[MARKREAD]">Mark this message read in my Voice Mailbox</a><br> -->
<!-- <a href="[CONTACTS]">View/Edit my EVM Contacts</a><br> -->
<!-- <a href="[SETTINGS]">View/Edit my EVM Settings</a><br> -->
<!-- <a href="[DELETEALL]">Delete all messages from my Voice Mailbox</a><br> -->
</p>
<!-- <p>Mailbox currently contains [NEWMSGs] New and [OLDMSGs] Old messages.</p> --
>
<!--<p>[HEADERS]</p>-->
</BODY>
</HTML>
```

7. Verification Steps

This section provides tests that can be performed to verify proper configuration of IP Office and EVM Plus.

7.1. IP Office Verification

From a PC running the IP Office Monitor application, select **Start > Programs > IP Office > System Status** to launch the application. The **Avaya IP Office System Status Logon** screen is displayed (not shown). Enter the appropriate credentials. From the left panel select **Voicemail** and then **Mailboxes**. The status of mailboxes can now be viewed in the right panel.

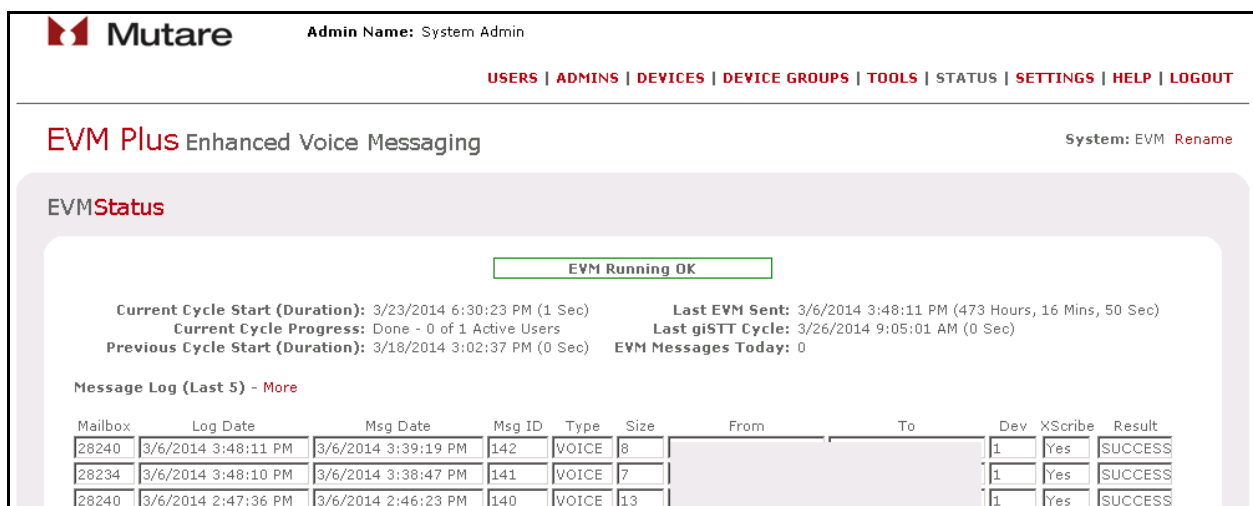


The screenshot shows the Avaya IP Office System Status application. The left sidebar contains a navigation menu with options: System, Alarms (12), Extensions (27), Trunks (5), Active Calls, Resources, Voicemail, Mailboxes (selected), IP Networking, and Locations. The main area is titled 'Mailbox Status' and shows 'Number of Mailboxes: 54'. Below this is a table with the following columns: Name, Voicemail Status, Hunt Group Broadcast, Email Options, Email Address, Text to Speech, Number of New Messages, Number of Read Messages, and Number of Saved Messages. The table lists several mailboxes, with 'Extn28233' highlighted by a red box. A 'Pause' button is located at the bottom left of the table area.

Name	Voicemail Status	Hunt Group Broadcast	Email Options	Email Address	Text to Speech	Number of New Messages	Number of Read Messages	Number of Saved Messages
NoUser	On	Not Applicable	Off		Off	0	0	0
Extn28201	On	Not Applicable	Copy	ipoevm@avaya.com	Off	2	0	0
Extn28225	On	Not Applicable	Off		Off	0	0	0
Extn28226	Off	Not Applicable	Off		Off	0	0	0
Extn28233	On	Not Applicable	Copy	ipoevm@avaya.com	Off	4	0	0
Extn28204	On	Not Applicable	Off		Off	1	0	0
IVR 28235	Off	Not Applicable	Off		Off	0	0	0
IVR 28236	Off	Not Applicable	Off		Off	0	0	0

7.2. EVM Plus Verification

From the EVM Plus Admin web page, select the **STATUS** tab. The following page is then displayed. From this page it can be determined if EVM is running ok and a message log is displayed with result details. The **From** and **To** email addresses have been masked out in the following figure.



The screenshot shows the Mutare EVM Plus Admin web page. The top navigation bar includes 'Admin Name: System Admin' and a menu with 'USERS | ADMINS | DEVICES | DEVICE GROUPS | TOOLS | STATUS | SETTINGS | HELP | LOGOUT'. The main heading is 'EVM Plus Enhanced Voice Messaging' with a 'System: EVM Rename' link. Below this is the 'EVMStatus' section, which includes a green box stating 'EVM Running OK'. It also displays cycle information: 'Current Cycle Start (Duration): 3/23/2014 6:30:23 PM (1 Sec)', 'Current Cycle Progress: Done - 0 of 1 Active Users', 'Previous Cycle Start (Duration): 3/18/2014 3:02:37 PM (0 Sec)', 'Last EVM Sent: 3/6/2014 3:48:11 PM (473 Hours, 16 Mins, 50 Sec)', 'Last giSTT Cycle: 3/26/2014 9:05:01 AM (0 Sec)', and 'EVM Messages Today: 0'. A 'Message Log (Last 5) - More' link is provided. Below the link is a table with the following columns: Mailbox, Log Date, Msg Date, Msg ID, Type, Size, From, To, Dev, XScribe, and Result. The table shows three messages, all with a 'SUCCESS' result.

Mailbox	Log Date	Msg Date	Msg ID	Type	Size	From	To	Dev	XScribe	Result
28240	3/6/2014 3:48:11 PM	3/6/2014 3:39:19 PM	142	VOICE	8			1	Yes	SUCCESS
28234	3/6/2014 3:48:10 PM	3/6/2014 3:38:47 PM	141	VOICE	7			1	Yes	SUCCESS
28240	3/6/2014 2:47:36 PM	3/6/2014 2:46:23 PM	140	VOICE	13			1	Yes	SUCCESS

8. Conclusion

Mutare EVM Plus giSTT successfully interoperated with Avaya IP Office with Embedded Voicemail as described in these notes.

9. Additional References

Product documentation for Avaya IP Office may be found at <http://support.avaya.com> and <http://marketingtools.avaya.com/knowledgebase>.

Avaya IP Office

- 1) *IP Office 9.0 Product Description*, –Issue 27.02.0, Document 15-601041, January 6, 2014

Product documentation for Mutare products may be found at <http://www.mutare.com>.

Mutare EVM Plus

- 2) *EVM Plus Admin Guide*, Rev. 3/2013

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