

Avaya Solution & Interoperability Test Lab

## Application Notes for Sagemcom XMediusFAX with Avaya IP Office 9.0 – Issue 1.0

### Abstract

These Application Notes describe the configuration steps required for Sagemcom XMediusFAX to interoperate with Avaya IP Office 9.0. Sagemcom XMediusFAX is a fax server application that uses the SIP trunk interface with T.38 fax from Avaya IP Office to send and receive fax.

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 Sagemcom XMediusFAX to interoperate with Avaya IP Office 9.0. Sagemcom XMediusFAX is a fax server application that uses the SIP trunk interface with T.38 fax from Avaya IP Office to send and receive fax.

For each user on Avaya IP Office desired to use fax, a fax extension is assigned and configured on Sagemcom XMediusFAX. Incoming fax is routed by Avaya IP Office to Sagemcom XMediusFAX via an available SIP channel. The received incoming fax can be viewed by the fax user via the Sagemcom XMediusFAX web interface. Similarly, outgoing fax can be sent by the fax user via the Sagemcom XMediusFAX web interface.

## 2. General Test Approach and Test Results

The feature test cases were performed manually. Fax calls to and from XMediusFAX were made. The faxes were sent and received using the XMediusFAX web interface and an analog fax machine at the PSTN.

The serviceability test cases were performed manually by disconnecting and reconnecting the Ethernet connection to XMediusFAX and rebooting the XMediusFAX server.

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

The compliance testing included feature and serviceability areas.

The feature testing focused on verifying the following on XMediusFAX:

- Proper handling of faxes via SIP trunk with T.38: send/receive, internal fax, external fax over ISDN (PRI), simultaneous bi-directional faxes, and miscellaneous failure scenarios.
- Proper handling of faxes with different pages, resolutions, complexity, paper sizes, and data rates.
- DTMF interactions between XMediusFAX and IP Office.
- Sample testing of G.711 pass-through mode
- No adverse impact on the internal and external VoIP calls during fax transmission.

The serviceability testing focused on verifying the ability of XMediusFAX to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet connection to XMediusFAX and rebooting the XMediusFAX server.

## 2.2. Test Results

All test cases were executed and verified as successful. However, the following observation was made during the compliance testing:

For an outbound PSTN call that required an account code, XMediusFAX generated the account code via DTMF but the DTMF digits were not recognized by IP Office and therefore the call did not go through. Outbound PSTN calls not requiring an account code worked fine.

## 2.3. Support

Technical support on XMediusFAX can be obtained through the following:

- **Phone:** (888) 766-1668
- Email: <u>xmediusfax.support.americas@sagemcom.com</u>
- Web: <u>http://xmediusfax.sagemcom.com/support</u>

## 3. Reference Configuration

The configuration used for the compliance testing is shown below. IP Office is connected to XMediusFAX via a SIP trunk and to an Emulated PSTN via an ISDN PRI line. Fax extensions of 29901 and 29902 are configured on the XMediusFAX server which send and receive fax calls to/from a fax machine in the PSTN.

All incoming calls to the fax extensions are routed by IP Office over the SIP trunks to XMediusFAX, and all outgoing faxes are routed by XMediusFAX over the SIP trunks to IP Office.



XMediusFAX running on Dell Blade Server and VMWare Virtual Machine

Figure 1: Compliance Testing Configuration

## 4. Equipment and Software Validated

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

Equipment	Software
Avaya IP Office on IP500 V2	9.0 (Build 829)
Avaya 1616 IP Deskphone (H.323)	R1.3
Avaya 9640 IP Deskphone (H.323)	R3.2
Sagemcom XMediusFAX on Microsoft Windows	D7 5
VMWare Virtual Machine	K/.J

Testing was performed with IP Office 500 V2 R9.0, but it also applies to IP Office Server Edition R9.0 (single site configuration only).

## 5. Configure Avaya IP Office

This section provides the procedures for configuring IP Office, assuming it has been installed and licensed. The procedures include the following areas:

- Verify IP Office license
- Obtain LAN IP address
- Enable SIP trunks
- Administer SIP line
- Administer incoming call route
- Administer short code

### 5.1. Verify IP Office License

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

The Avaya IP Office R9 Manager screen is displayed. From the configuration tree in the left pane, select License to display the License screen in the right pane. Verify that the License Status for SIP Trunk Channels is "Valid", and that the Instances value is sufficient for the desired maximum number of simultaneous faxes. If there is insufficient capacity of SIP Trunks, contact an Avaya representative to make the appropriate changes.

📶 Avaya IP Office R9 Manager IPC	)-R9 [9.0.0.829] [Administrator(Administr	ator)]					×
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🗟 🤜 System (1) 🔥	License Remote Server						
=-17 Line (6)	Feature	License Key	Instances	Status		Add	^ ٦
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	Phone Manager Pro IP Audio Enab	D4VnOTo6AvqOlzkcClx11mkLM6reXPxm	255	Valid		Remove	JE
-197	Receptionist	3tIO55yEAGF1@E_BgperBH4VDvdeOuxx	255	Valid	_		
- 178	Preferred Edition Additional Voice	qtm61zvcXAsnyMfMwUcx6F_VM3mjN7LB	255	Valid			
17	3rd Party IP Endpoints	qvmrGtgotGrnboWJ6Yx6x9o9V39eKf75	255	Valid			
🕀 🖘 Control Unit (4)	Phone Manager Pro (per seat)	bvystL99Xj8cI9_CRNcdH8Rcp6sjIfEm	255	Valid			
Hand Stension (34)	AUDD( Voicemail	d4DdshButUh2GLfQQqev5jirck9xKYEQ	255	Valid			
Group (1)	VMPro Networked Messaging	ZyOQgv6Btv7Ny9mMwScKo_kdpv0EIeEB	255	Valid			
• • • • • • • • • • • • • • • • • • •	VMPro TTS (Scansoft)	j40VKmmYXAGJiVfmJnccraFcO3ddDuzH	255	Valid			
- 🛞 Service (0)	VMPro TTS (Generic)	NtTcvydHtAoH0o_6P2c61pROj39@VR7u	255	Valid			
🗄 🚽 RAS (1) 👘 👘	IP500 Voice Networking Channels	24WGcDy_ASFaVmxp5nxb1G_Vc6V8tpSC	255	Valid	Ξ		
E [ Incoming Call Rout	SIP Trunk Channels	a4Kx5AB5XGFaFIJ8Blur5fRcr39rKul9	255	Valid			
WanPort (0)	IP500 Universal PRI (Additional cha	KTKAOSmBvsbuV7H6H4c1cHFVckVeI8pC	255	Valid			
- Time Profile (0)	UMS Web Services	3vV2dVB_Xvoe0ouPWIu1cfZrr3d8VRmx	255	Valid			
😈 Firewall Profile (1)	Software Upgrade 255	qTT09Fm_AjfunLWkRne36tq9ev@ctppm	1	Valid			
🕂 📶 IP Route (2)	Avaya IP endpoints	U4twwboRAGjayEz8f7e@5o_9DvLbXRDz	255	Valid			
Account Code (1)	Essential Edition Additional Voice	2vK4tAtwXvhJZVbH1quwrUi9j6@cKPbJ	255	Valid			
Tuppel (0)	Teleworker	DvHCcEyuXAhIiohe5QxG_JkO9ko2VJrc	255	Valid			
- Se User Rights (8)	Mobile Worker	@tX00LmLvAZJIzTcYRcdmURdM3ooNp9e	255	Valid			
Auto Attendant (0)	Power User	Dvt0G4vpXvFeqS01QJesrq3dr6VMIW_C	255	Valid			-
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### 5.2. Obtain LAN IP Address

From the configuration tree in the left pane, select **IPO-R9**  $\rightarrow$  **System** to display the **IPO-R9** screen in the right pane, where **IPO-R9** is the name of the IP Office system. 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 XMediusFAX in **Section 6.2**. Note that IP Office can support SIP trunks on the LAN1 and/or LAN2 interfaces, and the compliance testing used the LAN1 interface.

🖬 Avaya IP Office R9 Manager IPO-R9 [9.0.0.829] [Administrator/Administrator)]						
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Administrator     Operator (3)     Administrator     Operator     Operator	System LAN1 LAN2 DNS LAN Settings VoIP Network IP Address IP Mask Primary Trans. IP Address RIP Mode DHCP Mode Server Client Dial	Voicemail         Telephony         Dire           :Topology         :         55           10         64         30         :           255         255         :         255           255         :         255         :         0           0         .         0         .         0           None         :         :         :           ::         Enable NAT         :         :           ::         Disabled         :         :	ctory Services System Events	SMTP SMDP	Twinning VCM CC	
IP Route (2)     Account Code (1)				ОК	Cancel Help	
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## 5.3. Enable SIP Trunks

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

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i 🚨 📨 🖬 🔺 🔝 🖿 🔔	🗸 🍛  🌠 🕴 IPO-R9	<ul> <li>System</li> <li>IPO-R9</li> </ul>	•
IP Offices	H	IPO-R9	📸 - 🔤   🗙   🖌   <   >
	System LAN1 LAN2 DNS	Voicemail Telephony Directory Services System Events	SMTP SMDR Twinning VCM CCR
Administrator Manager Manager PO-R9 System (1) System (1)	VOIP Network	opology V Auto-create User	H323 Remote Extn Enable
□	SIP Trunks Enable		=
-176	🔽 SIP Registrar Enable		
-177	Auto-create Extn/User		🔲 SIP Remote Extn Enable
17	Domain Name		
Extension (34)		UDP UDP Port 5060	Remote UDP Port
⊕ ∰ Group (1) ⊕ ∯× Short Code (61)	Layer 4 Protocol	TLS TLS Port 5061	Remote TLS Port 5061
RAS (1)	Challenge Expiry Time (secs)	10	
	RTP		
	Port Number Range		
Directory (0) 	Minimum	49152 🚔 Maximum 53246 🚔	-
Firewall Profile (1)     Firewall Profile (2)	•		- F
Account Code (1)			
← License (32) ▼ ∢ ►			OK Cancel Help
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### 5.4. Administer SIP Line

From the configuration tree in the left pane, right-click on Line, and select New  $\rightarrow$  SIP Line from the pop-up list to add a new SIP line. Select the **Transport** tab in the right pane. For **ITSP Proxy Address**, enter the IP address of XMediusFAX. Set the Layer 4 Protocol field to TCP. Retain the default values for the remaining fields.

📶 Avaya IP Office R9 Manager IF	O-R9 [9.0.0.829] [Administrator(Administrator)]	
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IP Offices	SIP Line - Line 1	7*
	SIP Line       Transport       SIP URI VoIP       T38 Fax       SIP Credentials         ITSP Proxy Address       10.64.30.55         Network       Configuration         Layer 4 Protocol       TCP       Ser         Use Network Topology Info       None       List         Explicit DNS Server(s)       0       0       0         Calls Route via Registrar       Image: Content of the cont	nd Port 5060 *

YTC; Reviewed:
SPOC 12/13/2013

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Select the **SIP URI** tab, and click **Add** to display the **New Channel** section. Enter the wildcard character "\*" for **Local URI**, **Contact**, and **Display Name**. Enter an unused group number such as "17" for **Incoming Group** and **Outgoing Group**. Set **Max Calls per Channel** to the maximum number of simultaneous faxes allowed by the XMediusFAX license, in this case "24". Retain the default values in the remaining fields. Click **OK**.

🖌 Avaya IP Office R9 Manager IPO-R9 [9.0.0.829] [Administrator(Administrator)]							
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Short Code (61)     Service (0)	Via	<none></none>			Connect		
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→ → Auto Attendant (0) ⊕ → ★ ARS (1)	Max Calls per Channel	24			-		
🦾 🦝 Location (0)					OK Cancel Help		
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The screen is updated, as shown below.

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Select the **VoIP** tab. Check **Re-invite Supported**. For **Fax Transport Support**, select "T38" from the drop-down list. Retain the default values in the remaining fields.

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1 2 🗃 - 🖬 🖪 💽 🖬 🔺	🗸 🍰  🌠 🕴 IPO-R9	- Line	- 1	-	
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BOOTP (1)     Operator (3)     Manager     Operator     Operator	SIP Line Transport SIP URI	VoIP T38 Fax SIP Credentia	ls		VoIP Silence Suppression Allow Direct Media Path
	Codec Selection	System Default	>>>         Selected           6.711 ULA         6.711 ALA           6.723.1 6K         6.723.1 6K           >>>	▼ W 64K K 64K ( CS-ACELP 3 MP-MLQ	Re-invite Supported Codec Lockdown PRACK/100rel Supported Force direct media with phones G.711 Fax ECAN
RAS (1) Incoming Call Rout 0 WanPort (0) Time Profile (0) Firewall Profile (1) Firewall Profile (1) Account Code (1)	Fax Transport Support Location Call Initiation Timeout (s) DTMF Support	T38 Cloud 4 RFC2833		• • •	
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Select the **T38 Fax** tab. Uncheck **Use Default Values** toward the bottom of the screen to access all fields.

For **T38 Fax Version**, select "0". Check **Disable T30 ECM** in the right section. Retain the default values in the remaining fields. Click **OK**.

📶 Avaya IP Office R9 Manager IPC	-R9 [9.0.0.829] [Administrator(/	Administrator)]		
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## 5.5. ISDN PRI Line Configuration

An ISDN PRI Line was pre-configured on the IP Office for connectivity to PSTN. Since it is an integral part of the test configuration, a screenshot is included in this section for information purpose.

🖌 Avaya IP Office R9 Manager IPO-R9 [9.0.0.829] [Administrator(Administrator)]								
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BOOTP (1)	PRI 24 Line Channels							
IPO-R9	Line Number	01		Line SubType	PRI			
⊕	Card	1						
	Port	9		Admin	In Service			
- 176	Switch Type	NI2	•	Provider	Local Telco			
178	Send Service Messages							
E Control Unit (4)	Channel Allocation	23 -> 1	•					
	Prefix				_			
Group (1)	Add 'Not end-to-end ISDN' Information Element	Always	•		-			
Service (0)	Send Redirecting Number							
Incoming Call Route (3)	Test Number							
WanPort (0) Winectory (0)	Clock Quality	Network	•	Framing	ESF ,			
Time Profile (0)	CRC Checking			Zero Suppression	B8ZS ,			
IP Route (2)	CSU Operation			Line Signalling	co ·			
License (32)	Haul Length	0-115 ft	•	Incoming Routing Digits	5			

## 5.6. Administer Incoming Call Route

From the configuration tree in the left pane, right-click on **Incoming Call Route**, and select **New** from the pop-up list to add a new route. For **Line Group Id**, select the incoming group number from **Section** Error! Reference source not found., in this case "17". Click **OK**.

🐮 Avaya IP Office R9 Manager IP	🖌 Avaya IP Office R9 Manager IPO-R9 [9.0.0.829] [Administrator(Administrator)]						
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🕴 🗶 🗁 - 🔙 🔺 💽 📰 🔺	🗸 🥪 🛹 🚹 🕴 IPO-R9	<ul> <li>Incoming Call Route</li> <li>0</li> </ul>	-				
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PO-R9     System (1)     PO-R9     PO-R9     PO-R9     PO-R     Po-R9     Po-R     Po-R9     Po-R     Po-Po-R     Po-Po-Po-Po-Po-Po-Po-Po-Po-Po-Po-Po-Po-P	Standard Voice Recording Bearer Capability Line Group ID Incoming Number Incoming Sub Address Incoming CLI Locale Priority Tag Hold Music Source Ring Tone Override	Destinations          Any Data       17         17       17         1       17         1       10        <					
Buto Attendant (II)			UK	Cancel Help			
Ready							

Select the **Destinations** tab. For **Destination**, enter "." to match any dialed number from XMediusFAX.

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in the system (1)	Standard Voice Recording	g Destinations	
IPO-R9	TimeProfile	Destination	Fallback Extension
다. IPO-R9 티 (주7 Line (6)	TimeProfile  Default Value	Destination	Fallback Extension
■ IPO-R9 ■ 行う Line (6) ● 行う 5	TimeProfile           Default Value	Destination	Fallback Extension
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	TimeProfile  Default Value	Destination	Fallback Extension
□ IPO-R9 □-f7 Line (6) □-f7 5 □-f7 6 □-f7 7	TimeProfile  Default Value	Destination	Fallback Extension

Repeat the procedure for Line Group 1, which was automatically created by the system for the PRI trunk. From the configuration tree in the left pane, right-click on **Incoming Call Route**, and select **New** from the pop-up list to add a new route. For **Line Group Id**, select the incoming group number from **Section** Error! Reference source not found., in this case "1". For Incoming Number, enter "172099XXXXX" to match any call where the called party number has 172099 as the leading digits. Click **OK**.

🛃 Avaya IP Office R9 Manager IP	O-R9 [9.0.0.829] [Administrator	(Administrator)]		
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-9x *51 ^ 9x *52 -9x *53 *N# -9x *55 -9x *57 *N# -9x *70 *N# -9x *70 *N# -9x *900* -9x *91N; -9x *92N;	Standard Voice Recording Bearer Capability Line Group ID Incoming Number Incoming Sub Address	Destinations       Any Voice       1       172099XXXXX		E
	Incoming CLI Locale Priority Tag Hold Music Source	United States (US English)		
P Incoming Call Route     17     1				OK Cancel Help

Select the **Destinations** tab. For **Destination**, enter "#". When this route is matched by a call, the "#" in the **Destination** field is replaced by the digits in the called party number that matches the "XXXXX" wildcards. For example, if the calling party number is 17209929901, the destination will be 29901.

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Service (0)				
E Incoming Call Route				
17				
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### 5.7. Administer Short Code

#### 5.7.1. Short Code for Call to XMediusFax Server

From the configuration tree in the left pane, right-click on **Short Code** and select **New** from the pop-up list to add a new short code for fax calls to XMediusFAX. In the compliance testing, users on IP Office are designated with fax numbers 299XX, and faxes are routed over the SIP trunks to XMediusFAX.

For **Code**, enter "299xx". For **Feature**, select "Dial" from the drop-down list. For **Telephone Number**, enter "299N"@10.64.101.119" where "299N" corresponds to the short code and "10.64.101.119" is the IP address of XMediusFAX. For **Line Group ID**, enter the outgoing group number from **Section** Error! Reference source not found.. Click **OK**.

K Avaya IP Office R9 Manager IP	O-R9 [9.0.0.829] [Admini:	trator(Administrator)]	40 (3)	
File Edit View Tools	Help			
🗄 🤽 🗁 - 🔙 🛛 💽 📰 🔔	🖌 🥪 🛹 🌆 🕴 IP(	0-R9 • Short Code • 299XX	-	
IP Offices	X	299XX: Dial		📸 • 🔤   🗙   🗸   <   >
BOOTP (1)	Short Code			
IPO-R9	Code	299XX		
मुः ज्ञा System (1) च्रिः (दे)	Feature	Dial	•	
<del>-</del> f75 ≡	Telephone Number	299N"@10.64.101.119"		
-176	Line Group ID	17	+	
- 17	Locale		•	
+ Control Unit (4)	Force Account Code			
User (36)				
Group (1)			OK	Cancel Help

#### 5.7.2. Short Code for Call to PSTN

Repeat the procedure for another new short code for fax calls from XMediusFAX to PSTN.

Right-click on **Short Code** and select **New** from the pop-up list. For **Code**, enter "9N;". For **Feature**, select "Dial" from the drop-down list. For **Telephone Number**, enter "N". For **Line Group ID**, enter the outgoing group number assigned to the PRI trunk which is "1". Click **OK**.

🖌 Avaya IP Office R9 Manager	IPO-R9 [9.0.0.829] [Admini:	strator(Administrator)]		-	
File Edit View Tools	Help				
🤽 🗁 - 🔚 🛛 💽 📰 🗸	🚹 🗸 🐸 🏞 🚺 🕴 IP	O-R9 • Short Code	✓ 9N;	-	
IP Offices	X	9N;:	Dial		📸 - 🔤   🗙   🗸   <   >
BOOTP (1)	Short Code				
IPO-R9	Code	9N;			
⊞	Feature	Dial		<b>•</b>	
	Telephone Number	Ν			
	Line Group ID	1		-	
	Locale			•	
Control Unit (4)	Force Account Code				
User (36)					
Short Code (61)				0	Cancel Help

## 5.8. Save Configuration

Once all the items are configured, click the Save Configuration File icon. The Save Configuration screen is displayed. Click **OK**.

Manager IF Office R9 Manager IF	0-R9 [9. <mark>0.0.829] [A</mark> dministra	ator(Administrator)]	
File Edit View Tools	Help V 🖉 🗢 🏞 👔 🕴 IPO-F	R9 • Short Code • 9N; •	<b>*</b> - <b>* X</b>
	Short Code Code Feature Telephone Number Line Group ID Locale Force Account Code	Save Configuration	
9× *1/*N#			OK Cancel Help

The **Service User Login** screen is displayed (not shown). Enter the appropriate credentials and click **OK**.

## 6. Configure Sagemcom XMediusFAX

This section provides the procedures for configuring XMediusFAX. The procedures include the following areas:

- Launch application
- Administer driver
- Administer fax users
- Administer incoming routing table
- Restart service

Note that as part of the XMediusFAX installation, the IP Office IP address was entered, and a site name and the Basic user profile were created.

## 6.1. Launch Application

From the XMediusFAX server, select **Start**  $\rightarrow$  **XMediusFAX**  $\rightarrow$  **XMediusFAX** to launch the application. The **Administrator Login** screen below is displayed. Log in using the appropriate credentials.

Administra	ator Login 🛛 🗙
Name:	Administrator
Password:	
Server:	Sagemcom2
Login As	
Sys	tem Administrator
C Site	Administrator
Site	Name:
[	OK Cancel

### 6.2. Administer Driver

The **XMediusFAX** screen below is displayed next. Navigate to **XMediusFAX**  $\rightarrow$  **System Configuration**  $\rightarrow$  **Hosts**  $\rightarrow$  **SAGEMCOM2**  $\rightarrow$  **Driver**, where **SAGEMCOM2** is the host name of the XMediusFAX server. Right click on **Driver**, and select **Properties**.



The **Driver Properties** screen is displayed. For **Maximum Number of Channels** and **Preferred Number Of Channels**, enter the maximum number of simultaneous faxes allowed by the XMediusFAX license, in this case "24". Retain the default values in the remaining fields.

Driver Properties	×
Options FoIP SIP SIP SIP Se	curity   H.323   Dial Plan   Peer List   Netv 4 >
Number of Channels:	24
Log Size (MB):	20
Information Logging Level:	Information
Enable Log Archiving	
Archive Retention (in days):	15
🗖 Debug	
Log Warning Messages In Ev	vent Viewer
Display Name:	SAGEMCOM2
FoIP Channel Configuration	
Maximum Number Of Channels:*	* 24
Preferred Number Of Channels:	24

Select the **FoIP** tab. For **Terminal Resolution Capacity**, select "Ultra (400x400)" from the dropdown list.

Driver Properties	×
Options FoIP SIP SIP SIP Sec	urity   H.323   Dial Plan   Peer List   Netv 💶 🕨
Received Document Encoding:* Terminal Resolution Capacity:*	Group 3 (1d)
Binding Interface:* Call Delay (seconds):	0.0.0.0
*Changes to properties marked v service is restarted.	with an asterisk will take effect when the

Select the **Dial Plan** tab, and configure as desired. In the compliance testing, the default setting was used to route any dialed number to IP Office. Note that the default setting was automatically created using the IP Office IP LAN1 address that was entered as part of installation (see Section 5.2).

ons FoIP SIP	SIP Security H.323	Dial Plan Peer List Netv
al Plan		
al Plan		
Number Pattern	Peers	Add
*	10.64.30.55	Remove
		Move Up
		Move Down
		Properties

Select the **Peer List** tab. Select the default entry as shown, and click **Properties**.

eer List		
Host Name	Protocol	Add SIP Peer
10.64.30.55	SIP	Add H.323 Peer
		Remove
		Properties
Use Peer List For	Inbound Security	

The **Peer Properties** screen is displayed. For **Transport** and **Port**, select the values that match the IP Office side configuration specified in **Section 5.4** ("TCP" and "5060). Retain the default values in the remaining fields. Click **OK**.

er Properties	
ieneral T.38 G.711 Codecs	
-Options	
Host Name:	10.64.30.55
Transport:	TCP
Port: 5060	
Made Turn	
мецатуре:	
Delay Before Call Completion (seconds):	1
Voice Call Timeout (seconds):	40
"user" parameter in SIP URI:	phone 💌
🔲 V.34 Enabled	
Use Proxy	
	-

#### 6.3. Administer Fax Users

From the **XMediusFAX** screen, select **XMediusFAX**  $\rightarrow$  **Sites**  $\rightarrow$  **Sagemcom2**  $\rightarrow$ 

**Configuration**  $\rightarrow$  **Internal Users** from the left pane, where **Sagemcom2** is the site name created as part of installation. Click on the **Add Record** icon.

💼 XMediusFAX - [XMediusFAX\Sites\Sagemo	om2\Configuration	\Internal Users]			_ 🗆 ×
File Action View Help					
♦ 2 1			All	💌 Search	Options
🕼 XMediusFAX	Internal Users	) Item(s), 0 Selected			
E f B Sites	SMTP Address	Profile Name	NT Account		
<ul> <li>Configuration</li> <li>General Settings</li> <li>Administrators</li> <li>Internal Users</li> <li>Profiles</li> </ul>		There are no it	ems to show in this view.		

The User Properties screen is displayed. Enter desired values for SMTP Address, Password, and Confirmed Password. Retain the default values in the remaining fields. Click OK.

er Properties		
Jser Personal Info	rmation	
User		
SMTP Address:	user1	
Profile Name:	Basic	•
NT Account:		
Password:	*	
Confirm Password:	*	
Time Zone		
Time Zone	United States (Denver)	-

Repeat this procedure to add another fax user. In the compliance testing, two fax users were created as shown below.

💼 XMediusFAX - [XMediusFAX\Sites\Sagen	ncom2\Configuratio	n\Internal Users]		_ 🗆 🗵
File Action View Help				
🗢 🔿 🖄 🛅 😹 🔡 🖬 🕂			All	Search Options
🗊 XMediusFAX	Internal Users	2 Item(s), 0 Selected		
□ [1]] Sites	SMTP Address	Profile Name	NT Account	
	Sec 1	Basic		
E General Settings	Sector 2	Basic		

#### 6.4. Administer Incoming Routing Table

From the **XMediusFAX** screen, select **XMediusFAX**  $\rightarrow$  **Sites**  $\rightarrow$  **Sagemcom2**  $\rightarrow$  **Configuration**  $\rightarrow$  **Incoming Routing Table** from the left pane. Click on the **Add Record** icon.

隨 XMediusFAX - [XMediusFAX\Sites\Sagemco	om2\Configura	ation\Incoming Routing	j Table]	_ 🗆 ×
File Action View Help				
🗢 🔿 🖄 📷 🗟 🖬 🕂 🤤 🌋				
🔯 XMediusFAX	Incoming Ro	uting Table 1 Item(s), 0	) Selected	
<ul> <li>Sites</li> <li>Sagemcom2</li> <li>Configuration</li> <li>General Settings</li> <li>Administrators</li> <li>Internal Users</li> <li>Profiles</li> <li>Profile Lookup Table</li> <li>Cover Sheets</li> <li>Incoming Routing Table</li> </ul>	Type	Destinations Lookup	DNIS/DID Filter	

YTC; Reviewed:	Solution & Interoperability Test Lab Application Notes	
SPOC 12/13/2013	©2013 Avaya Inc. All Rights Reserved.	

The **Routing Table Entry Properties** screen is displayed. Check the **Match DNIS/DID** checkbox and enter a value that matches the pattern configured in **Section 5.7.1** (e.g. 29901) in the corresponding **Pattern** field. In the **Type** field, select "User" from the dropdown list and click **Search**. The users configured in **Section 6.3** are displayed in the **Search Results** box. Select "user1" and click **Add to List**. The user then appears in the **Destination** box. Click **OK**.

Routing					
Match DNIS/DID	Pattern:	29901			
🗌 Match ANI	Pattern:				
Match CSID	Pattern:				
Match DTMF	Pattern:				
Routing Destinations					
Type: User			•		
Filter:				Search	Add User
Search Resul	ts				
050/2					
				Add to List	- 1
Destination				Add to List	
Destination Type	User		Display Name	Add to List Remove	
Destination Type User	User user1		Display Name	Add to List Remove	
Destination Type User If this routing ent	User user1	, continue	Display Name	Add to List Remove	

Repeat the procedure for "user2" with fax extension "29902".

## 6.5. Restart Service

From the **XMediusFAX** server, select **Start**  $\rightarrow$  **Control Panel**  $\rightarrow$  **Administrative Tools**  $\rightarrow$  **Services** to display the **Services** screen. Restart the **XMFaxDriver** service shown below.

🝳 Services						_	
File Action View	Help						l l
	🛓 🛛 📷 🕨 🕨 💷 💷 🕨						
Services (Local)	🖏 Services (Local)						
	Select an item to view its description.	Name 🔺	Description	Status	Startup Type	Log On As	-
		🤹 WMI Performance	Provides p		Manual	Local System	
	1	🎑 Workstation	Creates an	Started	Automatic	Network S	
	1	🎑 World Wide Web P	Provides W	Started	Automatic	Local System	
	1	🎑 XMCoConfig	XMediusFA	Started	Automatic	Local System	
	1	🎑 XMConfigManager	XMediusFA	Started	Automatic	Local System	
	1	🎑 XMDocumentRaster	XMediusFA	Started	Automatic	Local System	
	1	🎑 XMFaultTolerance	XMediusFA	Started	Automatic	Local System	
	1	🎑 XMFaxArchive	XMediusFA	Started	Automatic	Local System	
	1	Contraction XMFaxDriver	XMediusFA	Started	Automatic	Local System	
	1	🎑 XMFaxManager	XMediusFA	Started	Automatic	Local System	
	1	🧠 XMProxy	XMediusFA	Started	Automatic	Local System	
	1	🎑 XMSMTPGateway	XMediusFA	Started	Automatic	Local System	
	1	🎑 XMXMLGateway	XMediusFA	Started	Automatic	Local System	-
	Extended / Standard /						

## 7. Verification Steps

This section provides the tests that can be performed to verify proper configuration of IP Office and XMediusFAX. Prior to verification, start sending a fax from the PSTN to a fax user on IP Office.

### 7.1. Verify Avaya IP Office

From the Avaya IP Office R9.0 Manager screen shown in Section 5.1, select File  $\rightarrow$  Advanced  $\rightarrow$  System Status to launch the System Status application, and log in using the appropriate credentials.

The **IP Office System Status** screen is displayed. Expand **Trunks** in the left pane and select the SIP line from **Section** Error! Reference source not found., in this case "17".

Verify that the **SIP Trunk Summary** screen shows an active channel with **Current State** of "Connected". Also verify that the **Other Party on Call** contains the proper information for the trunk with the PSTN, as shown below. In the compliance testing, line "1" is the existing PRI trunk to the PSTN.



## 7.2. Verify Sagemcom XMediusFAX

From the **XMediusFAX** screen, select **XMediusFAX**  $\rightarrow$  **System Monitor**  $\rightarrow$  **Channels**  $\rightarrow$  **SAGEMCOM2**, to display the status of the channels in the right pane.

Verify that there is an active channel with the fax destination shown in **Destination/DNIS/DID**.

隨 XMediusFAX - [XMediusFAX\Sys	tem Monitor	\Channels	\SAGEMCOM2]						_	
File Action View Help										
🗢 🔿 🔰 🖬 🙆 🖬	ī									
Modification Mod	SAGEMCON Channel 2 3 3 4 5 5 6 6 7 8 8 9 9 10 11 22 12 2 12	12 24 Iten Ready Ready Ready Ready Ready Ready Ready Ready Stopped Stopped Recei	n(s), 0 Selected Destination/DNIS/DID 29906	Current Page 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Total Pages           0	Time Start	Local CSID	Remote C	Site	User
Administrators C Deletion Policy Reports General Settings System Monitor Outgoing Queue Services Status Log Files C Channels SAGEMCOM2	13         14         15         16         17         18         19         20         21         22         23         24	Ready Ready Ready Ready Ready Ready Ready Ready Ready Ready			0 0 0 0 0 0 0 0 0 0 0					

Access the XMediusFAX web interface by using the URL "http://ip-address/fax" in an Internet browser window, where "ip-address" is the IP address of XMediusFAX. Log in using the appropriate fax user credentials from **Section 6.3**.

XMediusFAX.	
Email Address : Password :	user1 Stay signed in Login
Copyright© 2013 - Sage	emcom Canada Inc XMediusFAX 7.5.0.28

The **XMediusFAX** screen below is displayed. After the incoming fax completes, select **Inbound History** from the left pane. Verify that there is an entry showing the new incoming fax, with proper values in the **DNIS/DID** and **ANI** fields. Click on the **View Fax** icon, and verify that the incoming fax can be viewed.

(←) → ↓ http://10.64.	101.119/fax/status/Folders.jsp 🖉 🕫 🚖 🛞
📦 XMediusFAX - Folder	x 🔤
VM a alteration	user1   Options   Help   Logout
Xiviediush	
BOARDLESS, T.38 FAX OVER	IP SERVER
	Ŧſ
Compose	Expression: Time range: Thursday, November 21 🗸 Status: All 🗸 Search Options Refresh
Folder	Folder view: Current   Deleted
🗳 Inbound History	Mark as viewed Mark as unviewed Delete Forward 🗸
Outbound History	€ € 1 to 2 of 2 ▶ ▶
Uutgoing Queue	Received Time Duration (sec.). DNIS/DID. Remote CSID. ANI. From. Time Note.
	Inursday, November 21, 2013         64         29901         Sagemcom1         anonymous         Fax         Thursday, November 21, 2013           9:42:13 AM         System         System         System         9:42:18 AM         System
	Thursday, November 21, 2013 9:41:49 93 29901 Sagemcom1 anonymous Fax System Thursday, November 21, 2013 9:41:54
	Hi ≤ 1 to 2 of 2 ▶ ▶ I
	Mark as viewed Mark as unviewed Delete Forward •
Contacts	
	\$\$
	Copyright® 2013 - Sagemcom Canada Inc XMediusFAX 7.5.0.28 🥵 Download Windows client

## 8. Conclusion

These Application Notes describe the configuration steps required for Sagemcom XMediusFAX to successfully interoperate with Avaya IP Office 9.0. All feature and serviceability test cases were completed with an observation noted in **Section 2.2**.

# 9. Additional References

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

- 1. *IP Office Manager 9.0*, Document 15-601011, Issue 9.01, September 2013, available at <u>http://support.avaya.com</u>.
- 2. *XMediusFAX Administrator Guide*, Version Number 7.5.0.28, October 2013, available upon request to Sagemcom technical support.
- **3.** *XMediusFAX User Guide*, Version Number 7.5.0.28, October 2013, available upon request to Sagemcom technical support.

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