

Avaya Solution & Interoperability Test Lab

Application Notes for Configuring OceanFax from OceanX Technology Limited with Avaya Aura® Communication Manager R6.2 and Avaya Aura® Session Manager R6.2 – Issue 1.0

Abstract

These Application Notes describe the configuration steps for provisioning OceanFax from OceanX Technology to interoperate with Avaya Aura® Communication Manager and Avaya Aura® Session Manager.

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 steps required to connect OceanFax from OceanX Technology Limited with Avaya Aura® Communication Manager R6.2 and Avaya Aura® Session Manager R6.2. The solution from OceanX consists of a fax server called Brooktrout configured as a SIP endpoint on Session Manager.

2. General Test Approach and Test Results

The OceanFax Brooktrout Server is registered with Session Manager as a SIP entity and has an internal fax number of 4400; this means that calls to 4400 are directed to the OceanFax Server. In order to test internal fax calls to and from the OceanFax server faxes are sent in on one channel and out on another channel. In order to test a fax call to the PSTN another fax machine configured on a secondary Communication Manager is used.. The OceanFax Brooktrout supports UDP/SIP Trunk/T.38 and T.30 over G711.

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 the test scenarios shown below. When sending "internal faxes", a fax is sent out on one channel and received on another channel using the same Fax Server. When sending PSTN faxes a simulated PSTN is used to another Communication Manager which had another fax machine connected on an analog port.

- Internal Fax calls
- Fax calls sent to PSTN
- Fax calls received from PSTN
- Verification of correct status and Caller ID for sent and received fax messages
- Successful transmission and receipt of a thirty page fax to PSTN
- Successful recovery from network and power failure

2.2. Test Results

All test cases passed successfully except the following:

- When using an internal Avaya extension to transfer a Fax call to/from the OceanFax server the fax transmission failed.
- It was observed that if there was a break in transmission when receiving a fax document the partially received document was totally discarded by the OceanFax server.

2.3. Support

Support from Avaya is available by visiting the website <u>http://support.avaya.com</u> and a list of product documentation can be found in **Section 10** of these Application Notes. Technical support for OceanFax can be obtained from the following location:

OceanX LTD <u>www.oceanfax.com</u> <u>support@oceanfax.com</u>

3. Reference Configuration

Figure 1 shows the reference configuration used for this compliance testing. In order to send a fax to the OceanFax Server and receive a fax from the OceanFax server a PC with a modem running Windows Fax from Windows XP is connected to an analog port of a Communication Manager R6.0.1. The OceanFax Brooktrout server running on a Windows 2008 R2 virtual server is registered as a SIP endpoint on Session Manager R6.2 connecting to Communication Manager R6.2. These two faxes are setup to simulate fax machines on two different sites.

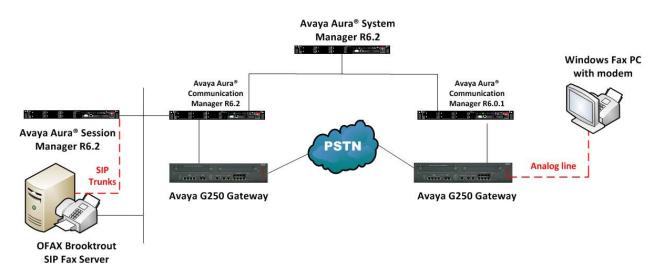


Figure 1: Network Solution of OceanFax Brooktrout Server with Avaya Aura® Communication Manager R6.2 and Avaya Aura® Session Manager R6.2.

4. Equipment and Software Validated

The following equipment and software was used for the compliance test.

Equipment/Software	Release/Version
Avaya Aura® System Manager running on Avaya S8800 Server	R6.2 SP4 (6.2.0.0.15669)
Avaya Aura® Communication Manager running on Avaya S8800 Server	R6.2 SP4 (R016x.02.0.823.0-20199)
Avaya Aura® Session Manager running on Avaya S8800 Server	R6.2 SP3 (6.2.3.0.623006)
Avaya G250 Media Gateway	R6.2
Windows Fax Machine	Windows XP SP3 FAX
OceanFax server with Brooktrout SR140 for	
FOIP (Fax Over IP) running on Windows 2008	R3.1
Virtual Server R2	
To simulate PSTN call	
Avaya Aura® Communication Manager running	R6.0.1
on Avaya S8800 Server	

5. Configure Avaya Aura® Communication Manager

The configuration and verification operations illustrated in this section were all performed using Communication Manager System Administration Terminal (SAT). The information provided in this section describes the configuration of Communication Manager required for this solution. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 10**. The configuration operations described in this section can be summarized as follows:

- Verify System Parameters Customer Options
- System Features and Access Codes
- Administer Dial Plan
- Configure SIP Trunk
- Administer Route Selection for OceanFax calls

Note: The configuration of the PRI interface to the PSTN is outside the scope of these Application Notes.

5.1. Verify System Parameters Customer Options

The license file installed on the system controls these attributes. If a required feature is not enabled or there is insufficient capacity, contact an authorized Avaya sales representative. Use the **display system-parameters customer-options** command to determine these values. On **Page 2**, verify that the **Maximum Administered SIP Trunks** has sufficient capacity. Each fax call to or from OceanFax uses a minimum of one SIP trunk. Calls that are routed back to Communication Manager to access the PSTN use two SIP trunks.

display system-parameters customer-options	Pa	ge 2 o	f 11	
OPTIONAL FEATURES				
IP PORT CAPACITIES	USE	D		
Maximum Administered H.323 Trunks:	12000 250			
Maximum Concurrently Registered IP Stations:	18000 2			
Maximum Administered Remote Office Trunks:	12000 0			
Maximum Concurrently Registered Remote Office Stations:	18000 0			
Maximum Concurrently Registered IP eCons:	414 0			
Max Concur Registered Unauthenticated H.323 Stations:	100 0			
Maximum Video Capable Stations:	18000 0			
Maximum Video Capable IP Softphones:	18000 0			
Maximum Administered SIP Trunks:	24000 319			
Maximum Administered Ad-hoc Video Conferencing Ports:	24000 0			

On Page 3, ensure that ARS is set to y.

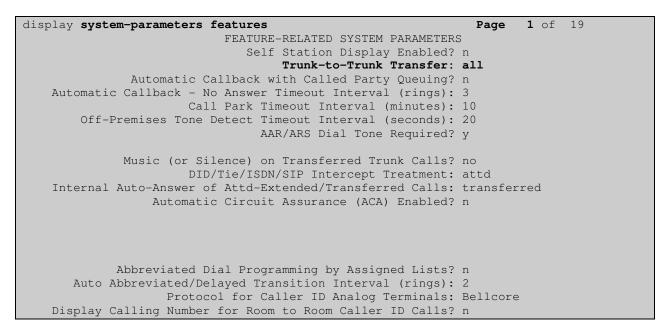
display system-parameters customer-option	s Page 3 of 11
OPTIONAL	FEATURES
Abbreviated Dialing Enhanced List? y	Audible Message Waiting? y
Access Security Gateway (ASG)? n	Authorization Codes? y
Analog Trunk Incoming Call ID? y	CAS Branch? n
A/D Grp/Sys List Dialing Start at 01? y	CAS Main? n
Answer Supervision by Call Classifier? y	Change COR by FAC? n
ARS? y	Computer Telephony Adjunct Links? y
ARS/AAR Partitioning? y	Cvg Of Calls Redirected Off-net? y
ARS/AAR Dialing without FAC? y	DCS (Basic)? y

On Page 5, ensure that Uniform Dialing Plan is set to y.

display system-parameters customer-option	ns Page 5 of 11 FEATURES
OPTIONAL	F LAIORES
Multinational Locations?	
Multiple Level Precedence & Preemption?	-
Multiple Locations?	
	System Management Data Transfer? n
Personal Station Access (PSA)?	y Tenant Partitioning? y
PNC Duplication?	n Terminal Trans. Init. (TTI)? y
Port Network Support?	y Time of Day Routing? y
Posted Messages?	y TN2501 VAL Maximum Capacity? y
	Uniform Dialing Plan? y
Private Networking?	y Usage Allocation Enhancements? y

5.2. System Features and Access Codes

For the testing, **Trunk-to Trunk Transfer** was set to **all** on **Page 1** of the **system-parameters features** page. An alternative to enabling this feature on a system wide basis is to control it using COR (Class of Restriction). Refer to **Section 10** for supporting documentation.



Use the **display feature-access-codes** command to verify that a FAC (feature access code) has been defined for both AAR and ARS. In the example below **5** is used for AAR and **9** for ARS.

display feature-access-codes	Page	1 o	f 10	
FEATURE ACCESS CODE (FAC)				
Abbreviated Dialing List1 Access Code:				
Abbreviated Dialing List2 Access Code:				
Abbreviated Dialing List3 Access Code:				
Abbreviated Dial - Prgm Group List Access Code:				
Announcement Access Code:				
Answer Back Access Code: *24				
Attendant Access Code:				
Auto Alternate Routing (AAR) Access Code: 5				
Auto Route Selection (ARS) - Access Code 1: 9 Access Cod	e 2:			
Automatic Callback Activation: *25 Deactivat	ion:	#25		

5.3. Administer Dial Plan

For the testing, two number ranges were used on Communication Manager. Extensions beginning with **2** and **3** and are four digits in length. The second range is used to deliver and identify calls to OceanFax; this range begins with digits **44**, which are four digits long, and are defined as **udp** in the dial plan.

display dialplan a	analysis		Pag	e 1 of 12
	DIAL P	LAN ANALYSIS TABLE		
		Location: all	Percen	t Full: 2
Dialed Tota	l Call Dialed	Total Call	Dialed Tot	al Call
String Leng	th Type String	Length Type	String Len	gth Type
2 4	ext			
3 4	ext			
44 4	udp			
5 1	fac			
600 4	ext			
7 3	dac			
8 1	fac			
9 1	fac			
* 3	fac			
# 3	fac			

5.4. Configure SIP Trunk

In the **IP NODE NAMES** form, note the IP Address of the **procr** and the Session Manager (**SM100**). The host names will be used throughout the other configuration screens of Communication Manager and Session Manager.

display node-names	ip	Page	1 of	2
	IP NODE NAMES			
Name	IP Address			
SM100	192.168.50.16			
aes62vmpg	10.10.40.10			
default	0.0.0			
g250-dcp	192.168.50.18			
procr	192.168.50.13			

In the **IP Network Region** form, the **Authoritative Domain** field is configured to match the domain name configured on Session Manager. In this configuration, the domain name is **devcon.avaya**. The **IP Network Region** form also specifies the **IP Codec Set** to be used. This codec set will be used for calls routed over the SIP trunk to Session manager as **ip-network region 1** is specified in the SIP signalling group.

```
display ip-network-region 1
                                                               Page
                                                                      1 of 20
                              IP NETWORK REGION
 Region: 1
Location: 1
                Authoritative Domain: devcon.avaya
   Name: Default region
MEDIA PARAMETERS
                               Intra-region IP-IP Direct Audio: yes
                               Inter-region IP-IP Direct Audio: yes
     Codec Set: 1
  UDP Port Min: 2048
                                          IP Audio Hairpinning? n
  UDP Port Max: 3329
DIFFSERV/TOS PARAMETERS
Call Control PHB Value: 46
       Audio PHB Value: 46
       Video PHB Value: 26
802.1P/Q PARAMETERS
Call Control 802.1p Priority: 6
       Audio 802.1p Priority: 6
       Video 802.1p Priority: 5
                                     AUDIO RESOURCE RESERVATION PARAMETERS
H.323 IP ENDPOINTS
                                                       RSVP Enabled? n
 H.323 Link Bounce Recovery? y
Idle Traffic Interval (sec): 20
  Keep-Alive Interval (sec): 5
           Keep-Alive Count: 5
```

In the **IP Codec Set** form, select the audio codecs supported for calls routed over the SIP trunk to OceanFax. The form is accessed via the **change ip-codec-set n** command. Note that IP codec set 1 was specified in IP Network Region 1 shown above. Multiple codecs may be specified in the **IP Codec Set** form in order of preference; the example below includes **G.711MU** (mu-law) and **G.711A** (a-law), which are supported by OceanFax.

```
change ip-codec-set 1
                                                      Page 1 of
                                                                 2
                     IP Codec Set
   Codec Set: 1
              Silence Frames
   Audio
                                Packet
   Codec
              Suppression Per Pkt Size(ms)
1: G.711MU
              n 2
                                  20
                          2
                                  20
2: G.711A
                  n
3:
4:
```

Prior to configuring a SIP trunk group for communication with Session Manager, a SIP signalling group must be configured. Configure the Signalling Group form shown below as follows:

- Enter the command **change signalling group** x where x is the signalling group present for SIP
- Set the **Group Type** field to **sip**
- Set the **Transport Method** to the desired transport method; **tcp** (transport control protocol) or **tls** (Transport Layer Security)
- The **Peer Detection Enabled** field should be set to **y** allowing the Communication Manager to automatically detect the peer server as Session Manager (**SM**)
- Set the Near-end Node Name to procr as shown IP NODE NAMES form above
- Set the **Far-end Node Name** to the node name defined for the Session Manager (node name **SM100**)
- Ensure that the recommended TCP port value of **5060** is configured in the **Near-end** Listen Port and the **Far-end Listen Port** fields
- In the **Far-end Network Region** field, enter the IP Network Region configured above. This field logically establishes the far-end for calls using this signaling group in network region 1
- Leave the **Far-end Domain** field blank to allow Communication Manager to accept any domain
- The **DTMF over IP** field should remain set to the default value of **rtp-payload**. This value enables Communication Manager to send DTMF transmissions using RFC 2833
- The **Direct IP-IP Audio Connections** field is set to **y**
- The default values for the other fields may be used

```
Page 1 of
change signaling-group 1
                                                                        2
                             SIGNALING GROUP
Group Number: 1
                          Group Type: sip
 IMS Enabled? n
                    Transport Method: tcp
      Q-SIP? n
    IP Video? n
                                               Enforce SIPS URI for SRTP? y
 Peer Detection Enabled? y Peer Server: SM
  Near-end Node Name: procr
                                         Far-end Node Name: SM100
Near-end Listen Port: 5060
                                       Far-end Listen Port: 5060
                                    Far-end Network Region: 1
Far-end Domain:
                                        Bypass If IP Threshold Exceeded? n
Incoming Dialog Loopbacks: eliminate
                                          RFC 3389 Comfort Noise? n
                                        Direct IP-IP Audio Connections? y
       DTMF over IP: rtp-payload
Session Establishment Timer(min): 3
                                          IP Audio Hairpinning? n
  Enable Layer 3 Test? y
                                             Initial IP-IP Direct Media? y
H.323 Station Outgoing Direct Media? n Alternate Route Timer(sec): 6
```

Configure the **Trunk Group** form as shown below. This trunk group is used for calls to and from OceanFax. Enter a descriptive name in the **Group Name** field. Set the **Group Type** field to **sip**. Enter a **TAC** code compatible with the Communication Manager dial plan. Set the **Service Type** field to **tie**. Specify the signaling group associated with this trunk group in the **Signaling Group** field, and specify the **Number of Members** supported by this SIP trunk group. Accept the default values for the remaining fields.

change trunk-	group 1		Page 1 of 21
		TRUNK GROUP	
Group Number:	1	Group Type: sip	CDR Reports: y
Group Name:	SIP TRK	COR: 1	TN: 1 TAC: *11
Direction:	two-way	Outgoing Display? y	
Dial Access?	n	Nigh	t Service:
Queue Length:	0		
Service Type:	tie	Auth Code? n	
		Member A	ssignment Method: auto
		Group Type: sip COR: 1 Outgoing Display? y Night Service: Auth Code? n Member Assignment Method: auto Signaling Group: 1	
		N	umber of Members: 10

On **Page 2** of the trunk-group form the **Preferred Minimum Session Refresh Interval (sec)** field should be set to a value mutually agreed with OceanFax to prevent unnecessary SIP messages during call setup. For the compliance test a value of **600** was used.

change trunk-group 1 Group Type: sip	Page	2 of	21
TRUNK PARAMETERS			
Unicode Name: auto Redirect On OPTIM F	ailure:	5000	
SCCAN? n Digital Loss Preferred Minimum Session Refresh Interva	-		
Disconnect Supervision - In? y Out? y			
XOIP Treatment: auto Delay Call Setup When Acce	ssed Vi	a IGAR	? n

5.5. Administer Route Selection for OceanFax Calls

As digits 44xx were defined in the dial plan as udp (Section 5.3) use the change uniformdialplan command to configure the routing of the dialed digits. In the example below calls to numbers beginning with 44 that are 4 digits in length will be matched. No digits are deleted or inserted. Calls are sent to **aar** for further processing.

change unifor	m-dialplan 4		Page 1 of 2	
	UNIF	Percent Full: 0		
Matching		Insert	Node	
Pattern	Len Del	Digits	Net Conv Num	
44	4 0		aar n	

Use the **change aar analysis** command to further configure the routing of the dialed digits. Calls to OceanFax begin with **44** and are matched with the AAR entry shown below. Calls are sent to **Route Pattern 1**, which contains the outbound SIP Trunk Group.

change aar analysis 44					Page 1 of	2
	AAR D	IGIT ANALY	SIS TABI			
		Location:	all	Percent Full: 1		
Dialed	Total	Route	Call	Node	ANI	
String	Min Max	Pattern	Туре	Num	Reqd	
44	4 4	1	unku		n	

Use the **change route-pattern** *n* command to add the SIP trunk group to the route pattern that AAR selects. In this configuration, **Route Pattern Number 1** is used to route calls to trunk group (**Grp No**) **1**.

char	nge i	route	e-pat	ter	n 1									Page	1 of	3	
					Patt	ern 1	Jumbei	r: 1	Pat	tern 1	Name:	SIPTR	K				
							SCCAI	N? n	S	ecure	SIP?	n					
	Grp	FRL	NPA	Pfx	Нор	Toll	No.	Inse	erted						DCS/	IXC	
	No			Mrk	Lmt	List	Del	Digi	ts						QSIG		
							Dgts								Intw		
1:	1	0													n	user	
2:															n	user	
3:															n	user	
4:															n	user	
5:															n	user	
6:															n	user	
				TSC			ITC	BCIE	Serv	rice/Fe	eatur	e PARM			ering 1	LAR	
	0 1	2 M	4 W		Requ	lest							-	Form	lat		
												Su	baddr	ess			
1:	У У	У У	y n	n			unre	e							1	none	
2:	У У	У У	y n	n			rest	t							1	none	
3:	у у	У У	y n	n			rest	t							1	none	
4:	у у	УУ	y n	n			rest	t							1	none	
5:	у у	УУ	y n	n			rest	t							1	none	
6:	У У	УУ	y n	n			rest	t							1	none	
6:	у у	УУ	y n	n			rest	t							1	none	

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6. Configuring Avaya Aura® Session Manager

This section provides the procedures for configuring Session Manager. Session Manager is configured via System Manager. The procedures include the following areas:

- Log in to Avaya Aura® Session Manager
- Administer SIP Domain
- Administer Location
- Administer SIP Entities
- Administer Routing Policies
- Administer Dial Patterns

6.1. Log in to Avaya Aura® System Manager

Access the System Manager using a Web Browser by entering **http://<FQDN >/SMGR**, where **<FQDN>** is the fully qualified domain name of System Manager. Log in using appropriate credentials (not shown).

6.2. Administer SIP Domain

SIP domains are created as part of Session Manager basic configuration. There will be at least one for which System Manager is the authoritative SIP controller. In these sample notes it is **devcon.avaya**. Navigating from the Home screen, under the **Elements** section click **Routing** \rightarrow **Domains** \rightarrow **New** (not shown) enter the domain **Name**, set the **Type** as **sip** and click **Commit**.

		6.0		Last Logged on at Dece	ember 17, 2012
AVAYA	Avaya Aura [®] System Ma	Avaya Aura® System Manager 6.2			ord Log off a
-				R	couting ×
Routing	Home / Elements / Routing / Domains				
Domains					
Locations	Domain Management				Commit
Adaptations	Warning: SIP Domain name change will cause login fa	ilure for Communication Address I	handles with this	domain. Consult release notes or Support for step	ps to reset login
SIP Entities	credentials.				
Entity Links					
Time Ranges	1 Item Refresh		1		Filter: E
Routing Policies	Name	Туре	Default	Notes	
Dial Patterns	* devcon.avaya	sip 💌			
Regular Expressions					
Defaults	* Input Required				Commit

6.3. Administer Location

Session Manager uses the origination location to determine which dial patterns to look at when routing a call. In this example, one Location has been created which will reference both the Session Manager location and the OceanFax location. Navigate to Home \rightarrow Elements \rightarrow Routing \rightarrow Locations \rightarrow New (not shown) enter an identifying Name, as shown below.

AVAYA	Avaya Aura® System Manag	er 6.2		Last Logged on at December 17, 2012 Help About Change Password Log off
				Routing ×
Routing	Home / Elements / Routing / Locations			
Domains				
Locations	Location Details			Commit
Adaptations				
SIP Entities	General			
Entity Links	* Name:	DevconLAB		
Time Ranges	Notes:			
Routing Policies				
Dial Patterns	Overall Managed Bandwidth			
Regular Expressions	Managed Bandwidth Units:	Kbit/sec 💙		
Defaults	Total Bandwidth:			
	Multimedia Bandwidth:			
	Audio Calls Can Take Multimedia Bandwidth:			
	Per-Call Bandwidth Parameters			
	Maximum Multimedia Bandwidth (Intra-Location):	1000 K	bit/Sec	
	Maximum Multimedia Bandwidth (Inter-Location):	1000 K	bit/Sec	

At the bottom of the same page the **Location Pattern** is defined. Click **Add** and enter the IP address range used to logically identify the location. In this case the **IP Address Pattern** is **192.168.50.*** as shown below. Click **Commit** when done.

Location Pattern	
Add Remove	
1 Item Refresh	Filter: Enable
IP Address Pattern	Notes
* 192.168.50.*	
Select : All, None	
* Input Required	(Commit) Cancel

6.4. Administer SIP Entities

Each SIP device (other than Avaya SIP Phones) that communicates with Session Manager requires a SIP Entity configuration. This section details the steps to create SIP Entities for Session Manager SIP Signaling Interface, Communication Manager and OpenGate Solution respectively.

6.4.1. Configure Session Manager SIP Signaling Interface Entity

Click Home \rightarrow Elements \rightarrow Routing \rightarrow SIP Entities \rightarrow New (not shown). Assign an identifying Name, the FQDN or IP Address for Session Manager SIP Signaling Interface, set the Type to Session Manager and the Location to the Location configured in Section 6.3 and click on Commit.

Αναγα	Avaya Aura®	System Manag	er 6.2	Help	Last Logged on at December 17, 201 About Change Password Log of
	•				Routing *
Routing	Home / Elements / Rou	ting / SIP Entities			
Domains					
Locations	SIP Entity Details				Commit
Adaptations	General			_	
SIP Entities		* Name:	SessionManager		
Entity Links		* FQDN or IP Address:			
Time Ranges		Type:			
Routing Policies					
Dial Patterns		Notes:	Session Manager		
Regular Expressions		Location:	DevconLAB 💙		
Defaults		Outbound Proxy:	×		
		Time Zone:	Europe/Dublin		
		Credential name:			
		c. coenciar name.]
	SIP Link Monitoring				
		SIP Link Monitoring:	Use Session Manager Configuration	~	

Tick the box next to the entity that was just created and click **Edit** (not shown). Scroll down the page until the **Port** section is displayed, click **Add** and configure the **Port** as **5060** the **Protocol TCP** and the **Default Domain** as the domain configured in **Section 6.2**. This corresponds to the signaling group domain configured in **Section 5.4**. Repeat this for the **UDP** connection which will be established to the OceanFax server, as shown below. Click **Commit** when done.

	ailover port:				
3 Item	ns Refresh				
	Port 🔺	Protocol	Default Domain	Notes	
	Port	Protocol	Default Domain devcon.avaya 💌	Notes	
				Notes	
	5060	ТСР 💌	devcon.avaya 💙	Notes	

6.5. Configure Avaya Aura® Communication Manager Entity

Click Home \rightarrow Elements \rightarrow Routing \rightarrow SIP Entities \rightarrow New (not shown). Assign an identifying Name, the FQDN or IP Address for the C-LAN, set the Type to CM and the Location to the Location configured in Section 6.3 and click on Commit.

AVAYA	Avaya Aura® System Manager 6.2	Last Logged on at December 17, 2012 Help About Change Password Log off a
Routing Domains Locations Adaptations SIP Entities	Home / Elements / Routing / SIP Entities SIP Entity Details General	Routing × F
Entity Links Time Ranges Routing Policies Dial Patterns	Name: CommunicationManager FQDN or IP Address: 192.168.50.13 Type: CM Notes: Communication Manager R6.2	
Regular Expressions Defaults	Adantation: Location: DevconLAB Time Zone: Europe/Dublin Override Port & Transport with DNS SRV:	
	* SIP Timer B/F (in seconds): 4	

6.6. Configure OceanFax SIP Entity

Click Home \rightarrow Elements \rightarrow Routing \rightarrow SIP Entities \rightarrow New (not shown). Assign an identifying Name, the FQDN or IP Address for the OceanFax server, set the Type to SIP Trunk, leave all other settings default and click Commit.

AVAYA	Avaya Aura® System Manager 6.2				Last Logged on at March 12, 2013 About Change Password Log off a
					Routing ×
Routing	Home / Elements / Ro	outing / SIP Entities			
Domains					
Locations	SIP Entity Details				Commit
Adaptations	General				
SIP Entities		* Name:	Ocean fax		
Entity Links		* FQDN or IP Address:	192.168.50.150		
Time Ranges		-	SIP Trunk		
Routing Policies		Notes:			
Dial Patterns		notes.]	
Regular Expressions		Adaptation:	**		
Defaults		Location:	DevconLAB 💙		
		Time Zone:	Europe/Dublin	~	
	Override Port	& Transport with DNS SRV:			
	* 5	GIP Timer B/F (in seconds):	4		
		Credential name:]
		Call Detail Recording:	egress 👻		

6.7. Administer SIP Entity Link

A SIP Trunk between a Session Manager and a telephony system is described by an Entity Link. An entity link needs to be created between Session Manager and both Communication Manager and OceanFax.

6.7.1. Administer SIP Entity Link from Avaya Aura® Session Manager to Avaya Aura® Communication Manager

Click on Home \rightarrow Elements \rightarrow Routing \rightarrow Entity Links \rightarrow New (not shown). Assign an identifying Name choose the entity assigned to the Session Manager SIP Signaling Interface as SIP Entity 1, set the Protocol as TCP, enter 5060 for the Port, choose the Communication Manager entity as SIP Entity 2 and set the Port to 5060, ensure Trusted is selected for the Connection Policy. Click Commit when done.

AVAYA	Avaya Aura® System Manager 6.2				Last Logged on at December 17, 2 Help About Change Password Log (
									Routing * Hor
Routing	Home / Elements /	Routing / Entity Links	5						
Domains									Hel
Locations	Entity Links								Commit Can
Adaptations									
SIP Entities									
Entity Links	1 Item Refresh						1		Filter: Ena
Time Ranges	Name	SIP Entity 1	Protocol	Port	SIP Entity 2	Port	Connection	Policy	Notes
Routing Policies	* CM62	* SessionManager 💌	TCP 💙	* 5060	* CommunicationManager 💌	* 5060	Trusted	*	
Dial Patterns									
Regular Expressions	* Input Required								Commit Can
Defaults									

6.7.2. Administer SIP Entity Link from Avaya Aura® Session Manager to OceanFax

Click on Home \rightarrow Elements \rightarrow Routing \rightarrow Entity Links \rightarrow New assign an identifying Name. Choose the entity assigned to the Session Manager SIP Signaling Interface as SIP Entity 1, set the Protocol as UDP enter 5060 for the Port, choose the OceanFax entity as SIP Entity 2 and set the Port to 5060, select Trusted from the Connection Policy drop-down list. Click Commit when done. This establishes the Session Manager end of the SIP Trunk to OceanFax.

Αναγα	Avaya Aura®System Manager 6.2					Last Logged on at March 12, 2 Help About Change Password Log (
									[Routing ×
Routing	Home / Elements /	/ Routing / Entity Links	5							
Domains										
Locations	Entity Links									Commit
Adaptations										
SIP Entities										
Entity Links	1 Item Refresh									Filter: E
Time Ranges	Name	SIP Entity 1	Protocol	Port	SIP Entity 2		Port	Connection	Policy	Notes
Routing Policies	* To OceanFax	* SessionManager 💙	UDP 💌	* 5060	* Ocean fax	*	* 5060	Trusted	*	
Dial Patterns										
Regular Expressions	* Input Required									Commit
Defaults										

PG; Reviewed: SPOC 6/25/2013 Solution & Interoperability Test Lab Application Notes ©2013 Avaya Inc. All Rights Reserved. 18 of 41 OceanFax_SM62

6.8. Administer Routing Policies

To complete the routing configuration, a Routing Policy is created. Routing policies direct how calls will be routed to a SIP Entity. Two routing policies must be created, one for the Communications Manager and the second for OceanFax. These will be associated with the Dial Patterns created in **Section 6.9**.

6.8.1. Create Routing Policy to Avaya Aura® Communication Manager

Click Home \rightarrow Elements \rightarrow Routing \rightarrow Routing Polices \rightarrow New (not shown). Assign an indentifying Name for the route. Under the SIP Entity as Destination section, click on Select and choose the Communication Manager SIP Entity and click Select (not shown). Click Commit when done.

AVAYA	Avaya Aura® Syste	m Manager 6.2		Last Logged on at De Help About Change Pass	
					Routing *
T Routing	Home / Elements / Routing / Ro	uting Policies			
Domains					
Locations	Routing Policy Details				Commit
Adaptations					
SIP Entities	General				
Entity Links		* Name: CM62			
Time Ranges		Disabled:			
Routing Policies		* Retries: 0			
Dial Patterns		Notes:			
Regular Expressions					
Defaults	SIP Entity as Destination				
	Select				
	Name	FQDN or IP Address	Туре	Notes	
	CommunicationManager	192.168.50.13	CM	Communication Manager R6.2	

6.8.2. Create Routing Policy to OceanFax

Click Home \rightarrow Elements \rightarrow Routing \rightarrow Routing Polices \rightarrow New (not shown). Assign an indentifying Name for the route. Under the SIP Entity as Destination section, click on Select and choose the OceanFax SIP Entity and click Select (not shown). Click Commit when done.

AVAYA	Avaya Aura	a® System Manager 6.2	Last Logged on at March Help About Change Password	
-			Routin	g ×
Routing	Home / Elements / R	outing / Routing Policies		
Domains				
Locations	Routing Policy Details			Commit
Adaptations				
SIP Entities	General			
Entity Links		* Name: OceanFaxRP		
Time Ranges		Disabled:		
Routing Policies		* Retries: 0		
Dial Patterns		Notes:		
Regular Expressions				
Defaults	SIP Entity as Dest	ination		
	Select			
	Name	FQDN or IP Address	Type Notes	
	Ocean fax	192.168.50.150	SIP Trunk	
	Time of Day			

6.9. Administer Dial Patterns

As one of its main functions, Session Manager routes SIP traffic between connected devices. Dial Patterns are created as part of the configuration to manage SIP traffic routing, which will direct calls based on the number dialed to the appropriate system.

6.9.1. Create Dial Pattern to OceanFax

In Section 5.5 Communication Manager is configured to route the dialed numbers beginning 44xx to Session Manager. To create a Dial Pattern to route 44xx from Session Manager to OceanFax click Home \rightarrow Elements \rightarrow Routing \rightarrow Dial Patterns \rightarrow New (not shown). Under Pattern enter the numbers presented to Session Manager by Communication Manager destined for OceanFax in the Patterns box. Set Min and Max digit string length, and set SIP Domain to that created in Section 6.2. In the Originating Locations and Routing Policies section of the web page, click Add. In the Origination Location section select the domain created in Section 6.2 above in the Routing Policies section click the routing policy created for OceanFax. Click Select when done (not shown). Click Commit when complete.

• Routing	Home / Elements / Routing / Dial I	Patterns					-	
Domains								H
Locations	Dial Pattern Details							Commit C
Adaptations								
SIP Entities	General					1		
Entity Links		* Pattern:	44					
Time Ranges		* Min:	4					
Routing Policies		* Max:	4					
Dial Patterns	En	nergency Call:						
Regular Expressions	Emerg	ency Priority:						
Defaults	Em	ergency Type:						
		SIP Domain:	devcon	avava 💙				
		Notes:				Ĩ		
		notes.						
	Originating Locations and Rout	ting Policies						
	Add Remove							
	1 Item Refresh							Filter: E
	Originating Location Name 1 🔺	Originating L Notes	ocation	Routing Policy Name	Rank 2 🔔	Routing Policy Disabled	Routing Policy Destination	Routing Po Notes
	DevconLAB			OceanFaxRP	0		Ocean fax	

6.9.2. Create Dial Pattern to Avaya Aura® Communication Manager

An additional Dial Pattern must be created on Session Manager to route incoming calls from OpenGate to Communication Manager stations 3xxx. To create a Dial Pattern to route 3xxx from Session Manager to Communication Manager, click **Home** \rightarrow **Elements** \rightarrow **Routing** \rightarrow **Dial Patterns** \rightarrow **New** (not shown). Under **Pattern** enter the numbers presented to Session Manager by OpenGate destined for Communication Manager, in the **Patterns** box. Set **Min** and **Max** digit string length, and set **SIP Domain** to that which was created in **Section 6.2**. In the **Originating Locations and Routing Policies** section of the web page, click **Add**. A new window opens, (not shown), in the **Origination Section**, select the domain name created in **Section 6.2** above. In the **Routing Policies** section click the routing policy created for Communication Manager. Click **Select** when done (not shown). Click **Commit** when finished.

Domains							H
Locations	Dial Pattern Details						Commit
Adaptations							
SIP Entities	General						
Entity Links		* Pattern: 3					
Time Ranges		* Min: 4					
Routing Policies		* Max: 4					
Dial Patterns	Em	nergency Call: 🗌					
Regular Expressions	Emerg	ency Priority: 1					
Defaults	Eme	ergency Type:					
		SIP Domain: devcon	avava 💙				
		Notes:					
		notes.					
	Originating Locations and Rout	ting Policies					
		ing rolleres					
	Add Remove						Filter: E
	Originating Location Name 1	Originating Location Notes	Routing Policy Name	Rank 2 🔔	Routing Policy Disabled	Routing Policy Destination	Routing Po Notes
	DevconLAB		CM62	0		CommunicationManager	
	Select : All, None						

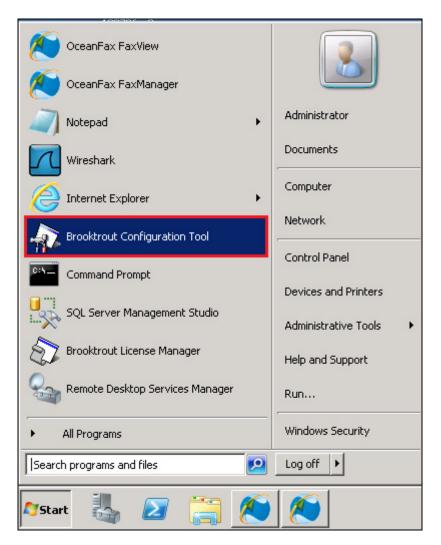
7. Configure OceanFax Server

The configuration of OceanFax consists of three separate configurations on the OceanFax server.

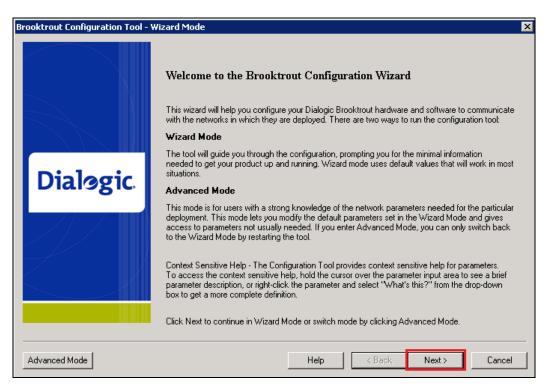
- Brooktrout Configuration Tool
- Create a Dial Rule on OceanFax
- Adding a User

7.1. Brooktrout Configuration Tool

On the OceanFax server, click on **Start** \rightarrow **Brooktrout Configuration Tool**.



The Brooktrout Configuration Tool – Wizard Mode is opened, click on Next to continue.



Information on the Hardware and Software is shown, click on Next to continue.

Brooktrout Configuration Tool - Wizard	l Mode				×
	System Report				
	Hardware Info	rmation			
	B	oard Informati	ion - Module	0x41	
	Name		Value		
	Board Name:		SR140		
	Number of Ports:		0		
Dialogia	Number of Voice Channels:		60		
Dialogic	Number of Fax Chann	nels:	60		
	Description:		Virtual Mod	ule: SR140	
	Software Infor	mation			
	Name	Version		Build	
	Boston Bfv API	6.5.2		5	
	Boston Driver	6.5.2		2	-
		Help	< Ba	ck Next>	Cancel

Ensure that **SIP** is selected for the **Protocol Selection**, click **Next** to continue.

Brooktrout Configuration Tool - '	Wizard Mode	×
	Protocol Selection	
	This product supports two standards for placing and receiving calls in an IP Network. Please select the IP Call Control protocol used in your network and click Next to continue.	
Dialogic	 SIP H.323 	
	Help < Back Next > Can	ncel

Select IPv4 only for the Media IP Family Preference and click on Next.

Brooktrout Configuration Tool -	Wizard Mode
	IP Preference Selection
	This product supports both IPv4 and IPv6 Internet Protocols. Please select the IP Preference used in your network.
Dialogic	Media IP Family Preference:
	Click Next to continue.
·	Help < Back Next > Cancel

Select Best Available IP4 Interface and click on Next.

Brooktrout Configuration Tool - '	Wizard Mode X
Brooktrout Configuration Tool -	Wizard Mode X Network Interface Setup There are multiple IP Interfaces detected in the system. Please select the IP Interface that you would like to use when making and receiving calls. IPv4 Interface IPv4 Interface Click Next to continue. Click Next to continue.
	Help < Back Next > Cancel

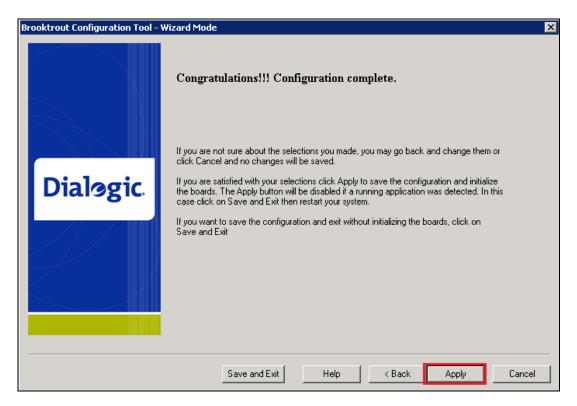
For the **routing method** select **Direct routing by the Application**, click on **Next** to continue.

Brooktrout Configuration Tool -	Wizard Mode	X
	SIP Setup	
	In SIP protocol, calls can be routed in one of the following three ways: Direct routing by the Application When direct routing is used, the application will make calls by specifying a phone number at an IP address, e.g. 9735551212@128.10.135.145.	
Dialogic.	Automatic routing to a Gateway or IP-PBX When automatic routing is used, you configure the IP address of the gateway or IP-PBX where all calls will be routed. Dynamic routing by a Proxy Server When dynamic routing through a proxy server is used, you configure the IP address of the proxy server which will provide the IP address of the device to use on a call by call basis.	
	Please select the routing method to be used:	
	 Automatic routing to a Gateway or IP-PBX Dynamic routing by a Proxy server 	
	Help < Back Next > Cancel	

Choose 14400 for the Maximum Bit Rate, bps, then click on Next.

Brooktrout Configuration Tool -	Wizard Mode	×
	Fax Setup	
Dialogic.	This screen lets you set the maximum data rate that will be used for fax transmissions. The two most common fax transmission standards which govern the rate at which fax data is sent are V.17, which supports rates up to 14,400 bps, and the newer V.34 which supports rates up to 33,600 bps. While this product supports both standards, not all IP telephony gateways support the more advanced V.34 standard. For this reason, selection of maximum data rates higher than 14,400 bps should be made with some careful consideration. Unless you are certain that the IP Telephony infrastructure within your network through which fax calls will be made do not fail when using V.34, the data rate of 14,400 will produce the best interoperability.	
	Maximum Bit Rate, bps:]
	Help < Back Next > Cancel	

Click on Apply and then Save and Exit to finish the setup.



7.2. Create a Dial Rule on OceanFax

Click on Start→Programs→OceanX OceanFax→OceanFax FaxManager

Windows Update Wireshark	
📕 7-Zip	
Accessories	
Administrative Tools	Administrator
Derooktrout	
📕 FileZilla FTP Client	Documents
Maintenance	
McAfee	Computer
Microsoft Office	compacer
Microsoft SQL Server 2008	Network
Microsoft SQL Server 2008 R2	
🐌 OceanX OceanFax	Control Panel
😂 LicenseTool	Concron and
💭 <u>OceanFax FaxManager</u>	Devices and Printers
👏 OceanFax FaxView	
NealVNC	Administrative Tools
퉬 SharePoint	
퉬 Startup	Help and Support
퉬 VMware	
📔 WinPcap 📃	Run
 Back 	Windows Security
Search programs and files	Log off
🍂 Start 🛃 🗾 🚞	1

Enter the proper credentials then click on LOGIN.



In the left window select **Server** \rightarrow **Service Monitoring**,

🧔 OceanFax FaxManager	
Channel Monitoring	nt 🛃 Outbound Rule 🚱 Inbound Rule 💦 Exit 😮 Help
Server * Service Monitoring * License Information * User and Group * System Rules * User rules * Black White List * Other settings *	

A list of services opens in the main window. Highlight **OceanFax FaxCard Server** and right click on this. Select **Configure Service** as is shown below.

	*							
Server	Ť	Update Time:	2013-03-15 15:37:2	22				
Service Monitoring		Service nan			Service Status	Startup Type	Latest Start Time	Log On As
Channel Monitoring		G Server: WIN-Q						
License Information		OceanFax A			🤗 Running	Automatic	2013-03-14 15:21:20	.\administrati
		OceanFax A			Stopped	Automatic	Unknown	.\administrati
User and Group	¥	OceanFax E			👰 Running	Automatic	2013-03-14 15:21:23	.\administrati
System Rules	×		onnector Service		🦞 Running	Automatic	2013-03-14 15:21:43	.\administrate
			onversion Service		🍳 Running	Automatic	2013-03-14 15:21:47	.\administrate
User rules	×	> 🚺 OceanFax F			🌻 Running	Automatic	2013-03-15 08:49:05	.\administrate
Black White List	¥	🛃 OceanFax	Start Service		🍳 Running	Automatic	2013-03-15 08:48:05	.\administrato
1.		🛃 OceanFax	Stop Service		🍳 Running	Automatic	2013-03-14 15:21:52	.\administrate
Other settings	¥	🛃 OceanFax	Restart Service		🎈 Running	Automatic	2013-03-14 15:21:49	.\administrate
		🚰 OceanFax	Start All Services		🎈 Running	Automatic	2013-03-14 15:21:58	.\administrate
		🛃 OceanFax	Stop All Services		🍳 Running	Automatic	2013-03-14 15:22:00	.\administrate
		🔮 OceanFax	Configure Service		🍳 Running	Automatic	2013-03-15 08:55:24	LocalSystem
		OceanFax V	VorkContainer2		🍳 Running	Automatic	2013-03-15 08:48:20	LocalSystem
		💮 OceanFax V	VorkContainer3		🍳 Running	Automatic	2013-03-15 08:48:35	LocalSystem
			VorkContainerController		Running	Automatic	2013-03-14 15:22:16	LocalSystem

A new window is opened for the **FOIP dial rules**. Click on **FOIP gateway** at the bottom right of this window.

	Service name		Service Status	Startup Type	Latest Start Time	Log On As
6	Server: WIN-QQK5M3PE8HJ					
	👶 OceanFax ADSync Service		🎈 Running	Automatic	2013-03-14 15:21:20	.\administrate
	🔮 OceanFax Archive Service		🌻 Stopped	Automatic	Unknown	.\administrate
	🔮 OceanFax Backup Service		🌻 Running	Automatic	2013-03-14 15:21:23	.\administrati
	🔮 OceanFax Connector Servi		A • •	• • •	0013-03-14 15:21:43	.\administrate
	🔮 OceanFax Conversion Serv	FOIP dial rules			× 13-03-14 15:21:47	.\administrate
>	🔮 OceanFax FaxCard Server	FOIP dial rules			13-03-15 08:49:05	.\administrate
	🔮 OceanFax FaxServer	No matchi FOIP gate	way	Add	13-03-15 08:48:05	.\administrate
	🔮 OceanFax Mail Server	>			13-03-14 15:21:52	.\administrate
	🔮 OceanFax MailMerge Servic			Delete	13-03-14 15:21:49	.\administrate
	🔮 OceanFax Report Service			Move Up	13-03-14 15:21:58	.\administrate
	🔮 OceanFax Server Interop S			Move op	13-03-14 15:22:00	.\administrate
	🔮 OceanFax WorkContainer1			Move Dow	n 13-03-15 08:55:24	LocalSystem
	🔮 OceanFax WorkContainer2				13-03-15 08:48:20	LocalSystem
	🔮 OceanFax WorkContainer3			Property	13-03-15 08:48:35	LocalSystem
	🐠 OceanFax WorkContainerC				13-03-14 15:22:16	LocalSystem
				FOIP gatewa	ау	

The FOIP gateway window is opened, click on Add at the top right of the window.

	Service name		Service Status	Startup Type	Latest St	art Time
	G Server: WIN-QQKSM3F	PE8HJ				
	🔮 OceanFax ADSync Se	ervice	🍳 Running	Automatic	2013-03-:	14 15:21:20
	🔮 OceanFax Archive Se	ervice	🌻 Stopped	Automatic	Unknown	
	🔮 OceanFax Backup Sei	ervice	🍳 Running	Automatic	2013-03-3	14 15:21:23
	👙 OceanFax Connector		A	• • •		14 15:21:43
	🔮 OceanFax Conversio	FOIP gateway			x	14 15:21:47
>	🔮 OceanFax FaxCard S	FOIP gateway				15 08:49:05
1	🔮 OceanFax FaxServer	FOIP gateway Countr Ar	ea code Extension	numbers	Add	15 08:48:05
	🔮 OceanFax Mail Serve	>				14 15:21:52
	👙 OceanFax MailMerge				Delete	14 15:21:49
	🔮 OceanFax Report Se			6	Property	14 15:21:58
1	👙 OceanFax Server Int			E.		14 15:22:00
	🔮 OceanFax WorkCont					15 08:55:24
	👙 OceanFax WorkCont					15 08:48:20
1	👙 OceanFax WorkCont					15 08:48:35
	🛃 OceanFax WorkCont					14 15:22:16
					Close	

Enter the IP address of Session Manager for the **FOIP gateway**, enter the relevant country and area codes and click on **OK**.

	<u>_</u>	OceanFax Backup Ser	vice				ļ	Running	Autom	atic	2013-0	3-14 15:21:23
	1	OceanFax Connector					•	- ·			0012.0	2 14 15:21:43
		OceanFax Conversio	FOIP	gateway							X	14 15:21:47
>	1	OceanFax FaxCard S	FOIP	P gateway								
		OceanFax FaxServer	F	OIP gateway	Countr	Area code		Extension nur	nbers		Add	15 08:48:05
		OceanFax Mail Serve	>	FOIP gateway	/				x			14 15:21:52
		OceanFax MailMerge		_							Delete	14 15:21:49
		OceanFax Report Se		FOIP gateway:	192	.168.8.16					Property	14 15:21:58
		OceanFax Server Int		Country Code:	+35	3					(Topolity	14 15:22:00
	2	OceanFax WorkCont		Area Code:								15 08:55:24
	2	OceanFax WorkCont		Extension num	oers:							15 08:48:20
		OceanFax WorkCont										15 08:48:35
	2	OceanFax WorkCont	L				ОK	Can	cel			14 15:22:16
										-		
											Close	
			-									

Once **OK** above is clicked in the previous window, **FOIP dial rules** window is shown, click on **Add** at the top right.

G Server: WIN-QQKSM3PE8HJ				
💮 😳 OceanFax ADSync Service		🍳 Running	Automatic	2013-03-14 15:21:20
🔮 OceanFax Archive Service		🌻 Stopped	Automatic	Unknown
💮 OceanFax Backup Service		🎈 Running	Automatic	2013-03-14 15:21:23
💮 😳 OceanFax Connector Servi		A a ·		0013-03-14 15:21:43
💮 OceanFax Conversion Serv	FOIP dial rules			× 13-03-14 15:21:47
🚱 OceanFax FaxCard Server	FOIP dial rules			13-03-15 08:49:05
🚰 OceanFax FaxServer	No matchi FOIP g	ateway	Add	13-03-15 08:48:05
🚰 OceanFax Mail Server	>	,		13-03-14 15:21:52
💮 OceanFax MailMerge Servio			Delete	13-03-14 15:21:49
🚰 OceanFax Report Service				13-03-14 15:21:58
🚱 OceanFax Server Interop S			Move Up	13-03-14 15:22:00
💮 OceanFax WorkContainer1			Move Down	13-03-15 08:55:24
💮 OceanFax WorkContainer2				13-03-15 08:48:20
🔮 OceanFax WorkContainer3			Property	13-03-15 08:48:35
💮 OceanFax WorkContainerC				13-03-14 15:22:16
			FOIP gatewa	w l
				T
		-	OK Cancel	

In order to pass all calls to Session Manager * is entered into the **No matching mode** window and Session Manager (**192.168.50.16**) is selected from the **FOIP gateway list**, as shown below. Click on **OK** to complete.

Server: WIN-QQKSM3PE8	BHJ						
💮 🤔 OceanFax ADSync Servi	ice		9	Running	Autom	natic	2013-03-14 15:21:20
🛃 OceanFax Archive Servi				Stonned	Autom	natic	Unknown
🔮 OceanFax Backup Se 🖡	OIP dial rules						× 14 15:21:23
💮 🔮 OceanFax Connector		H					14 15:21:43
🔮 OceanFax Conversio	No matching mode:	1					14 15:21:47
🔮 OceanFax FaxCard S		*	Zero or more digit				15 08:49:05
🔮 OceanFax FaxServer		+	One or more digits				15 08:48:05
🔮 OceanFax Mail Serve		?	Zero or one digita		_		14 15:21:52
🔮 OceanFax MailMerge	FOIP gateway list:			\rightarrow		192.168.50.16	14 15:21:49
🔮 OceanFax Report Se							14 15:21:58
🔮 OceanFax Server Int							14 15:22:00
🔮 OceanFax WorkCont				t			15 08:55:24
🔮 OceanFax WorkCont							15 08:48:20
🔮 OceanFax WorkCont				+			15 08:48:35
🛃 OceanFax WorkCont							14 15:22:16
						OK Car	
							ncel

7.3. Adding a user

In order to route calls to OceanFax a number will need to be associated with OceanFax. Login to OceanFax Manager as described in **Section 7.2** above. Select **User and Group** in the left window and under **User and Group** click on **User**. Click on **+Add** at the bottom of the screen to add a new user.

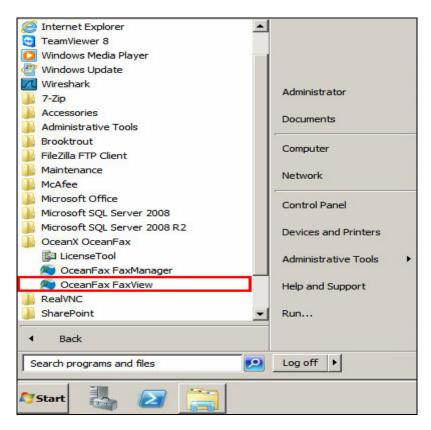
User and Group $$				
Permission Template				
À System Rules 🛛 🕹				
User rules 🛛 💝				
💕 Black White List 🛛 🕹				
🕢 Other settings 🛛 🕹	•			
		🕂 Add 🥖	Edit 🔀 Delete	🧬 Refresh

The User Name and Password entered here will be used to login the user and view the faxes that are being sent/receive to and from this user. The routing number (Routing No) associated with the user is the number used to send faxes to the user.

🌔 OceanFax FaxManager - [User]									
E Mannel Monitoring	Management	Outbound Rule	Inbour	nd Rule	Exit 🚺	Help			
Server 🌣		_			Edit User Pro	file			
Service Monitoring	User Informatio	User Information Additional Information Send Profile Archive Option							
Channel Monitoring License Information	User Name: First Name:	4400	400			Password: *** Last Name:			
User and Group 🖈	Fax No.:				Routing	No.:	4400		
Sroup	Group:	User		-	Domain	Account:			
😁 Permission Template	Permission:	Can view fa	ax,Can creat	. 🔻	Ass	ociated	Delegates	s	
System Rules 🛛 🕹									
User rules 🛛 💝				Save	1 🔊	Cancel			
🚔 Black White List 🛛 🕹	1			Jave		Curicor			
Other settings 🛛 🕹	User Nam	e:	First	Last N	Fax No.	Routing No.		Group	
Conton Socialitys	👌 Default							User	
	👌 Administra	ator	Administr		brooktrout 4400	1000		Admin	
	> 👌 4400					4400		User	
	4500					4500		User	
	1301					02075551301		User	
	oge 👌					4444		User	

8. Verification Steps

The following steps can be taken to ensure that faxes can be sent to and from the OceanFax Server. Click on Start \rightarrow OceanFax \rightarrow OceanFax \rightarrow OceanFaxFaxView.



Enter the proper credentials for the required user and click on LOGIN.

-			1
OceanFax		-	
	Server:	127.0.0.1	
	User ID:	4400	
	Password:		
		Remember Passwor Domain User Logir	
		🐕 LOGIN 🛛 🗙 CANCE	L
			AXVIEW
2009 OceanX Technology Co., Ltd. All Ri	ights heserved		

8.1. Sending a FAX to PSTN

Click on **New Fax** in the top left corner.

🗧 OceanFax FaxView) & 🔀
Fax Options Style		10							<u> </u>
Fax" 🦳 🖂 ᆂ	2 🛃 🕭	🚔 🥭 🕽	K 🥖 🔍		📸 🕄 🍏				
			ete Edit View		Release History Refre				
				ы		21	21		
OceanFax	My faxes								
📕 Fax 🔨	↑↓ Doc	Status Status info	ormation	Caller ID 🔺	Fax No.	Pa	Owner	Time	^
My faxes									
Inbox(11)									
Trash									
Message									
G Sms outbox									
Email outbox									
Email sent									
Options 🗸									
Delegates									
velegates V									

Enter a **Fax No**. to send a fax to PSTN and select **Upload**. In the example below, **001315551301** represents a PSTN fax number.

💐 OceanFax FaxView		
Fax Options Style		
	Delete Edit View Split Combine Release History Refresh	Exit
OceanFax 📮	My fa Fax information	
🔑 Fax 🔨	Basic Information Other Option Pa.	Owner
🕞 🤁 My faxes	Recipients	
Inbox(11)	Name: Phonebook Need Preview	
Trash	Fax No.: 001415551301 Need Approval	
	Company:	
	Subject And Cover	
Message 🔨	Subject:	
Sms outbox	Cover: No cover sheet	
Email outbox	Cover Content:	
Email sent		
Options 🗸	Attachments	
Delegates V	Selected Attachments:	
	Send Cancel	

Browse to the location and select the fax to be sent and click on Open.

Open						×
🔘 🗖 Desktop 🔹		- 🐼	Search Desktop			2
Organize 🔻 New folder					· 🗔	•
Favorites E Desktop Downloads	LIC File 422 bytes license_20130312032027 LIC File 610 bytes	7-new.lic				•
 Recent Places Libraries Documents Music 	text Text Document 1.31 KB					
Pictures Videos	TIF Image 327 KB					
P Computer	TIF Image 327 KB					
🗣 Network	Shortcut 997 bytes					-
File na	me: tif-30		Open	(Cancel	

Once the fax has been added, click on **Send** to send the fax.

Basic Information	Other Option	
lecipients		
Name:	Phonebook	Need Preview
Fax No.:	001415551301	Need Approval
Company:		\sim
ubject And Cover		
Subject:		
Cover:	No cover sheet	\sim
Cover Content:		^ ~
Attachments		
Selected Attachmer	C:\Users\Administrator\Desktop\tif-30.Tif	Upload

8.2. Sending a FAX Internally

Click on New Fax in the top left corner.

OceanFax FaxView									- 8 🗵
Fax Options Style									3
Fax 🦳 🦲 🖂 ᆂ	2 2 2	2 🚘 🥭	XL	🔍 🗄		A 5	4		
	Forward Route Ou					History Refresh	n Exit		
		الا لا			2		a a		
OceanFax	My faxes		1		-1				
Fax 🔨		Status Stat	us information	Caller	r ID 🔺 Fax No	D. F	Pa 0	wner Time	
My faxes									
Inbox(11)	C								
Trash									
Message									
Sms outbox									
Email outbox									
Email sent									
Options 🗸									
V Delegates									

Enter a **Fax No**. to send an internal fax and select **Upload**. In the screen below **4400** represents an example of a fax sent internally.

👏 OceanFax FaxView							
Fax Options Style							
and the second	y Forward	d Route Out	Move ReSend	Delete	View Split		efresh
OceanFax	My fa	Fax informatio	n				
Fax A		Basic Information	Other Option	ו			Pa Owner
Inbox(11)		Name:			Phonebool	k Need Preview	
Trash		Fax No.:	4400			Need Approval	
		Company:					
		Subject And Cov	er				
Message 🖉		Subject:					
Sms outbox		Cover:	No cove			\sim	
Email outbox		Cover Conter	it:				
						\sim	
Options 💽		Attachments					
V Delegates V		Selected Atta	chments:			Upload	
				Send	Cancel		

Browse to the location and select the fax to be sent and click on Open.

Open						X
Desktop -		- 5	Search Desktop			2
Organize 🔻 New folder						0
☆ Favorites ■ Desktop ↓ Downloads ₩ Recent Places	LIC File 422 bytes license_20130312032027-r LIC File 610 bytes	new.lic				*
Libraries Documents Music Pictures Videos	text Text Document 1.31 KB tif-30 TIF Image 327 KB					
🖳 Computer	tif-30-a TIF Image 327 KB		-			
🗣 Network	Shortcut 997 bytes					•
File n	ame: tif-30					•
		. [Open	C	ancel	

Once the fax has been added, click on **Send** to send the fax.

Basic Information	Other Option	
Recipients		
Name:	Phonebook	Need Preview
Fax No.:	4400	Need Approval
Company:		\checkmark
Subject And Cover		
Subject:		
Cover:	No cover sheet	\sim
Cover Content:		
Attachments		
Selected Attachmen	nts C:\Users\Administrator\Desktop\tif-30.Tif	
		×
	Send	

8.3. Receiving a fax

A received fax message can be found in the inbox as shown below. In order to view a fax double-click on the required message.

Fax Options Style							
		🗾 🥭 🙀 oute Out Move		w Split Combine	Release History Refre	esh Exit	
· · · ·							
			2	ии		2 2]
nFax 🖣	My faxes						
Fax 🔨	11	Doc • Status	Status information	Caller ID 🔺	Fax No.	Pa 0	wner Time
My faxes	8						
Inbox(11)	▶ .5	217 🍚	ОК	02075551301		1 44	400 2013/03/12 11:45
🔁 Outbox 		216 🎈	ОК	02075551301		1 44	00 2013/03/12 11:33
u nam		210 🌻	ОК	anonymous		1 44	00 2013/03/12 11:09
		209 🎈	ОК	anonymous		1 44	00 2013/03/12 11:03
		207 🎈	ОК	anonymous		1 44	00 2013/03/12 10:57
Message 🔨	1 👤	204 🎈	ОК	anonymous		1 44	400 2013/03/12 10:32
	1	187 🎈	ОК	anonymous		1 44	00 2013/03/12 08:52
Sms outbox	<u>+</u>	181 🌳	ОК	softip		30 44	400 2013/02/09 16:26
Email outbox		180 🌻	ок	softip		30 44	400 2013/02/09 16:19
Email sent	<u>₹</u>	179 🎈	ОК	softip		30 44	400 2013/02/09 16:10
Options 🗸	n 📃 🕹	175 🎈	ок	softip		30 44	400 2013/02/09 09:12
		174 🎈	ок	softip		30 44	400 2013/02/09 08:49
Delegates 🗸		172 🎈	ок	anonymous		30 44	400 2013/02/09 02:19
		169 🎈	ок	anonymous		30 44	400 2013/02/09 01:50
		168 🎈	ок	anonymous		30 44	400 2013/02/09 00:12
		158 🎈	ок	02075551301		30 44	400 2013/02/08 14:29

9. Conclusion

These Application Notes describe the configuration steps required for OceanFax to successfully interoperate with Avaya Aura® Communication Manager R6.2 and Avaya Aura® Session Manager R6.2 by registering the OceanFax Server as a SIP Entity on Avaya Aura® Session Manager. Please refer to **Section 2.2** for test results and observations.

10. Additional References

This section references documentation relevant to these Application Notes. The Avaya product documentation is available at <u>http://support.avaya.com</u> where the following documents can be obtained.

- [1] Administering Avaya Aura® Communication Manager, Document ID 03-300509 Release 6.2
- [2] Avaya Aura® Communication Manager Feature Description and Implementation, Document ID 555-245-205 Release 6.2
- [3] Implementing Avaya Aura® Session Manager Document ID 03-603473 Release 6.2
- [4] Administering Avaya Aura® Session Manager, Doc ID 03-603324 Release 6.2

Please refer to Section 2.3 of these Application Notes for information on OceanFax support.

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