



Avaya Solution & Interoperability Test Lab

Application Notes for IP Trade Voice Trading Solution with Avaya Aura® Session Manager and Avaya Aura® Communication Manager using SIP Trunks – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for IP Trade Voice Trading Solution to interoperate with Avaya Aura® Session Manager and Avaya Aura® Communication Manager using SIP Trunks.

The IP Trade solution consists of a set of IP Trade turrets, a Turret Support Server (TSS), and a Turret Proxy to Open Line Dealing (TPO) server. The trading turrets, as well as the Open Line Dealing (OLD) extensions defined in the TPO server, register as SIP endpoints with Avaya Aura® Session Manager. This enables IP Trade devices to integrate with Avaya Aura® Communication Manager, Avaya Aura® Session Manager and, in the case of the turrets, Avaya Modular Messaging.

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

Application Notes describe the procedures for configuring IP Trade's IP-based trading floor solution to communicate with Avaya Aura® Session Manager, Avaya Aura® Communication Manager and Avaya Modular Messaging (MM).

The IP Trade solution consists of the following components:

- **Turret Support Server (TSS):** The TSS provides security extensions, end user profile management, hunt group capabilities and bridges to middle-office applications.
- **IP Trade turret:** The IP Trade turret is SIP-based VoIP trading phone. Its call handling panel uses Avaya Communication Manager feature name extensions (FNE) and/or IP Trade Profile internal features to provide a variety of call features (e.g., Hold, Transfer, Conference, Call Park, Call Forward, Call Pickup, Call Dispatch, Barge-In, etc.).
- **Turret Proxy to Open Line Dealing (TPO) Server:** The TPO server serves as a proxy phone between a remote place via private wire or lines (referred to DDI Lines) registered to the local Avaya Communication Manager and locally shared on IP Trade end-users (turrets). When a local IP Trade end-user presses the button for respective private wire to reach the remote place, all of the other local IP Trade end users see that the line is in use and can also connect to the same remote location by means of the TPO conferencing and bridging, connecting IP Trade end user to the same "Open Line" locally over a single call to the remote location, and are each able to speak publicly or privately to that remote location
- While private wires are direct (point-to-point) connections to remote places, the same concept is applied to DDI Lines that are shared among local IP Trade end users. Shared DDI Line offer the following capabilities:
 - *Common lamping* – Shared DDI lines can be mapped on programmable keys on several traders position and provide them in real-time with the state of line.
 - *Line sharing* – Once the line is engaged on a call, traders can join/leave the line without any restrictions as they would do on private wires; similarly, the distant party can be put on hold by any trader and resumed from another position.
 - *Floating & line coverage* – Whether call events are monitored - or not - and whether ringing lines are alerted in the float area - or not - can now be selected for each individual line and activated/deactivated on-demand.
 - *Telephony functions* – The main telephony functions remain available on shared DDI lines and enables traders to transfer the distant party to another extension, to conference external parties – i.e. IP phones, external lines –, to forward the line, to switch "do not disturb" on/off and to receive MWI notifications. DTMF are also supported.

In these Application Notes, the TPO server registers many SIP endpoints as Shared DDI Lines or as single lines for private wires with Avaya Aura® Session Manager . One Avaya IP extension was used for a simulated private wire remote place.

2. General Test Approach and Test Results

The feature test cases were performed manually. Calls were manually established among IP Trade turren users with Avaya SIP, Avaya H.323, PSTN users, and/or the Avaya Modular Messaging voicemail pilot to verify MWI scenarios.

The serviceability test cases were performed manually by disconnecting and reconnecting the LAN connection to IP Trade TSS.

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 interoperability compliance test included feature and serviceability testing. The feature testing included subscriber login, greeting, leaving and retrieving voice message, message waiting indicator, unconditional call forward, blind and attended transfer, hold and resume, conference, and Private Line Automatic Ringdown (PLAR).

The serviceability testing focused on verifying the ability of IP Trade Voice Trading Solution to recover from adverse conditions, such as disconnecting/reconnecting the LAN connection to the TSS server.

2.2. Test Results

All test cases were executed and verified. The following were the observations on IP Trade from the compliance testing.

- Avaya did not interpret DMTF digits from IP Trade endpoints, so the DTMF tests only covered the IP Trade interpretation of DMTF digits from the Avaya side. During the voicemail retrieving scenario, DTMF from IP Trade side was verified.

2.3. Support

Technical support on IP Trade Voice Trading Solution can be obtained through the following:

- **Phone:** +32 494 53 41 94
- **Email:** Support@iptrade-networks.com

3. Reference Configuration

As shown in **Figure 1** below, IP Trade Voice Trading Solution consists of the Turret Support Server, Turret Proxy to Open Line Dealing Server, and IP Trade turret. During the compliance test, IP Trade turrets are registered with Session Manager.

The detailed administration of basic connectivity among Avaya Aura® Communication Manager, Avaya Aura® Session Manager, and Avaya Modular Messaging is not the focus of these Application Notes and will not be described.

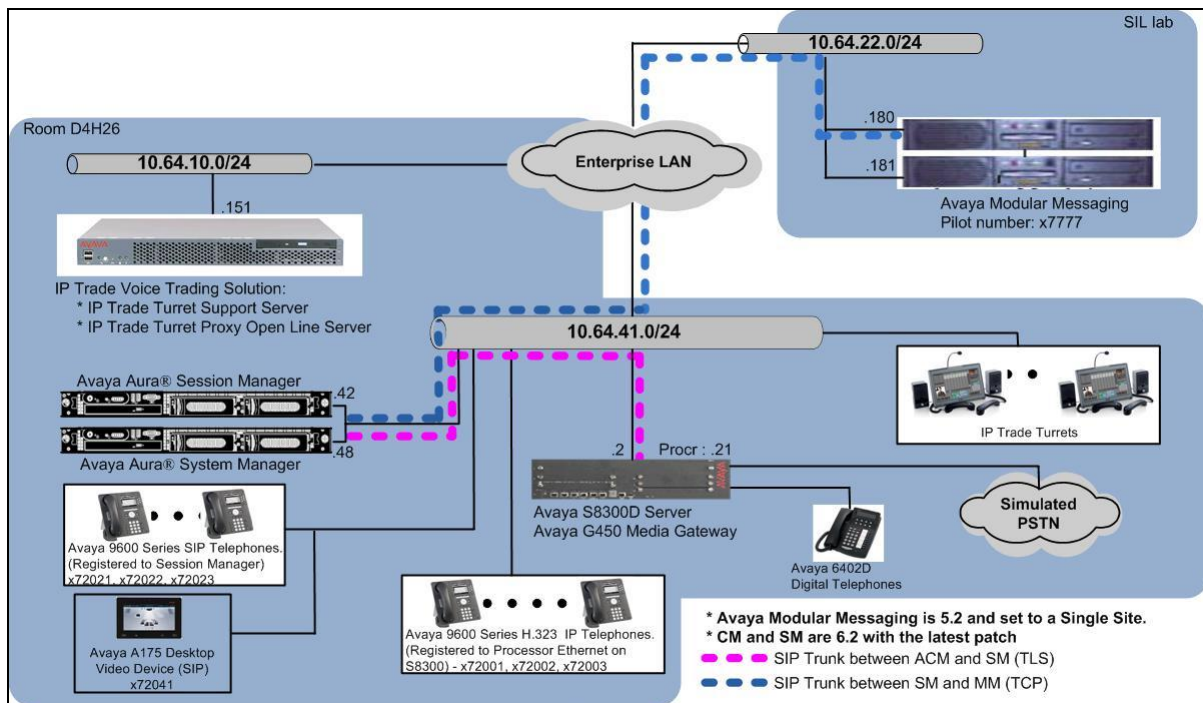


Figure 1: Test Configuration of IP Trade

4. Equipment and Software Validated

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

Equipment	Software
Avaya Aura® Communication Manager on Avaya S8300D Server	6.2 (R016x.02.0.823.0-20001)
Avaya Aura® Session Manager	6.2.2.0622005
Avaya Aura® System Manager	6.2.12.0
Avaya Modular Messaging <ul style="list-style-type: none">• Messaging Storage Server• Messaging Application Server	5.2 SP9 P4 5.2 SP9 P4
Avaya A175 Desktop Video Device (SIP)	1.1.1
Avaya 96xx IP Telephone (H.323)	3.1
Avaya 96xx IP Telephone (SIP)	2.6.8
IP Trade Voice Trading Solution <ul style="list-style-type: none">• Turret Support Server• Turret Proxy to Open Line Dealing Server• IP Trade turret	7.1.20852 7.1.20843 7.1.21096

5. Configure Avaya Aura® Communication Manager

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

- Verify Communication Manager license
- Administer SIP trunk group
- Administer SIP signaling group
- Administer IP network region
- Administer IP codec set
- Administer route pattern
- Administer private numbering
- Administer uniform dial plan
- Administer AAR analysis
- Administer public Unknown Numbering for PSTN

5.1. Verify Communication Manager License

Log into the System Access Terminal (SAT) to verify that the Communication Manager license has proper permissions for features illustrated in these Application Notes. Use the “display system-parameters customer-options” command. Navigate to **Page 2**, and verify that there is sufficient remaining capacity for SIP trunks by comparing the **Maximum Administered SIP Trunks** field value with the corresponding value in the **USED** column.

The license file installed on the system controls the maximum permitted. If there is insufficient capacity, contact an authorized Avaya sales representative to make the appropriate changes.

display system-parameters customer-options		Page 2 of 11
OPTIONAL FEATURES		
IP PORT CAPACITIES		USED
Maximum Administered H.323 Trunks:	4000	27
Maximum Concurrently Registered IP Stations:	2400	3
Maximum Administered Remote Office Trunks:	4000	0
Maximum Concurrently Registered Remote Office Stations:	2400	0
Maximum Concurrently Registered IP eCons:	68	0
Max Concur Registered Unauthenticated H.323 Stations:	100	0
Maximum Video Capable Stations:	2400	2
Maximum Video Capable IP Softphones:	2400	2
Maximum Administered SIP Trunks:	4000	70
Maximum Administered Ad-hoc Video Conferencing Ports:	4000	0
Maximum Number of DS1 Boards with Echo Cancellation:	80	0

5.2. Administer SIP Trunk Group

Use the “add trunk-group n” command, where “n” is an available trunk group number, in this case “92”. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Group Type:** “sip”
- **Group Name:** A descriptive name.
- **TAC:** An available trunk access code.
- **Service Type:** “tie”

```
add trunk-group 92                                     Page 1 of 21
TRUNK GROUP
Group Number: 92                                     Group Type: sip          CDR Reports: y
Group Name: SM 41 42                                COR: 1                  TN: 1                TAC: 1092
Direction: two-way                                Outgoing Display? y
Dial Access? n                                    Night Service:
Queue Length: 0
Service Type: tie                                Auth Code? n
                                                Member Assignment Method: auto
                                                Signaling Group: 92
                                                Number of Members: 10
```

Navigate to **Page 3**, and enter “private” for **Numbering Format**.

```
add trunk-group 92                                     Page 3 of 21
TRUNK FEATURES
ACA Assignment? n                                Measured: none
                                                Maintenance Tests? y
Numbering Format: private
UI Treatment: service-provider
Replace Restricted Numbers? n
Replace Unavailable Numbers? n
Modify Tandem Calling Number: no
```

5.3. Administer SIP Signaling Group

Use the “add signaling-group n” command, where “n” is an available signaling group number, in this case “92”. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Group Type:** “sip”
- **Transport Method:** “tls”
- **Near-end Node Name:** An existing C-LAN node name or procr.
- **Far-end Node Name:** The existing Session Manager node name.

- **Near-end Listen Port:** An available port for integration on Communication Manager.
- **Far-end Listen Port:** The same port number as in **Near-end Listen Port**.
- **Far-end Network Region:** A network region for integration with IP Trade turrets, in this case “1”.
- **Far-end Domain** Set to “avaya.com”

```

add signaling-group 92                                     Page 1 of 2
                                SIGNALING GROUP

Group Number: 92                                Group Type: sip
IMS Enabled? n                                Transport Method: tls
Q-SIP? n
IP Video? y                                Priority Video? n                                Enforce SIPS URI for SRTP? y
Peer Detection Enabled? y Peer Server: SM

Near-end Node Name: procr                                Far-end Node Name: SM-1
Near-end Listen Port: 5061                                Far-end Listen Port: 5061
                                                Far-end Network Region: 1

Far-end Domain:avaya.com

Incoming Dialog Loopbacks: eliminate                                Bypass If IP Threshold Exceeded? n
                                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? y                                Initial IP-IP Direct Media? n
H.323 Station Outgoing Direct Media? n                                Alternate Route Timer(sec): 6

```

5.4. Administer IP Network Region

Use the “change ip-network-region n” command, where “n” is the existing far-end network region number used by the SIP signaling group from **Section 5.3**. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Authoritative Domain:** “avaya.com”
- **Codec Set:** Set to “1”
- **Intra-region IP-IP Direct Audio:** “yes”
- **Inter-region IP-IP Direct Audio:** “yes”

```

change ip-network-region 1                               Page 1 of 20
                                IP NETWORK REGION

Region: 1
Location: 1                                Authoritative Domain: avaya.com
Name:
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

```


5.5. Administer IP Codec Set

Use the “change ip-codec-set n” command, where “n” is the codec set number from **Section 5.4**. Update the audio codec types in the **Audio Codec** fields as necessary.

Note that IP Trade supports the G.711MU and G.711A codecs. During the compliance test, G.711MU was utilized.

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:			
3:			
4:			

5.6. Administer Route Pattern

Use the “change route-pattern n” command, where “n” is an existing route pattern number to be used to reach IP Trade turrets, in this case “92”. Enter the following values for the specified fields, and retain the default values for the remaining fields.

- **Pattern Name:** A descriptive name.
- **Grp No:** The SIP trunk group number from **Section 5.2**.
- **FRL:** A level that allows access to this trunk, with 0 being least restrictive.

change route-pattern 92												Page	1 of	3
Pattern Number: 92 Pattern Name: no IMS SIP trk														
SCCAN? n Secure SIP? n														
Grp	FRL	NPA	Pfx	Hop	Toll	No.	Inserted					DCS/	IXC	
No			Mrk	Lmt	List	Del	Digits					QSIG		
													Intw	
1: 92 0												n	user	
2:												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:	v	v	v	v	v	n	n	rest		none				

5.7. Administer Private Numbering

Use the “change private-numbering 0” command, to define the calling party number to send to IP Trade. Add an entry for the trunk group defined in **Section 5.2**. In the example shown below, all calls originating from a 5-digit extension beginning with 72 and routed to trunk group 92 will result in a 5-digit calling number. The calling party number will be in the SIP “From” header.

change private-numbering 0					Page 1 of 2
NUMBERING - PRIVATE FORMAT					
Ext	Ext	Trk	Private	Total	
Len	Code	Grp(s)	Prefix	Len	
5	72	92		5	Total Administered: 10
5	72	93		5	Maximum Entries: 540

5.8. Administer Uniform Dial Plan

This section provides a sample AAR routing used for routing calls with dialed digits 7206x to IP Trade. Note that other methods of routing may be used. Use the “change uniform-dialplan 0” command, and add an entry to specify the use of AAR for routing digits 7206x, as shown below.

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
7206	5	0		aar	n

5.9. Administer AAR Analysis

Use the “change aar analysis 0” command, and add an entry to specify how to route calls to 7206x. In the highlighted example shown below, calls with digits 7206x will be routed using route pattern “92” from **Section 5.6**.

change aar analysis 0					Page 1 of 2
AAR DIGIT ANALYSIS TABLE					
Location: all					Percent Full: 3
Dialed	Total	Route	Call	Node	ANI
String	Min Max	Pattern	Type	Num	Reqd
7206	5 5	92	unku		n

5.10. Administer public Unknown Numbering for PSTN

Use the “change public-unknown-numbering 0” command, to define the calling party number to send to PSTN from IP Trade turrets. During the compliance test, the trunk group 80 was designated to go out to PSTN. In the example shown below, all calls originating from a 5-digit extension beginning with 7206 are routed to trunk group 80 will result in a 5-digit calling number.

change public-unknown-numbering 0					Page 1 of 2
NUMBERING - PUBLIC/UNKNOWN FORMAT					
Ext	Ext	Trk	CPN	Total	
Len	Code	Grp(s)	Prefix	CPN	
				Len	
5	7206	80		5	Total Administered: 6
					Maximum Entries: 240

6. Configure Private Line Automatic Ringdown (PLAR)

This section describes the procedures for configuring Session Manager and Communication Manager to support PLAR trunks to the Financial Circuit Carrier Network.

To terminate the PLAR trunk facilities to the PSTN, a DS1 circuit pack using robbed-bit signaling must be administered. Enter “add ds1 xxyy”, where “xxyy” is the Avaya Media Gateway slot where a DS1 circuit pack has been added, and enter the following values, retaining the defaults for the remaining fields:

- **Name:** Enter a descriptive name.
- **Line Coding:** Enter the line coding scheme to be used for this facility (typically, PLAR trunks use “b8zs”).
- **Framing Mode:** Enter the framing mode to be used for this facility (typically, PLAR trunks use “esf” framing).
- **Signaling Mode:** Enter “robbed-bit”.

```
change ds1 1a10                                Page 1 of 2
                                         DS1 CIRCUIT PACK

      Location: 01A10                          Name: IP Trade PLAR Trunk
      Bit Rate: 1.544                        Line Coding: b8zs
Line Compensation: 1                        Framing Mode: esf
      Signaling Mode: robbed-bit

Interface Companding: mulaw
      Idle Code: 11111111

Slip Detection? n                        Near-end CSU Type: other
```

6.1. Administer PLAR Trunk Group

To configure a PLAR trunk, enter “add trunk-group x”, where “x” is an available trunk group to create a trunk group that will allow access to a given PLAR trunk. Enter the following values:

- **Group Type:** Enter “tie”.
- **Group Name:** Enter a descriptive name.
- **TAC:** Enter an available Trunk Access Code that is consistent with the provisioned dial plan. The TAC is entered at the Target in the respective TPO Place configuration.
- **Dial Access:** Enter “y” to allow the PLAR trunk to be seized directly by the associated TPO Place, to connect with a specific remote location.
- **Incoming Destination:** Enter the TPO Place Local extension associated with this PLAR trunk.
- **Trunk Type (in/out):** Enter “auto/auto”

```
add trunk-group 11                                     Page 1 of 22
                                     TRUNK GROUP
Group Number: 11                                     Group Type: tie          CDR Reports: y
Group Name: S8720-PRI trunk                          COR: 1                 TN: 1                 TAC: 1011
Direction: two-way      Outgoing Display? n Trunk Signaling Type:
Dial Access? y          Busy Threshold: 255 Night Service:
Queue Length: 0          Incoming Destination: 72065
Comm Type: voice        Auth Code? n
                        Trunk Flash? n
Trunk Type (in/out): auto/auto
```

On **Page 2**, set the **Sig Bit Inversion** field to “A&B”.

```
add trunk-group 11                                     Page 2 of 22
    Group Type: tie                                     Trunk Type: auto/auto
TRUNK PARAMETERS
    Outgoing Dial Type: tone                            Incoming Rotary Timeout(sec):5
                                                         Incoming Dial Type:tone
                                                         Disconnect Timing(msec):500
    Digit Treatment:                                     Digits:
                                                         Sig Bit Inversion: A&B
    Analog Loss Group: 9                                Digital Loss Group: 13
    Incoming Dial Tone? y
```


On **Page 6**, enter the **Port** location of the specific DS1 channel connected to the remote destination to be reached via the corresponding TPO Place. (This should be the only member of this trunk group.)

add trunk-group 11									
Page 6 of 22									
TRUNK GROUP									
Administered Members (min/max): 1/1									
Total Administered Members: 1									
GROUP MEMBER ASSIGNMENTS									
Port	Code	Sfx	Name	Night	Mode	Type	Ans	Delay	
1:	01A1001	TN464	F						

7. Configure Avaya Aura® Session Manager

This section provides the procedures for configuring Session Manager. Since IP Trade turrets are registered with Session Manager as SIP endpoints, this section only describes creating users.

Access the System Manager web interface by using the URL “https://ip-address” in an Internet browser window, where “ip-address” is the IP address of the System Manager server. Log in using the appropriate credentials.


Avaya Aura® System Manager 6.2

Home / Log On

Log On

Recommended access to System Manager is via FQDN.

[Go to central login for Single Sign-On](#)

If IP address access is your only option, then note that authentication will fail in the following cases:

- First time login with "admin" account
- Expired/Reset passwords

User ID:
Password:


Log On Cancel

[Change Password](#)

In the subsequent screen (not shown), select **Users** → **User Management** to display the **User Management** screen below. Select **Manage Users** from the left pane, and click **New** in the subsequent screen (not shown) to add a new user for the IP Trade turret solution. Users are required for the IP Trade Turret solution for the following purposes:

- Turret User Primary Extension assignment
- TPO lines linked to TPO Places for DDI Shared Lines
- TPO lines linked to TPO Places for (PLAR) private wire access to remote Financial locations

Note: IP Trade Turret Users can be configured to use only a Global Default DDI line, without any Turret User Primary Extension.



Avaya Aura® System Manager 6.2

Last Logged on at December 21, 2012 3:27 PM

[Help](#) | [About](#) | [Change Password](#) | [Log off admin](#)

User Management

User Management

Home

User Management

Manage Users

Public Contacts

Shared Addresses

System Presence ACLs

Home / Users / User Management

User Management

Sub Pages

Action	Description	Help
Manage Users	Provides a central user administration to create, view, modify, and delete user profiles. Also, you can manage communication profiles, roles, and groups for users.	Users management
Public Contacts	Create, view, edit, and delete the public contacts that can be shared by all users in the enterprise.	Public Contacts management
Shared Addresses	Configure and manage common addresses that can be specified for one or more users in the enterprise.	Shared Addresses management
System Presence ACLs	Configure and manage Presence access rules for users.	Presence ACLs management

When adding new SIP user, use the option to automatically generate the SIP station in Communication Manager, after adding a new SIP user. To create a new user, provide the following information:

Identity section

- **Last Name** – Enter last name of user.
- **First Name** – Enter first name of user.
- **Login Name** – Enter extension number@sip domain. The sip domain is defined as Authoritative Domain in **Section 5.3**.
- **Authentication Type** – Verify “Basic” is selected.
- **Password** – Enter password to be used to log into System Manager.
- **Confirm Password** – Repeat value entered above.

AVAYA Avaya Aura® System Manager 6.2

Last Logged on at December 20, 2012 5:26 PM Help | About | Change Password | User Management

Home / Users / User Management / Manage Users

New User Profile Commit & Continue Commit Cancel

Identity * Communication Profile * Membership Contacts

Identity

* Last Name: IP-Trade

* First Name: 72061

Middle Name:

Description:

* Login Name: 72061@avaya.com

* Authentication Type: Basic

* Password:

* Confirm Password:

Localized Display Name: IPTrade

Endpoint Display Name: IPTrade

Title:

Language Preference: English (United States)

Time Zone: (-7:0)Mountain Time (US & Canada): Chihuahua

Communication Profile section

- **Communication Profile Password** – Type Communication profile password in this field. This password is used when registering a SIP endpoint to the SM.
- **Confirm Password** – Repeat value entered above.

Avaya Aura® System Manager 6.2

Last Logged on at December 20, 2012 5:26 PM

Help | About | Change Password

User Management

Home / Users / User Management / Manage Users

New User Profile

Commit & Continue Commit Cancel

Identity * Communication Profile * Membership Contacts

Communication Profile

Communication Profile Password:

Confirm Password:

New Delete Done Cancel

Name
Primary

Select : None

* Name:

Default : ☐

Communication Profile sub-section

- **Fully Qualified Address** – Enter the extension of the user
- Click **Add** button

Communication Address

New Edit Delete

Type	Handle	Domain
No Records found		

Type: Avaya SIP

* Fully Qualified Address: 72061 @ avaya.com

Add Cancel

Session Manager Profile section

- **Primary Session Manager** – Select one of the Session Managers.
- **Origination Application Sequence** – Select Application Sequence defined for Communication Manager.
- **Termination Application Sequence** – Select Application Sequence defined for Communication Manager.
- **Home Location** – Select Location defined.

☒ **Session Manager Profile** ▼

*** Primary Session Manager**

SessionManager ▼

Secondary Session Manager

(None) ▼

Origination Application Sequence

AppSeq-S8300D ▼

Termination Application Sequence

AppSeq-S8300D ▼

Conference Factory Set

(None) ▼

Survivability Server

(None) ▼

*** Home Location**

41-subnet ▼

Endpoint Profile section

- **System** – Select Managed Element.
- **Profile Type** – Select **Endpoint**.
- **Use Existing Endpoints** - Leave unchecked to automatically create new endpoint when new user is created. Or else, check the box if endpoint is already defined in Communication Manager.
- **Extension** - Enter same extension number used in this section.
- **Template** – Select template for type of SIP phone
- **Security Code** – Enter numeric value used to logon to SIP telephone. (**Note:** this field must match the value entered for the Shared Communication Profile Password field.
- **Port** – Select **IP**
- **Voice Mail Number** – Enter **Pilot Number** for Avaya Modular Messaging if installed. Or else, leave field blank. This feature is not used during the compliance test.
- **Delete Endpoint on Unassign of Endpoint from User or on Delete User**– Check the box to automatically delete station when Endpoint Profile is un-assigned from user.

CM Endpoint Profile

* System Element-S8300D

* Profile Type Endpoint

Use Existing Endpoints ☐

* Extension 72061 Endpoint Editor

* Template DEFAULT_9630SIP_CM_6_2

Set Type 9630SIP

Security Code

* Port IP

Voice Mail Number 72061

Preferred Handle (None)

Delete Endpoint on Unassign of Endpoint from User or on Delete User. ☒

Override Endpoint Name ☒

Repeat above step as necessary to configure additional extension. During the compliance test, the following extensions were created:

- 72061- 72063 – (3) IP Trade Turret Users
- 72064 – Risk Dept. Line
- 72065 – Simulated Ring-down (PLAR). Refer to **Section 6.1**

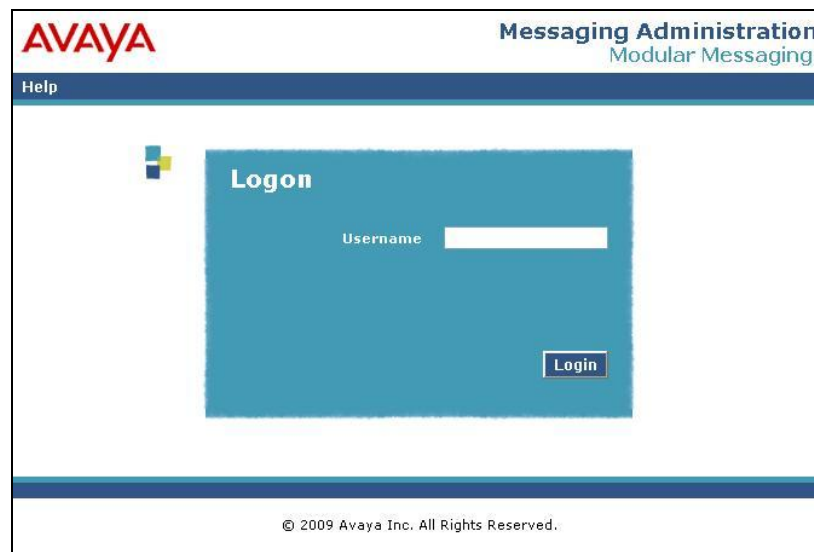
8. Configure Avaya Modular Messaging MSS

This section provides the procedures for configuring IP Trade turret users as local subscribers on Avaya Modular Messaging. The subscriber management is configured on the Messaging Storage Server (MSS) component. The configuration procedures include the following areas:

- Launch messaging administration
- Administer subscriber extension ranges
- Administer subscribers

8.1. Launch Messaging Administration

Access the MSS web interface by using the URL “http://ip-address” in an Internet browser window, where “ip-address” is the IP address of the MSS server. The **Logon** screen is displayed. Log in using a valid user name and password. The **Password** field will appear after a value is entered into the **Username** field. The **Messaging Administration** screen appears (not shown).



The screenshot displays the Avaya Messaging Administration web interface. At the top left is the Avaya logo, and at the top right is the text "Messaging Administration" with "Modular Messaging" below it. A "Help" link is visible in the top left corner. The main content area features a blue "Logon" box with a "Username" label and a text input field. A "Login" button is located at the bottom right of the box. A small Avaya logo is also present to the left of the Logon box. The footer contains the copyright notice "© 2009 Avaya Inc. All Rights Reserved."

8.2. Administer Subscriber Extension Ranges

Select **Messaging Administration** → **Networked Machines** from the left pane, to display the **Manage Networked Machines** screen. Select the MSS server from the table listing, and click **Edit the Selected Networked Machine** toward the bottom right of the screen.

AVAYA Modular Messaging
Messaging Administration

Help Log Off This server: 10.64.22.181

Manage Networked Machines

Machine	IP Address	Machine Type	Total Subs
alpinemss1	10.64.22.181	local	24

Buttons:

- Display Report of Networked Machines
- Delete the Selected Networked Machine
- Add a New Networked Machine
- Edit the Selected Networked Machine
- Display Network Snapshot
- Display Report of Networked Machine Ranges

The **Edit Networked Machine** screen is displayed. Under the **MAILBOX NUMBER RANGES** section, locate an available entry line and enter the desired starting and ending mailbox numbers to be used for the IP Trade subscribers as necessary. In the compliance testing, the existing entry covered the 7206x extensions used by the IP Trade turret users.

AVAYA Modular Messaging Messaging Administration
This server: 10.64.22.181

Help Log Off

Messaging Administration

- Subscriber Management
- Activity Log Configuration
- Messaging Attributes
- Classes-of-Service
- Enhanced-Lists
- Sending Restrictions
- System Administration
- Request Remote Update
- Networked Machines
- Trusted Servers

Server Administration

- Configure Using DCT
- TCP/IP Network Configuration
- External Hosts
- MAS Host Setup
- MAS Host Send
- Windows Domain Setup
- Console Reboot Option
- Date/Time/NTP Server
- Syslog Server
- Modem/Terminal Display
- Modem/Terminal Configuration

Machine Name alpinemss1 **Password** **Confirm Password**

IP Address 10.64.22.181 **Machine Type** tcpip

Mailbox Number Length 5 **Default Community** 1

Updates In yes **Updates Out** yes

LDAP Port 56389 **Log Updates In** no

MAILBOX NUMBER RANGES

Prefix	Starting Mailbox Number	Ending Mailbox Number
	00000	99999

8.3. Administer Subscribers

Select **Messaging Administration** → **Subscriber Management** from the left pane, to display the **Manage Subscribers** screen. For the **Local Subscriber Mailbox Number** field toward the top of the screen, enter the first IP Trade turret user extension to add as a local subscriber, in this case “72061”. Click **Add or Edit**.

AVAYA Modular Messaging Messaging Administration
This server: 10.64.22.181

Help Log Off

Messaging Administration

- Subscriber Management
- Activity Log Configuration
- Messaging Attributes
- Classes-of-Service
- Enhanced-Lists
- Sending Restrictions
- System Administration
- Request Remote Update
- Networked Machines
- Trusted Servers

Server Administration

- Configure Using DCT
- TCP/IP Network Configuration
- External Hosts
- MAS Host Setup
- MAS Host Send
- Windows Domain Setup
- Console Reboot Option
- Date/Time/NTP Server
- Syslog Server
- Modem/Terminal Display
- Modem/Terminal Configuration

Manage Subscribers

• **Local Subscriber Mailbox Number** **Add or Edit**

	Machine Name	Local Subscriber Mailboxes	Total Subscribers	Filtered Subscribers
• Local Subscribers	alpinemss1	23	24	24
• Remote Subscribers	internet		0	0

The **Add Local Subscriber** screen is displayed next. Enter the desired string into the **Last Name**, **First Name**, and **Password** fields.

In the compliance testing, the same telephone extensions for the IP Trade subscribers were used for the **Mailbox Number**, **Numeric Address** fields. Select the appropriate **Class Of Service**, and retain the default values in the remaining fields.

Scroll down to the bottom of the screen and click **Save** (not shown). Repeat this section to add all IP Trade subscribers.

The screenshot displays the Avaya Modular Messaging Administration web interface. The top header includes the Avaya logo, 'Modular Messaging Administration', and the server IP '10.64.22.181'. A left-hand navigation menu lists various administrative tasks. The main content area is titled 'Add Local Subscriber' and contains a 'BASIC INFORMATION' section with several input fields. The fields are: *Last Name (IPTrade-1), First Name (72061), *Password (masked with dots), *Mailbox Number (72061), *Numeric Address (72061), PBX Extension (empty), *Class Of Service (0 - class00), and *Community ID (1). Red boxes highlight the *Last Name, *Password, *Mailbox Number, and *Numeric Address fields.

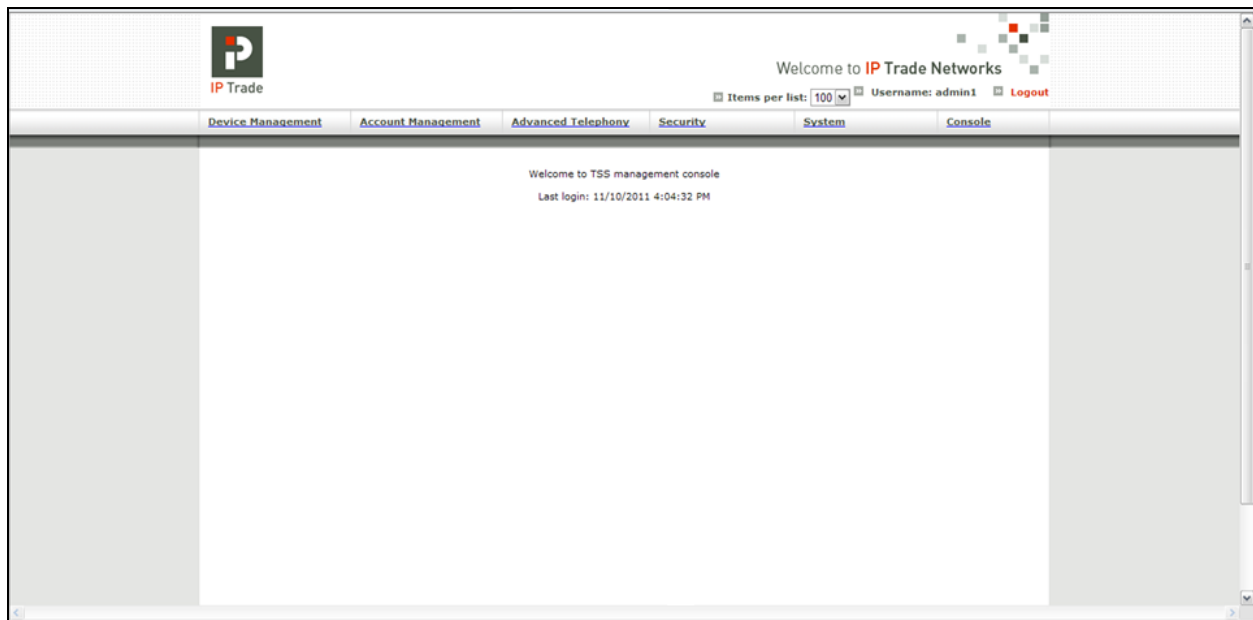
BASIC INFORMATION * (Required Fields)	
*Last Name	IPTrade-1
First Name	72061
*Password	*****
*Mailbox Number	72061
*Numeric Address	72061
PBX Extension	
*Class Of Service	0 - class00
*Community ID	1

9. Configure IP Trade Turret Support Server

The configuration of IP Trade TSS Administration Console is typically performed by IP Trade installation technicians, and procedures are provided by an IP Trade engineer. The procedural steps are presented in these Application Notes for informational purposes.

This section describes the procedure for configuring the IP Trade TSS to create and manage User/Shared Profiles, TPO Lines and Places for DDI Lines & PLAR trunks, including FTP Settings for high level common turret settings.

From a Web browser, navigate to <http://<ip-addr>/iptradenet.console>, where <ip-addr> is the IP address of the TSS. After logging in with an appropriate set of credentials, the main page appears.



9.1. Configure FTP Settings

On the TSS administration console from the top menu bar, select **System** → **Settings** → **FTP settings** (not shown). Be sure that the version and file options are the one that will be applied to your running turret firmware. Select “SIP” on the left pane (not shown), and click the “**Basic Mode**” tab on the top menu. Provide the following:

- **SIP local domain:** Enter “avaya.com”.
- **SIP Server Name:** Enter IP address of Session Manager.
- **SIP Proxy address:** Enter IP address of Session Manager.
- **SIP Connection mode:** Select “TCP” from drop down menu
- **SIP Proxy Transport:** Select “TCP” from drop down menu
- **Fast media connection on SIP Ringing state:** Select “true”
- **SIP Local IP Ports:** Enter “5060”

Click the **Update** button to update the changes.

Selection

Source: D:\FTPRoot
Version: R7_0_20286
File: ipt.global Delete

Action

Copy current to Create new
ipt.00-18-7D-1C-93-15

Pre-defined settings

Audio Profile: Noisy environment Apply
Timezone template: (GMT-08:00) Pacific Time (US & Canada) Apply

Basic Mode

Expert Mode

Advanced Mode

Audio

Automatic actions

Bluetooth

Call History

Contextual Email

CRM

DDI - Sharing

Devices

Dial Plan

DTMF

Global

Highlights

Intercom

Name	Value	Description
<input type="checkbox"/> Use bulk registration (Cisco only)	<input type="radio"/> true <input checked="" type="radio"/> false	?
<input checked="" type="checkbox"/> SIP Compatibility mode	acm30	?
<input checked="" type="checkbox"/> SIP local domain	avaya.com	?
<input checked="" type="checkbox"/> SIP Server Name	10.64.41.42	?
<input checked="" type="checkbox"/> SIP Proxy addresses	10.64.41.42	?
<input checked="" type="checkbox"/> SIP Connection mode	TCP	?
<input checked="" type="checkbox"/> SIP Proxy Transport Type	TCP	?
<input checked="" type="checkbox"/> Fast media connection on SIP Ringing state	<input checked="" type="radio"/> true <input type="radio"/> false	?
<input checked="" type="checkbox"/> SIP Local IP Ports	5060	?
<input type="checkbox"/> Parking mode	<input type="radio"/> tpo <input checked="" type="radio"/> adhoc	?
<input type="checkbox"/> SIP Manage Unsolicited messages	<input checked="" type="radio"/> false <input type="radio"/> true	?

Update Updated.

Click the “**Expert Mode**”, and provide the following:

- **Allow sip header in Register message:** Select “true” from drop down menu
- **Enable TCP on SIP stack** (not shown): Select “true”
- **SIP Diversion Header Name** (not shown): Enter “History-Info”

Click the **Update** button (not shown) to update the changes.

[Device Management](#)
[Account Management](#)
[Advanced Telephony](#)
[Security](#)
[System](#)
[Console](#)

Selection

Source:
Version:
File:

Action

Pre-defined settings

Audio Profile

Timezone template

Basic Mode

Expert Mode

Advanced Mode

	Name	Value	Description
Audio			
Automatic actions	<input type="checkbox"/> CallBack notification pattern search (SoftKeyItem element)	<input type="text" value="Dial"/>	<input type="button" value="?"/>
Bluetooth	<input checked="" type="checkbox"/> Allow sip header in Register messenger	<input type="text" value="true"/>	<input type="button" value="?"/>
Call History	<input type="checkbox"/> Bulk registration always contain a body	<input type="radio"/> true <input checked="" type="radio"/> false	<input type="button" value="?"/>
Contextual Email	<input type="checkbox"/> Registration state buffer	<input type="text" value="1000"/>	<input type="button" value="?"/>
CRM	<input type="checkbox"/> Force subscription usage for Cisco Message Dialog	<input type="text" value="false"/>	<input type="button" value="?"/>
DDI - Sharing	<input type="checkbox"/> "Completed else where" value	<input type="text" value="Call completed elsewhere"/>	<input type="button" value="?"/>
Devices	<input type="checkbox"/> TPO Connection persistence (TCP only)	<input checked="" type="radio"/> true <input type="radio"/> false	<input type="button" value="?"/>

CRK; Reviewed:
SPOC: 3/7/2013

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25 of 41
IPTrade-SM62

9.2. Configure Turret Proxy to Open Line Dealing (TPO) Settings

Navigate to **Device Management** → **Settings** → **Basic Mode** to configure Basic TPO Cluster SIP Settings. Select SIP on the left pane, and provide the following:

- **SIP local domain:** Enter “avaya.com”.
- **SIP Server Name:** Enter IP address of Session Manager.
- **SIP Proxy address:** Enter IP address of Session Manager.
- **SIP Connection mode:** Select “TCP/IP” from drop down menu
- **SIP Proxy Transport:** Select “TCP/IP” from drop down menu
- **Early media mixing:** Select “true”
- **SIP Local IP Ports:** Enter “5060”
- **Check replace header on incoming call:** Select “true”

Click the **Update** button to update the changes.

The screenshot displays the Turret Proxy Settings interface. At the top, there are tabs for **Device Management**, **Account Management**, **Advanced Telephony**, **Security**, **System**, and **Console**. Below these, there are sub-tabs for **General**, **Settings** (selected), **TPO Cluster**, **TPO Places**, and **TPO Lines**. A link [Back to TPO Cluster list >](#) is visible in the top right. The **Settings** section has three modes: **Basic Mode** (selected), **Expert Mode**, and **Advanced Mode**. On the left, there is a sidebar with buttons for **Global**, **Media**, **SIP** (selected), **Cluster**, and **Recorder**. The main area shows a table of SIP settings:

Name	Value	Description
<input checked="" type="checkbox"/> SIP local domain	avaya.com	?
<input checked="" type="checkbox"/> SIP Proxy addresses	10.64.41.42	?
<input checked="" type="checkbox"/> SIP Server Name	10.64.41.42	?
<input checked="" type="checkbox"/> SIP Connection mode	TCP	?
<input checked="" type="checkbox"/> SIP Proxy Transport Type	TCP	?
<input checked="" type="checkbox"/> Early media mixing	<input checked="" type="radio"/> true <input type="radio"/> false	?
<input type="checkbox"/> SIP Local IP Ports	5060	?
<input type="checkbox"/> Use bulk registration (Cisco only)	<input type="radio"/> true <input checked="" type="radio"/> false	?
<input checked="" type="checkbox"/> Check replace header on incoming call	<input checked="" type="radio"/> true <input type="radio"/> false	?

At the bottom, there are buttons for **Update**, **Refresh**, and a green status indicator **Updated.**

Navigate to **Device Management** → **Settings** → **Expert Mode** to configure Expert TPO Cluster SIP Settings. Select SIP on the left pane, and provide the following:

- **Enable TCP on SIP stack:** Select “true”
- **Add Remote party ID header on registered line:** Select “true”
- **Ringing remote party ID header:** Enter “P-Asserted-Identity”
- **Allow sip header in Register message** (not shown): Select “true” from drop down menu
- **User subscription for MWI :** Select “true”

Click the **Update** button to update the changes.

The screenshot displays the IPTrade configuration interface, specifically the SIP settings in Expert Mode. The interface is divided into three main sections: a left sidebar with navigation tabs (Global, Media, SIP, Cluster, Recorder), a central configuration area, and a right sidebar. The central area is titled 'Basic Mode', 'Expert Mode' (selected), and 'Advanced Mode'. It contains a table with columns 'Name', 'Value', and 'Description'. The table lists various SIP parameters and their current values. At the bottom of the central area, there are 'Update', 'Refresh', and 'Updated.' buttons. The right sidebar shows a zoom level of 100%.

Name	Value	Description
<input type="checkbox"/> SIP User agent Name	IPTTurret	?
<input type="checkbox"/> SIP Register renewal Time	120	?
<input type="checkbox"/> SIP Register renewal launch delay	5	?
<input type="checkbox"/> SIP Stack Logging enablement	<input checked="" type="radio"/> false <input type="radio"/> true	?
<input type="checkbox"/> SIP Stack Logging target		?
<input type="checkbox"/> SIP Stack Logging default filter		?
<input type="checkbox"/> DNS List		?
<input type="checkbox"/> DNS Suffix		?
<input type="checkbox"/> SIP Stack Application Number of memory pool pages	20	?
<input type="checkbox"/> SIP Stack memory pool page size	2048	?
<input type="checkbox"/> Local Call Preserve	<input type="radio"/> true <input checked="" type="radio"/> false	?
<input type="checkbox"/> Synchronization SIP subscription keep alive time	60	?
<input checked="" type="checkbox"/> Enable TCP on SIP stack	<input type="radio"/> false <input checked="" type="radio"/> true	?
<input type="checkbox"/> TPO Hunt - Transfer on alcatel PBX	<input type="radio"/> true <input checked="" type="radio"/> false	?
<input checked="" type="checkbox"/> Add Remote party ID header on registered line	<input checked="" type="radio"/> true <input type="radio"/> false	?
<input checked="" type="checkbox"/> Ringing remote party ID header	P-Asserted-Identity	?

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9.3. Configure Turret Proxy to Open Line Dealing (TPO) Lines & Turret Proxy to Open Line Dealing (TPO) Places

Navigate to TPO Lines tab to add a TPO line. Provide the following information:

- **Local Extension:** Enter an extension created in **Section 7**.
- **Register:** Select “Yes”.
- **SIP Display Name:** Enter a descriptive name to be used.
- **SIP Password:** Enter the password created in **Section 7**.
- **SIP Digest:** Enter the same extension created in **Section 7**.
- **SIP Domain:** Enter “avaya.com”.
- **Access Point Extension:** Select “No”.

Click the **Save and Go Back** button.

The screenshot shows the 'TPO Cluster: TPO Line Edition' configuration page in the IPTrade Networks interface. The page has a top navigation bar with tabs: Device Management, Account Management, Advanced Telephony, Security, System, and Console. The 'System' tab is active. The main content area contains a form for adding a TPO line. The form fields are: Local Extension * (72061), Fetch Type (Not Fetched), Place (empty), Register (radio buttons for No and Yes, with Yes selected), SIP Display Name (Bob Funds), SIP Password (123456), SIP Digest (72061), SIP Domain (avaya.com), SIP Contact ID (empty), SIP Device ID (empty), SIP Line Index (empty), IP Address (empty), and SDP IP Address (empty). There are also radio buttons for Access Point Extension (Yes and No, with No selected). At the bottom of the form are four buttons: Save and Go Back, Save and Add Another, Reset, and Cancel. A link 'Back to TPO Cluster list > TPO Cluster 01' is located in the top right corner of the form area. The page footer shows '100%' zoom level.

Repeat above step as necessary to configure additional extensions.

The following screen shows the TPO lines created during the compliance test.

The screenshot displays the IPTrade Networks web interface for Device Management. The top navigation bar includes links for Device Management, Account Management, Advanced Telephony, Security, System, and Console. The main content area is titled "TPO Lines" and features a table of configured lines. The table has columns for Local Extension, Register, Display Name, Device ID, Line Index, IP Address, SDP IP Address, Access Point Extension, and Linked. Below the table are controls for Refresh, Add new, and Delete selected, along with a pagination indicator showing 1 / 1.

Local Extension	Register	Display Name	Device ID	Line Index	IP Address	SDP IP Address	Access Point Extension	Linked
1111	No	- N/A -	- N/A -	- N/A -	- N/A -	- N/A -	No	
1112	No	- N/A -	- N/A -	- N/A -	- N/A -	- N/A -	No	
72061	Yes	Bob Funds					No	
72062	Yes	Joe Deals					No	
72063	Yes	Sammy Stocks					No	
72064	Yes	Risk Management Dept.					No	
72065	Yes	Ringdown					No	
72066	Yes	PBX Access Line					No	

Refresh Add new Delete selected 1 / 1

Navigate to TPO Place tab and select “Add New” (not shown) to create a TPO Place. Provide the following information as shown below:

- **Name:** Enter a descriptive name to identify the TPO Place
- **Group ID:** Select the appropriate ID for the respective TPO Cluster
- **Place Type:** Select “RingdownDynamic” from the drop down.
- **VirtualSlot Extensions:** This defines the number of call appearance for the respective extension, these are called DDI Slots and are shared on the IP Trade Turrets. In this example, the TPO Place configured is for extension 72061 which will have 3 shared DDI Slots (appearances). Therefore the following was entered as shown below: 7206101 - 7206203
- **Conference Mode:** All (Default value)
- **Local Extensions:** Click on the “+ Defined Lines” to select the corresponding TPO Line that should be linked to this TPO Place. For this example, select “72061” from the list and press the “Link Selected” button.

Click the **Save and Go Back** button (not shown).

Repeat above step as necessary to configure additional TPO Places.

[Back to TPO Cluster list](#) > [TPO Cluster 01](#)

General

Name *

Comment

State * Stopped

Group ID * 1

Default RTP Frame Size (ms) ☐ 10 ☒ 20

MasterCall RTP Frame Size (ms) ☐ 10 ☒ 20

Place Type * RingdownDynamic

VirtualSlot Extensions - ☐ Add Slot Properties

Conference Mode * All

Local Extensions *

- Defined Lines

72062
72063
72064
72065
72066

Link Selected

Local Extension *	Register	Display Name	Device ID	Line Index	IP Address	SDP IP Address	Access Point Extension
<input type="checkbox"/> 72061	Yes	Bob Funds					No G/E

9.3.1. Configure Turret Proxy to Open Line Dealing (TPO) Place for Automatic Ringdown (PLAR)

Navigate to TPO Place tab and select “Add New” (not shown) to create a TPO Place. Provide the following information:

- **Name:** Enter a descriptive name to identify the TPO Place
- **Group ID:** Select the appropriate ID for the respective TPO Cluster
- **Place Type:** Select “RingdownDynamic” from the drop down.
- **VirtualSlot Extensions:** This defines the number of call appearance for the respective extension called DDI Slots shared on the IP Trade Turrets. In this example, the TPO Place configured is for extension 72065 which only requires a single appearance and is equal to the “Incoming Destination” assigned for Automatic Ring-down (PLAR) Trunk Group. [Refer to **Section 6.1**].
 - The following was entered as shown below: 72065 – 72065.
 - Enter a check mark to assign the Virtual Slot Extension as Defined Slots.
 - Click on the “+Defined Slots” button and select the Virtual Slot Extension.
 - Press on the “Link Selected” button to link the Defined Slot to the TPO Place.
 - Modify the Slot Properties and assign Target: Press the “Mouse” icon as shown below by the red arrow to modify slot properties and assign the TAC in the “Target” field to the corresponding PLAR Trunk Group [Refer to **Section 6.1**]. Set the Slot Type to “Ringdown” and the other fields as shown below. Press the green check mark to save the changes.
- **Conference Mode:** All (Default value)
- **Local Extensions:** Click on the “+ Defined Lines” button and select the corresponding TPO Line that should be linked to this TPO Place. For this example, select “72065” from the list and press the “Link Selected” button.

Click the **Save and Go Back** button.

Repeat above step as necessary to configure additional TPO Places.

Back to TPO Cluster List * TPO Cluster List

General

Name * ARD 72065

Comment

State * Stopped

Group ID * 1

Default RTP Frame Size (ms) 10 20

MasterCall RTP Frame Size (ms) 10 20

Place Type * RingdownDynamic

VirtualSlot Extensions 72065 - 72065 Add Slot Properties

Defined Slots

Link Selected

Slot *	Slot Type *	MRD	ARD	Connected Notification	Disconnected Notification	Target	
72065	RingDown	No	Always	Yes	Always	1092	Link Selected

Unlink selected

Conference Mode * All

Local Extensions * **Defined Lines**

72066

Link Selected

Local Extension *	Register	Display Name	Device ID	Line Index	IP Address	SDP IP Address	Access Point Extension
72065	Yes	Ringdown					No

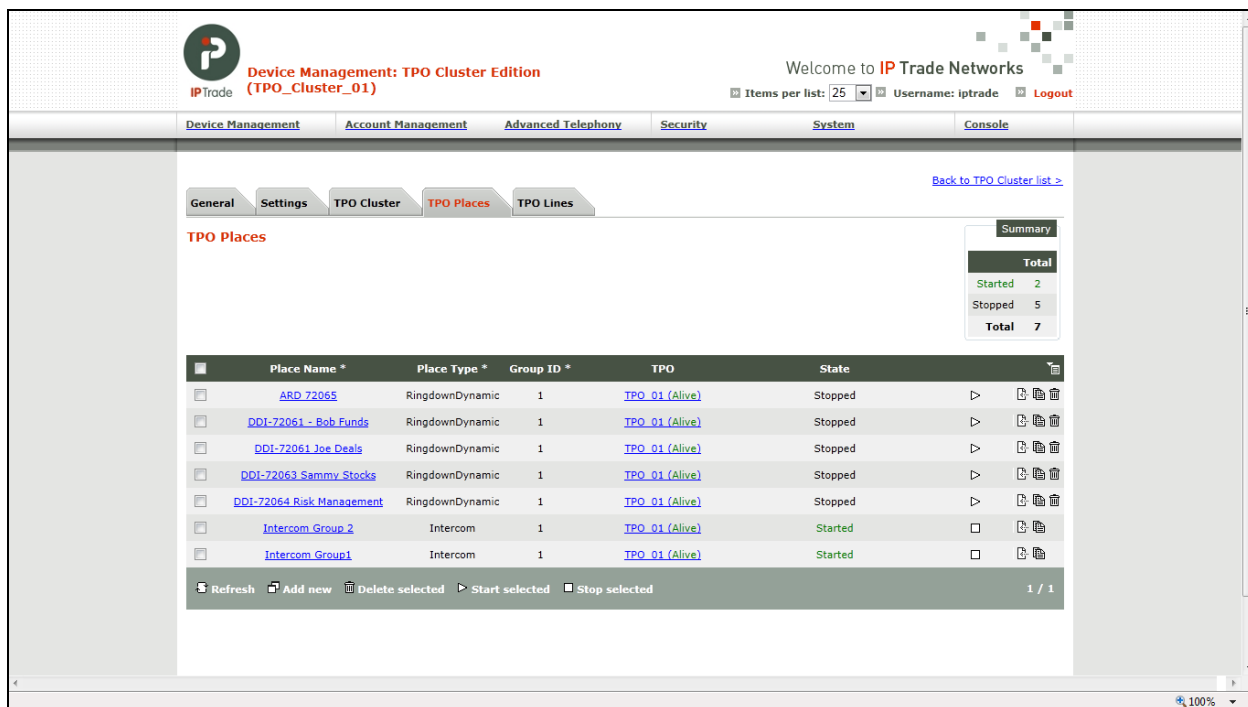
Unlink selected

Recording Channel * From To Record All on one channel

Save and Go Back Save and Edit Save and Add Another Reset Cancel

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Note: It is recommended to add multiple PLAR Trunks using the same TPO Place by adding multiple Virtual Slot Extension and corresponding Local Extensions. The following screen shows the TPO lines created during the compliance test:



Starting the TPO Place, registers the corresponding TPO Line to Session Manager. To change the state to “Started”, select the TPO Place(s) and then press “Start selected” icon.

9.4. Administer Lines in Shared Profile

These Application Notes assume that Shared Profiles are pre-configured for the respective users who are in the same Trading Group. Shared Profiles allow setting of Lines, Settings, Turret Layout settings, Shortcut Pages and Shortcuts (buttons) that are common to the users in the same Trading Group.

Navigate to “Account Management” on the top menu bar and select “Shared Profiles” (not shown). Click the Shared Profile you wish to change and then select the “Lines” tab (not shown). Click on “Add New” to assign a Line to the Shared Profile. Provide the following information as shown below:

- **Type:** Choose “DDI Shared Line” from the drop down list.
- **Subscribe to Notifications:** Must be set to “Yes” (Default value).
- **Extension:** Enter the Local Extension as defined in the corresponding TPO Place
- **TPO Group Name:** Select the name the TPO where the DDI Shared Line is hosted
- **SIP Display Name:** Enter a descriptive name for the Line.

The assignment of all other fields were set to default parameters for this line in the Shared Profile. Press “Update” to commit changes. Repeat the process above to add all Shared DDI Lines and PLAR Lines that will be part of the Shared Profile.

Account Management: Line Edition

Welcome to IPTrade Networks

Items per list: 100 Username: iptrade Logout

Device Management Account Management Advanced Telephony Security System Console

Status: Not connected

General

Type * DDI Sharing Line

Subscribe to Notifications * Yes

Special Tag * None

Ringtone Set (None)

Ringtone Volume (None)

Ringtone Delay * 0

Call events dispatching * All but incoming

Call Notification Delay * 0

Extension * 72061

TPO Group Name * TPO1

In Call History * No

In Floating Keys * Yes

Msg Waiting Indicator * No

Default DDI * Yes

Default Global Line * No

Queue Type * None

SIP

SIP Display Name * Bob Funds

[Back to Shared Profiles list](#) > [SharedProfile](#)

The following screen shows the Lines assigned to the respective Shared Profile during the compliance test:

Account Management: Shared Profile Edition (SharedProfile)

Welcome to IPTrade Networks

Items per list: 100 Username: iptrade Logout

Device Management Account Management Advanced Telephony Security System Console

[Back to Shared Profiles list](#) >

General Lines Adv. Telephony Settings Turret Layout Shortcuts

Lines

Type	SIP Display Name	SIP Extension	SIP Digest	SIP Domain
DDI Sharing Line	ARD 72065	72065		
DDI Sharing Line	Bob Funds	72061		
DDI Sharing Line	Joe Deals	72062		
DDI Sharing Line	Risk Management Dept.	72064		
DDI Sharing Line	Sammy Stocks	72063		

Server time: 17:17:56
Last refresh time: 17:17:36

Refresh Add new Delete selected Clear overwritten values

1 / 1

9.5. Administer Inherited Lines in the User Profile

These Application Notes assume that User Profiles are pre-configured for the respective users and are assigned to a Shared Profile for the Trader Group. Lines, Settings, Turret Layout settings, Shortcut Pages and Shortcuts (buttons) assigned in the Shared Profile are inherited values and settings in the User Profile. The User Profile allows for changes to values set in the Shared Profile for user customization.

Navigate to **Account Management** → **Users** and select a previously created User. Select the “Lines” tab. The Lines shown below are inherited in the User Profile from the Shared Profile.

Type	SIP Display Name	SIP Extension	SIP Digest	SIP Domain
DDI Sharing Line	ARD 72065	72065		inherited
DDI Sharing Line	Bob Funds	72061		inherited
DDI Sharing Line	Joe Deals	72062		inherited
DDI Sharing Line	Risk Management Dept.	72064		inherited
DDI Sharing Line	Sammy Stocks	72063		inherited

For this example, User Profile “Bob Funds” was chosen and assigned to extension 72061 inherited and configured in the respective Shared Profile that User “Bob Funds” is associated with. Select DDI Shared Line “Bob Funds” to change the inherited parameter values for his Line 72061. To change the inherited values, place a check mark to the following parameters and adjust the value as shown below:

For example:

- **In Call History:** Inherited value is “No”. Change to “Yes” to record call history for this line.
- **Msg Waiting Indicator:** Inherited value is “No”. Change to “Yes” to enable MWI notification for this line.

- **Global Default Line:** Inherited value is “No”. Change to “Yes” to set this line as the default line for the user on his turret. If no Primary Extension is assigned, the Global Default Line becomes the Primary Extension for the turret user.

Press **Update** to commit changes.

Repeat the process in each User Profile as necessary.

The screenshot displays a web-based configuration interface for a user profile. It is divided into two main sections: 'General' and 'SIP'.

General Tab:

- Type *: DDI Sharing Line
- Subscribe to Notifications *: Yes
- Special Tag *: None
- Ringtone Set: (None)
- Ringtone Volume: (None)
- Ringtone Delay *: 0
- Call events dispatching *: All but incoming
- Call Notification Delay *: 0
- Extension *: 72061
- TPO Group Name *: TPO1
- In Call History *: Yes
- In Floating Keys *: Yes
- Msg Waiting Indicator *: Yes
- Default DDI *: Yes
- Default Global Line *: Yes
- Queue Type *: None

Automatic action:

- Incoming Auto Accept Delay: Default
- Held Auto Forward Delay: Default
- Held Auto Forward Target:
- Dispatch Monitor Auto Recall Delay: Off

SIP Tab:

- SIP Display Name *: Bob Funds

The interface includes a sidebar on the left and a bottom status bar showing '100%' zoom.

The following screen from the User Profile shows the Lines that have values different than the inherited value with an asterisk “inherited *”.

Account Management: User Edition (BFUNDS)

Welcome to IPTrade Networks

Items per list: 100 Username: iptrade Logout

Device Management Account Management Advanced Telephony Security System Console

General Lines Adv. Telephony Settings Turret Layout Shortcuts Call History

Lines + Configuration fetch

Type	SIP Display Name	SIP Extension	SIP Digest	SIP Domain
DDI Sharing Line	ARD 72065	72065		inherited
DDI Sharing Line	Bob Funds	72061		inherited *
DDI Sharing Line	Joe Deals	72062		inherited
DDI Sharing Line	Risk Management Dept.	72064		inherited
DDI Sharing Line	Sammy Stocks	72063		inherited

Server time: 17:22:13
Last refresh time: 17:21:55

Refresh Add new Delete selected 1 / 1

9.6. Administer DDI Slot Buttons in Shared or User Profile

Every VirtualSlot Extension assigned to a TPO Place of a Shared DDI line (or Shared DDI Line with Slot Properties for a PLAR Line) must have its corresponding DDI slot shortcut (button) created in the Shared or User Profile. However, it is not mandatory to create each DDI slot in each user profile. User or IT administrator should create the DDI slot shortcuts (buttons) that will be effectively used by the turret user. These shortcuts(buttons) can be positioned in one of its home pages or Shortcut (button) applets. The system will automatically generate any missing DDI slot shortcuts(buttons) during line registration, but these will have no assigned ringtone. Those automatically generated shortcuts(button) are grouped in a page called "Missing DDI Slots". It is recommend to create as many DDI Slot shortcuts (buttons) as configured number of VirtualSlot Extensions.

Shortcuts(buttons) can be programmed from the TSS administration console or directly from the turret. Although not mandatory, it is advisable to have these buttons closely grouped in the same area of the screen; From the TSS administration Console, please proceed as follows to manually create DDI slot buttons (not shown):

1. Navigate to the desired User or Shared Profile to create the DDI Slots. ;
2. Go to the Shortcut tab.

(It is assumed that a Shortcut Page is preconfigured and assigned to the Turret Layout.

3. Select the proper Shortcut Page and then click on "Add new" on the bottom of the page.
4. **Label:** Enter a descriptive label for the DDI Slot
 - a. For Example: "72061 Line 1"
5. **Type:** Select "DDI Slot" from the drop down list
6. **Phone extension:** Enter the cooresponding VirtualSlot Extension.
 - a. For this example enter "7206101"
7. Click on the "Add and Continue" to save the entry and add the next DDI Slot.

Repeat the procedure to add all necessary DDI Slots in the User or Shared Profile for Shared DDI Lines or Ringdowns (PLAR).

Note: While the system automatically creates any missing DDI slot key when the user subscribes to a line, it does not automatically remove it when the user unsubscribes or manually creates a private slot key in the user profile. Also note that removing a DDI slot key in the user profile while the user is authenticated is highly discouraged, because it would leave a slot without any key associated.

9.7. Administer Avaya Modular Messaging Pilot Extension

Navigate to Account Management → Shared Profiles (not shown) and select pre-configured Shared Profile for the Trading Group. Select the “Settings” and then “User Settings” on the left pane, and set the following as shown below:

- **Voicemail:** Set the assigned Modular Messaging Pilot Extension

Press **Update** to commit changes.

The screenshot shows the Avaya User Settings interface. On the left, a sidebar lists various settings categories: Inter-turret messaging highway, Intercom, Join - Barge, Layout, Mobile Trader User, PBX Features, PIM Synchronization, Mobile Trader Device, Recorder, Search, Session, Shortcut Notification, Text messaging, TPO, User Settings (selected), SIP, and Video Call. The main content area displays the configuration for the selected 'User Settings'. It includes several settings with checkboxes and input fields, each with a help icon (question mark) to its right. The settings are: 'Attendant display policy' (set to 'remote / shortcut'), 'Auto-create shortcut pages' (checked, with radio buttons for 'true' and 'false'), 'Global ducking devices' (set to 'HF;HS'), 'Global ducking value' (set to '2'), 'Ducking value' (set to '2'), 'Ducking mode' (radio buttons for 'absolute' and 'offset'), 'Global ducking mode' (radio buttons for 'absolute' and 'offset'), 'Automatic ducking' (radio buttons for 'true' and 'false'), and 'Voice mail' (checked, with a text field containing '7777'). At the bottom of the settings list, there are two buttons: 'Update' and 'Refresh'. The bottom of the window shows a status bar with a zoom level of 100%.

10. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Avaya Modular Messaging, Avaya Aura® Session Manager, and IP Trade Voice Trading Solution.

- Place a call from an IP Trade turret user to the Modular Messaging pilot number. Verify that Modular Messaging recognizes the calling party as a local subscriber.
- Place calls from an IP Trade turret to SIP, H323, and PSTN endpoints and verify that the calls are successfully established with two-way talk path.

11. Conclusion

These Application Notes describe the configuration steps required for IP Trade Voice Trading Solution 7.1 to successfully interoperate with Avaya Aura® Session Manager 6.2, Avaya Aura® Communication Manager 6.2, and Avaya Modular Messaging 5.2 in a centralized messaging environment using SIP trunks. All feature and serviceability test cases were completed with observations noted in **Section 2.2**.

12. Additional References

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

1. *Administering Avaya Aura® Communication Manager*, Document 03-300509, Issue 7.0, Release 6.2, July 2012, available at <http://support.avaya.com>.
2. *Administering Avaya Aura® Session Manager*, Document Number 03-603324, Release 6.2, July 2012, available at <http://support.avaya.com>.
3. *Avaya Modular Messaging for the Avaya Message Store Server (MSS) Configuration*, Release 5.2, August 2012, available at <http://support.avaya.com>.

IP Trade Voice Trading Solution and Product information is available from IP Trade. Visit <http://www.IPTrade-networks.com/turret.html>.

For additional information or documentation, please contact your local IP Trade office. Visit http://www.iptrade-networks.com/other_inquiry.html.

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