



DevConnect Program

Application Notes for British Telecom Trading Platform 10.0.12 with Avaya Aura® Session Manager 10.2 and Avaya Aura® Communication Manager 10.2 - Issue 0.1

Abstract

These Application Notes describe the configuration steps required to integrate British Telecom Trading Platform 10.0.12 with Avaya Aura® Session Manager 10.2 and Avaya Aura® Communication Manager 10.2. British Telecom Trading Platform is a SIP endpoint management solution that registers with Avaya Aura® Session Manager as SIP endpoints.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as the observations noted in **Section 2.2**, to ensure that their own use cases are adequately covered by this scope and results.

Information in these Application Notes has been obtained through DevConnect Compliance testing and additional technical discussions. Testing was conducted via the DevConnect Program at the Avaya Solution and Interoperability Test Lab.

1. Introduction

These Application Notes describe the configuration steps required to successfully integrate British Telecom (BT) Trading Platform 10.0.12 with Avaya Aura® Session Manager 10.2 and Avaya Aura® Communication Manager 10.2. The BT Trading Platform is a SIP endpoint management solution that uses Avaya Aura® Session Manager to route calls between Avaya Aura® Communication Manager and BT Trading Turrets.

British Telecom (BT) Trading Platform consists of a set of BT Trading Turrets, a Turret Support Server (TSS), and a Turret Proxy to Open Line Dealing Server (TPO). The BT Trading Turrets register as SIP endpoints with Avaya Aura® Session Manager.

- **TSS server:** It provides security extensions, end user profiles management, hunt group, and bridge to middle-office applications.
- **BT Trading Turret:** The BT Trading Turret is SIP-based VoIP trading phone.
- **Turret Proxy to Open Line Dealing Server (TPO):** The TPO server serves as a proxy phone between a remote place extension and the local IP Trade end-users (turrets). When the local IP Trade end-users dial to the TPO proxy number of a remote place, the users can speak publicly or privately to that remote place. In these Application Notes, the TPO server registers one SIP endpoint as the proxy phone with Avaya Aura® Session Manager.

2. General Test Approach and Test Results

The general test approach was to configure the BT Trading Turrets to communicate with the Session Manager as third-party SIP endpoints.

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.

Avaya recommends our customers implement Avaya solutions using appropriate security and encryption capabilities enabled by our products. The testing referenced in these DevConnect Application Notes included the enablement of supported encryption capabilities in the Avaya products. Readers should consult the appropriate Avaya product documentation for further information regarding security and encryption capabilities supported by those Avaya products.

Support for these security and encryption capabilities in any non-Avaya solution component is the responsibility of each individual vendor. Readers should consult the appropriate vendor-supplied product documentation for more information regarding those products.

For the testing associated with these Application Notes, the interface between Avaya systems and the BT Trading Platform did not include use of any specific encryption features as requested by British Telecom.

This test was conducted in a lab environment simulating a basic customer enterprise network environment. The testing focused on the standards-based interface between the Avaya solution and the third-party solution. The results of testing are therefore considered to be applicable to either a premise-based deployment or to a hosted or cloud deployment where some elements of the third-party solution may reside beyond the boundaries of the enterprise network, or at a different physical location from the Avaya components.

Readers should be aware that network behaviors (e.g., jitter, packet loss, delay, speed, etc.) can vary significantly from one location to another and may affect the reliability or performance of the overall solution. Different network elements (e.g., session border controllers, soft switches, firewalls, NAT appliances, etc.) can also affect how the solution performs.

If a customer is considering implementation of this solution in a cloud environment, the customer should evaluate and discuss the network characteristics with their cloud service provider and network organizations and evaluate if the solution is viable to be deployed in the cloud.

The network characteristics required to support this solution are outside the scope of these Application Notes. Readers should consult the appropriate Avaya and third-party documentation for the product network requirements. Avaya makes no guarantee that this solution will work in all potential deployment configurations.

2.1. Interoperability Compliance Testing

The interoperability compliance test included both feature functionality and serviceability testing. The feature functionality testing focused on carrying out different call scenarios with good quality audio. The tests included:

- Successful registration of BT Trading Turret with Session Manager using a TCP connection.
- Calls between BT Trading Turret and Avaya SIP, H.323, and digital telephones.
- G.711A, G.711U codecs support and negotiation, with and without media shuffling.
- Basic features including making an audio call, answer, hang up, music on hold, DTMF transmission, and feature access code dialing.
- Call features including Hold, Transfers and Conference.
- Basic video between Avaya Workplace Client and BT Trading Turrets.
- Proper system recovery after removal and reconnection of LAN cable.

2.2. Test Results

The testing was successful. All the test cases passed.

2.3. Support

For technical support on BT Trading Platform, contact:

Email: Unified.Trading.interop.team@bt.com

3. Reference Configuration

The configuration shown in **Figure 1** was used during the compliance test of BT Trading Platform with Session Manager and Communication Manager. BT Trading Platform manages BT Trading Turrets by registering with Avaya Session Manager and allowing communication with Avaya phones.

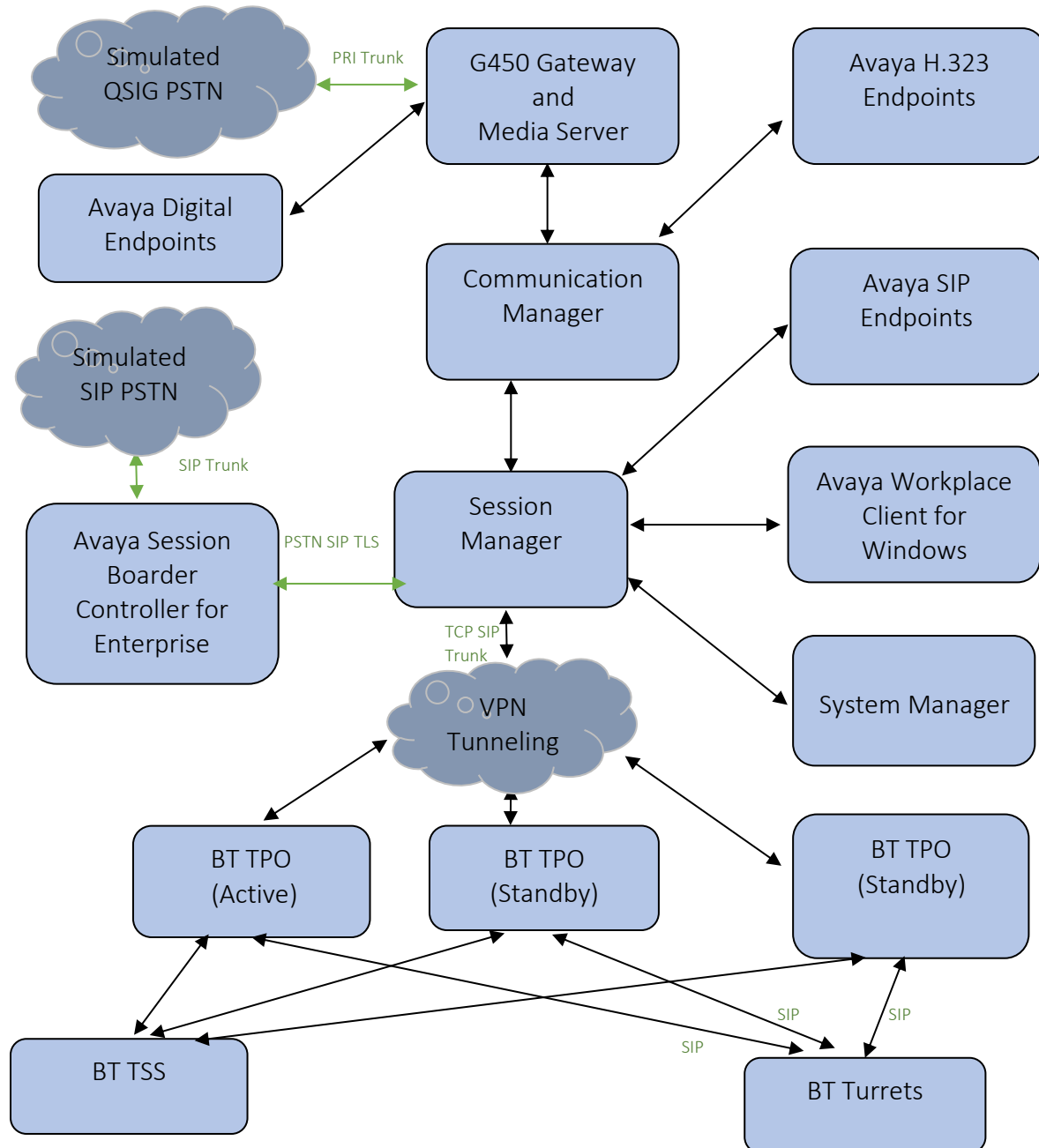


Figure 1: Connection of BT Trading Platform with Avaya Aura® Session Manager and Avaya Aura® Communication manager

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® System Manager in Virtual Environment	10.2.0.1 1020117101
Avaya Aura® Session Manager in Virtual Environment	10.2.0.1.1020108
Avaya Aura® Communication Manager in Virtual Environment	10.2.0.1.1 02.0.229.0-28126
Avaya G450 Media Gateway • MGP	42_27_0
Avaya Aura® Media Server in Virtual Environment	10.1.0 SP 7
Avaya Session Border Controller for Enterprise in Virtual Environment	10.2.0.0
9641G and J159 IP Deskphone (H.323)	6.8.5
Avaya Workplace Client for Windows	3.35.1.30
Avaya J159 and J179 IP Deskphone (SIP)	4.1.5
Avaya 1408 Digital Deskphone	2.0 Service Pack 9 (R20)
BT Trading Platform Turret Support Server (TSS) • Firmware • Bootstrap	R10.0.12 R10.0.12

BT TPO with Redundancy Mode Session Persistency - Firmware - Bootstrap	R10.0.12 R10.0.12
BT Trading Turrets - BT TouchPro - Firmware - Bootstrap - BT FlexPro Version	R10.0.12 R10.0.12 R10.0.12

5. Configure Avaya Aura® Communication Manager

This section describes the steps required to allow Communication Manager to communicate with the BT Trading Platform. Is it assumed that Communication Manager is installed and configured before implementing the configuration steps. For all other provisioning information such as initial installation and configuration, please refer to the product documentation in **Section 10**. The configuration illustrated in this section was performed using the Communication Manager System Administration Terminal (SAT).

Configuration steps include:

- Check Off PBX Station Licensing.
- SIP Trunk Administration (to Session Manager).
- Adding Route Pattern.

5.1. Checking Licensing

Using the *display system-parameters customer-options* command go to **Page 1** and check that the system is sufficiently licensed for **Off-PBX Telephones -OPS**.

```
display system-parameters customer-options                               Page 1 of 12
                                OPTIONAL FEATURES

G3 Version: V20                                     Software Package: Enterprise
Location: 2                                           System ID (SID): 1
Platform: 28                                         Module ID (MID): 1

                                USED
Platform Maximum Ports: 48000      2047
Maximum Stations: 36000      24
Maximum XMOBILE Stations: 36000      0
Maximum Off-PBX Telephones - EC500: 41000      0
Maximum Off-PBX Telephones - OPS: 41000      19
Maximum Off-PBX Telephones - PBFMC: 41000      0
Maximum Off-PBX Telephones - PVFMC: 41000      0
Maximum Off-PBX Telephones - SCCAN: 0      0
Maximum Off-PBX Telephones - EMX: 36000      0
Maximum Survivable Processors: 313      0

(NOTE: You must logoff & login to effect the permission changes.)
```

5.2. Configure IP Codec Set

Enter the change *ip-codec-set* *x* command where *x* is the number codec set associated with the network region used by the sip signaling group used for the integration, on **Page 2** and set **Allow Direct-IP Multimedia** to **y** and update **Maximum Call Rate for Direct-IP Multimedia** and **Maximum Call Rate for Priority Direct-IP Multimedia** to **15360**.

change ip-codec-set 1

Page2 of 2

IP MEDIA PARAMETERS

Allow Direct-IP Multimedia? y

Maximum Call Rate for Direct-IP Multimedia: 15360:Kbits

Maximum Call Rate for Priority Direct-IP Multimedia: 15360:Kbits

	Mode	Redun- dancy	Packet Size (ms)
FAX	relay	0	
Modem	off	0	
TDD/TTY	US	3	
H.323 Clear-channel	n	0	
SIP 64K Data	n	0	20

Media Connection IP Address Type Preferences

1: IPv4

2:

6. Configure Avaya Aura® Session Manager

In this section, the configuration steps required to connect BT Trading Platform to Session Manager as a SIP endpoint is described. It is assumed that an existing Session manager instance has already been installed and configured as this is out with the scope of this document. All Configuration steps were carried out using System Manager. Configuration steps will include:

- Configure SIP User
- Adding BT Trading cluster TPO's to Local Host Name Resolution.
- Adding BT Trading cluster FQDN to SIP Entity with Type Endpoint Concentrator.

6.1. Configure SIP User

A SIP user must be added for each BT Trading Turret required. Navigate to the System Manager web interface, in this case <https://<IP Address>/SMGR> and login with the relevant credentials.

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

Use the "Change Password" hyperlink on this page to change the password manually, and then login.

Also note that single sign-on between servers in the same security domain is not supported when accessing via IP address.

This system is restricted solely to authorized users for legitimate business purposes only. The actual or attempted unauthorized access, use, or modification of this system is strictly prohibited.

Unauthorized users are subject to company disciplinary procedures and or criminal and civil penalties under state, federal, or other applicable domestic and foreign laws.

The use of this system may be monitored and recorded for administrative and security reasons. Anyone accessing this system expressly consents to such monitoring and recording, and is advised that if it reveals possible evidence of criminal activity, the evidence of such activity may be provided to law enforcement officials.

All users must comply with all corporate instructions regarding the protection of information assets.

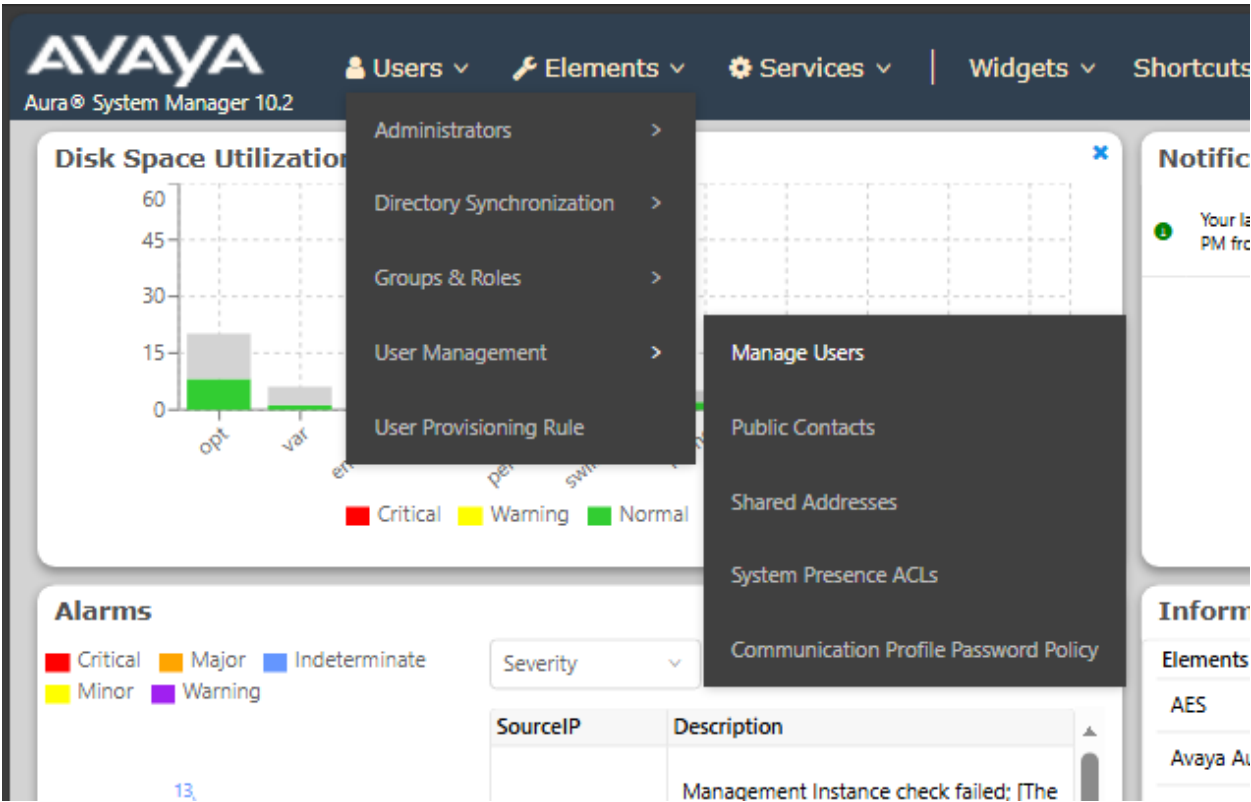
User ID:

Password:

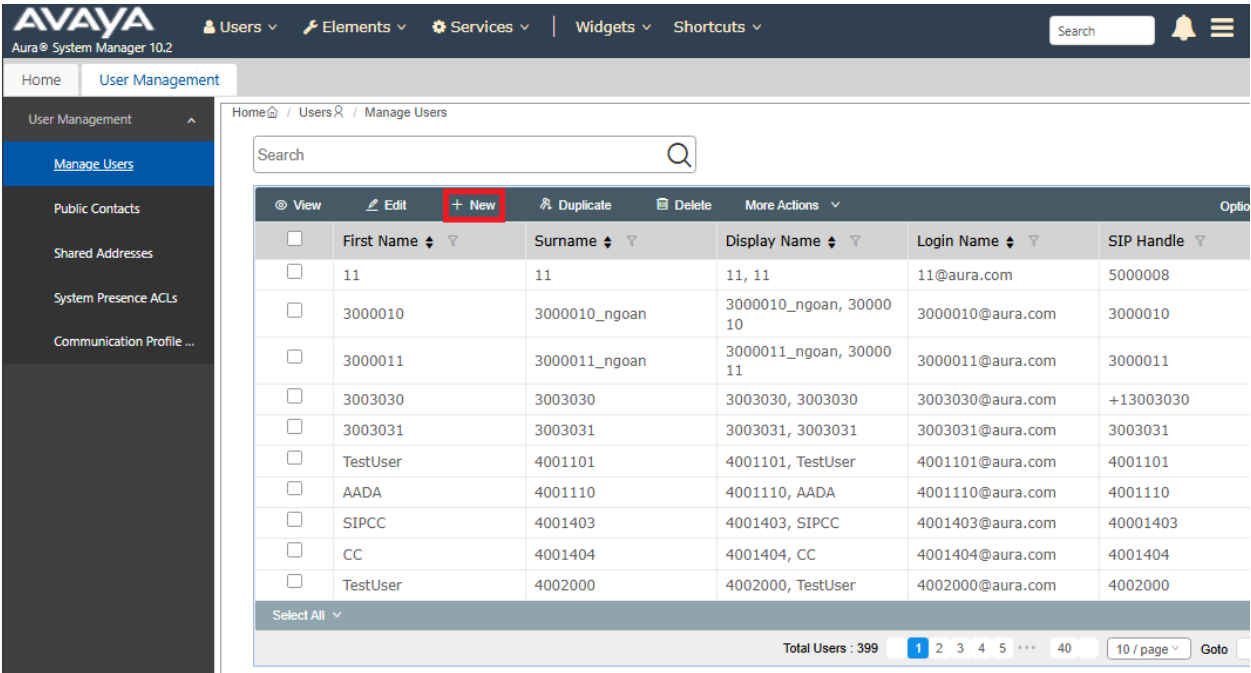
[Change Password](#)

Supported Browsers: Firefox (minimum version 118.0), Chrome (minimum version 117.0) or Edge (minimum version 117.0).

From the Dashboard, select **Users** → **User Management** → **Manage Users**.



Select **New**.



On the **Identity** tab, enter an identifying **Last Name** and **First Name**, enter an appropriate **Login Name**, and administer a password in the **Password** and **Confirm Password** fields.

IdentityCommunication ProfileMembershipContacts

Basic Info

Address

LocalizedName

User Provisioning Rule :

Select

* Last Name :

BT Test

Last Name (in Latin alphabet characters) :

BT Test

* First Name :

Station1

First Name (in Latin alphabet characters) :

Station1

* Login Name :

8123001@bt.com

Middle Name :

Middle Name Of User

Description :

Description Of User

Email Address :

Email Address Of User

Password :

User Type :

Basic

Confirm Password :

Localized Display Name :

BT Test, Station1

Endpoint Display Name :

BT Test, Station1

Title Of User :

Title Of User

Language Preference :

English (United States)

Time Zone :

(+7:0)Bangkok, Hanoi, J...

Employee ID :

Employee Id Of User

Department :

Department Of User

Company :

Company Of User

Update Time :

Apr 23, 2024 09:50:16

Click on the **Communication Profile** tab and enter and confirm a **Comm-Profile Password**, this is used when logging in the SIP endpoint.

IdentityCommunication ProfileMembershipContacts

Communication Profile Password

PROFILE SET : P

Communication A

PROFILES

Session Manage

Avaya Breeze®

CM Endpoint Pro

IP Office Endpoi

Presence Profile

Comm-Profile Password

Comm-Profile Password :

.....

* Re-enter Comm-Profile Password :

.....

Generate Comm-Profile Password

Cancel

OK

NAQ;
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12 of 50
BTTrade10ASM102

Click on the **Communication Address**, select **New**.

The screenshot shows a web interface for managing communication profiles. At the top, there are tabs: 'Identity', 'Communication Profile', 'Membership', and 'Contacts'. The 'Communication Profile' tab is active. On the left, there's a sidebar with 'Communication Profile Password', 'PROFILE SET : Primary', and 'Communication Address'. The 'Communication Address' section is highlighted. The main area displays a table with columns 'Type' and 'Handle'. A '+ New' button is highlighted in green. Below the table, there's a 'Select All' button.

Select **Avaya SIP** from the **Type** drop down box and enter the **Fully Qualified Address** of the new SIP user. Click **OK** when done.

The screenshot shows a 'Communication Address Add/Edit' dialog box. It has a title bar with a close button. Inside, there are two main fields: '* Type:' with a dropdown menu showing 'Avaya SIP', and '*Fully Qualified Address:' which is split into two input fields: '8123001' and '@ aura.com'. At the bottom right, there are 'Cancel' and 'OK' buttons. The 'OK' button is highlighted in blue.

Continue to scroll down on the same page. Enable **Session Manager Profile** (not shown) and enter the **Primary Session Manager**, **Origination Sequence**, **Termination Sequence** and **Home Location** (not shown) relevant to the implementation.

PROFILES

Session Manager Profile

CM Endpoint Profile

Officelinx Comm Profile

* Primary Session Manager :

SM91-SM100

Secondary Session Manager :

SM93-SM100

Survivability Server :

Start typing...

Max. Simultaneous Devices :

3

Block New Registration When Maximum Registrations Active? *

Application Sequences

Origination Sequence :

CM242AppSeq

Termination Sequence :

CM242AppSeq

Scroll down the page and enable **CM Endpoint Profile** section. Select the Communication Manager system from the **System** drop down box, select **Endpoint** as the **Profile Type**, enter the **Extension** number that used as part of the **Fully Qualified Address** of the new SIP user above, select **J179_DEFAULT_CM_10_2** as the **Template** and ensure **IP** is configured as the **Port**, click **Commit & Continue** when finished.

Identity

Communication Profile

Membership

Contacts

Communication Profile Password

PROFILE SET : Primary

Communication Address

PROFILES

Session Manager Profile

CM Endpoint Profile

Officelinx Comm Profile

* System :

CM242

* Profile Type :

Endpoint

Use Existing Endpoints :

* Extension :

8123001

* Template :

J179_DEFAULT_CM_10_2

* Set Type :

J179

Security Code :

Enter Security Code

Port :

IP

Voice Mail Number :

8129999

Preferred Handle :

Select

Calculate Route Pattern :

Sip Trunk :

SIP URI :

Select

Delete on Unassign from User or on Delete User :

Override Endpoint Name and Localized Name :

Allow H.323 and SIP Endpoint Dual Registration :

Click on **Endpoint Editor** in the **CM Endpoint Profile**, click on **Feature Options (F)** tab (not shown), scroll down and check **IP Softphones** and **IP Video Softphone**. Click on **Done** (not shown) to save changes and go back to the User Communication Profile screen.

Features

☐ Always Use

☐ IP Audio Hairpinning

☐ Bridged Call Alerting

☐ Bridged Idle Line Preference

☒ Coverage Message Retrieval

☐ Data Restriction

☒ Survivable Trunk Dest

☐ Bridged Appearance Origination Restriction

☒ Restrict Last Appearance

☐ Turn on mute for remote off-hook attempt

☐ IP Hoteling

☐ Idle Appearance Preference

☒ IP SoftPhone

☒ LWC Activation

☐ CDR Privacy

☒ Direct IP-IP Audio Connections

☐ H.320 Conversion

☒ IP Video Softphone

☐ Per Button Ring Control

Click on **Commit** to save the user. The user is now listed. In this compliance testing, six BT Users were created.

View

Edit

+ New

Duplicate

Delete

More Actions

Options

☐	First Name	Surname	Display Name	Login Name	SIP Handle
☐	Quang	BT Test	BT Test, Quang	8123007@aura.com	8123007
☐	Station1	BT Test	BT Test, Station1	8123001@bt.com	8123001
☐	Station2	BT Test	BT Test, Station2	8123002@bt.com	8123002
☐	Station3	BT Test	BT Test, Station3	8123003@bt.com	8123003
☐	Station4	BT Test	BT Test, Station4	8123004@bt.com	8123004
☐	Station5	BT Test	BT Test, Station5	8123005@bt.com	8123005
☐	Station6	BT Test	BT Test, Station6	8123006@bt.com	8123006

Select All

Total Users : 7

1

10 / page

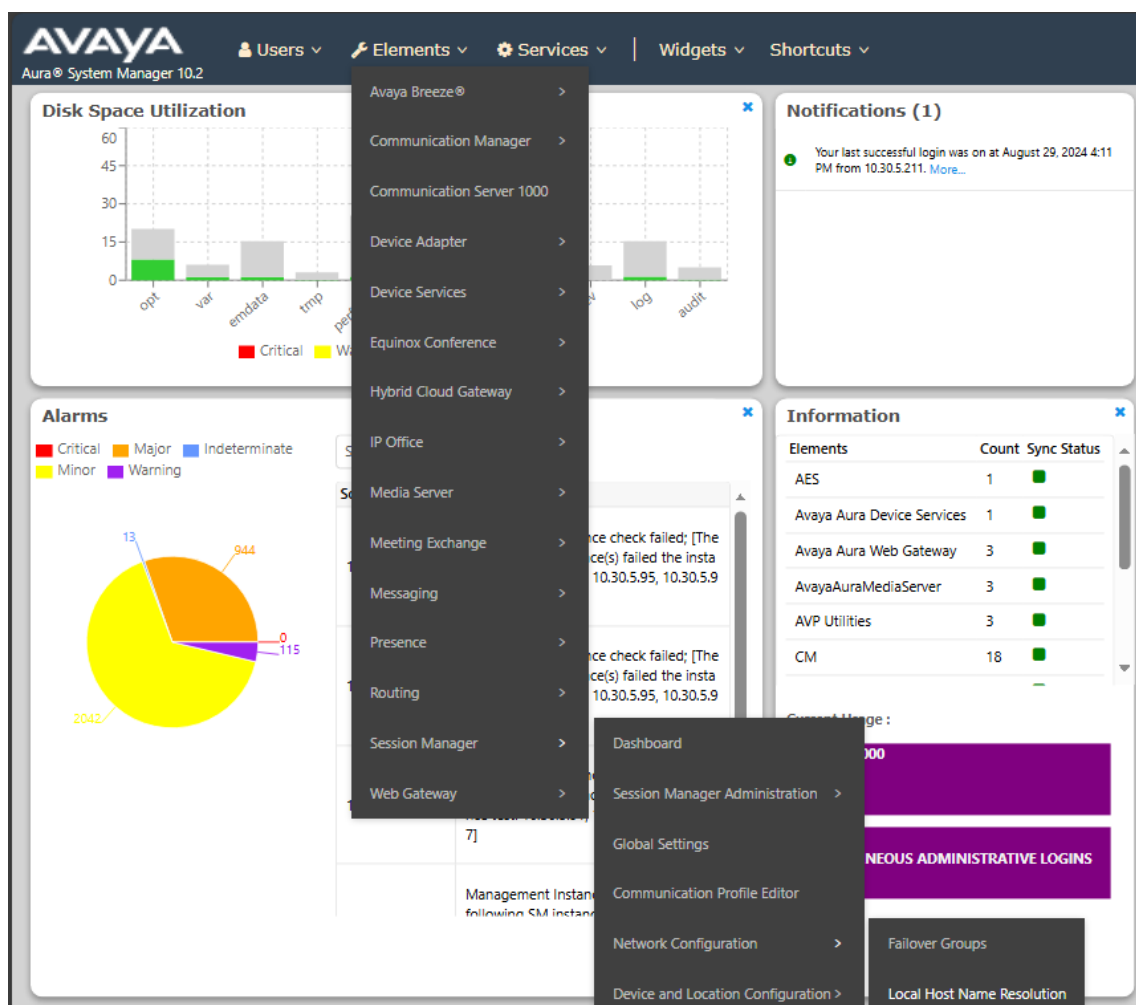
Goto

6.2. Adding BT Trading Platform TPO's to Session Manager Local Host Name Resolution

The Session Manager Local Host Names Resolution (LHNR) table is a DNS table used locally by Session Manager. When Session Manager looks at the SIP Entity IP/FQDN field it will attempt to resolve any DNS name in that field first in the LHNR table prior any attempt to resolve it with an external DNS server.

Add all three BT Platform Server IP addresses to the LHNR table giving them both the same Local Host Name. Give the third BT Platform Server IP address a priority of 300, Secondary BT Platform Server IP address a priority of 200 and the Primary BT Platform Server IP address a priority of 100. This will allow traffic to route to the primary BT Platform Server in the event of a WAN link failure between the primary BT Platform Server and two other servers. This will also allow the proper routing of traffic to the second/third BT Platform Server in the case of a primary BT Platform Server outage.

From SMGR Dashboard, go to **Elements** → **Session Manager** → **Network Configuration** → **Local Host Name Resolution**.



Click on **New** and enter all BT Servers as below.

New Local Host Name Entries

Commit

Cancel

New Local Host Name Entries

☐	Host Name (FQDN)	IP Address	Port	Priority	Weight	Transport
☒	btcluster.avaya.com	172.27.130.3	5060	100	100	TCP
☒	btcluster.avaya.com	172.27.130.4	5060	200	100	TCP
☒	btcluster.avaya.com	172.27.130.5	5060	300	100	TCP
☐				400	100	TLS
☐				500	100	TLS
☐				600	100	TLS

Press **Commit** to save.

6.3. Adding BT Trading Platform Avaya TPO cluster FQDN name to SIP Entity with Type Endpoint Concentrator

Go to **Elements** → **Routing** → **SIP Entities**. Click **New**.

AVAYA

Aura® System Manager 10.2

Users

Elements

Services

Widgets

Home

Routing

Routing

Domains

Locations

Conditions

Adaptations

SIP Entities

Entity Links

SIP Entities

New

Edit

Delete

Duplicate

More Actions

25 Items

☐	Name	IP Address Family	FQDN or IPv4 Address
☐	SM97-SM100	IPv4	10.30.5.98
☐	SM95-SM100	IPv4	10.30.5.96
☐	SM93-SM100	IPv4	10.30.5.94
☐	SM91-SM100	IPv4	10.30.5.92

In **SIP Entity Details**, Choose Type **Endpoint Concentrator**. Enter following information for BT System:

Name: Enter an identifying Name for BT Platform Cluster.

FQDN or IP Address: Enter BT Trading Host Name configured in **Section 6.2**.

Entity Links: Add an **Entity link** with **TCP** protocol and **Port 5060** with Session Manager.

The **SIP Endpoint Concentrator Connection Policy** allows up to 1000 connections on a single IP address. This still requires authentication from REGISTER and INVITE requests but does not enforce the lower TCP connection limit.

AVAYA Aura® System Manager 10.2 Users Elements Services Widgets Shortcuts Search admin

Home Routing

SIP Entity Details Commit Cancel

General

* Name: BTcluster

* IP Address Family: IPv4 Tolerance: ☐

* FQDN or IPv4 Address: btcluster.avaya.com

Type: Endpoint Concentrator

Notes:

Minimum TLS Version: Use Global Setting

Credential name:

Securable: ☐

Entity Links

Override Port & Transport with DNS SRV: ☐

Add Remove

1 Item Filter: Enable

	Name	SIP Entity 1	Protocol	Port	SIP Entity 2	Port	IP Address Family	Connection Policy	Deny New Service
☐	* SM91-SM100_BTcluster	SM91-SM100	TCP	* 5060	BTcluster	* 5060	* IPv4	endpt conc	☐

Select : All, None

Commit Cancel

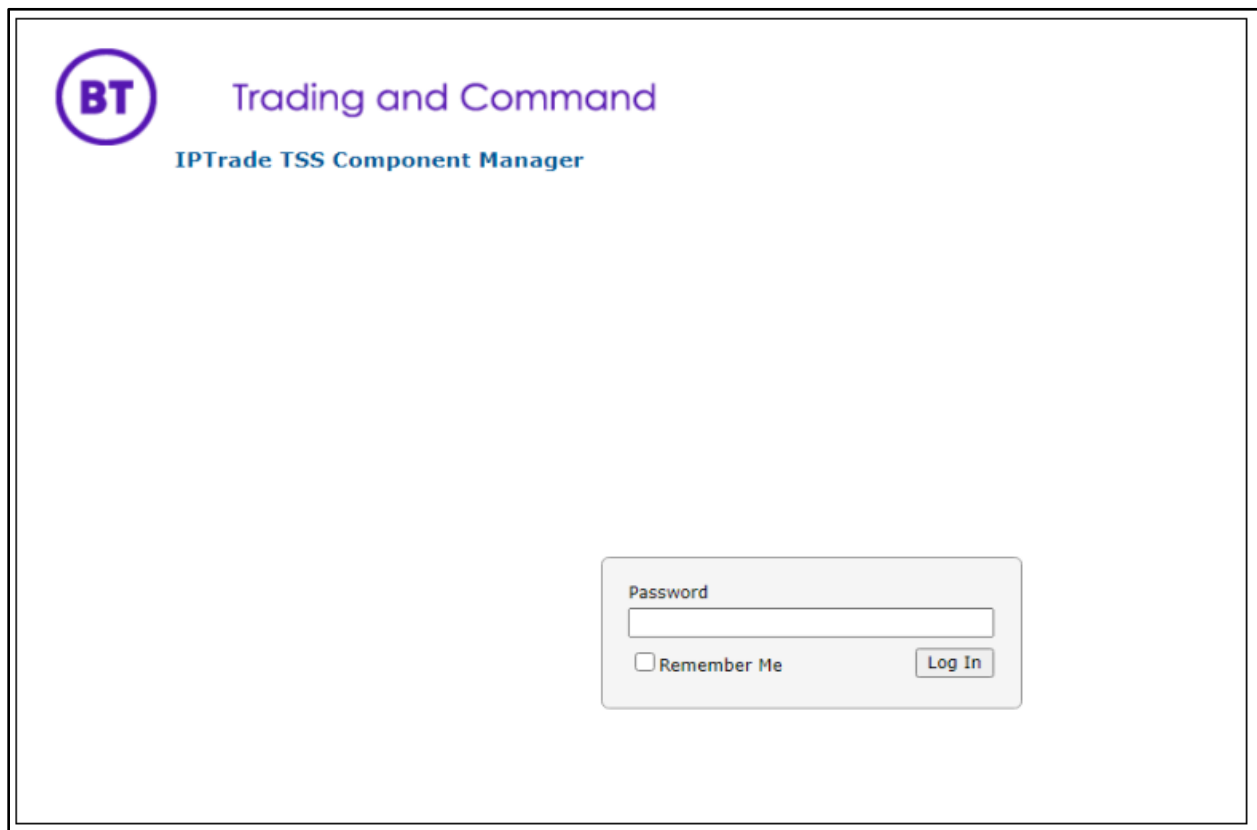
7. Configure the BT Trading System

This section addresses the administrative steps to be performed on the BT Trading Platform solution. The installation of the BT Trading Platform solution software, as well as the initial configuration of the turrets and servers, is beyond the scope of this document.

7.1. Configure the BT Trading Turret Support Server

This section describes the procedure for configuring the BT Trading Platform Turret Support Server (TSS). This procedure assumes that the TSS has already been configured with an anonymous profile and that a TFTP server (typically co-resident with the TSS) is being used for downloading certain configuration parameters to the turrets.

From a Web browser, navigate to the IP Address of the TSS. Enter the correct password and click on **Log In**.



The screenshot shows a web interface for the BT Trading and Command IPTrade TSS Component Manager. In the top left corner, there is a logo consisting of the letters 'BT' inside a purple circle. To the right of the logo, the text 'Trading and Command' is displayed in purple, and 'IPTrade TSS Component Manager' is displayed in blue below it. In the center of the page, there is a light gray rectangular box containing a login form. The form has a label 'Password' above a text input field. Below the input field, there is a checkbox labeled 'Remember Me' and a 'Log In' button.

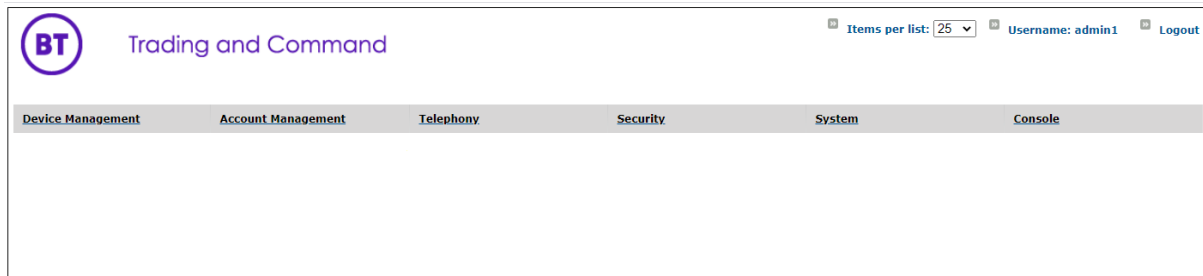
From the **TSS Versions** tab select the **Console** link as shown below.

The screenshot shows the IPTrade TSS Component Manager interface. At the top, there is a header with the BT logo and the text "Trading and Command" and "IPTrade TSS Component Manager". On the right side, there are links for "Security", "Advanced Configuration", "Logging Service", "FTP Server Configuration", "CM Logger Configuration", and "Logout". Below the header, there are three tabs: "TSS Versions", "TSS OS", and "TSS Bootstrap". The "TSS Versions" tab is selected. In the center, there is a "Replication" section. It includes a "Secondary server IP or FQDN:" field with a "Set" button. Below this, it says "Default Version 10.0.12.57249". There is a table with two columns: "PRIMARY" and "SECONDARY". The "Console" row shows the URL "https://Avaya_TSS01.thrdpa.itsnet.bt.com/iptradenet/console". The "TSS" row shows the URL "https://Avaya_TSS01.thrdpa.itsnet.bt.com/iptradenet/tss".

Enter the **User Identifier** and **Password** for the BT Trading system and select **Log In**.

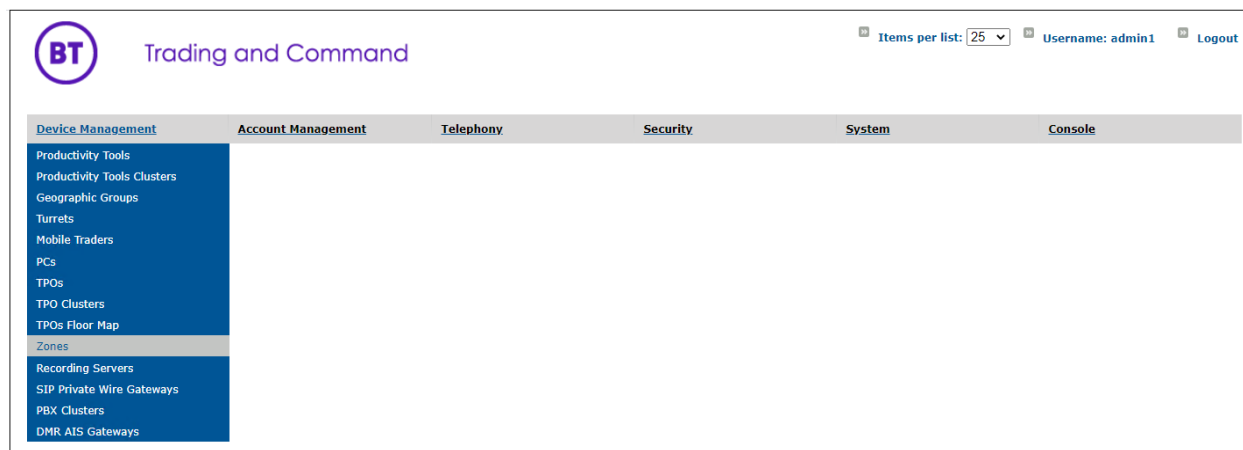
The screenshot shows the BT Trading system login page. It features the BT logo and the text "Trading and Command". In the center, there is a "Log In" section. It includes a "User Identifier" field with the value "admin1", a "Password" field with masked characters, and a checkbox for "Remember my login on this computer". There is a "Log In" button at the bottom right of the login section.

Upon successful login, the following screen will be presented.



7.1.1. Configure Avaya Zone

Select **Device Management** from the top menu bar and then **Zones** from the resulting drop-down box.



Select **Add new** from the Zone menu bar.



Enter a zone name for Avaya here it's **Avaya Aura Zone** and click **Update** (not shown).

BT Trading and Command

Items per list: 25 Username: admin1 Logout

Device Management: Zone Edition

Device Management Account Management Telephony Security System Console

<< Back to Zones list

General

General

Name * Avaya Aura Zone

Comment Avaya Aura Zone

Location

Country Belgium

State Province de Liège

City Liège

Once Avaya Aura Zone is created the additional tabs will be displayed.

BT Trading and Command

Items per list: 25 Username: admin1 Logout

Device Management: Zone Edition (Avaya Aura Zone)

Device Management Account Management Telephony Security System Console

Zone: Avaya Aura Zone

<< Back to Zones list

General TPO Boot Settings Turret Boot Settings Turrets Mobile Trader TPO TPO Cluster TPO DNS Users Shared Profiles Adv. Telephony

General

Name * Avaya Aura Zone

Comment Avaya Aura Zone

Location

Country Belgium

State Province de Liège

City Liège

Call Prefix

Recording Server Disabled

Turret WES7 (x64) OS Upgrade Level Default Inherited from global config (0)

TPO WES7 OS Upgrade Level Default Inherited from global config (19)

TPO W10 OS Upgrade Level Default Inherited from global config (0)

Usage

Turrets: DESKDEV42

MobileTrader: none

TPO: AvayaTPO1, AvayaTPO2, AvayaTPO3

Reboot all devices for this zone

Navigate to the **Turret Boot Settings** tab in Avaya Aura Zone, then select **SIP** option **Basic Mode** and enter the Session Manager signalling IP address as **SIP local domain**. Enter other checked parameters as shown below.

Zone: Avaya Aura Zone [<< Back to Zones list](#)

General TPO Boot Settings **Turret Boot Settings** Turrets Mobile Trader TPO TPO Cluster TPO DNS Users Shared Profiles Adv. Telephony

Turret Boot Settings + Pre-defined settings

T4 Basic Mode Expert Mode Advanced Mode

PBX Features Recorder RTP Search Session Shortcut Notification SIP SNMP Sync Text messaging

Name	Value	Description
☒ Use bulk registration (Cisco only)	☐ true ☒ false	
☐ MSG Proxy Transport Type	TCP	
☐ MSG Encoding		
☒ SIP Compatibility mode	ccm50	
☒ SIP local domain	10.30.5.92	
☒ SIP Connection mode	TCP	
☒ SIP Proxy Transport Type	TCP	
☒ Fast media connection on SIP Ringing state	☒ true ☐ false	
☒ SIP Local IP Ports	5060	
☐ Parking mode	☐ tpo ☒ adhoc	
☐ SIP Manage Unsolicited messages	☒ true ☐ false	

Navigate to the **Turret Boot Settings** tab and then select the **Advanced Mode** tab.

General TPO Boot Settings **Turret Boot Settings** Turrets Mobile Trader TPO TPO Cluster TPO DNS Users Shared Profiles Adv. Telephony

Turret Boot Settings + Pre-defined settings

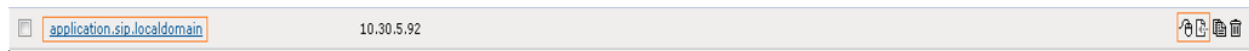
Basic Mode Expert Mode **Advanced Mode**

Refresh Add new Bulk admin selected Provisioning 1 / 1

Parameter *	Value	
application.bscg.alternateServiceURI		
application.bscg.baseServiceURI	https://Avaya_TSS01.thrdpa.itsnet.bt.com/IptradeNet TSS:10.0.12	
application.global.autologin.lastuserlogged	true	
application.global.telephony.conference	standard	
application.mm.DTMFPayloadType	127	
application.mm.supportedcodecs	0,PCMU,8000 ; 8,PCMA,8000 ; 127,telephone-event,80...	
application.mm.supportedcodecs.video.H264	97 * H264 * 90000 * profile-level-id=42801E;packetizati...	
application.sip.call.fastmediaconnect	true	
application.sip.connection.mode	TCP	
application.sip.connection.port	5060	
application.sip.enableTCP	true	
application.sip.koml.enabled	false	
application.sip.localdomain	10.30.5.92	
application.sip.non-standard.compatibility	ccm50	
application.sip.proxy.transporttype	TCP	
application.sip.register.bulk	false	
profile.setting.ddi.advanced.handling.on.all	true	
profile.setting.ddi.conference.mode	Default involved	

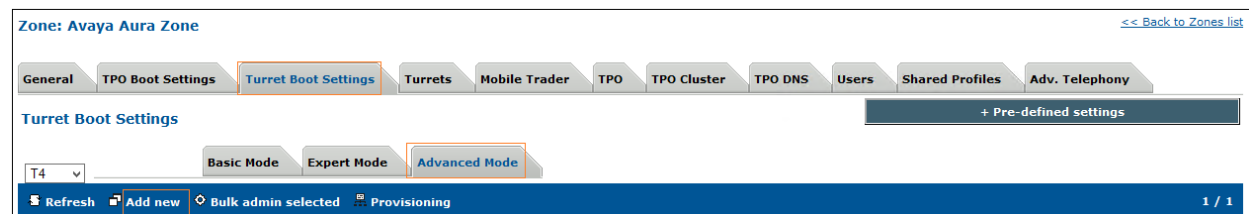
Refresh Add new Bulk admin selected Provisioning 1 / 1

NOTE: If any of the above advanced parameters are already configured, edit them rather than add. This can be done by either clicking the advanced parameter or by selecting either of the two symbols as shown in the picture below.



A horizontal configuration bar with a light gray background. On the left, there is a text field containing 'application.sip.localdomain'. To its right is another text field containing '10.30.5.92'. On the far right, there are two small icons: a pencil (edit) and a trash can (delete).

If the advanced parameter is not present, select **Add new**.



A screenshot of a web application interface. At the top, it says 'Zone: Avaya Aura Zone' with a link '<< Back to Zones list'. Below this is a series of tabs: 'General', 'TPO Boot Settings', 'Turret Boot Settings' (which is selected and highlighted), 'Turrets', 'Mobile Trader', 'TPO', 'TPO Cluster', 'TPO DNS', 'Users', 'Shared Profiles', and 'Adv. Telephony'. Under the 'Turret Boot Settings' tab, there are three sub-tabs: 'Basic Mode', 'Expert Mode', and 'Advanced Mode' (which is selected and highlighted). Below the sub-tabs, there is a dropdown menu showing 'T4'. At the bottom of the page, there is a blue bar with buttons: 'Refresh', 'Add new', 'Bulk admin selected', and 'Provisioning'. On the far right of the blue bar, it says '1 / 1'.

Now enter the following statement, the IP Address should mirror the Session Manager. In this example, the IP Address is **10.30.5.92**. When complete, select **Update and Go Back**.



A screenshot of a web application interface showing a form to add a new configuration. At the top right, there is a link '<< Back to Zones list > Avaya Aura Zone'. The form has two input fields: 'Name *' with the value 'application.sip.localdomain' and 'Value' with the value '10.30.5.92'. Below the input fields, there are five buttons: 'Update and Go Back', 'Reset', 'Refresh', 'Cancel', and 'Delete'.

Finally, ensure that all other advanced parameters are configured as shown below. Add any that are missing by using the same process as above or by using the individual menus.

GeneralTPO Boot SettingsTurret Boot SettingsTurretsMobile TraderTPO TPO ClusterTPO DNSUsersShared ProfilesAdv. Telephony

Turret Boot Settings

+ Pre-defined settings

Basic ModeExpert ModeAdvanced Mode

RefreshAdd newBulk admin selectedProvisioning1 / 1

Parameter *	Value	
application.bscg.alternateServiceURI		
application.bscg.baseServiceURI	https://Avaya_TSS01.thrdpa.itsnet.bt.com/lptradeNet TSS.10.0.12	
☐ application.global.autologin.lastuserlogged	true	
☐ application.global.telephony.conference	standard	
☒ application.mm.DTMFPayloadType	127	
☐ application.mm.supportedcodecs	0,PCMU,8000 ; 8,PCMA,8000 ; 127,telephone-event,80...	
☐ application.mm.supportedcodecs.video.H264	97 * H264 * 90000 * profile-level-id=42801E;packetizati...	
☐ application.sip.call.fastmediacconnect	true	
☐ application.sip.connection.mode	TCP	
☐ application.sip.connection.port	5060	
☐ application.sip.enableTCP	true	
☐ application.sip.kcml.enabled	false	
☐ application.sip.localdomain	10.30.5.92	
☐ application.sip.non-standard.compatibility	ccm50	
☐ application.sip.proxy.transporttype	TCP	
☐ application.sip.register.bulk	false	
☐ profile.setting.ddi.advanced.handling.on.all	true	
☐ profile.setting.ddi.conference.mode	Default involved	

RefreshAdd newBulk admin selectedProvisioning1 / 1

7.1.2. Configure Avaya TPO cluster:

From the top menu, select **Device Management** and then **TPO Clusters**.

BT Trading and Command

Items per list: 500Username: admin1Logout

Device Management: TPO Clusters

Device ManagementAccount ManagementTelephonySecuritySystemConsole

Productivity ToolsProductivity Tools ClustersGeographic GroupsTurretsMobile TradersPCsTPOsTPO ClustersTPOs Floor MapZonesRecording ServersSIP Private Wire GatewaysPBX ClustersDMR AIS Gateways

refreshAdd newBulk admin selected1 / 1

Zone	Department	Cost center	Comment	Last modification date *
Avaya Aura Zone			Avaya-Aura-Cluster	8/14/2024 9:54:19 AM
Avaya IPO Zone			Avaya-IPO-Cluster	8/14/2024 9:54:30 AM
CUCM Zone				6/3/2024 10:08:30 AM

refreshAdd newBulk admin selected1 / 1

Select **Add new** from the bottom of screenshot above to create a TPO Cluster and assign name.

Trading and Command

Device Management: TPO Cluster Edition

Device Management Account Management Telephony Security System Console

<< Back to TPO Clusters list

General

Name * Avaya-Aura-Cluster

Zone Avaya Aura Zone

Recording Server Inherited

Comment Avaya-Aura-Cluster

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

Navigate to **TPO Cluster Edition (Avaya-Aura-Cluster) → Boot Settings** and configure Session Manager IP and other parameters shown in below picture.

Trading and Command

Device Management: TPO Cluster Edition (Avaya-Aura-Cluster)

Device Management Account Management Telephony Security System Console

<< Back to TPO Clusters list

General Boot Settings Settings TPO Cluster TPO Places TPO Lines

Boot Settings

Basic Mode Expert Mode Advanced Mode

	Name	Value	Description
CAPF	☒ SIP local domain	10.30.5.92	
Cluster	☒ SIP Connection mode	TCP	
FTP	☒ SIP Proxy Transport Type	TCP	
Global	☐ Early media mixing	☒ true ☐ false	
Media	☒ SIP Local IP Ports	5060,5062,5064,5066,5068,5070,5072,5074,5076,5078,5080,5082,5084	
	☒ SIP Local IP addresses	10.30.5.92	
OLDCB	☐ QOS - DiffServ	160	
Recorder	☐ Check replace header on incoming call	☒ true ☐ false	
SIP	☐ Use bulk registration (Cisco only)	☐ true ☒ false	
SNMP	☒ MSG Proxy Transport Type	TCP	
TSMH	☐ MSG Encoding		
TSS			

Update Refresh

Select the **Boot Settings** tab and then **Advanced Mode**, ensure that the configuration matches with the picture below but with the Session Manager details.

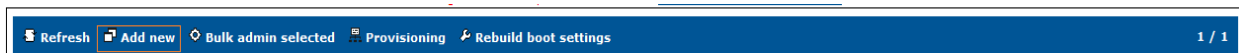
The screenshot shows the BT Trading and Command interface. At the top, there's a header with the BT logo, 'Trading and Command', and user information: 'Items per list: 500', 'Username: admin1', and 'Logout'. Below the header is a navigation bar with tabs: 'Device Management', 'Account Management', 'Telephony', 'Security', 'System', and 'Console'. The 'Device Management' tab is selected. Under 'Device Management', there are sub-tabs: 'General', 'Boot Settings', 'Settings', 'TPO Cluster', 'TPO Places', and 'TPO Lines'. The 'Boot Settings' sub-tab is selected. Within 'Boot Settings', there are three modes: 'Basic Mode', 'Expert Mode', and 'Advanced Mode'. The 'Advanced Mode' is selected. Below the modes, there's a table of parameters. The table has columns: 'Parameter *', 'Value', and 'Level'. The table contains 15 rows of parameters, all with 'TPO Cluster' as the level. The parameters include 'application.bscg.baseServiceURI', 'application.mm.nvDTMFPlayloadType', 'application.mm.nvsupportedcodecs', 'application.mm.nvsupportedcodecs.video.H264', 'application.mm.video.enable', 'application.sip.connection.ipaddress', 'application.sip.connection.mode', 'application.sip.connection.port', 'application.sip.enableTCP', 'application.sip.localdomain', 'application.sip.msg.proxy.transporttype', 'application.sip.non-standard.ccm50.offhold.header', 'application.sip.non-standard.ccm50.onhold.header', and 'application.sip.proxy.transporttype'.

Parameter *	Value	Level
application.bscg.baseServiceURI	https://Avaya_TSS01.thrdpa.itsnet.bt.com/lptradeNet.T...	Zone
application.mm.nvDTMFPlayloadType	127	TPO Cluster
application.mm.nvsupportedcodecs	0,PCMU,8000 ; 8,PCMA,8000 ; 101,telephone-event,80...	TPO Cluster
application.mm.nvsupportedcodecs.video.H264	97 * H264 * 90000 * profile-level-id=42801E;packetizati...	TPO Cluster
application.mm.video.enable	true	TPO Cluster
application.sip.connection.ipaddress	10.30.5.92	TPO Cluster
application.sip.connection.mode	TCP	TPO Cluster
application.sip.connection.port	5060,5062,5064,5066,5068,5070,5072,5074,5076,5078,...	TPO Cluster
application.sip.enableTCP	true	TPO Cluster
application.sip.localdomain	10.30.5.92	TPO Cluster
application.sip.msg.proxy.transporttype	TCP	TPO Cluster
application.sip.non-standard.ccm50.offhold.header	dummy	TPO Cluster
application.sip.non-standard.ccm50.onhold.header	dummy	TPO Cluster
application.sip.proxy.transporttype	TCP	TPO Cluster

Select **Device Management** and navigate to **TPOs**.

The screenshot shows a dropdown menu for 'Device Management'. The menu items are: 'Productivity Tools', 'Productivity Tools Clusters', 'Geographic Groups', 'Turrets', 'Mobile Traders', 'PCs', 'TPOs' (highlighted with an orange box), 'TPO Clusters', 'TPOs Floor Map', 'Zones', 'Recording Servers', 'SIP Private Wire Gateways', 'PBX Clusters', and 'DMR AIS Gateways'.

Select **Add new** from the menu bar.



Enter new TPO **Device Identifier** and select the **Avaya Aura Zone** created in previous steps. Repeat the same step again to add more TPO's. There are 3 TPOs created in the compliance test: **AvayaTPO1**, **AvayaTPO2** and **AvayaTPO3**.

A screenshot of the 'Device Management: TPO Edition (AvayaTPO1)' configuration page in the BT Trading and Command interface. The page has a header with the BT logo and 'Trading and Command'. Below the header is a navigation bar with tabs: 'Device Management', 'Account Management', 'Telephony', 'Security', 'System', and 'Console'. The 'Device Management' tab is active. Under this tab, there are sub-tabs: 'General', 'Boot Settings', 'Settings', and 'Certificates'. The 'General' sub-tab is selected. The main content area shows the configuration for 'AvayaTPO1'. Fields include 'Device Identifier *' (set to 'AvayaTPO1'), 'Zone' (set to 'Avaya Aura Zone'), 'Recording Server' (set to 'Inherited (Disabled)'), and a 'Comment' text area. Below these are 'Bootstrap Version' and 'Firmware Version' (both set to 'Default'), and 'Last Update DateTime' (9/2/2024 7:58:22 AM). There are buttons for 'Dump System Information', 'Start', and '+ Log tracing configuration'. At the bottom, there is a section for 'Assigned TPO Cluster' with a link to 'Avaya-Aura-Cluster' and buttons for 'Update', 'Update and Go Back', 'Reset', 'Refresh', and 'Cancel'.

Link newly added TPO's to Avaya-Aura-Cluster TPO cluster. Navigate to **Device Management** → **TPO Cluster** → **Avaya-Aura-Cluster** → **Settings** → **TPO Cluster**. Select **AvayaTPO1**, **AvayaTPO2** and **AvayaTPO3**, which are added in the previous step, and click on **Link Selected** to link TPO's to Cluster.

Set **TPO Redundancy Mode** to **Session Persistency**.

The screenshot displays the Avaya Aura Device Management interface. At the top, the 'Trading and Command' logo is visible. The main navigation bar includes 'Device Management', 'Account Management', 'Telephony', 'Security', 'System', and 'Console'. The 'Device Management' section is active, and the 'TPO Cluster' tab is selected. The 'TPO Redundancy Mode' is set to 'Session Persistency'. A modal window titled '- Available TPO Nodes' is open, showing a list of 'Available Nodes (3)' with checkboxes for 'AvayaTPO1', 'AvayaTPO2', and 'AvayaTPO3', all of which are selected. A 'Link Selected' button is at the bottom of the modal. The main interface shows a table with columns for Node, IP, Order, Group ID, TPO Role, Firmware version, Current Group ID, and Current TPO Role. The table is currently empty.

Node *	IP *	Order *	Group ID	TPO Role	Firmware version	Current Group ID	Current TPO Role
- This list is empty -							

7.1.4. Assign Turrets to the Avaya Zone

Select **Device Management** → **Zones : Avaya Aura Zone**, select the **Turrets** tab. Click **Search** as shown in the picture below and look for the turrets needing to be added into the Avaya Zone.

Select the Turrets from the left-hand window and select **Add** to move the Turrets into the Zone. Select **Update**.

The screenshot shows the 'Trading and Command' interface for 'Device Management: Zone Edition (Avaya Aura Zone)'. The 'Turrets' tab is selected. A search bar with a 'Search' button is present. Below it, there are two columns: 'Available Turrets (4)' and 'Selected Turrets (0)'. The 'Available Turrets' column lists four items: '3PA-Turret-01 (Avaya Aura Zone)', '3PA-Turret-02 (Avaya Aura Zone)', '3PA-Turret-03 (Avaya Aura Zone)', and 'DESKDEV42 (Avaya Aura Zone)'. The 'Selected Turrets' column is empty. Between the columns are 'Add >>' and '<< Remove' buttons. The top navigation bar includes 'Device Management', 'Account Management', 'Telephony', 'Security', 'System', and 'Console'. The top right shows 'Items per list: 25', 'Username: admin1', and a 'Logout' button.

Select the **TPO Cluster** tab and select **Search**, select the TPO Cluster created from the left-hand window and select the **Add** button.

Select **Update and Go Back**.

BT Trading and Command

Items per list: 25 Username: admin1 Logout

Device Management: Zone Edition (Avaya Aura Zone)

Device Management Account Management Telephony Security System Console

Zone: Avaya Aura Zone << Back to Zones list

General TPO Boot Settings Turret Boot Settings Turrets Mobile Trader TPO TPO Cluster TPO DNS Users Shared Profiles Adv. Telephony

TPO Cluster

Name Search

Available TPO Clusters (3)

- ☐ Avaya-IPO-Cluster (Avaya IPO Zone)
- ☐ Cisco-TPO-Cluster (CUCM Zone)
- ☒ Avaya-Aura-Cluster (Avaya Aura Zone)

Add >> << Remove

Selected TPO Clusters (0)

Update Update and Go Back Reset Refresh Cancel Delete

BT Trading and Command

Items per list: 25 Username: admin1 Logout

Device Management: Zone Edition (Avaya Aura Zone)

Device Management Account Management Telephony Security System Console

Zone: Avaya Aura Zone << Back to Zones list

General TPO Boot Settings Turret Boot Settings Turrets Mobile Trader TPO TPO Cluster TPO DNS Users Shared Profiles Adv. Telephony

TPO Cluster

Name Search

Available TPO Clusters (2)

- ☐ Avaya-IPO-Cluster (Avaya IPO Zone)
- ☐ Cisco-TPO-Cluster (CUCM Zone)

Add >> << Remove

Selected TPO Clusters (1)

- ☒ Avaya-Aura-Cluster (Avaya Aura Zone)

Update Update and Go Back Reset Refresh Cancel Delete

Select **Device Management** and the **TPO Cluster → Avaya-Aura-Cluster** and configure TPO lines by selecting the **TPO Lines** tab and select **Add new**.

The screenshot shows the BT Trading and Command web interface. At the top, there's a header with the BT logo, the text "Trading and Command", and user information: "Items per list: 25", "Username: admin1", and a "Logout" link. Below the header is a navigation bar with tabs: "Device Management", "Account Management", "Telephony", "Security", "System", and "Console". Under "Device Management", there's a sub-navigation bar with tabs: "General", "Boot Settings", "Settings", "TPO Cluster", "TPO Places", and "TPO Lines". The "TPO Lines" tab is selected and highlighted with an orange box. Below the tabs, there's a "TPO Lines" section with a "+ Configuration fetch" button. At the bottom, there's a blue bar with buttons: "Refresh", "Add new", "Bulk admin selected", and "Provisioning". On the right side of this bar, it says "1 / 1".

Enter the data as below.

Local Extension: The SIP user extension defined in **Section 6.1**.

Register: Select the Yes radio button.

SIP Display Name: Define the SIP user extension again.

SIP Password: The SIP user Communication Profile Password on Session Manager.

SIP Digest: Define the SIP user extension again.

SIP Domain: Define the IP Address of the Session Manager signalling interface.

Access Point Extension: Set the radio button to No.

The screenshot shows the BT Trading and Command web interface for the "TPO Cluster: TPO Line Edition (8123001)". At the top, there's a header with the BT logo, the text "Trading and Command", and user information: "Items per list: 500", "Username: admin1", and a "Logout" link. Below the header is a navigation bar with tabs: "Device Management", "Account Management", "Telephony", "Security", "System", and "Console". Under "Device Management", there's a sub-navigation bar with tabs: "General", "Boot Settings", "Settings", "TPO Cluster", "TPO Places", and "TPO Lines". The "TPO Lines" tab is selected. Below the tabs, there's a "TPO Line Edition (8123001)" section. It contains various fields and radio buttons for configuration. The "Local Extension *" field is set to "8123001". The "Fetch Type" is "Not Fetched". The "Place" is "8123001". The "ITS Line" checkbox is unchecked. The "Register" radio buttons have "Yes" selected. The "End User Credentials" checkbox is unchecked. The "PBX Cluster *" dropdown is set to "10.30.5.92". The "SIP Display Name" is "8123001". The "SIP Password" is masked with "*****". The "SIP Digest" is "8123001". The "SIP Domain" is "10.30.5.92". The "SIP Contact ID" is empty. The "SIP Device ID" is empty. The "SIP Line Index" is empty. The "IP Address" is empty. The "SDP IP Address" is empty. The "T3MH Listening port" is empty. The "Access Point Extension" radio buttons have "No" selected. At the bottom, there are buttons: "Update and Go Back", "Reset", "Refresh", "Cancel", and "Delete".

Once complete, select **Save and Go Back** (not shown).

Select **TPO Places** and **Add new**.

BT Trading and Command

Device Management: TPO Cluster Edition (Avaya-Aura-Cluster)

Device Management | Account Management | Telephony | Security

General | Boot Settings | Settings | TPO Cluster | **TPO Places** | TPO Lines

TPO Places

Refresh | **Add new** | Bulk admin selected | Provisioning

In the first instance, create a **Name**. Select the **Group ID** used. Ensure **RingdownDynamic** is selected as the **Place Type**.

In the **VirtualSlot Extensions**, **812300101** to **812300103** are specified. This will create three appearances for the 8123001 DDI line which are associated with the SIP user, 8123001**01** is Slot 1, 8123001**02** is Slot 2 and 8123001**03** is Slot 3.

BT Trading and Command

Items per list: 500 | Username: admin1 | Logout

TPO Cluster: TPO Place Edition (8123001)

Device Management | Account Management | Telephony | Security | System | Console

[<< Back to TPO Cluster list > Avaya-Aura-Cluster](#)

General

Name *: **8123001** | Group ID*: **1**

Comment:

☐ Critical

State: > Stopped

Default RTP Frame Size (ms): ☐ 10 ☒ 20 ☐ 30

MasterCall RTP Frame Size (ms): ☐ 10 ☒ 20 ☐ 30

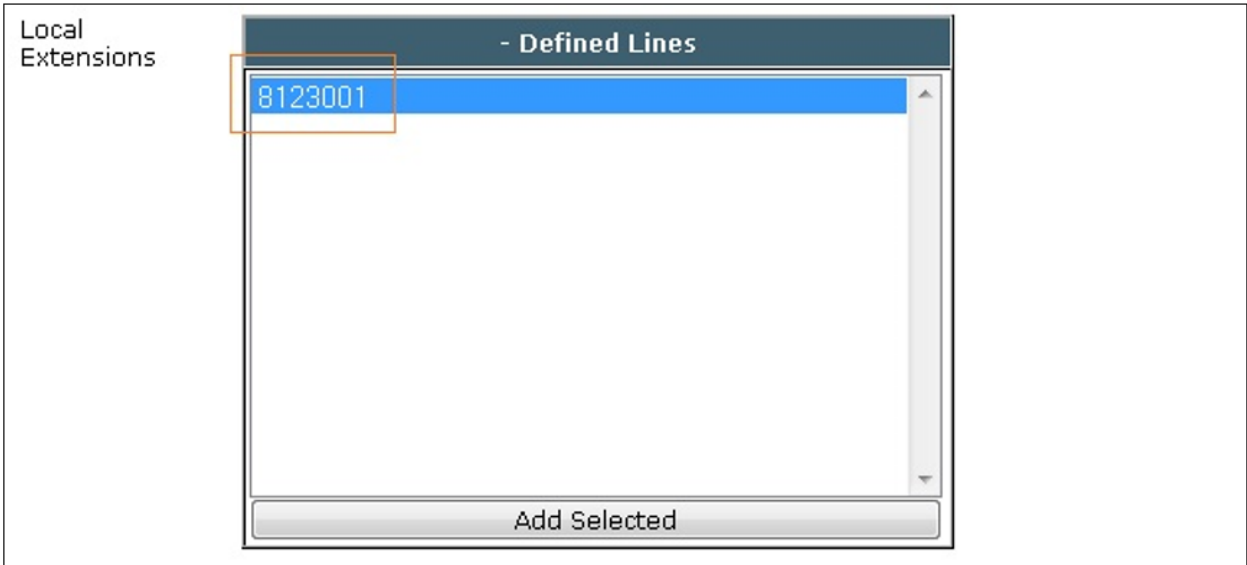
Default Volume amp (dB):

MasterCall Volume amp (dB):

Place Type: **RingdownDynamic**

Virtual Slot Extensions *: **812300101** - **812300103** ☐ Add Slot Properties

Link the Line to the TPO Place by selecting the grey **Defined Lines** box. Select **Add Selected** to add the local Extensions.



Ensure that the extension has linked correctly by looking at the linked extensions below.

Unlink selected									
Local Extension *	Register	End User Credentials	Display Name	Device ID	Line Index	IP Address	SDP IP Address	Access Point Extension	
☐ 8123001	Yes	No	8123001					No	
Unlink selected									

Next, navigate to the **TPO Cluster** (not shown) tab.

Add the **TPO Group ID** in a format which has a dot in it, in this example ‘btcluster.avaya.com’ is used as **TPO DNS Name**. This name is registered on the DNS. Again, select the green arrow to commit the changes.

TPO Group ID			
Refresh Bulk admin selected 1 / 1			
Group ID *	TPO DNS Name *	CIA	
☐ 1	btcluster.avaya.com	☐	
Refresh Bulk admin selected 1 / 1			

Add the **Order** of preference (if more than two TPO's are in a TPO Cluster). The **Group ID** that Lines were added to. Select **Active** from the **TPO Role** drop down. Select the green arrow to the right to save the changes. Follow the same step and select the **TPO Role** to **Passive** to configure passive TPO's in the cluster.

TPO Cluster

+ Available TPO Nodes

Refresh Bulk admin selected Reset									1 / 1
Node *	IP *	Order *	Group ID	TPO Role	Firmware version	Current Group ID	Current TPO Role		
☐ AvayaTPO1	172.27.130.3	1	1	Active		1	Active		
☐ AvayaTPO2	172.27.130.4	2		Idle	R10.0_12.57242		Passive		
☐ AvayaTPO3	172.27.130.5	3		Idle	R10.0_12.57242		Passive		
Refresh Bulk admin selected Reset									1 / 1

After a couple of seconds, the TPO current role will become **Active**, **Passive** and **Passive**.

BT

Trading and Command

Items per list: 500

Username: admin1

Logout

Device Management: TPO Cluster Edition (Avaya-Aura-Cluster)

Device Management

Account Management

Telephony

Security

System

Console

General

Boot Settings

Settings

TPO Cluster

TPO Places

TPO Lines

<< Back to TPO Clusters list

TPO Redundancy Mode

Session Persistency

TPO Cluster

+ Available TPO Nodes

Refresh Bulk admin selected Reset

1 / 1

Node *	IP *	Order *	Group ID	TPO Role	Firmware version	Current Group ID	Current TPO Role	
☐ AvayaTPO1	172.27.130.3	1	1	Active	R10.0_12.57242	1	Active	☐
☐ AvayaTPO2	172.27.130.4	2		Passive	R10.0_12.57242		Passive	☐
☐ AvayaTPO3	172.27.130.5	3		Passive	R10.0_12.57242		Passive	☐

Refresh Bulk admin selected Reset

1 / 1

Now select the **TPO Places** tab and select the Play button and wait for the line to register.

TPO Places17 places: 17 Stopped

Refresh

Add new

Bulk admin selected

Provisioning

1 / 1

Place Name *	Connected to	Place Type *	Group ID *	TPO	State	SIP Device ID
8123001		RingdownDynamic	1	AvayaTPO1 (Alive)	Stopped	

Once the line registers, it will display a status of **Alive** and **Started**.

TPO Places							17 places: 1 Started 16 Stopped
Refresh Add new Bulk admin selected Provisioning							1 / 1
Place Name *	Connected to	Place Type *	Group ID *	TPO	State	SIP Device ID	
8123001		RingdownDynamic	1	AvayaTPO1 (Alive)	Started		▶ 📄 🗑️

7.1.5.Add Users

The next task is to add a user, use the top menu and select **Account Management**, and then **Users**.

Device Management: TPO Cluster Edition (Avaya-Aura-Cluster)

Device Management

Account Management

Telephony

Security

System

Console

Users

Shared Profiles

Select **Add new**.

Refresh

Add new

Bulk admin selected

Provisioning

LDAP Sync

1 / 1

Enter the information regarding the user below. For this example, the user login of **aura1** was created.

BT

Trading and Command

Items per list: 25

Username: admin1

Logout

Account Management: User Edition (aura1)

Device Management

Account Management

Telephony

Security

System

Console

General

Lines

Adv. Telephony

Settings

Screen Layout

Video Stream

Call Notification

Shortcuts

Call History

<< Back to Users list

General

Type

Turret

First Name *

Aura

Last Name *

One

Status

Active

User Login *

aura1

Security policy

PwdPolicy_User

Password *

Confirm password *

Fallback pin code (Netrix only)

Zone

Avaya Aura Zone

Recording Server

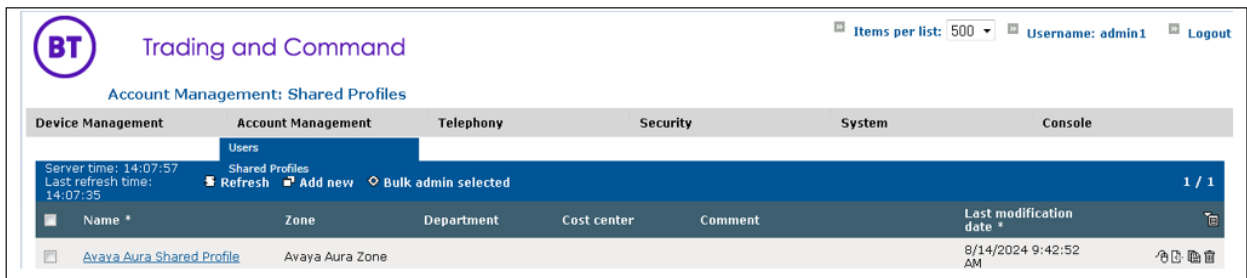
Inherited

Comment

Tools

Reset Password History

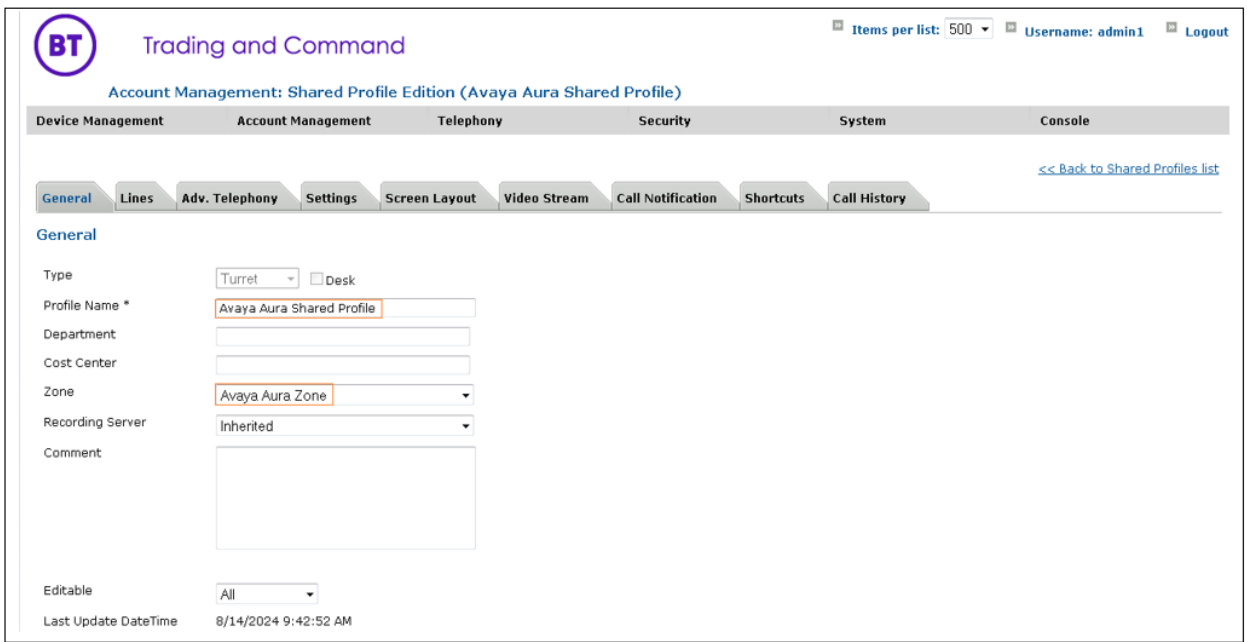
Now create a shared profile, select **Account Management** and then **Shared Profiles**.



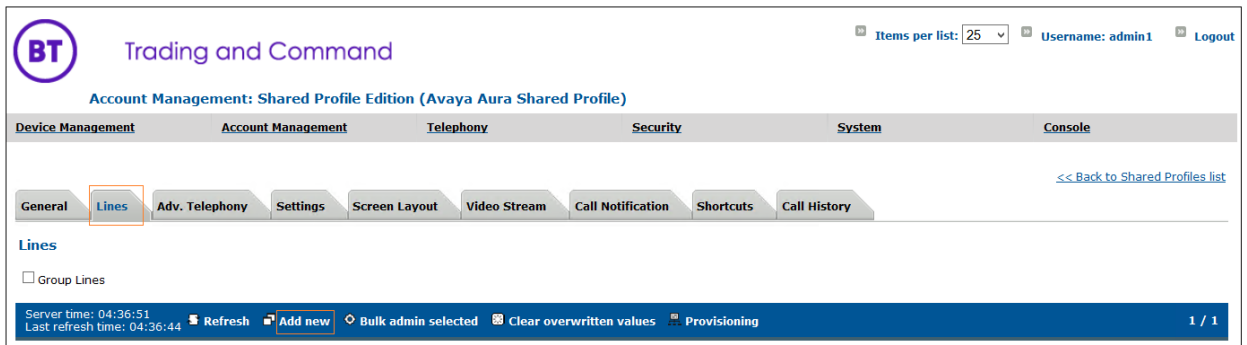
Select **Add new**.



Configure the shared Profile. Select **Update** (not shown).



Select the **Lines** tab, then select **Add new**.



Enter all the Lines associated with the Avaya profile by entering the following information. In this example the shared line 8123001 is added.

BT

Trading and Command

Items per list: 500

Username: admin1

Logout

Account Management: Line Edition (8123001)

Device Management

Account Management

Telephony

Security

System

Console

Status: Not connected

[<< Back to Shared Profiles list](#) > [Avaya Aura Shared Profile](#)

General

Type

DDI Sharing Line

Line subscription state

Subscribed

Priority

None

Call events dispatching

All but incoming

Extension *

8123001

TPO Name (or TPO DNS Name)

btcluster.avaya.com

Voice recording

Yes

Msg Waiting Indicator

Yes

Default DDI

Yes

Default Global Line

No

Queue Type

None

Radio

No

SIP

SIP Display Name *

8123001

Automatic action

Incoming Auto Accept Delay

Default

Held Auto Forward Delay

Default

Held Auto Forward Target

Dispatch Monitor Auto Recall Delay

Off

Dispatch Monitor Auto Recall Target

Auto Hold Mode

No

Select **Update** and **Go Back** (not shown) when completed.

Ensure all the Lines are present via the shared profile by selecting the **Lines** tab.

BT

Trading and Command

Items per list: 500

Username: admin1

Logout

Account Management: Shared Profile Edition (Avaya Aura Shared Profile)

Device Management

Account Management

Telephony

Security

System

Console

[<< Back to Shared Profiles list](#)

General

Lines

Adv. Telephony

Settings

Screen Layout

Video Stream

Call Notification

Shortcuts

Call History

Lines

☐ Group Lines

Server time: 14:20:50
Last refresh time: 14:20:28

Refresh

Add new

Bulk admin selected

Clear overwritten values

Provisioning

1 / 1

Type	SIP Display Name	SIP Extension	SIP Digest	SIP Domain	TPO DNS Name	
☐ DDI Sharing Line	8123001	8123001			btcluster.avaya.com	
☐ DDI Sharing Line	8123002	8123002			btcluster.avaya.com	
☐ DDI Sharing Line	8123003	8123003			btcluster.avaya.com	
☐ DDI Sharing Line	8123004	8123004			btcluster.avaya.com	
☐ DDI Sharing Line	8123005	8123005			btcluster.avaya.com	
☐ DDI Sharing Line	8123006	8123006			btcluster.avaya.com	

Server time: 14:24:34
Last refresh time: 14:20:28

Refresh

Add new

Bulk admin selected

Clear overwritten values

Provisioning

1 / 1

Update

Refresh

Now that the lines are added, they need to be inserted onto a Keypage. Navigate to **Account Management** and then **Shared Profiles** (not shown).

Select the **Shared Profile** and select the **Shortcuts** tab from the Menu bar select **Add New** Shortcut page (e.g. **DDI Lines**) and configure **shortcuts** for Avaya DDI Lines.

 **Trading and Command**

Items per list: 500 Username: admin1 Logou

Account Management: Shared Profile Edition (Avaya Aura Shared Profile)

Device ManagementAccount ManagementTelephonySecuritySystemConsole

GeneralLinesAdv. TelephonySettingsScreen LayoutVideo StreamCall NotificationShortcutsCall History

Hold shortcut changes

Shortcuts

Import from CSV - Export to CSV

RefreshAdd newBulk admin selected1 / 1

Name *	Display option	Comment	External Source
☐ DDI Lines	Positional		  

RefreshAdd newBulk admin selected1 / 1

Shortcuts

Page selection DDI Lines

RefreshAdd newBulk admin selected1 / 1

Label *	Extension *	Type	Slot	
☐ 8123001/01	812300101	DDI Slot	NOP	  
☐ 8123001/02	812300102	DDI Slot	NOP	  
☐ 8123001/03	812300103	DDI Slot	NOP	  
☐ 8123002/01	812300201	DDI Slot	NOP	  
☐ 8123002/02	812300202	DDI Slot	NOP	  
☐ 8123002/03	812300203	DDI Slot	NOP	  
☐ 8123003/01	812300301	DDI Slot	NOP	  
☐ 8123003/02	812300302	DDI Slot	NOP	  
☐ 8123003/03	812300303	DDI Slot	NOP	  
☐ 8123004/01	812300401	DDI Slot	NOP	  
☐ 8123004/02	812300402	DDI Slot	NOP	  
☐ 8123004/03	812300403	DDI Slot	NOP	  

Configure the example shown below. In this example, the first slot (8123001/01) is configured for Shared Appearance 8123001.

Label: The Shared Appearance followed by the slot number.

Type: Select **DDI Slot**.

Slot: The full Shared Appearance. 812300101. mean this slot take 1st appearance of extension 8123001.

Once complete, select **Update and Go Back**.

BT Trading and Command

Items per list: 500 Username: admin1 Logout

Account Management: Shortcut Edition (8123001/01)

Device Management Account Management Telephony Security System Console

Label * 8123001/01

Comment 8123001/01

Type DDI Slot

Slot * 812300101

Highlight Colors Text Background

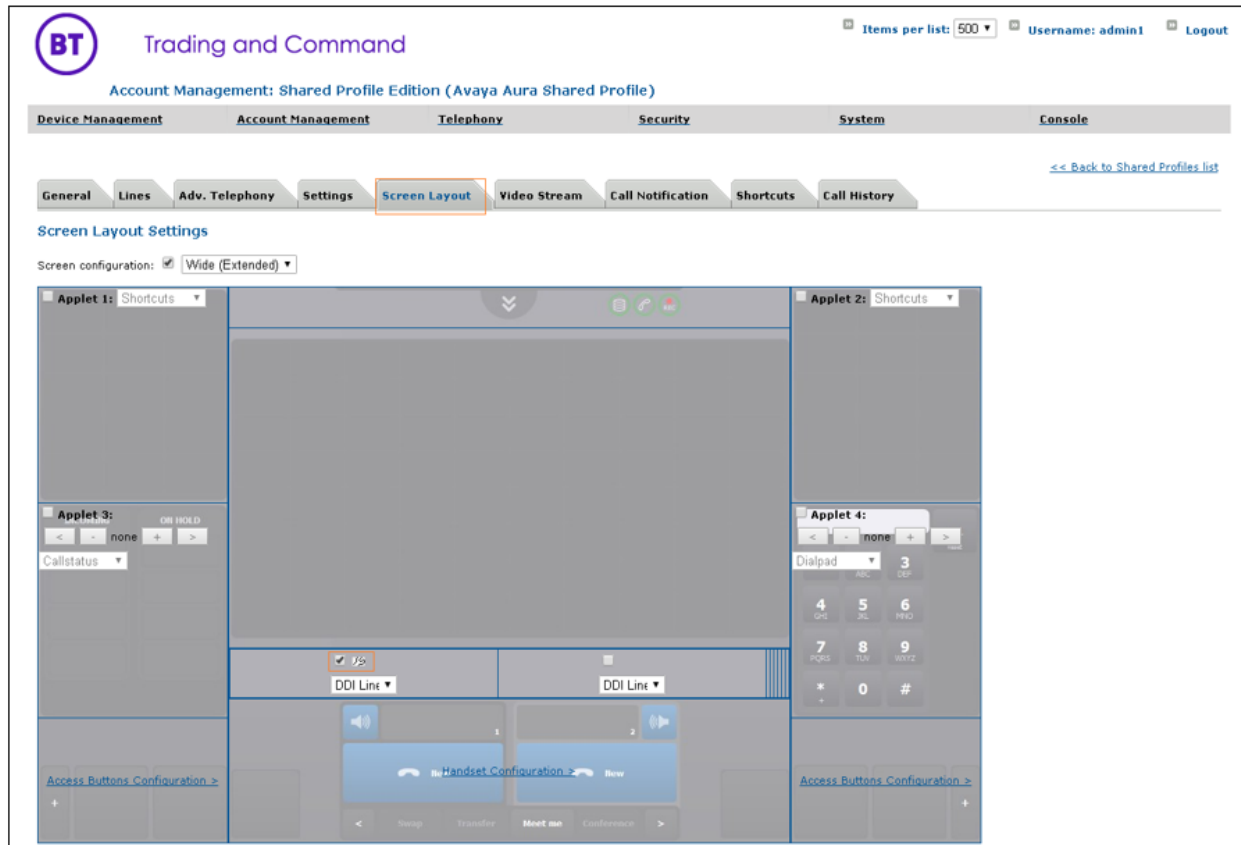
External Reference IPT_000Wq0001

Group	Device	Handset	Monitoring slot	Left Applet	Slot	Ringtone Set	Volume	State Notification
All	HS first	Default				(None)	(None)	None
	LS first	Monitoring slot	Left Applet	Slot 01				
DDI Lines *	HS first	Default				(None)	(None)	None
	LS first	Monitoring slot	Left Applet	Slot 01				

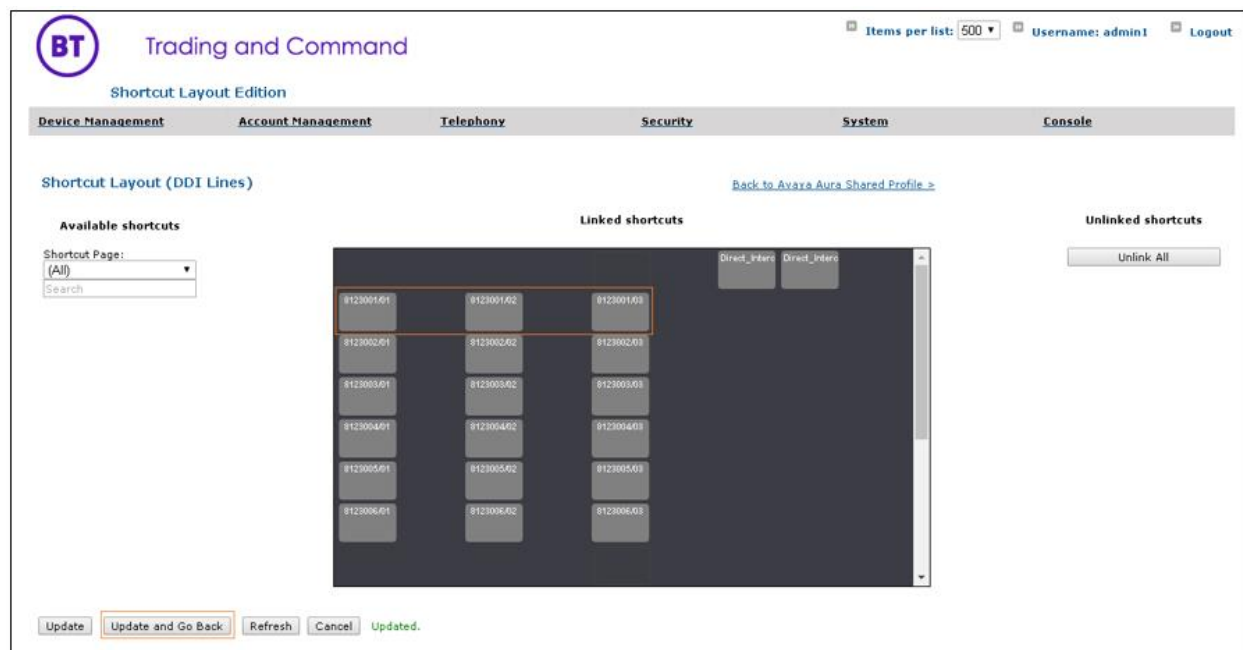
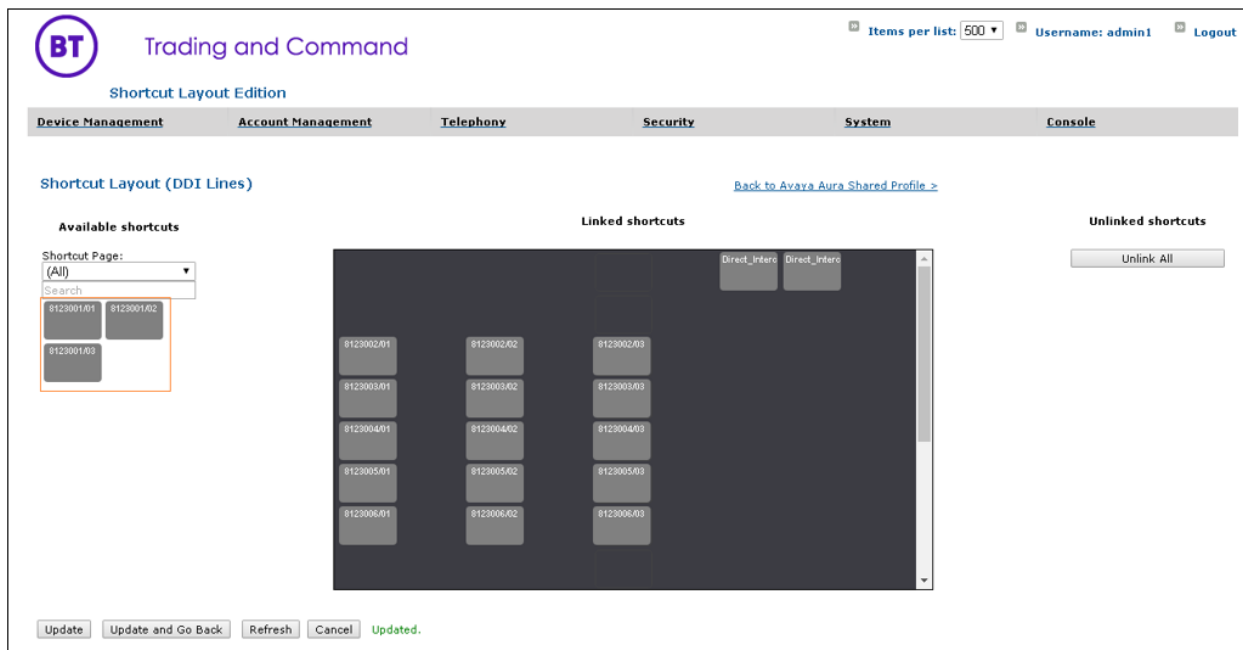
Update Update and Go Back Reset Refresh Cancel Delete

Next, select the **Screen Layout** tab from the top menu bar.

Select the Keypage to place the shared appearances by checking the tick box and then selecting the spanner symbol next to it as shown in the picture below.



The shortcuts are created as **Available shortcuts** on the left-hand side of the screen. Click each shortcut which will automatically place the shortcut into the **Unlinked shortcuts** window. Click and drag the shortcuts into the **Linked shortcuts** window.



Select **Update and Go Back** (not shown) after linking the shortcuts.

Navigate to **Advanced Mode** tab, ensure that all the advanced settings are present as per the screenshot below. Please refer to earlier in this document for adding new parameters.

Basic Mode Expert Mode Advanced Mode			
Refresh Add new Bulk admin selected Provisioning 1 / 1			
☐	Parameter *	Value	
☐	profile.setting.ddi.advanced.handling.on.all	true	
☐	profile.setting.ddi.conference.mode	All lines	
☐	profile.setting.defaulthandset	0	
☐	profile.setting.dispatch.is.blind	true	
☐	profile.setting.dispatch.is.monitored	false	
☐	profile.setting.dispatch.is.on.callkey	false	
☐	profile.setting.dnd.forward.sharedlines	true	
☐	profile.setting.forward.ddi.sharedlines	true	
☐	profile.setting.forward.sharedlines	true	
☐	profile.setting.forwardall.extensions	2400006	
☐	profile.setting.forwardpbx	true	
☐	profile.setting.hs.invert	false	
☐	profile.setting.hsbarbuttons	swap;transfer;conference;meetme;redial;merge;pickup;group_p	
☐	profile.setting.hsbarbuttons.hideinactive	false	
☐	profile.setting.screen.layout	extended	
☐	profile.setting.screen.type	false	
☐	profile.setting.shortcut.group0	Avaya KP1	
☐	profile.setting.singlehandset	false	
☐	profile.setting.transfer.uselastheldcall	true	
☐	profile.setting.videocall.enable	true	
☐	profile.setting.videocall.mirrorfeedbackvideo	true	

7.1.6. Assign Avaya Aura shared profile to the Users.

Select the **General** tab (not shown) and halfway down the page there is a search box as shown in the screenshot below. Select **Search**.

All Users configured on the system will appear, select the ones to add into this Shared Profile and select **Add**.

The screenshot shows the 'Attached users' section of a web interface. At the top, there is a search bar with 'User Name' and a dropdown menu set to '(All)', followed by a 'Search' button. Below the search bar, there are two main panels. The left panel, titled 'Available Users (3)', contains a list of three users: 'Aura One (aura1)', 'Aura Three (aura3)', and 'Aura Two (aura2)', each with a checked checkbox. The right panel, titled 'Selected Users (0)', is currently empty. Between these two panels are two buttons: 'Add >>' and '<< Remove'. Below these panels, there is a section titled 'Directories' with two empty panels: 'Available Directories (0)' and 'Selected Directories (0)', and an 'Add >>' button between them.

The screenshot shows the 'Attached users' section after the users have been added. The search bar remains at the top. The 'Available Users (0)' panel is now empty. The 'Selected Users (3)' panel now contains the same three users: 'Aura One (aura1)', 'Aura Three (aura3)', and 'Aura Two (aura2)', each with an unchecked checkbox. The 'Add >>' and '<< Remove' buttons are still present between the panels.

The users have been added into the right-hand window. Select **Update and Go Back** (not shown).

Parent profiles

Desk profile

None ▾

Profile Name

(All) ▾

Search

Available Profiles (0)

Selected Profiles (1)

☐ [Avaya Aura Shared Profile \(Shared\)](#)

Add >>

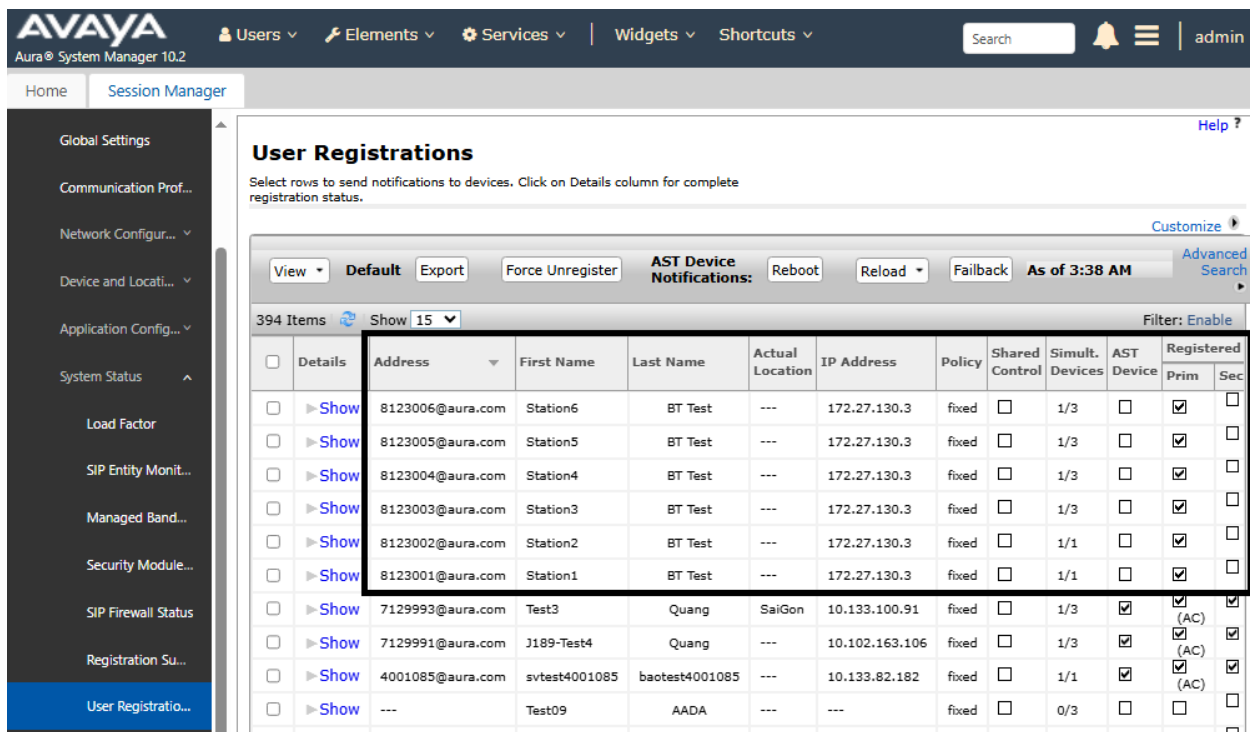
<< Remove

8. Verification Steps

This section describes the checks that can be carried out to verify the connection between BT Trading Platform with Avaya Aura® Session Manager and Avaya Aura® Communication Manager.

8.1. Avaya Aura® Session Manager Verification

From the main System Manager dashboard select **Session Manager** from the **Elements** section (not shown). Select **System Status** → **User Registrations** from the left-hand menu (not shown). The BT Trading Turret users are listed and will show a tick in the **Prim** box under **Registered**.

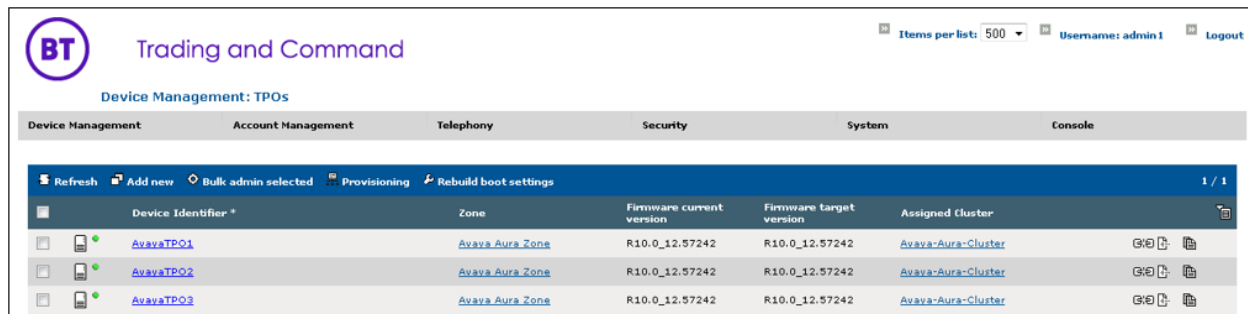


The screenshot displays the Avaya Aura System Manager 10.2 interface. The left-hand menu is open, showing the navigation path: Home > Session Manager > System Status > User Registrations. The main content area is titled "User Registrations" and includes a sub-header: "Select rows to send notifications to devices. Click on Details column for complete registration status." Below this, there are tabs for "View" (Default, Export), "Force Unregister", "AST Device Notifications", "Reboot", "Reload", and "Failback". The "As of 3:38 AM" timestamp is displayed. The table shows 394 items, with 15 items displayed per page. The table columns are: Address, First Name, Last Name, Actual Location, IP Address, Policy, Shared Control, Simult. Devices, AST Device, and Registered (Prim, Sec). The first five rows of the table are highlighted with a red box, indicating the BT Trading Turret users. These users have a "Registered" status with a tick in the "Prim" box.

	Details	Address	First Name	Last Name	Actual Location	IP Address	Policy	Shared Control	Simult. Devices	AST Device	Registered	
											Prim	Sec
☐	Show	8123006@aura.com	Station6	BT Test	---	172.27.130.3	fixed	☐	1/3	☐	☒	☐
☐	Show	8123005@aura.com	Station5	BT Test	---	172.27.130.3	fixed	☐	1/3	☐	☒	☐
☐	Show	8123004@aura.com	Station4	BT Test	---	172.27.130.3	fixed	☐	1/3	☐	☒	☐
☐	Show	8123003@aura.com	Station3	BT Test	---	172.27.130.3	fixed	☐	1/3	☐	☒	☐
☐	Show	8123002@aura.com	Station2	BT Test	---	172.27.130.3	fixed	☐	1/1	☐	☒	☐
☐	Show	8123001@aura.com	Station1	BT Test	---	172.27.130.3	fixed	☐	1/1	☐	☒	☐
☐	Show	7129993@aura.com	Test3	Quang	SaiGon	10.133.100.91	fixed	☐	1/3	☒	☒	☒
☐	Show	7129991@aura.com	J189-Test4	Quang	---	10.102.163.106	fixed	☐	1/3	☒	☒	☒
☐	Show	4001085@aura.com	svtest4001085	baotest4001085	---	10.133.82.182	fixed	☐	1/1	☒	☒	☒
☐	Show	---	Test09	AADA	---	---	fixed	☐	0/3	☐	☐	☐

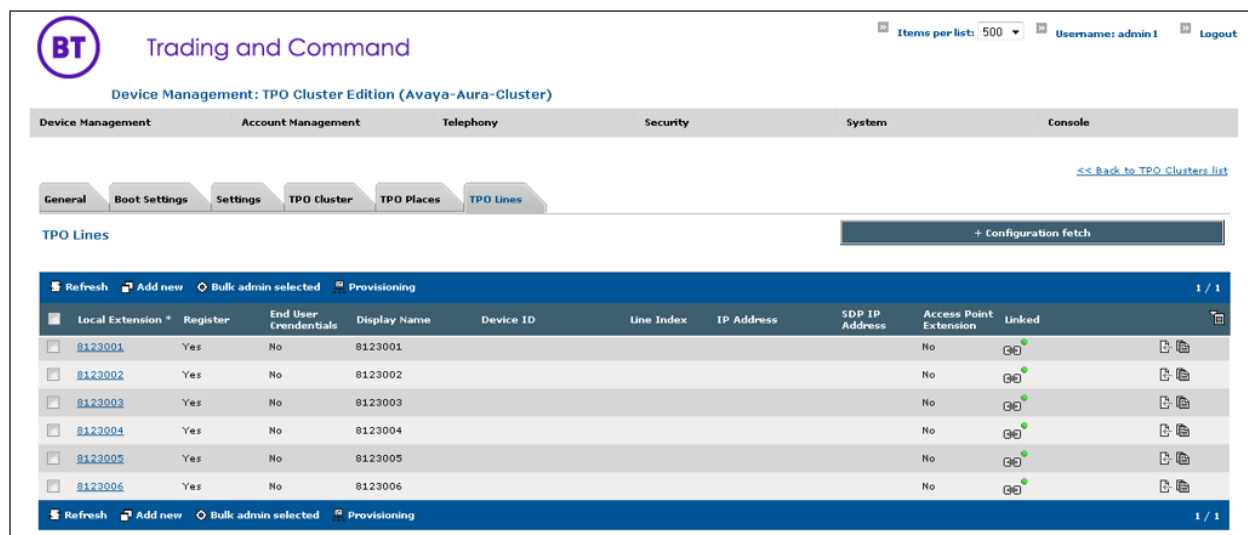
8.2. BT Trading Platform Verification

In **Device Management** → **TPOs**, ensure that the TPOs are reachable and appear in the green status as shown below.



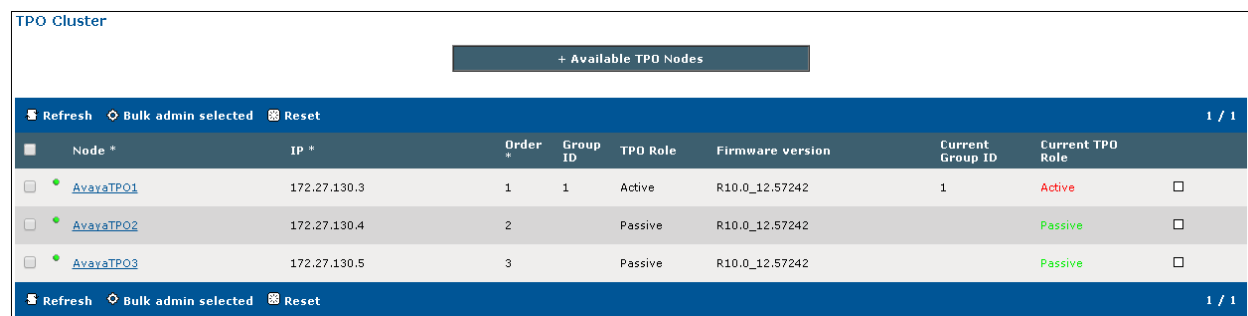
Device Identifier *	Zone	Firmware current version	Firmware target version	Assigned cluster
AvayaTPO1	Avaya Aura Zone	R10.0_12.57242	R10.0_12.57242	Avaya-Aura-Cluster
AvayaTPO2	Avaya Aura Zone	R10.0_12.57242	R10.0_12.57242	Avaya-Aura-Cluster
AvayaTPO3	Avaya Aura Zone	R10.0_12.57242	R10.0_12.57242	Avaya-Aura-Cluster

In **Device Management** → **TPO Cluster Edition (Avaya-Aura- Cluster)**, navigate to the **TPO Clusters** and **Avaya-Aura-Cluster** → **TPO Lines** tab. The Lines must be linked to the TPO place.



Local Extension *	Register	End User Credentials	Display Name	Device ID	Line Index	IP Address	SDP IP Address	Access Point Extension	Linked
8123001	Yes	No	8123001					No	Green
8123002	Yes	No	8123002					No	Green
8123003	Yes	No	8123003					No	Green
8123004	Yes	No	8123004					No	Green
8123005	Yes	No	8123005					No	Green
8123006	Yes	No	8123006					No	Green

In the same area, on the **TPO Cluster** tab, the TPOs must show a green status and **Active** for the active TPO and **Passive** for the two standby TPOs.



Node *	IP *	Order	Group ID	TPO Role	Firmware version	Current Group ID	Current TPO Role
AvayaTPO1	172.27.130.3	1	1	Active	R10.0_12.57242	1	Active
AvayaTPO2	172.27.130.4	2		Passive	R10.0_12.57242		Passive
AvayaTPO3	172.27.130.5	3		Passive	R10.0_12.57242		Passive

Lastly select the **TPO Places** tab. All lines show a status of **Started**; this indicates that the TPO has registered the line to the Session Manager.

BT

Trading and Command

Items per list: 500

Username: admin1

Logout

Device Management: TPO Cluster Edition (Avaya-Aura-Cluster)

Device Management

Account Management

Telephony

Security

System

Console

General

Boot Settings

Settings

TPO Cluster

TPO Places

TPO Lines

<< Back to TPO Clusters list

TPO Places

17 places: 6 Started, 11 Stopped

Refresh

Add new

Bulk admin selected

Provisioning

1 / 1

Place Name *	Connected to	Place Type *	Group ID *	TPO	State	SIP Device ID	
☐ 8123001		RingdownDynamic	1	AvayaTPO1 (Alive)	Started		☐
☐ 8123002		RingdownDynamic	1	AvayaTPO1 (Alive)	Started		☐
☐ 8123003		RingdownDynamic	1	AvayaTPO1 (Alive)	Started		☐
☐ 8123004		RingdownDynamic	1	AvayaTPO1 (Alive)	Started		☐
☐ 8123005		RingdownDynamic	1	AvayaTPO1 (Alive)	Started		☐
☐ 8123006		RingdownDynamic	1	AvayaTPO1 (Alive)	Started		☐

Refresh

Add new

Bulk admin selected

Provisioning

1 / 1

9. Conclusion

These Application Notes describe the configuration steps required for BT Trading Platform to interoperate with Avaya Aura® Session Manager and Avaya Aura® Communication Manager. All feature functionality and serviceability test cases were completed successfully as outlined in **Section 2.2**.

10. Additional References

Product documentation for Avaya products may be found at <http://support.avaya.com>.

1. *Administering Avaya Aura® Communication Manager*, Release 10.2.x, Issue 5 August 2024
2. *Administering Avaya Aura® Session Manager*, Release 10.2.x, Issue 2 January 2024
3. *Administering Avaya Aura® Application Enablement Services*, Release 10.2.x, Issue 1 December 2023
4. *Administering Avaya Aura® System Manager*, Release 10.2, Issue 10 August 2024

Information regarding Product documentation for BT Trading Platform can be obtained by contacting the Support email in **Section 2.3**.

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