Avaya Solution & Interoperability Test Lab

Application Notes for MESSAGEmanager IP Fax Server Software 10.1 with Avaya Aura® Communication Manager 6.0.1 and Avaya Aura® Session Manager 6.1 via SIP Trunking – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for MESSAGEmanager IP Fax Server Software to interoperate with Avaya Aura® Communication Manager and Avaya Aura® Session Manager. MESSAGEmanager IP Fax enables users of Multifunction Devices, Email, Desktop applications, CRM and ERP applications to send and receive facsimiles (fax) over Avaya IP networks. MESSAGEmanager IP Fax communicates with Session Manager via SIP Trunking.

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.

Table of Contents

1. Introduction

These Application Notes describe the configuration used to enable MESSAGEmanager IP Fax Server Software to interoperate with Avaya Aura® Communication Manager and Avaya Aura® Session Manager. MESSAGEmanager IP Fax allows facsimiles (fax) to be sent/received to/from both local and PSTN fax endpoints, and be subsequently printed or archived.

2. General Test Approach and Test Results

The compliance testing of the MESSAGEmanager IP Fax solution was performed manually. The tests were all functional in nature, and no performance testing was done. The test method employed can be described as follows:

- Communication Manager was configured to support various local IP telephones and analog fax machines, as well as a SIP Trunking connection to Session Manager.
- Session Manager was configured to connect to both Communication Manager and MESSAGEmanager IP Fax via SIP trunks.
- MESSAGEmanager IP Fax was configured to connect to Session Manager.

2.1. Interoperability Compliance Testing

The following tests were performed as part of the compliance testing:

- Sending of multi-page faxes to local and PSTN fax machines using T.38 fax protocol.
- Receiving of multi-page faxes from local and PSTN fax machines using T.38 fax protocol.
- Sending of faxes with different page layouts (Letter, Legal, A4).
- Sending and receiving of faxes with different resolutions (Standard, Fine).
- Sending and receiving of faxes at different transmission rates (14400bps, 9600bps).
- Verification of correct Transmitting Subscriber Identification (TSID) composition for sent and received fax messages.
- Sending and receiving of faxes using G.711 pass-through mode.
- Verifying its ability to recover from interruptions during fax transmission.
- Verifying its ability to recover from reboots to MESSAGEmanager IP Fax server and Communication Manager.
- Verifying its ability to recover from interruptions to the LAN connection between MESSAGEmanager IP Fax server and the network.

2.2. Test Results

All test cases specified in **Section** Error! Reference source not found. were tested successfully. The following behaviors were noted:

1. Avaya G430, G450 Media Gateways and TN2602AP IP Media Processor board support a fixed 9600bps for the T.38 fax protocol, while Avaya G250, G350, G700 Media Gateways and TN2302AP IP Media Processor board support a fixed 14400bps for the T.38 fax protocol.

2.3. Support

For support on MESSAGEmanager IP Fax, contact MESSAGEmanager as follows:

- Web: http://www.mmanager.com/support.aspx
- Email: support@mmanager.com
- Fax: +61 2 8448 8840
- Phone: +61 2 8448 8870

3. Reference Configuration

Figure 1 shows the test configuration used for compliance testing. An Avaya S8800 Server running Avaya Aura® Solution for Midsize Enterprise provided the required SIP-enabled communication platform, which included Avaya Aura® Communication Manager, Avaya Aura® System Manager and Avaya Aura® Session Manager. The Avaya G430 and G650 Media Gateways provided the connections to the analog fax machines and ISDN-BRI trunks to the PSTN. MESSAGEmanager IP Fax was installed on a Windows 2003 Server and was configured to interface to Session Manager through a SIP Trunk.

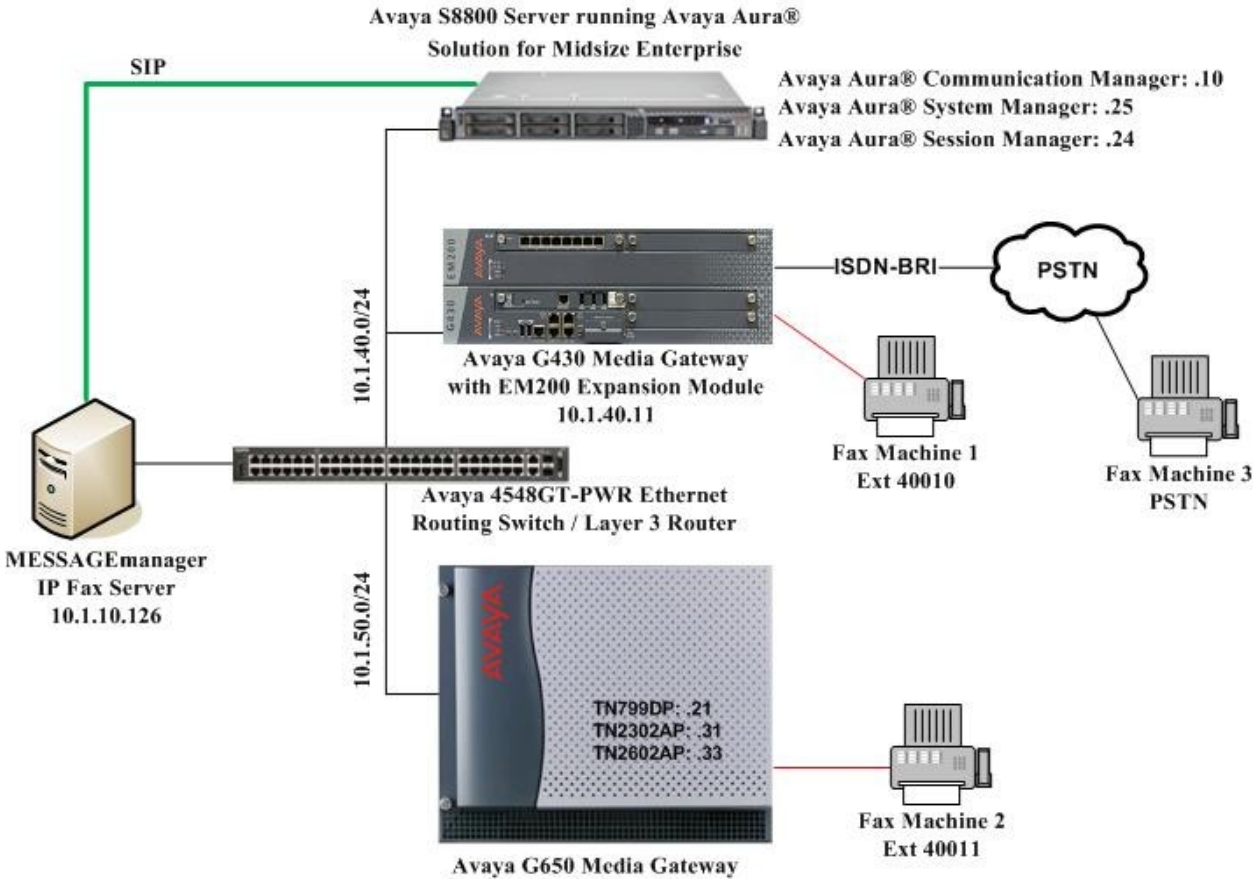


Figure 1: **Test Configuration**

4. Equipment and Software Validated

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

Equipment	Software
Avaya S8800 Server running Avaya Aura® Solution for Midsize Enterprise	Avaya Aura® Communication Manager 6.0.1 (Service Pack 3 00.1.510.1-19009) Avaya Aura® System Manager 6.1 Service Pack 2 Avaya Aura® Session Manager 6.1 Service Pack 2 (6.1.2.0.612004)
Avaya G650 Media Gateway - TN2312BP IP Server Interface - TN799DP C-LAN Interface (x 2) - TN2602AP IP Media Processor - TN2302AP IP Media Processor - TN2793B Analog Line	- HW15 FW054 HW01 FW040 HW02 FW059 HW20 FW121 000013
Avaya G430 Media Gateway - MM722AP BRI MM - MM711AP Analog MM	31.19.2 HW01 FW008 HW31 FW095
Avaya 4548GT-PWR Ethernet Routing Switch	V5.4.0.008
Brother MFC5840CN All-In-One Printer	-
Canon MultiPASS L90 Fax/Printer	-
MESSAGEmanager IP Fax Server Software	10.1

5. Configure Avaya Aura® Communication Manager

The configuration and verification operations illustrated in this section were all performed using the Communication Manager System Access Terminal (SAT).

Only those configuration details concerning the SIP interface to Session Manager and MESSAGEmanager IP Fax are shown within this section.

5.1. Verify system-parameters customer-options

Use the **display system-parameters customer options** command to verify that Communication Manager is configured to meet the minimum requirements to support MESSAGEmanager IP Fax. Those items shown in **bold** indicate required values or minimum capacity requirements. If these are not met in the configuration, please contact an Avaya representative for further assistance.

Parameter	Usage
Maximum Administered SIP Trunks Stations (Page 2)	The number of available licensed SIP trunks must be sufficient to accommodate the number of trunk members assigned to the trunk group used to interface to Session Manager in **Section 5.6**.

```
display system-parameters customer-options                    Page   2 of  11
                                OPTIONAL FEATURES

IP PORT CAPACITIES                                            USED
                     Maximum Administered H.323 Trunks: 12000 0
           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: 128   0
  Max Concur Registered Unauthenticated H.323 Stations: 100   0
                       Maximum Video Capable Stations: 18000 0
                   Maximum Video Capable IP Softphones: 250   0
                       Maximum Administered SIP Trunks: 12000 255
  Maximum Administered Ad-hoc Video Conferencing Ports: 12000 0
   Maximum Number of DS1 Boards with Echo Cancellation: 522   0
                             Maximum TN2501 VAL Boards: 10    1
                     Maximum Media Gateway VAL Sources: 250   1
           Maximum TN2602 Boards with 80 VoIP Channels: 128   0
          Maximum TN2602 Boards with 320 VoIP Channels: 128   1
   Maximum Number of Expanded Meet-me Conference Ports: 250   0
```

5.2. Node Names

Use the **change node-names ip** command to configure the node name for Session Manager.

Parameter	Usage
Name / IP Address	Enter an appropriate name to identify Session Manager, along with the IP address.

```
change node-names ip                                          Page   1 of   2
                                IP NODE NAMES
    Name              IP Address
CLAN-1a02           10.1.50.21
MEDPRO-1a07         10.1.50.31
MEDPRO-1a09         10.1.50.33
PN1-router          10.1.50.1
SM                  10.1.40.24
default             0.0.0.0
procr               10.1.40.10
procr6              ::
```

5.3. Dialplan

Use the **change dialplan analysis** command to configure the dial plan using the parameters shown below.

Dialed String	Total Length	Usage
4	5	Extension range for fax machines and MESSAGEmanager IP Fax.
#	3	Trunk Access Code used in the SIP trunk group defined in **Section 5.6**.

```
change dialplan analysis                                        Page   1 of  12
                            DIAL PLAN ANALYSIS TABLE
                                  Location: all            Percent Full: 2

    Dialed   Total  Call     Dialed   Total  Call     Dialed   Total  Call
    String   Length Type     String   Length Type     String   Length Type
   0           1   attd
   4           5   ext
   9           1   fac
   *           3   fac
   #           3   dac
```

5.4. Configure IP-Codec

Use the **change ip-codec-set 1** command to configure the audio codecs which will be used to communicate with Session Manager. The G.711MU and G.711A codecs were used to set up the initial audio call prior to the T.38 fax protocol negotiation between Communication Manager and MESSAGEmanager IP Fax.

```
change ip-codec-set 1                                           Page   1 of   2

                           IP Codec Set

    Codec Set: 1

    Audio        Silence      Frames   Packet
    Codec        Suppression  Per Pkt  Size(ms)
 1: G.711MU           n         2        20
 2: G.711A            n         2        20
```

On Page 2, set **FAX** to **t.38-standard** to enable T.38 fax protocol negotiations. If G.711 pass-through mode is preferred, then set **FAX** to **off**.

```
change ip-codec-set 1                                          Page   2 of   2

                          IP Codec Set

                              Allow Direct-IP Multimedia? y
              Maximum Call Rate for Direct-IP Multimedia:  2048:Kbits
     Maximum Call Rate for Priority Direct-IP Multimedia:  2048:Kbits

                     Mode                Redundancy
    FAX              t.38-standard        0
    Modem            off                  0
    TDD/TTY          off                  0
    Clear-channel    n                    0
```

5.5. Configure Network Region

Use the **change ip-network-region** command to assign an appropriate **Authoritative Domain** to be used by Communication Manager. This name is also used in **Section 6.1.1**. Set **Codec Set** to the IP Codec defined in **Section 5.4**.

```
change ip-network-region 1                                     Page   1 of  20
                              IP NETWORK REGION
  Region: 1
Location: 1       Authoritative Domain: avaya.com
    Name: LOCAL
MEDIA PARAMETERS                Intra-region IP-IP Direct Audio: yes
      Codec Set: 1              Inter-region IP-IP Direct Audio: yes
   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
```

5.6. Configure SIP Interface to Session Manager

Use the **add signaling-group** command to configure the Signaling Group parameters for the SIP trunk group. Assign values for this command as shown in the following table.

Parameter	Usage
Group Type	Enter the Group Type as “sip”.
Transport Method	Enter “tls”.
Near-end Node Name	Enter “procr” to designate the Processor Ethernet interface.
Near-end Listen Port	Enter “5061”.
Far-end Node Name	Enter the node name assigned to the Session Manager configured in **Section 5.2**.
Far-end Listen Port	Enter “5061”.
Far-end Network Region	Enter the Network Region configured in **Section 5.4**.
Far-end Domain	Enter the domain name assigned to the network region in **Section 5.4**.
Direct IP-IP Audio Connections	Enter “y” to turn on “shuffling”.

```
add signaling-group 3                                           Page   1 of   1
                                SIGNALING GROUP

 Group Number: 3              Group Type: sip
  IMS Enabled? n        Transport Method: tls
        Q-SIP? n                                          SIP Enabled LSP? n
     IP Video? y          Priority Video? y        Enforce SIPS URI for SRTP? y
  Peer Detection Enabled? n  Peer Server: SM



   Near-end Node Name: procr                 Far-end Node Name: SM
 Near-end Listen Port: 5061                Far-end Listen Port: 5061
                                        Far-end Network Region: 1
                                   Far-end Secondary Node Name:
Far-end Domain: avaya.com
                                          Bypass If IP Threshold Exceeded? n
Incoming Dialog Loopbacks: eliminate               RFC 3389 Comfort Noise? n
         DTMF over IP: rtp-payload         Direct IP-IP Audio Connections? y
Session Establishment Timer(min): 3                  IP Audio Hairpinning? n
         Enable Layer 3 Test? n                 Initial IP-IP Direct Media? y
H.323 Station Outgoing Direct Media? n          Alternate Route Timer(sec): 6
```

Use the **add trunk-group** command to configure the SIP Trunk Group to Session Manager. Assign values for this command as shown in the following table.

Parameter	Usage
Group Type (Page 1)	Specify the Group Type as "sip".
Group Name (Page 1)	Select an appropriate name to identify the device.
TAC (Page 1)	Specify a trunk access code that can be used to provide dial access to the trunk group.
Service Type (Page 1)	Designate the trunk as a "tie" line to a peer system.
Signaling Group (Page 1)	Enter the number assigned to the SIP signaling group defined above.
Number of Members (Page 1)	Specify sufficient number of members to support the maximum simultaneous connections required.
Numbering Format (Page 3)	Enter "private".

```
add trunk-group 3                                                Page   1 of  21
                                TRUNK GROUP

Group Number: 3                    Group Type: sip           CDR Reports: y
  Group Name: SIP Trunk to SM             COR: 1        TN: 1        TAC: #03
   Direction: two-way        Outgoing Display? n
 Dial Access? n                                   Night Service:
Queue Length: 0
Service Type: tie                   Auth Code? n
                                          Member Assignment Method: auto
                                                   Signaling Group: 3
                                                 Number of Members: 255
```

```
add trunk-group 3                                                Page   3 of  21
TRUNK FEATURES
          ACA Assignment? n            Measured: internal
                                                       Maintenance Tests? y

                     Numbering Format: private
                                                UUI Treatment: service-provider

                                                 Replace Restricted Numbers? n
                                                Replace Unavailable Numbers? n


                                Modify Tandem Calling Number: no

 Show ANSWERED BY on Display? y

 DSN Term? n
```

5.7. Call Routing to MESSAGEmanager IP Fax

Use the **change uniform-dialplan 0** command. Assign values for this command as shown in the following table.

Parameter	Usage
Matching Pattern	For this testing, the extension range assigned to MESSAGEmanager IP Fax is 40050 to 40059. So enter "4005" as the Matching Pattern.
Len	Enter the length of the extensions assigned to MESSAGEmanager IP Fax.
Net	Enter "aar".

```
change uniform-dialplan 0                                        Page   1 of   2
                      UNIFORM DIAL PLAN TABLE
                                                              Percent Full: 0

  Matching                    Insert              Node
  Pattern       Len Del       Digits     Net Conv Num
 4005            5   0                   aar  n
```

Use the **change aar analysis 0.** Assign values for this command as shown in the following table.

Parameter	Usage
Dialed String	Enter the leading digits of the extensions assigned to MESSAGEmanager IP Fax
Min / Max	Enter the length of the extensions assigned to MESSAGEmanager IP Fax.
Route Pattern	Enter the number of the route pattern described on the next page.
Call Type	Enter "aar".

```
change aar analysis 0                                            Page   1 of   2
                            AAR DIGIT ANALYSIS TABLE
                                  Location: all            Percent Full: 0

          Dialed           Total     Route    Call   Node  ANI
          String          Min  Max  Pattern   Type   Num   Reqd
    4005                  5    5     3        aar          n
```

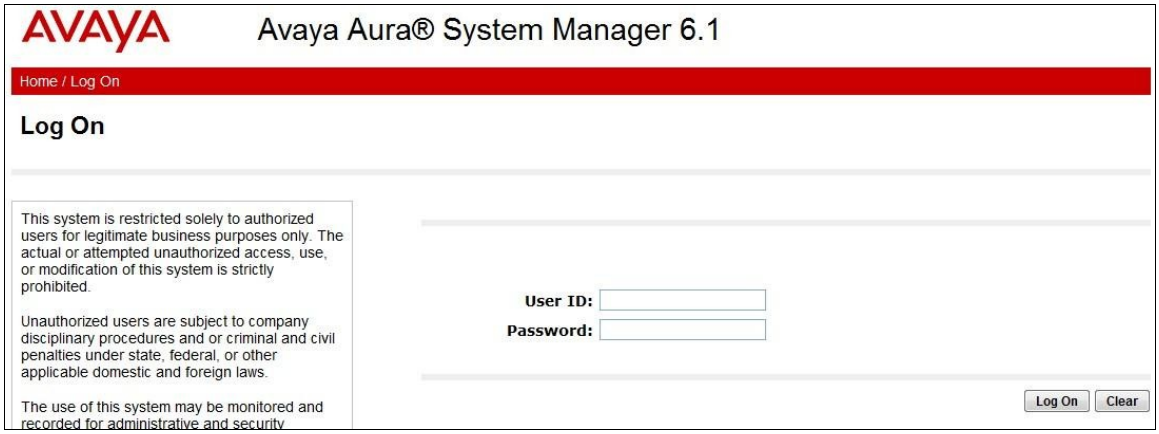
Use the **change route-pattern n** command, where **n** is the route pattern to route calls destined for MESSAGEmanager IP Fax from Communication Manager to Session Manager. Assign values for this command as shown in the following table.

Parameter	Usage
Pattern Name	Enter a descriptive name to identify the route pattern.
Grp No	Enter the number of the SIP trunk which connects to Session Manager, which is defined in **Section 5.6**.
FRL	Set the Facility Restriction Level (**FRL**) field to a level that allows access to this trunk for all users that require it. The value of ***0*** is the least restrictive level.

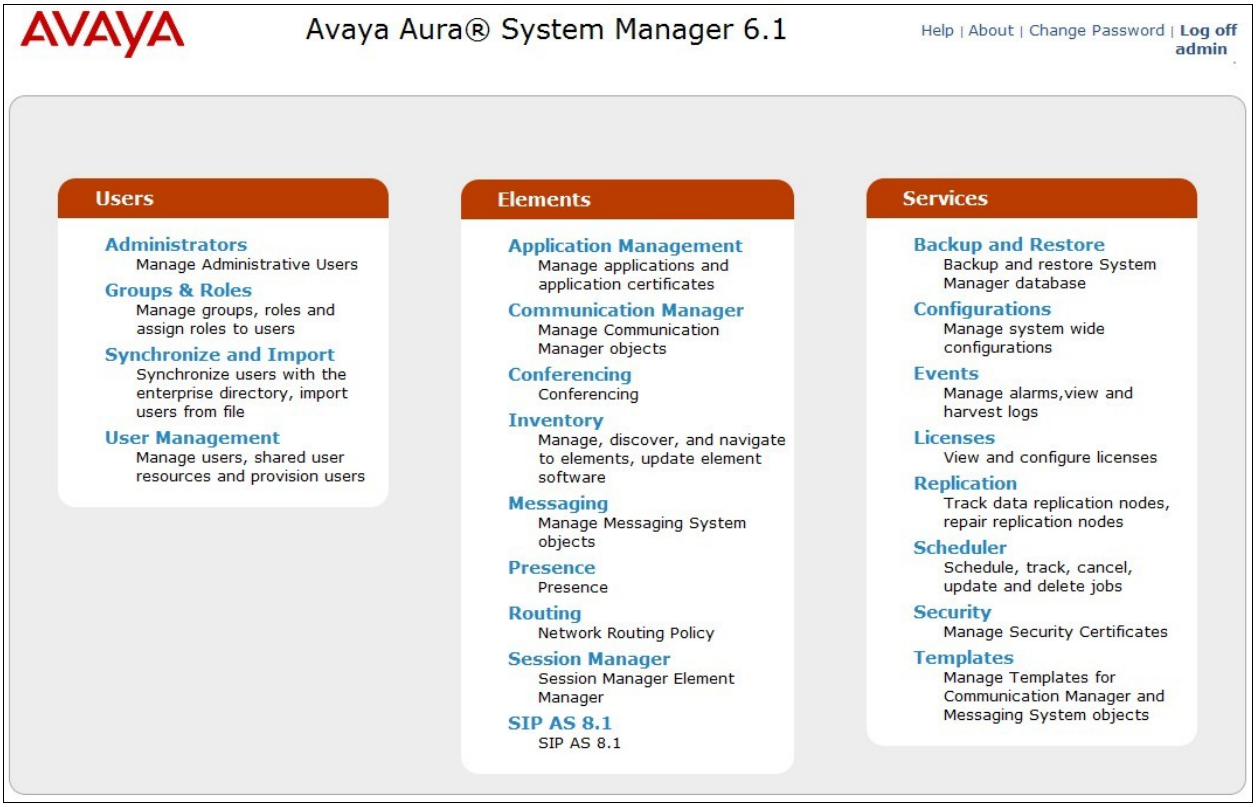
```
change route-pattern 3                                          Page   1 of   3
                    Pattern Number: 3   Pattern Name: SIP Trunk
                              SCCAN? n     Secure SIP? n
    Grp FRL NPA Pfx Hop Toll No.  Inserted                              DCS/ IXC
    No          Mrk Lmt List Del  Digits                                QSIG
                              Dgts                                      Intw
 1: 3    0                                                             n   user
 2:                                                                    n   user
 3:                                                                    n   user
 4:                                                                    n   user
 5:                                                                    n   user
 6:                                                                    n   user

     BCC VALUE  TSC CA-TSC    ITC BCIE Service/Feature PARM  No. Numbering LAR
    0 1 2 M 4 W     Request                                 Dgts Format
                                                          Subaddress
 1: y y y y y n  n            rest                                        none
 2: y y y y y n  n            rest                                        none
 3: y y y y y n  n            rest                                        none
 4: y y y y y n  n            rest                                        none
 5: y y y y y n  n            rest                                        none
 6: y y y y y n  n            rest                                        none
```

6. Configure Avaya Aura® Session Manager

This section illustrates relevant aspects of the Avaya Aura® Session Manager configuration used in the verification of these Application Notes. Session Manager is managed via Avaya Aura® System Manager. Using a web browser, access "https://<ip-addr of System Manager>/SMGR". In the **Log On** screen, enter appropriate **User ID** and **Password** and press the **Log On** button.

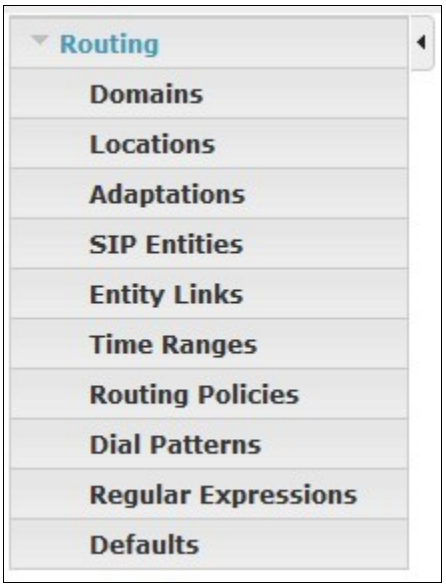


Once logged in, a **Home Screen** is displayed.



6.1. Routing

When **Routing** is selected, the right side outlines a series of steps.



The sub-sections that follow are in the same order as the steps outlined under **Introduction to Network Routing** in the abridged screen shown below. In these Application Notes, all these steps are illustrated with the exception of Steps 3 and 9, since "Adaptations" and "Regular Expressions" were not used.

Introduction to Network Routing Policy

Network Routing Policy consists of several routing applications like "Domains", "Locations", "SIP Entities", etc.

The recommended order to use the routing applications (that means the overall routing workflow) to configure your network configuration is as follows:

Step 1: Create "Domains" of type SIP (other routing applications are referring domains of type SIP).

Step 2: Create "Locations"

Step 3: Create "Adaptations"

Step 4: Create "SIP Entities"

- SIP Entities that are used as "Outbound Proxies" e.g. a certain "Gateway" or "SIP Trunk"
- Create all "other SIP Entities" (Session Manager, CM, SIP/PSTN Gateways, SIP Trunks)
- Assign the appropriate "Locations", "Adaptations" and "Outbound Proxies"

Step 5: Create the "Entity Links"

- Between Session Managers
- Between Session Managers and "other SIP Entities"

Step 6: Create "Time Ranges"

- Align with the tariff information received from the Service Providers

Step 7: Create "Routing Policies"

- Assign the appropriate "Routing Destination" and "Time Of Day"

(Time Of Day = assign the appropriate "Time Range" and define the "Ranking")

Step 8: Create "Dial Patterns"

- Assign the appropriate "Locations" and "Routing Policies" to the "Dial Patterns"

Step 9: Create "Regular Expressions"

- Assign the appropriate "Routing Policies" to the "Regular Expressions"

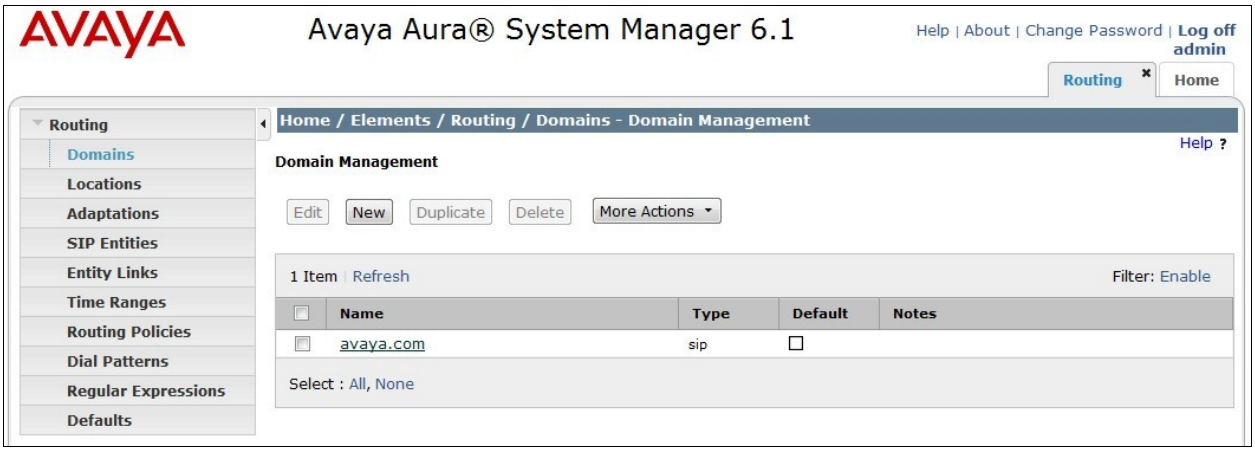
Each "Routing Policy" defines the "Routing Destination" (which is a "SIP Entity") as well as the "Time of Day" and its associated "Ranking".

IMPORTANT: the appropriate dial patterns are defined and assigned afterwards with the help of the routing application "Dial patterns". That's why this overall routing workflow can be interpreted as

6.1.1. Domains

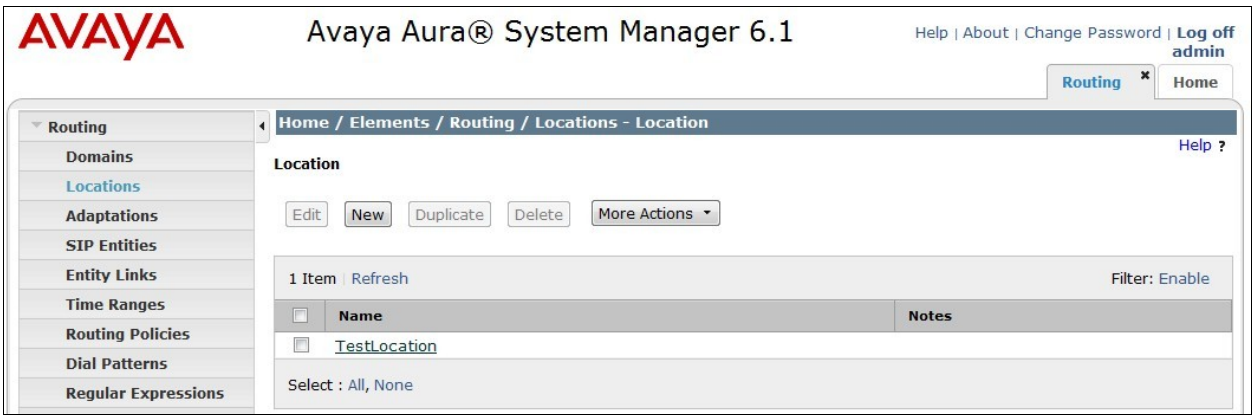
To view or change SIP domains, select **Routing > Domains**. Click on the checkbox next to the name of the SIP domain and **Edit** to edit an existing domain, or the **New** button to add a domain. Click the **Commit** button after changes are completed. The domain name to be configured should be the same as was configured for the Communication Manager network region in **Section 5.4**.

The following screen shows the list of configured SIP domains.



6.1.2. Locations

To view or change locations, select **Routing > Locations**. The following screen shows an abridged list of configured locations. Click on the checkbox corresponding to the name of a location and **Edit** to edit an existing location, or the **New** button to add a location. Click the **Commit** button after changes are completed. Assigning unique locations (based on IP Network Address) can allow Session Manager to perform location-based routing, bandwidth management, and call admission control.

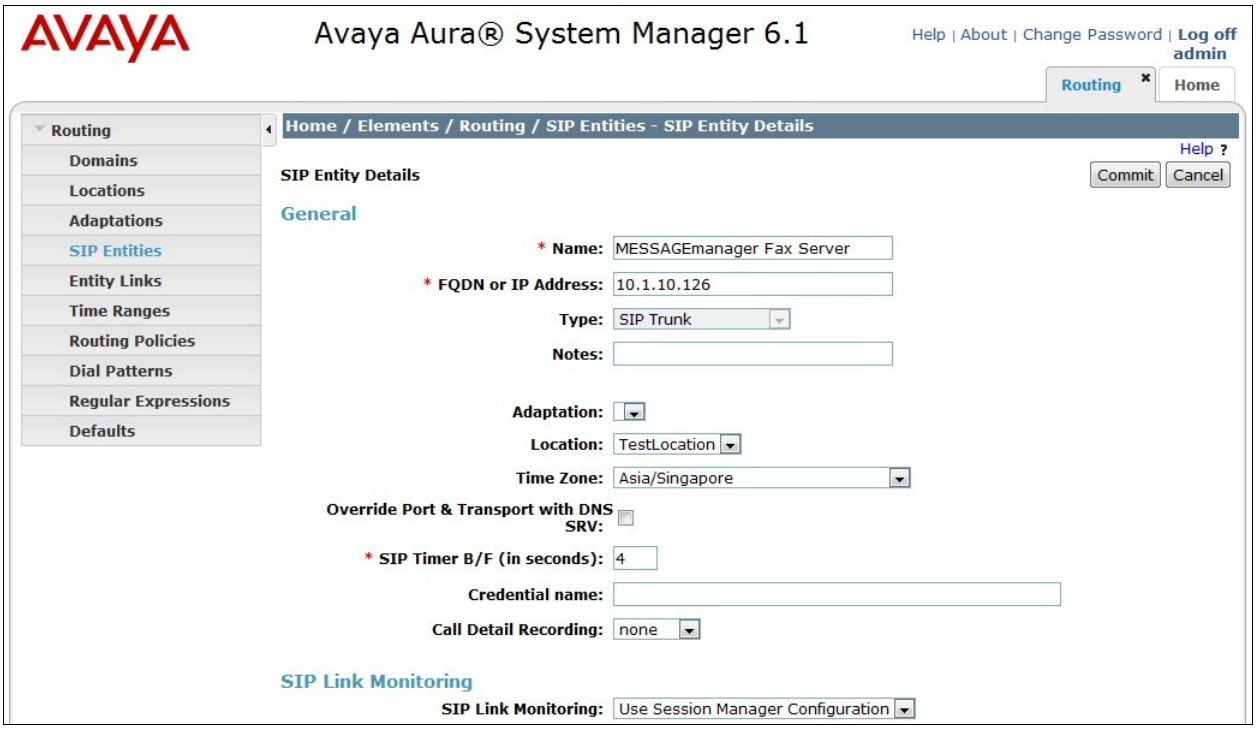


6.1.3. SIP Entities

To view or change SIP elements, select **Routing > SIP Entities**. Click the checkbox corresponding to the name of an element and **Edit** to edit an existing element, or the **New** button to add an element. Assign values for this command as shown in the following table.

Parameter	Usage
Name	Enter an appropriate name to identify the SIP entity.
FQDN or IP Address	Enter the MESSAGEmanager IP Fax Server IP address.
Type	Select **SIP Trunk** from the drop-down menu.
Location	Select the location defined in **Section 6.1.2** from the drop-down menu.
Time Zone	Select the proper time zone from the drop-down menu.

Click the **Commit** button after changes are completed.

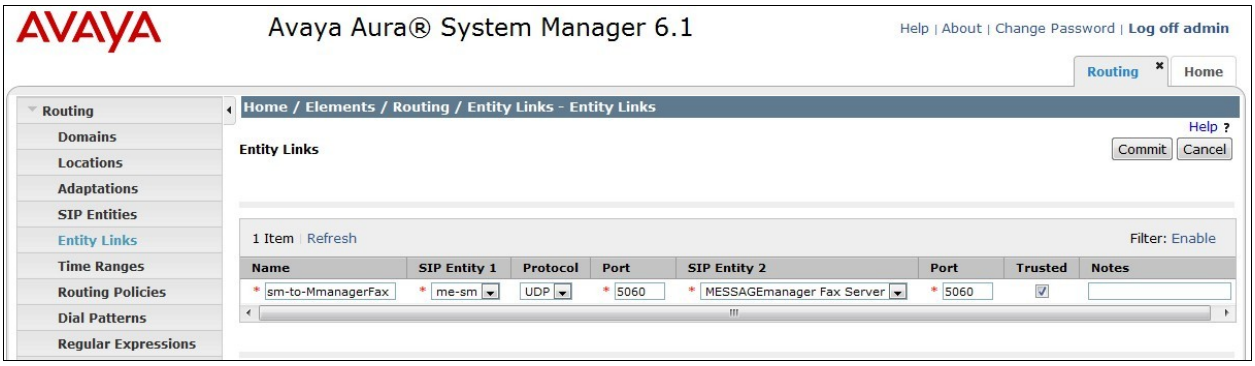


6.1.4. Entity Links

To view or change Entity Links, select **Routing > Entity Links**. Click on the checkbox corresponding to the name of a link and **Edit** to edit an existing link, or the **New** button to add a link. Assign values for this command as shown in the following table.

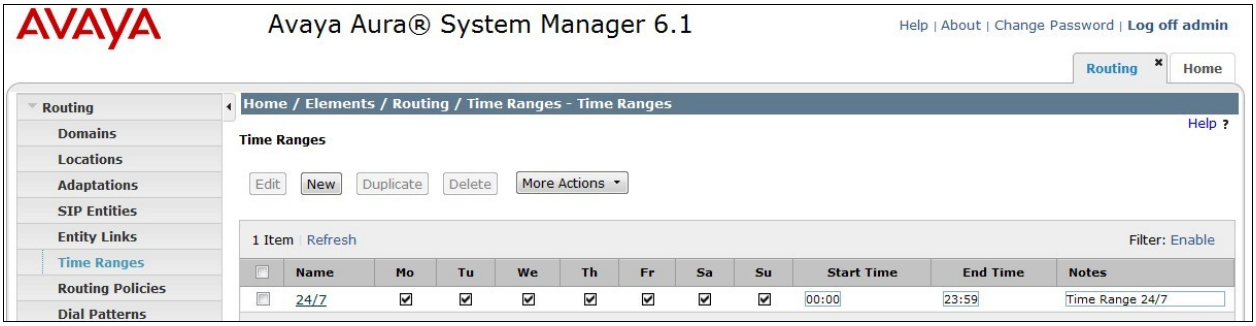
Parameter	Usage
Name	Select the SIP entity for MESSAGEmanager IP Fax Server created in **Section 6.1.3** from the drop-down menu.
SIP Entity 1 / Protocol / Port	Select the SIP entity for Session Manager, with the appropriate protocol and port. For this testing, the Entity Link is configured for UDP with Port 5060.
SIP Entity 2 / Port	Select the SIP entity for the MESSAGEmanager IP Fax Server, with the appropriate port.
Trusted	Check this box.

Click the **Commit** button after changes are completed.



6.1.5. Time Ranges

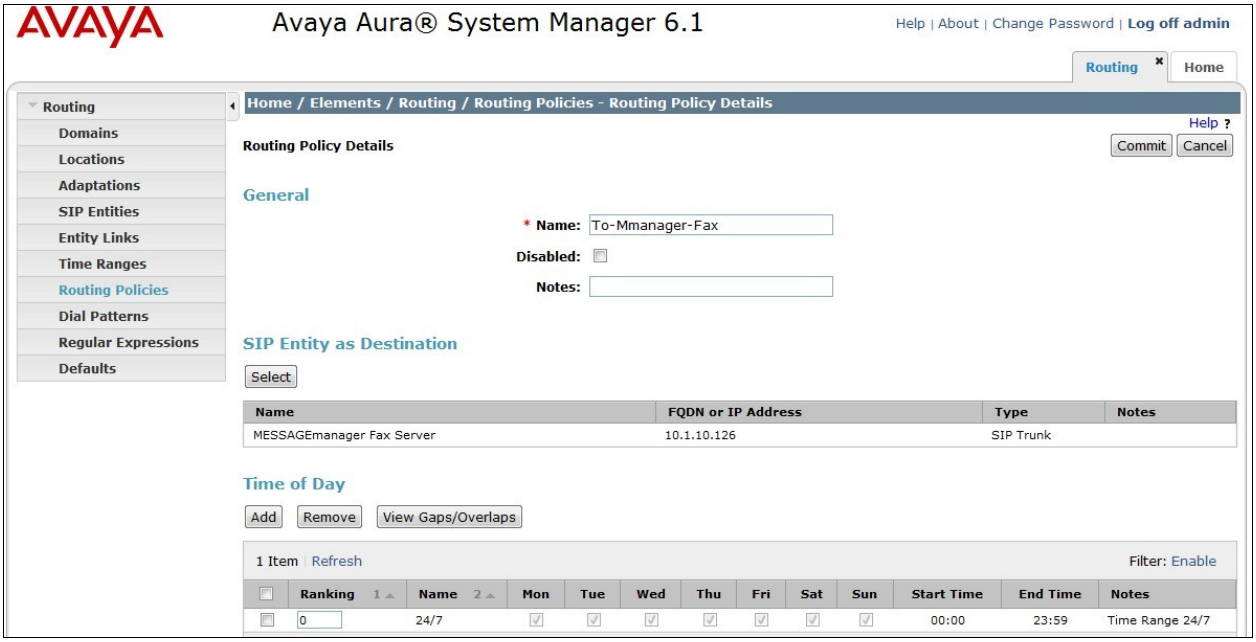
To view or change Time Ranges, select **Routing > Time Ranges**. The Routing Policies shown subsequently will use the "24/7" range since time-based routing was not the focus of these Application Notes.



6.1.6. Routing Policies

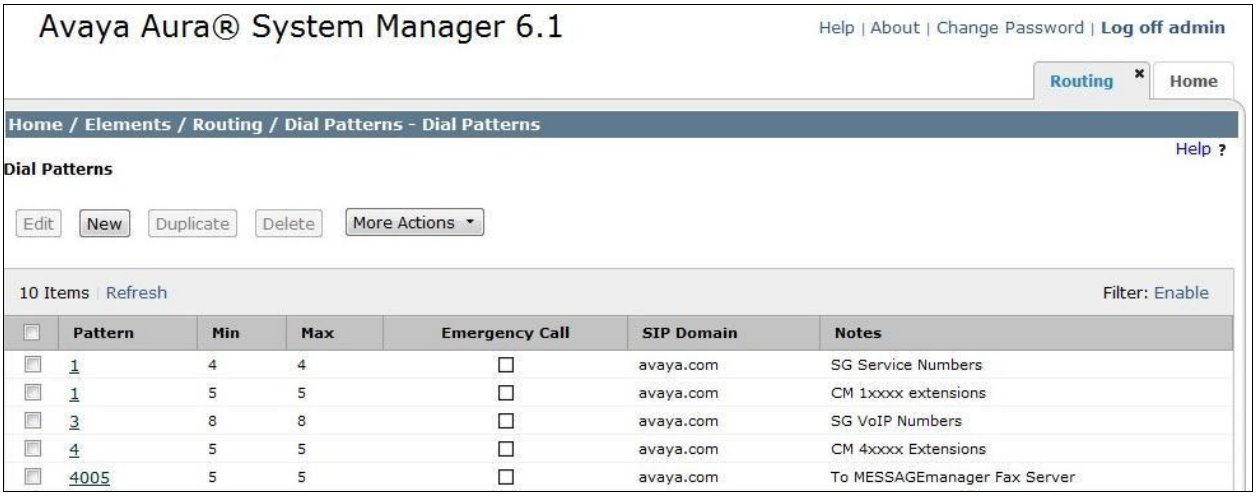
To view or change routing policies, select **Routing > Routing Policies**. Click on the checkbox corresponding to the name of a policy and **Edit** to edit an existing policy, or **New** to add a policy. Enter a descriptive name for the routing policy, and select the MESSAGEmanager IP Fax server as the route destination by clicking "Select".

Click the **Commit** button after changes are completed.



6.1.7. Dial Patterns

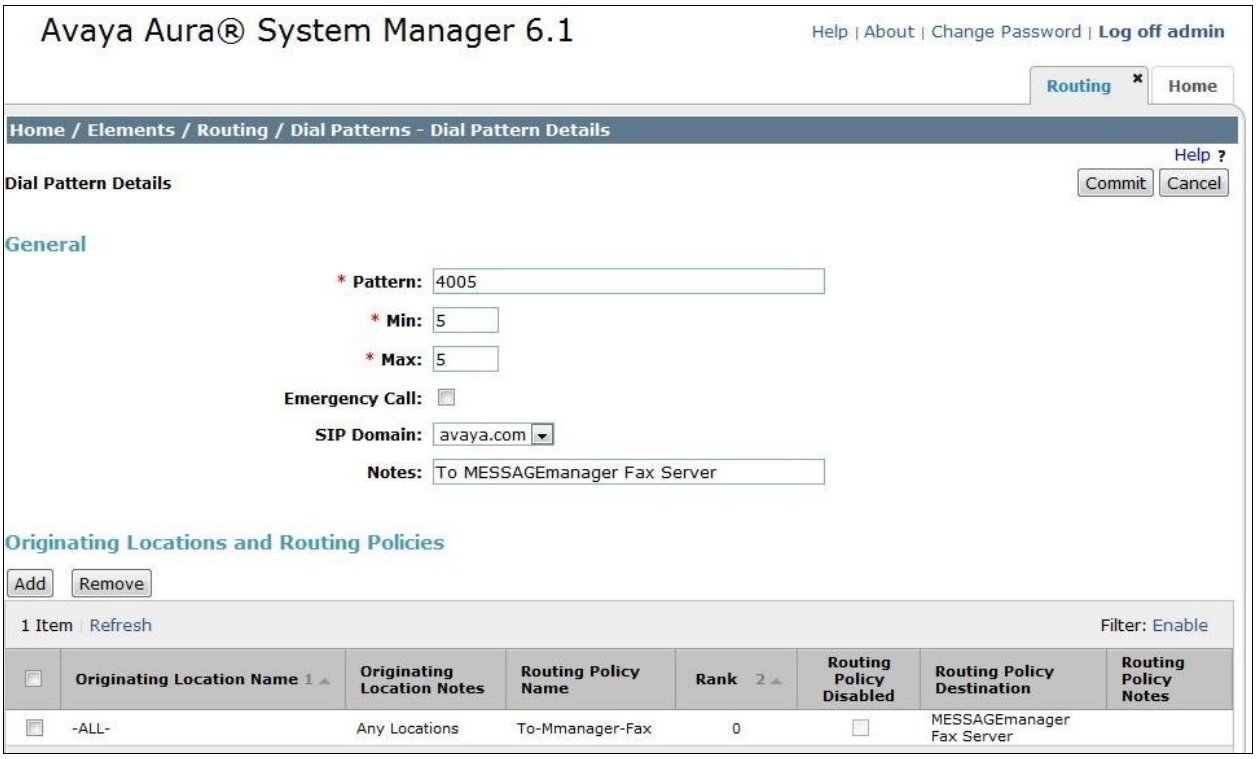
To view or change dial patterns, select **Routing > Dial Patterns**. Click on the checkbox corresponding to the name of a pattern and **Edit** to edit an existing pattern, or **New** to add a pattern.



Assign values for this command as shown in the following table.

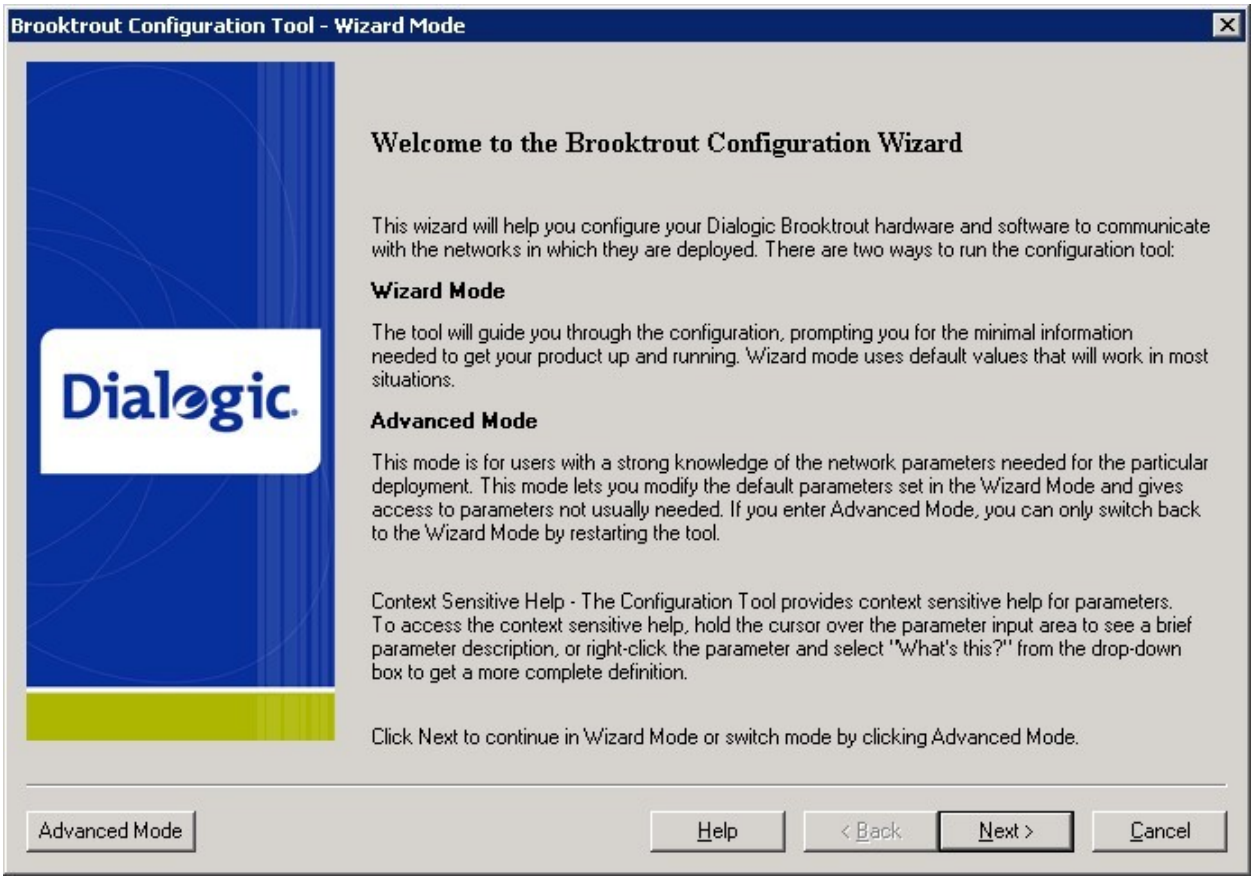
Parameter	Usage
Pattern	Enter the leading digits assigned for MESSAGEmanager IP Fax, as described in **Section 5.7**. In this testing, enter "4005".
Min	Enter the length of the MESSAGEmanager IP Fax extensions.
Max	Enter the length of the MESSAGEmanager IP Fax extensions.
SIP Domain	Select "avaya.com" from the drop-down menu.

Click the "Add" button, select the originating location of "All", and the routing policy defined in **Section 6.1.6**, and click the **Commit** button.



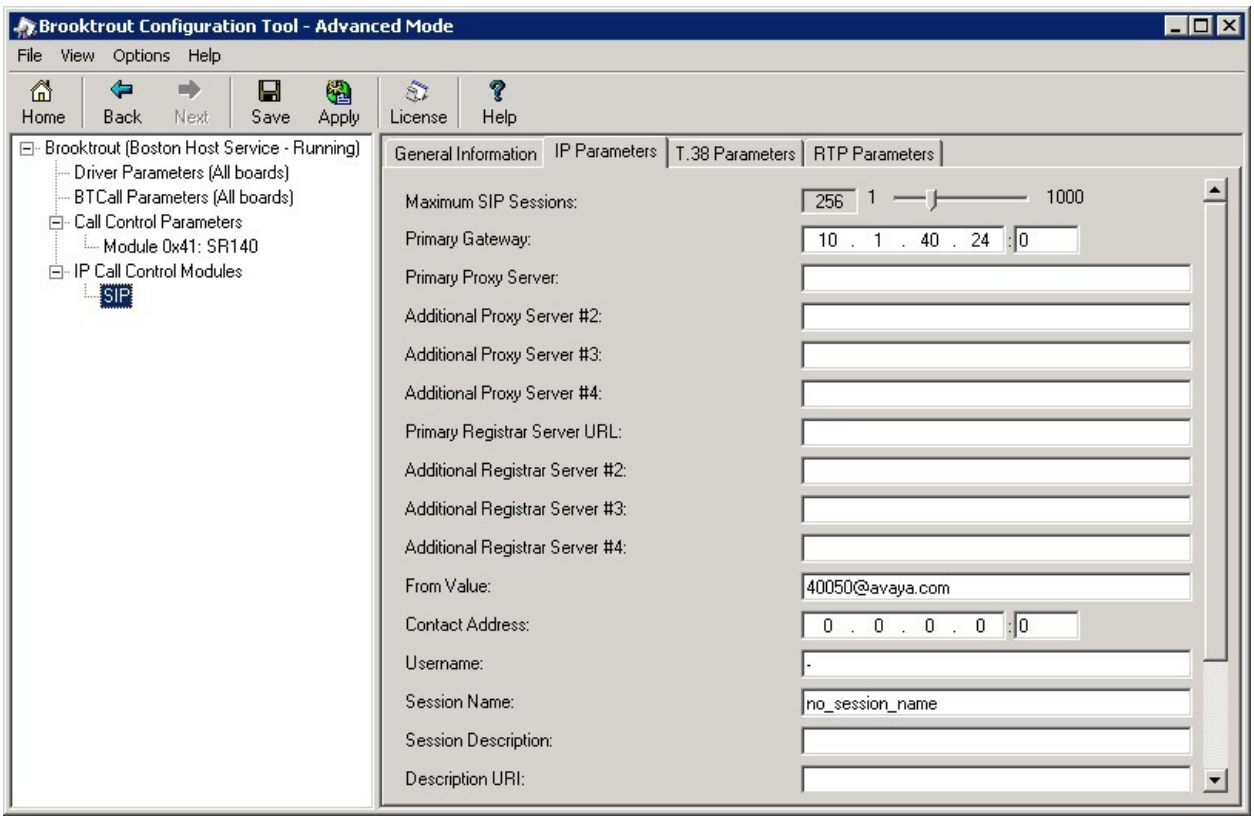
7. Configure MESSAGEmanager IP Fax

Only those configuration details concerning the interface to Avaya are shown within this section. Log in as Administrator from MESSAGEmanager IP Fax server, and click **Start > All Programs > Brooktrout > Brooktrout Configuration Tool**. The Brooktrout Configuration Wizard is as shown below. Click **Advanced Mode** to bypass the wizard.



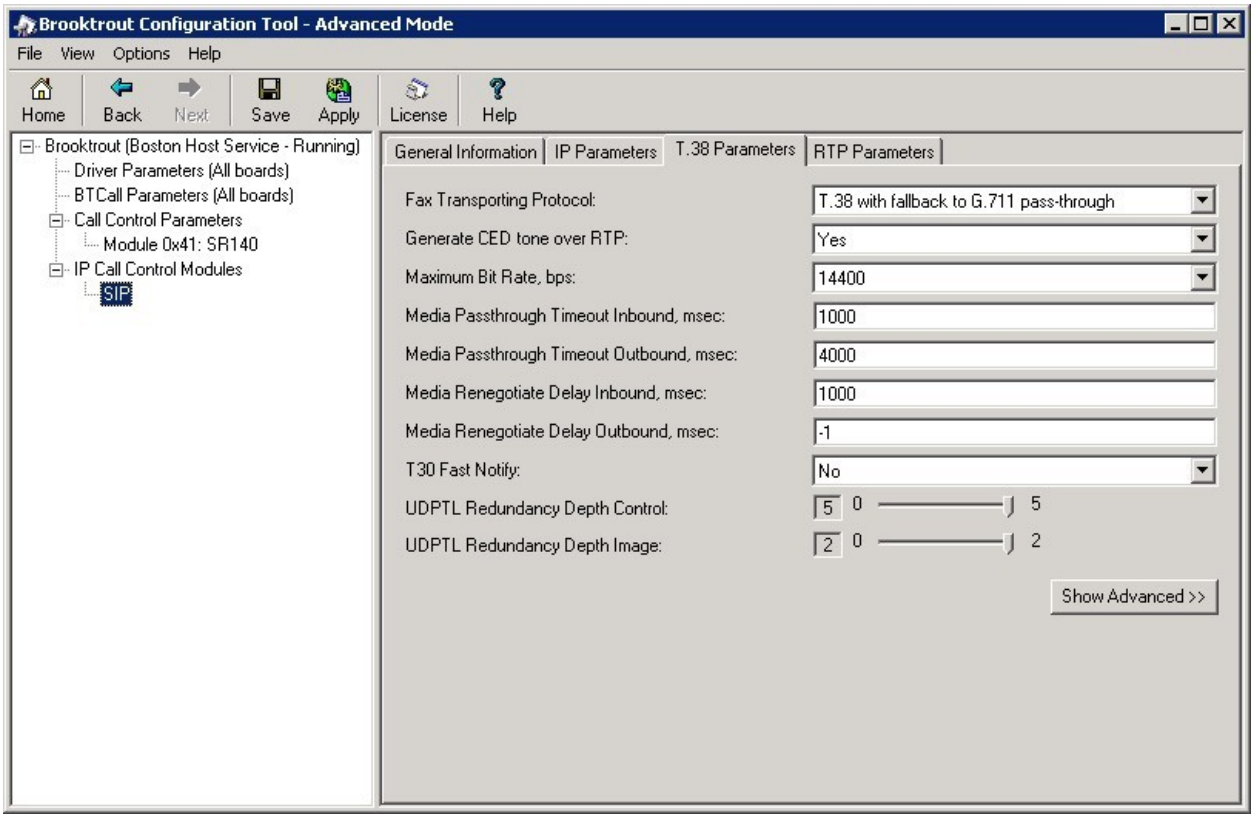
In the Advanced Mode window, select **Brooktrout > IP Call Control Modules > SIP** from the left pane, and then select the **IP Parameters** tab from right pane. Assign values as shown in the following table.

Parameter	Usage
Primary Gateway	Enter the IP Address of the Session Manager SIP Entity, as shown in **Figure 1**. The port was left at "0" to accept the default port of 5060.
From Value	Enter a SIP address assigned to MESSAGEmanager IP Fax, in this case **40050@avaya.com** is used.



Select the **T.38 Parameters** tab from right pane. Assign values as shown in the following table.

Parameter	Usage
Fax Transporting Protocol	Select "T.38 only" or "T.38 with fallback to G.711 pass-through" from the drop-down menu.
Maximum Bit Rate, bps	Select "14400" from the drop-down menu.



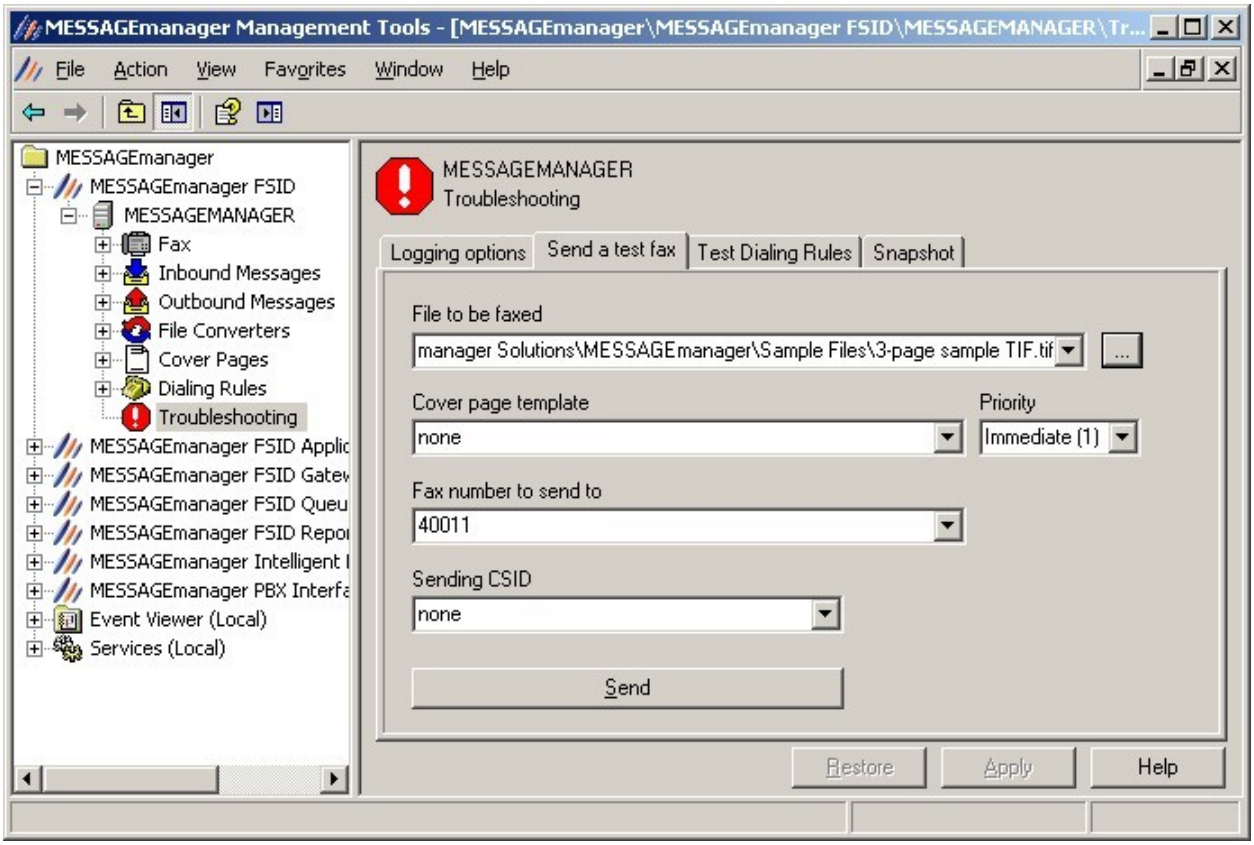
Click **Save** and then **Apply**. The Brooktrout services will need to be restarted to effect the changes.

8. Verification Steps

The correct installation and configuration of MESSAGEmanager IP Fax can be verified by performing the following steps shown below. Using the SAT terminal, enter the **status signaling-group n** command, where **n** is the number of the SIP signaling group which connects to Session Manager. Verify that the signaling group status is "in-service".

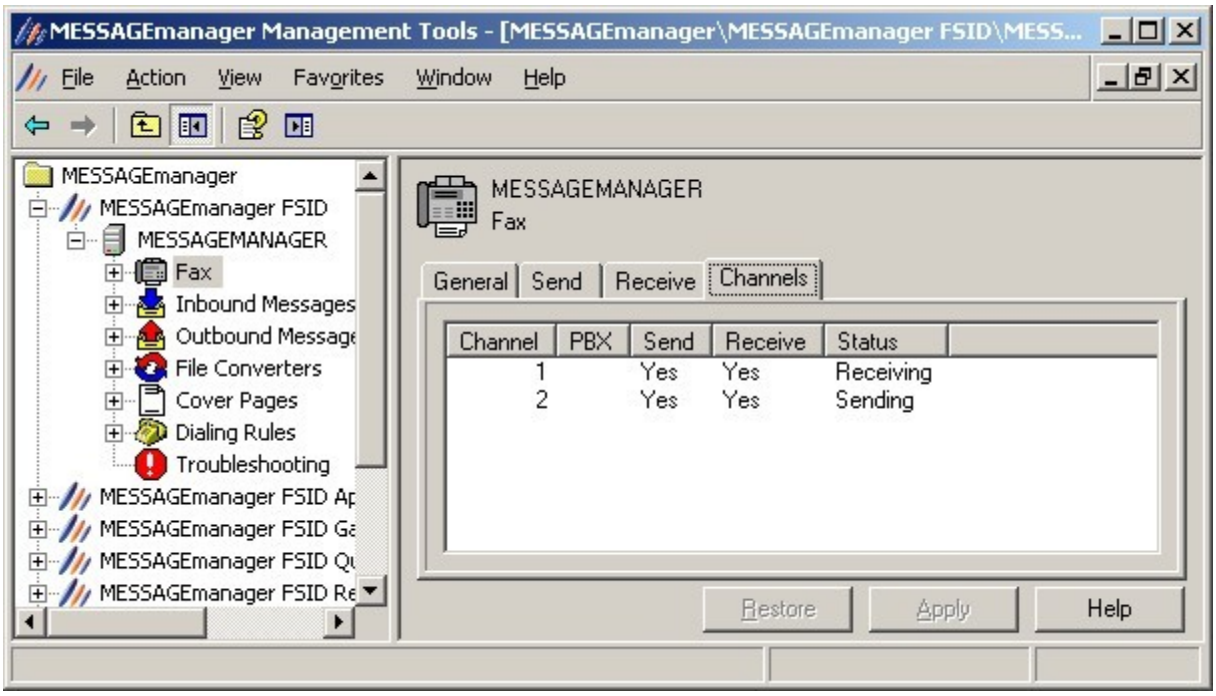
```
status signaling-group 3
                          STATUS SIGNALING GROUP

        Group ID: 3
      Group Type: sip

     Group State: in-service
```

From the MESSAGEmanager IP Fax server, click **Start > All Programs > MESSAGEmanager > MESSAGEmanager Server**. From the MESSAGEmanager Management Tools window, expand **MESSAGEmanager > MESSAGEmanager FSID > MESSAGEMANAGER** (which is the computer name of the server) and select **Troubleshooting**. On the right pane, select the **Send a test fax** tab. Select a sample TIF file from the MESSAGEmanager installed directory, enter the fax number and click **Send**.



From a fax machine, send a fax to MESSAGEmanager IP Fax.

To view the status of the channels, click **Fax** from the left pane and select the **Channels** tab on the right pane as shown below. Verify that the faxes are sent and received correctly from MESSAGEmanager IP Fax.



9. Conclusion

These Application Notes describe the compliance testing MESSAGEmanager IP Fax Server Software 10.1 with Avaya Aura® Communication Manager 6.0.1 and Avaya Aura® Session Manager 6.1. The fax functionality of MESSAGEmanager IP Fax was tested. MESSAGEmanager IP Fax passed all of the tests performed.

10. References

This section references documentation relevant to these Applications. Avaya product documentation, including the following, is available at http://support.avaya.com.

Information regarding MESSAGEmanager IP Fax is available here: http://www.mmanager.com/products_fax.aspx.

[1] *Installing and Configuring Avaya Aura® Communication Manager*, Doc ID 03-603558, Issue 1.3, Release 6.0.1, December 2010.

[2] *Administering Avaya Aura® Communication Manager*, Doc ID 03-300509, Release 6.0, June 2010.

[3] *Administering Avaya Aura® Session Manager*, Doc ID 03-603324, Release 6.1, November 2010.

[4] *Installing and Configuring Avaya Aura® Session Manager,* Doc ID 03-603473 Release 6.1, April 2011.

[5] *Maintaining and Troubleshooting Avaya Aura® Session Manager,* Doc ID 03-603325, Release 6.1, March 2011.

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