



Avaya Solution & Interoperability Test Lab

Application Notes for OpenText Qfiniti Survey 20.4 with Avaya Aura® Application Enablement Services 8.1.3 and Avaya Aura® Session Manager 8.1.3 – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for OpenText Qfiniti Survey 20.4 to interoperate with Avaya Aura® Application Enablement Services 8.1.3, Avaya Aura® Session Manager 8.1.3, and Avaya Aura® Communication Manager 8.1.3. OpenText Qfiniti Survey is an inbound IVR-based survey system that is part of the OpenText Qfiniti product suite.

In the compliance testing, OpenText Qfiniti Survey used the Telephony Services Application Programming Interface from Avaya Aura® Application Enablement Services and SIP users with Avaya Aura® Session Manager to provide automated survey to inbound ACD callers.

Readers should pay attention to **Section 2**, in particular the scope of testing as outlined in **Section 2.1** as well as any 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 for OpenText Qfiniti Survey (Survey) 20.4 to interoperate with Avaya Aura® Application Enablement Services 8.1.3, Avaya Aura® Session Manager 8.1.3, and Avaya Aura® Communication Manager 8.1.3. Survey is an inbound IVR-based survey system that is part of the Qfiniti product suite.

In the compliance testing, Survey used the Telephony Services Application Programming Interface (TSAPI) from Application Enablement Services and SIP users with Session Manager to provide automated survey to inbound ACD callers.

The TSAPI interface is used by Survey to monitor skill groups, agent stations, and virtual SIP users. The SIP user interface is used by Survey to register virtual SIP users with Session Manager for connecting inbound ACD callers to Survey. The virtual SIP users are configured as members of a hunt group on Communication Manager.

Survey supports various modes, and the compliance testing used the agent transfer mode with agent verbally offering survey to PSTN callers toward end of inbound ACD call and performs unsupervised transfer of agreed callers to the Survey hunt group.

Upon connection of PSTN caller with Survey caller via an available virtual SIP user, Survey plays pertinent survey questions and collects responses via DTMF selections. Survey can also record PSTN caller voice responses for open-ended questions such as additional comments and performs immediate transfer of PSTN caller to supervisor via SIP REFER upon meeting specific criteria.

2. General Test Approach and Test Results

The feature test cases were performed both automatically and manually. Upon start of the Survey application, the application automatically used SIP to register the virtual SIP users, and TSAPI to request monitoring of skill groups, agent stations, and virtual SIP users.

For the manual part of testing, survey calls were manually transferred by agents to the Survey hunt group. DTMF and voice input were provided as responses to pertinent survey questions.

The verification of tests included use of Qfiniti web interface for proper logging of survey results and playback of voice responses.

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 Note, the interfaces between Avaya systems and Survey did not include use of any specific encryption features as requested by OpenText.

2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying the following on Survey:

- Handling of TSAPI messages in areas of event notification and value queries.
- Handling of SIP messages in areas of registration, G.711, media shuffling, codec negotiation, session refresh, REFER, and inbound DTMF.
- Proper handling of survey results for scenarios involving agent transfer, abandon, no response, partial response, complete response, voice response recording and playback, immediate transfer to supervisor, and multiple agents.

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

2.2. Test Results

All test cases were executed, and the following were observations on Survey:

- By design, Survey does not log the PSTN calling number as part of survey results. If required by customer, this can be accomplished via scripting changes on Survey.
- Survey does not support SRTP nor SDP capability negotiation. As such, the compliance testing used a separate set of network region and codec set in Communication Manager for integration with Survey.

2.3. Support

Technical support on Survey can be obtained through the following:

- **Phone:** (800) 540-7292
- **Web:** <http://engage.opentext.com/products/qfiniti>

3. Reference Configuration

The configuration used for the compliance testing is shown in **Figure 1**, with “**dr220.com**” being the domain name. The configuration of Session Manager is performed via the web interface of System Manager. The detailed administration of basic connectivity between Communication Manager, Application Enablement Services, System Manager, Session Manager, and of call center devices are not the focus of these Application Notes and will not be described.

In the compliance testing, Survey monitored the skill groups and agent station extensions shown in the table below.

Device Type	Extension
Skill Group	61001, 61002
Agent Station	65001 (H.323), 66006 (SIP)
Agent ID	65881, 65882
Supervisor Station	65000

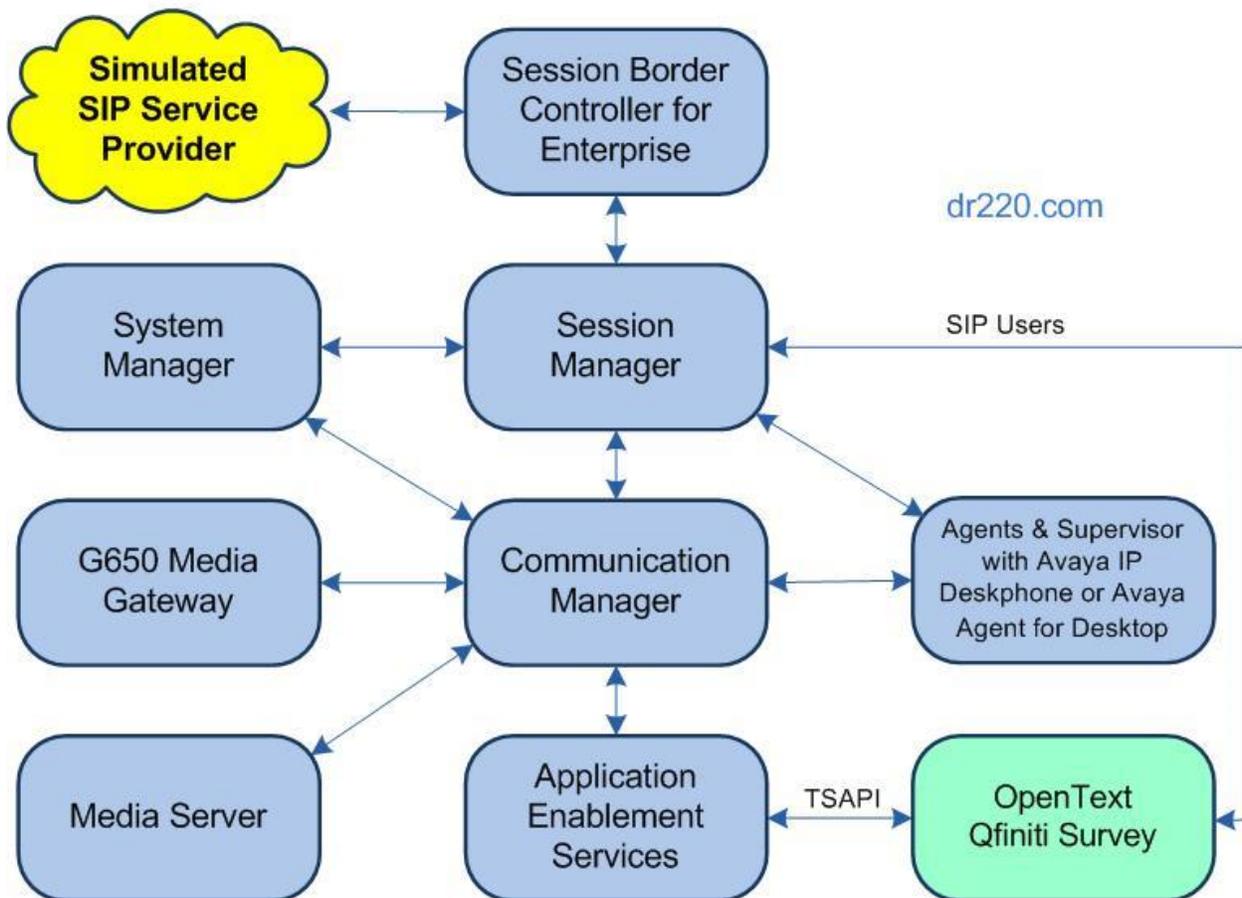


Figure 1: Compliance Testing Configuration

4. Equipment and Software Validated

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

Equipment/Software	Release/Version
Avaya Aura® Communication Manager in Virtual Environment	8.1.3 (8.1.3.3.1.890.27168)
Avaya G650 Media Gateway	NA
Avaya Aura® Media Server in Virtual Environment	8.0.2.200
Avaya Aura® Application Enablement Services in Virtual Environment	8.1.3.3.0.4-0
Avaya Aura® Session Manager in Virtual Environment	8.1.3 (8.1.3.3.813310)
Avaya Aura® System Manager in Virtual Environment	8.1.3 (8.1.3.3.1013878)
Avaya Session Border Controller for Enterprise in Virtual Environment	8.1.2 (8.1.2.0-31-19809)
Avaya Agent for Desktop (H.323 & SIP)	2.0.6.17.3006
Avaya J179 & 9611G IP Deskphone (H.323)	6.8511
Avaya J169 IP Deskphone (SIP)	4.0.10.3.2
OpenText Qfiniti on Microsoft Windows Server 2019 <ul style="list-style-type: none">Avaya TSAPI Windows Client (csta32.dll)	20.4.0 with QF-18193 & QF-18501 Standard 8.1.3.25

5. Configure Avaya Aura® Communication Manager

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

- Verify license
- Administer CTI link
- Administer hunt group
- Administer codec set
- Administer network region
- Administer network region map

5.1. Verify License

Log in to the System Access Terminal 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 to verify that there is sufficient license for SIP stations by comparing the **Maximum Off-PBX Telephones – OPS** field value with the corresponding value in the **USED** column.

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

G3 Version: V18                                     Software Package: Enterprise
Location: 2                                         System ID (SID): 1
Platform: 28                                       Module ID (MID): 1

                                USED
Platform Maximum Ports: 81000      217
Maximum Stations: 41000           23
Maximum XMOBILE Stations: 41000    0
Maximum Off-PBX Telephones - EC500: 41000 0
Maximum Off-PBX Telephones - OPS: 41000 6
```

Navigate to **Page 4** and verify that **Computer Telephony Adjunct Links** is enabled. If not enabled, then contact the Avaya sales team or business partner for a proper license file.

```
display system-parameters customer-options                               Page 4 of 12
                                OPTIONAL FEATURES

Abbreviated Dialing Enhanced List? y             Audible Message Waiting? y
Access Security Gateway (ASG)? n                 Authorization Codes? y
Analog Trunk Incoming Call ID? y                 CAS Branch? n
A/D Grp/Sys List Dialing Start at 01? y         CAS Main? n
Answer Supervision by Call Classifier? y         Change COR by FAC? n
ARS? y Computer Telephony Adjunct Links? y
```

5.2. Administer CTI Link

Add a CTI link using the “**add cti-link n**” command, where “**n**” is an available CTI link number. Enter an available extension number in the **Extension** field.

Enter “**ADJ-IP**” in the **Type** field, and a descriptive name in the **Name** field. Default values may be used in the remaining fields.

```
add cti-link 1                                     Page 1 of 3
                                         CTI LINK
CTI Link: 1
Extension: 60111
  Type: ADJ-IP
                                         COR: 1
  Name: AES CTI Link
Unicode Name? n
```

5.3. Administer Hunt Group

After the virtual SIP users have been created in **Section 7.3**, add a hunt group with virtual SIP users as members to route calls to Survey. Use the “**add hunt-group n**” command, where “**n**” is an available hunt group number. Enter the following values for the specified fields and retain the default values for the remaining fields.

- **Group Number:** The available group number.
- **Group Name:** A descriptive name.
- **Group Extension:** An available extension number.

```
add hunt-group 3                                 Page 1 of 60
                                         HUNT GROUP
  Group Number: 3                               ACD? n
  Group Name: Survey Agent Transfer             Queue? n
  Group Extension: 61003                       Vector? n
  Group Type: ucd-mia                           Coverage Path:
  TN: 1                                         Night Service Destination:
  COR: 1                                       MM Early Answer? n
  Security Code:                               Local Agent Preference? n
ISDN/SIP Caller Display:
```

Navigate to **Page 3** and enter extensions of all virtual SIP users from **Section 7.3** as members.

```
add hunt-group 3                                 Page 3 of 60
                                         HUNT GROUP
  Group Number: 3      Group Extension: 61003      Group Type: ucd-mia
  Member Range Allowed: 1 - 1500      Administered Members (min/max): 0 /0
                                         Total Administered Members: 0
GROUP MEMBER ASSIGNMENTS
  Ext      Name(16 characters)      Ext      Name(16 characters)
  1: 66991                               14:
  2: 66992                               15:
  3:                               16:
```

5.4. Administer Codec Set

Administer a codec set for integration with Survey. Use the “**change ip-codec-set n**” command, where “**n**” is an existing codec set number to use for interoperability.

For **Audio Codec**, enter the pertinent G.711 variant as shown below. Note that G.711 is the only codec type supported by Survey. For **Media Encryption** and **Encrypted SRTCP**, enter “**none**” and “**enforce-unenc-srtcp**” as shown below. Retain the default values for the remaining fields.

```
change ip-codec-set 3                                     Page 1 of 2

                                IP MEDIA PARAMETERS

Codec Set: 3

Audio      Silence      Frames      Packet
Codec      Suppression  Per Pkt    Size(ms)
1: G.711MU      n           2          20
2:
3:
4:
5:
6:
7:

Media Encryption                               Encrypted SRTCP: enforce-unenc-srtcp
1: none
```

5.5. Administer Network Region

Administer a network region for integration with Survey. Use the “**change ip-network-region n**” command, where “**n**” is an existing network region number to use for interoperability.

Enter the following values for the specified fields and retain the default values for the remaining fields.

- **Authoritative Domain:** The SIP domain from **Section 3**.
- **Name:** A descriptive name.
- **Codec Set:** The codec set number from **Section 5.4**.

Enter “**no**” for **Intra-region IP-IP Direct Audio** and **Inter-region IP-IP Direct Audio**.

```
change ip-network-region 3                               Page 1 of 20

                                IP NETWORK REGION

Region: 3      NR Group: 3
Location:      Authoritative Domain: dr220.com
Name: Survey   Stub Network Region: n
MEDIA PARAMETERS      Intra-region IP-IP Direct Audio: no
Codec Set: 3         Inter-region IP-IP Direct Audio: no
UDP Port Min: 2048   IP Audio Hairpinning? n
UDP Port Max: 3329
DIFFSERV/TOS PARAMETERS
Call Control PHB Value: 46
```

Navigate to **page 4**, locate the entry associated with the network region assigned to the agent stations, in this case “1”. For **codec set**, enter the codec set value from above as shown below, to enable the Survey codec set to be used for calls with agent stations.

```
change ip-network-region 3 Page 4 of 20

Source Region: 3      Inter Network Region Connection Management      I      M
                                                                G A t
dst codec direct  WAN-BW-limits  Video      Intervening  Dyn A G c
rgn set  WAN Units  Total Norm  Prio Shr Regions  CAC R L e
1  3    y    NoLimit                n      t
2
3      3
4
5
6
```

5.6. Administer Network Region Map

Use the “**change ip-network-map**” command to map virtual SIP users to the network region configured for integration with Survey.

For **IP Address**, enter IP address of the Survey server. For **Network Reg**, enter the network region number from **Section 5.5**.

```
change ip-network-map Page 1 of 63
                        IP ADDRESS MAPPING

IP Address                Subnet Network  Emergency
                        Bits  Reg  VLAN  Location Ext
-----
FROM: 10.64.101.202      /      3      n
TO: 10.64.101.202
FROM: /                  /      n
TO:
```

6. Configure Avaya Aura® Application Enablement Services

This section provides the procedures for configuring Application Enablement Services. The procedures include the following areas:

- Launch OAM interface
- Verify license
- Administer TSAPI link
- Administer Survey user
- Administer security database
- Restart services

6.1. Launch OAM Interface

Access the OAM web-based interface by using the URL “**https://ip-address**” in an Internet browser window, where “**ip-address**” is the IP address of the Application Enablement Services server.

The **Please login here** screen is displayed. Log in using the appropriate credentials.



The screenshot shows the Avaya Application Enablement Services Management Console login interface. At the top left is the Avaya logo. The title "Application Enablement Services Management Console" is centered. A red horizontal bar spans the width of the page, with a "Help" link on the right. In the center, there is a login box with the text "Please login here:" followed by a "Username" label and an input field. Below the input field is a "Continue" button. At the bottom of the page, a red horizontal bar is present, and below it, the copyright notice "Copyright © 2009-2020 Avaya Inc. All Rights Reserved." is displayed.

The **Welcome to OAM** screen is displayed next.

The screenshot shows the AVAYA Application Enablement Services Management Console. The top navigation bar includes 'Home', 'Help', and 'Logout'. The left sidebar contains a menu with items: AE Services, Communication Manager Interface, High Availability, Licensing, Maintenance, Networking, Security, Status, User Management, Utilities, and Help. The main content area is titled 'Welcome to OAM' and contains the following text:

Welcome: User
Last login: Tue Jan 18 15:44:45 2022 from 192.168.200.20
Number of prior failed login attempts: 0
HostName/IP: aes7/10.64.101.239
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 8.1.3.3.0.4-0
Server Date and Time: Tue Jan 18 16:50:09 EST 2022
HA Status: Not Configured

Welcome to OAM

The AE Services Operations, Administration, and Management (OAM) Web provides you with tools for managing the AE Server. OAM spans the following administrative domains:

- AE Services - Use AE Services to manage all AE Services that you are licensed to use on the AE Server.
- Communication Manager Interface - Use Communication Manager Interface to manage switch connection and dialplan.
- High Availability - Use High Availability to manage AE Services HA.
- Licensing - Use Licensing to manage the license server.
- Maintenance - Use Maintenance to manage the routine maintenance tasks.
- Networking - Use Networking to manage the network interfaces and ports.
- Security - Use Security to manage Linux user accounts, certificate, host authentication and authorization, configure Linux-PAM (Pluggable Authentication Modules for Linux) and so on.
- Status - Use Status to obtain server status informations.
- User Management - Use User Management to manage AE Services users and AE Services user-related resources.
- Utilities - Use Utilities to carry out basic connectivity tests.
- Help - Use Help to obtain a few tips for using the OAM Help system

Depending on your business requirements, these administrative domains can be served by one administrator for all domains, or a separate administrator for each domain.

6.2. Verify License

Select **Licensing** → **WebLM Server Access** in the left pane, to display the applicable WebLM server log in screen (not shown). Log in using the appropriate credentials and navigate to display installed licenses (not shown).

The screenshot shows the AVAYA Application Enablement Services Management Console with the 'Licensing' menu item selected in the left sidebar. The main content area is titled 'Licensing' and contains the following text:

Welcome: User
Last login: Tue Jan 18 15:44:45 2022 from 192.168.200.20
Number of prior failed login attempts: 0
HostName/IP: aes7/10.64.101.239
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 8.1.3.3.0.4-0
Server Date and Time: Tue Jan 18 16:50:09 EST 2022
HA Status: Not Configured

Licensing

If you are setting up and maintaining the WebLM, you need to use the following:

- WebLM Server Address

If you are importing, setting up and maintaining the license, you need to use the following:

- WebLM Server Access

If you want to administer TSAPI Reserved Licenses or DMCC Reserved Licenses, you need to use the following:

- Reserved Licenses

Select **Licensed products** → **APPL_ENAB** → **Application Enablement** in the left pane, to display the **Application Enablement (CTI)** screen in the right pane.

Verify that there are sufficient licenses for **TSAPI Simultaneous Users**, as shown below.

Application Enablement (CTI) - Release: 8 - SID: 10503000 (Enterprise license)

You are here: Licensed Products > Application_Enablement > View by Feature

License installed on: August 8, 2019 4:43:51 PM -05:00

License File Host IDs: VE-83-02-2D-26-52-01

Feature (License Keyword)	License Capacity
Unified CC API Desktop Edition (VALUE_AES_AEC_UNIFIED_CC_DESKTOP)	1000
CVLAN ASAI (VALUE_AES_CVLAN_ASAI)	16
Device Media and Call Control (VALUE_AES_DMCC_DMC)	1000
AES ADVANCED SMALL SWITCH (VALUE_AES_AEC_SMALL_ADVANCED)	3
DLG (VALUE_AES_DLG)	16
TSAPI Simultaneous Users (VALUE_AES_TSAPI_USERS)	1000
AES ADVANCED LARGE SWITCH (VALUE_AES_AEC_LARGE_ADVANCED)	3
CVLAN Proprietary Links (VALUE_AES_PROPRIETARY_LINKS)	16

6.3. Administer TSAPI Link

Select **AE Services** → **TSAPI** → **TSAPI Links** from the left pane of the **Management Console**, to administer a TSAPI link. The **TSAPI Links** screen is displayed, as shown below. Click **Add Link**.

The screenshot shows the Avaya Management Console interface. At the top left is the Avaya logo and the text "Application Enablement Services Management Console". At the top right, there is a user welcome message: "Welcome: User", "Last login: Tue Jan 18 15:44:45 2022 from 192.168.200.20", "Number of prior failed login attempts: 0", "HostName/IP: aes7/10.64.101.239", "Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE", "SW Version: 8.1.3.3.0.4-0", "Server Date and Time: Tue Jan 18 16:50:09 EST 2022", and "HA Status: Not Configured". Below this is a red navigation bar with "AE Services | TSAPI | TSAPI Links" on the left and "Home | Help | Logout" on the right. The main content area is titled "TSAPI Links" and contains a table with columns: "Link", "Switch Connection", "Switch CTI Link #", "ASAI Link Version", and "Security". Below the table are three buttons: "Add Link", "Edit Link", and "Delete Link". On the left side, there is a sidebar menu with "AE Services" expanded, showing sub-items: "CVLAN", "DLG", "DMCC", "SMS", "TSAPI" (expanded), "TSAPI Links", and "TSAPI Properties".

The **Add TSAPI Links** screen is displayed next. The **Link** field is only local to the Application Enablement Services server and may be set to any available number.

For **Switch Connection**, select the relevant switch connection from the drop-down list, in this case “**cm7**”. For **Switch CTI Link Number**, select the CTI link number from **Section 5.2**.

Retain the default value for **ASAI Link Version** and set **Security** to the desired value, in this case “**Both**” to allow for both encrypted and non-encrypted connections.

The screenshot shows the Avaya Management Console interface for the "Add TSAPI Links" screen. The top header and user information are identical to the previous screenshot. The navigation bar is the same. The sidebar menu is also the same. The main content area is titled "Add TSAPI Links" and contains several form fields: "Link" (text input with value "1"), "Switch Connection" (drop-down menu with value "cm7"), "Switch CTI Link Number" (drop-down menu with value "1"), "ASAI Link Version" (drop-down menu with value "12"), and "Security" (drop-down menu with value "Both"). At the bottom of the form are three buttons: "Apply Changes", "Cancel Changes", and "Advanced Settings".

6.4. Administer Survey User

Select **User Management** → **User Admin** → **Add User** from the left pane, to display the **Add User** screen in the right pane.

Enter desired values for **User Id**, **Common Name**, **Surname**, **User Password**, and **Confirm Password**. For **CT User**, select “Yes” from the drop-down list. Retain the default value in the remaining fields.

The screenshot displays the Avaya Application Enablement Services Management Console. The top right corner shows system information: Welcome: User, Last login: Tue Jan 18 15:44:45 2022 from 192.168.200.20, Number of prior failed login attempts: 0, HostName/IP: aes7/10.64.101.239, Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE, SW Version: 8.1.3.3.0.4-0, Server Date and Time: Tue Jan 18 16:50:09 EST 2022, HA Status: Not Configured. The breadcrumb navigation is User Management | User Admin | Add User. The left sidebar menu includes AE Services, Communication Manager Interface, High Availability, Licensing, Maintenance, Networking, Security, Status, User Management (expanded), Service Admin, User Admin (expanded), Add User (selected), Change User Password, List All Users, Modify Default Users, Search Users, Utilities, and Help. The main content area is titled 'Add User' and contains the following fields: * User Id (text input: qfiniti), * Common Name (text input: qfiniti), * Surname (text input: qfiniti), * User Password (password input: masked with dots), * Confirm Password (password input: masked with dots), Admin Note (text input), Avaya Role (dropdown menu: None), Business Category (text input), Car License (text input), CM Home (text input), Csm Home (text input), CT User (dropdown menu: Yes), Department Number (text input), Display Name (text input), Employee Number (text input), Employee Type (text input), Enterprise Handle (text input), and Given Name (text input). A note indicates that fields marked with * are required.

6.5. Administer Security Database

Select **Security** → **Security Database** → **Control** from the left pane, to display the **SDB Control for DMCC, TSAPI, JTAPI and Telephony Web Services** screen in the right pane. Make certain that both parameters are unchecked, as shown below.

In the case that the security database is used by the customer with parameters already enabled, then follow reference [2] to configure access privileges for the Survey user from **Section 6.4**.

The screenshot displays the Avaya Application Enablement Services Management Console. The top left features the Avaya logo and the text "Application Enablement Services Management Console". The top right corner shows system information: "Welcome: User", "Last login: Tue Jan 18 15:44:45 2022 from 192.168.200.20", "Number of prior failed login attempts: 0", "HostName/IP: aes7/10.64.101.239", "Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE", "SW Version: 8.1.3.3.0.4-0", "Server Date and Time: Tue Jan 18 16:50:09 EST 2022", and "HA Status: Not Configured". A red navigation bar contains "Security | Security Database | Control" and "Home | Help | Logout". The left sidebar lists various services, with "Security" expanded to show "Control" selected. The main content area is titled "SDB Control for DMCC, TSAPI, JTAPI and Telephony Web Services" and contains two unchecked checkboxes: "Enable SDB for DMCC Service" and "Enable SDB for TSAPI Service, JTAPI and Telephony Web Services", along with an "Apply Changes" button.

6.6. Restart Service

Select **Maintenance** → **Service Controller** from the left pane, to display the **Service Controller** screen in the right pane. Check **TSAPI Service** and click **Restart Service**.

The screenshot shows the Avaya Application Enablement Services Management Console. The top header includes the Avaya logo and the text "Application Enablement Services Management Console". A user welcome message is displayed in the top right corner, including the user name, last login time, and system information. The main navigation pane on the left lists various sections, with "Maintenance" expanded to show "Service Controller" as the selected option. The main content area displays the "Service Controller" page, which contains a table of services and their statuses. The "TSAPI Service" is checked, and the "Restart Service" button is highlighted.

Welcome: User
Last login: Tue Jan 18 15:44:45 2022 from 192.168.200.20
Number of prior failed login attempts: 0
HostName/IP: aes7/10.64.101.239
Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
SW Version: 8.1.3.3.0.4-0
Server Date and Time: Tue Jan 18 16:50:09 EST 2022
HA Status: Not Configured

Maintenance | Service Controller Home | Help | Logout

▶ AE Services
▶ Communication Manager Interface
▶ High Availability
▶ Licensing
▼ Maintenance
 Date Time/NTP Server
 ▶ Security Database
 Service Controller
 ▶ Server Data
▶ Networking
▶ Security
▶ Status

Service Controller

Service	Controller Status
<input type="checkbox"/> ASAI Link Manager	Running
<input type="checkbox"/> DMCC Service	Running
<input type="checkbox"/> CVLAN Service	Running
<input type="checkbox"/> DLG Service	Running
<input type="checkbox"/> Transport Layer Service	Running
<input checked="" type="checkbox"/> TSAPI Service	Running

For status on actual services, please use [Status and Control](#)

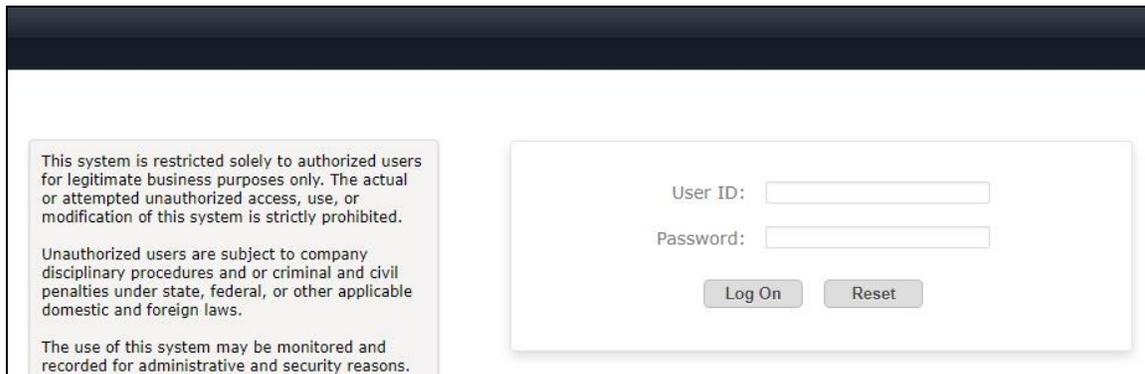
7. Configure Avaya Aura® Session Manager

This section provides the procedures for configuring Session Manager, which is performed via the web interface of System Manager. The procedures include the following areas:

- Launch System Manager
- Administer SIP agent users
- Administer virtual SIP users
- Administer SIP entities

7.1. Launch System Manager

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 System Manager. Log in using the appropriate credentials.



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.

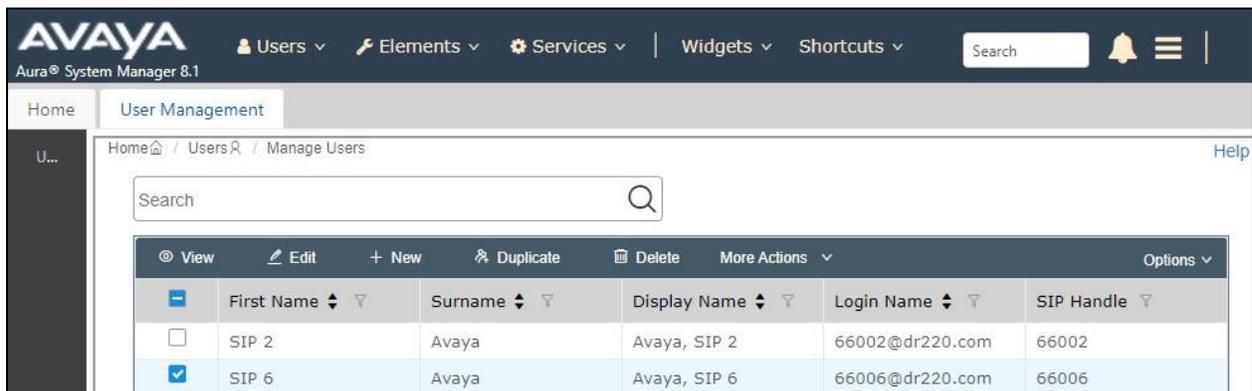
User ID:

Password:

7.2. Administer SIP Agent Users

In the subsequent screen (not shown), select **Users** → **User Management** from the top menu. Select **User Management** → **Manage Users** (not shown) from the left pane to display the screen below.

Select the entry associated with the first SIP agent station from **Section 3**, in this case “**66006**”, and click **Edit**.



AVAYA
Aura® System Manager 8.1

Users ▾ Elements ▾ Services ▾ | Widgets ▾ Shortcuts ▾ Search 🔍 🔔 ☰

Home User Management

Home / Users / Manage Users Help

Search 🔍

View	Edit	New	Duplicate	Delete	More Actions	Options
First Name	Surname	Display Name	Login Name	SIP Handle		
<input type="checkbox"/>	SIP 2	Avaya	Avaya, SIP 2	66002@dr220.com	66002	
<input checked="" type="checkbox"/>	SIP 6	Avaya	Avaya, SIP 6	66006@dr220.com	66006	

The **User Profile | Edit** screen is displayed. Select the **Communication Profile** tab, followed by **CM Endpoint Profile** to display the screen below.

Click on the **Editor** icon shown below.

The screenshot shows the Avaya Aura System Manager 8.1 interface. The top navigation bar includes the Avaya logo, 'Users', 'Elements', 'Services', 'Widgets', and 'Shortcuts' menus, along with a search bar and notification icons. The main content area is titled 'User Profile | Edit | 66006@dr220.com' and features tabs for 'Identity', 'Communication Profile', 'Membership', and 'Contacts'. The 'Communication Profile' tab is active, and the 'CM Endpoint Profile' sub-tab is selected. The form contains several fields: 'System' (DR-CM), 'Profile Type' (Endpoint), 'Extension' (66006), 'Set Type' (J169CC), 'Port' (S000115), 'Voice Mail Number' (admin), and 'Sip Trunk' (aar). A red box highlights the blue editor icon on the right side of the 'Extension' field.

The **Edit Endpoint** pop-up screen is displayed. For **Type of 3PCC Enabled**, select “Avaya” as shown below.

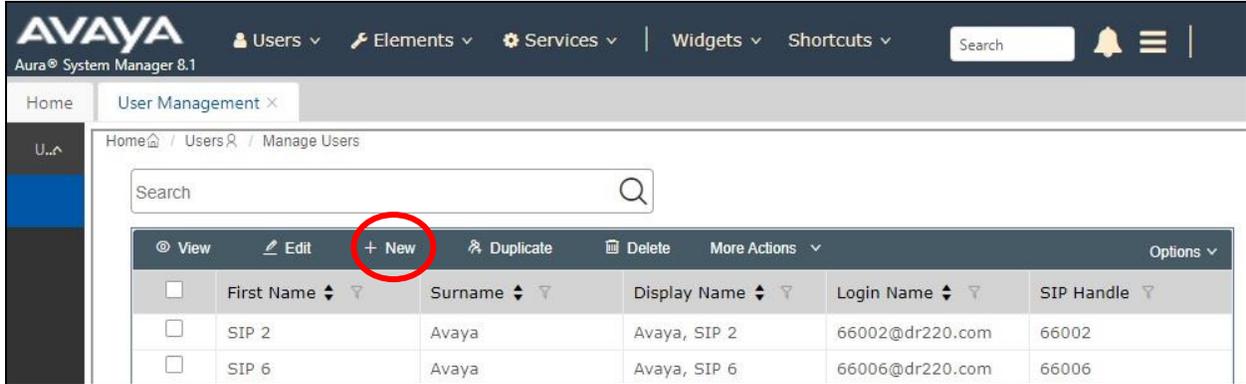
Repeat this section for all SIP agent stations from **Section 3**. In the compliance testing, one SIP agent station was configured.

The screenshot shows the Avaya Aura System Manager 8.1 interface. The main content area is titled "Edit Endpoint". At the top right, there are buttons for "Done" and "[Save As Template]". The configuration is organized into several sections:

- System Information:** System (DR-CM), Extension (66006), Template (Select), Set Type (J169CC), Port (S000115), Security Code, and Name (Avaya, SIP 6).
- Options Tabs:** General Options (G) (selected), Feature Options (F), Site Data (S), Abbreviated Call Dialing (A), Enhanced Call Fwd (E), Button Assignment (B), Profile Settings (P), and Group Membership (M).
- General Options (G):**
 - Class of Restriction (COR): 1
 - Emergency Location Ext: 66006
 - Tenant Number: 1
 - SIP Trunk: Qaar
 - Coverage Path 1: [Empty]
 - Lock Message: [Unchecked]
 - Multibyte Language: Not Applicable
 - SIP URI: [Empty]
 - Class Of Service (COS): 1
 - Message Lamp Ext.: 66006
 - Type of 3PCC Enabled: Avaya** (highlighted with a red box)
 - Coverage Path 2: [Empty]
 - Localized Display Name: Avaya, SIP 6
 - Enable Reachability for Station Domain Control: system

7.3. Administer Virtual SIP Users

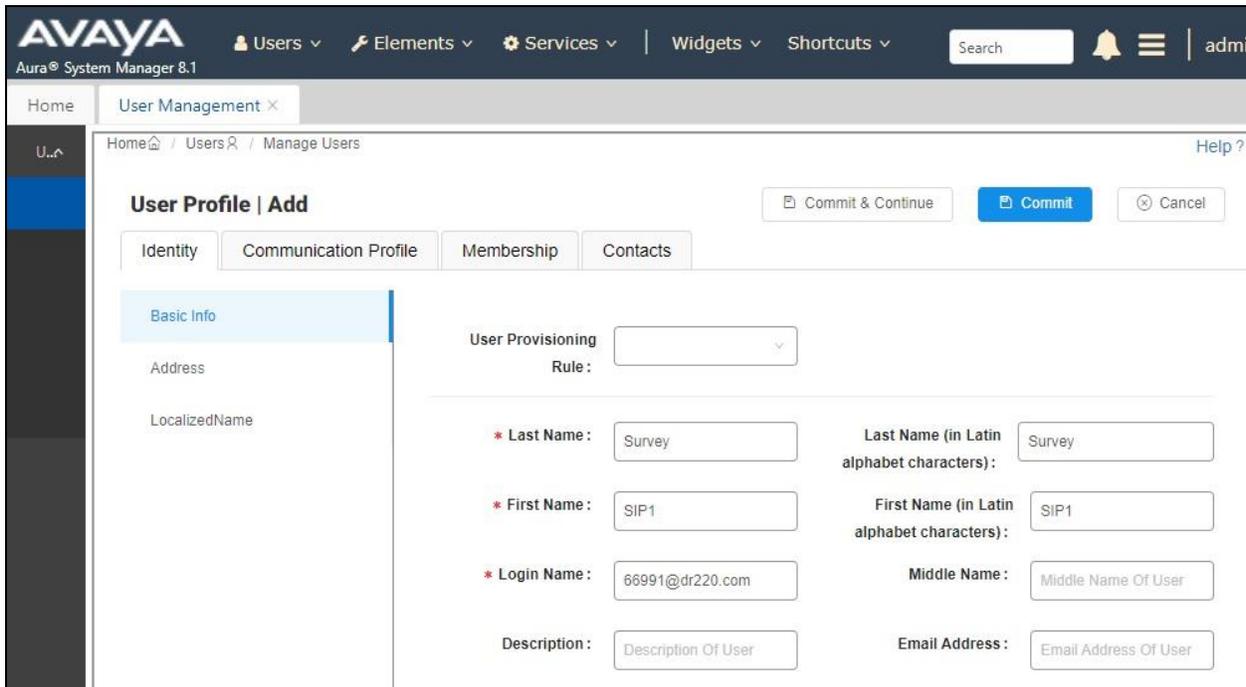
From the left pane, select **User Management** → **Manage Users** (not shown) to display the **Managed Users** screen again. Click **New** to add a user.



7.3.1. Identity

The **User Profile | Add** screen is displayed. Enter desired **Last Name** and **First Name**.

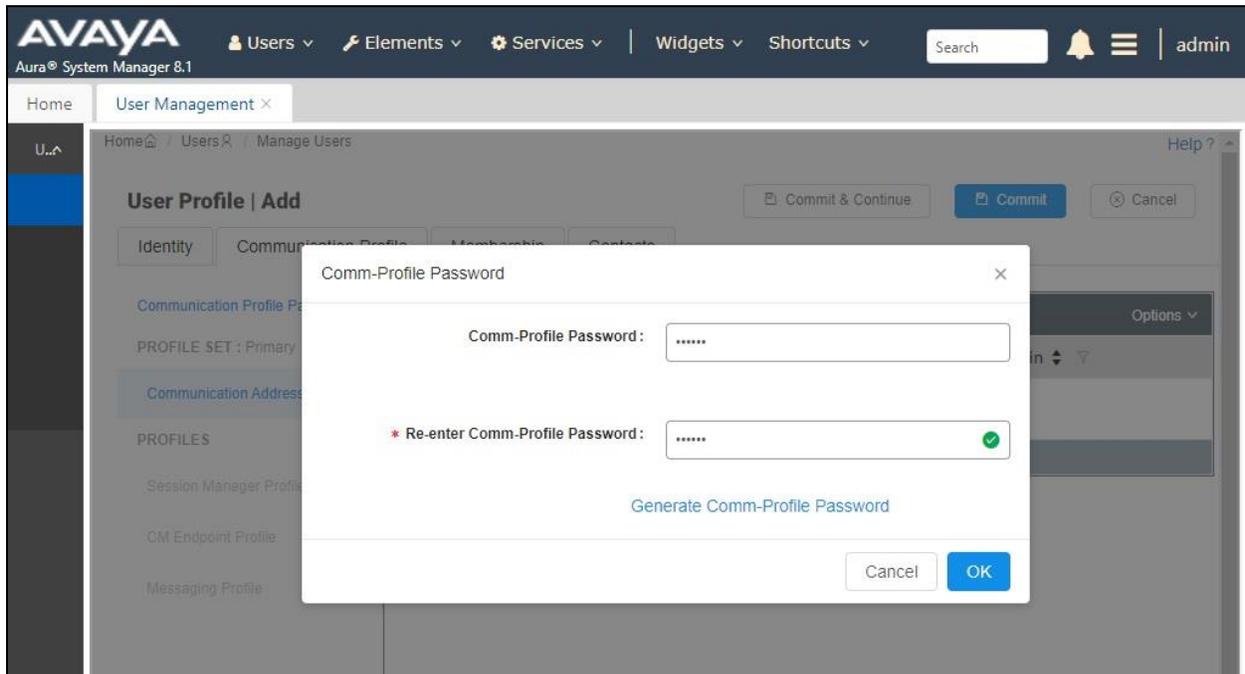
For **Login Name**, enter “**x@y**”, where “**x**” is an available user extension and “**y**” is the applicable domain name from **Section 3**. Retain the default values in the remaining fields.



7.3.2. Communication Profile

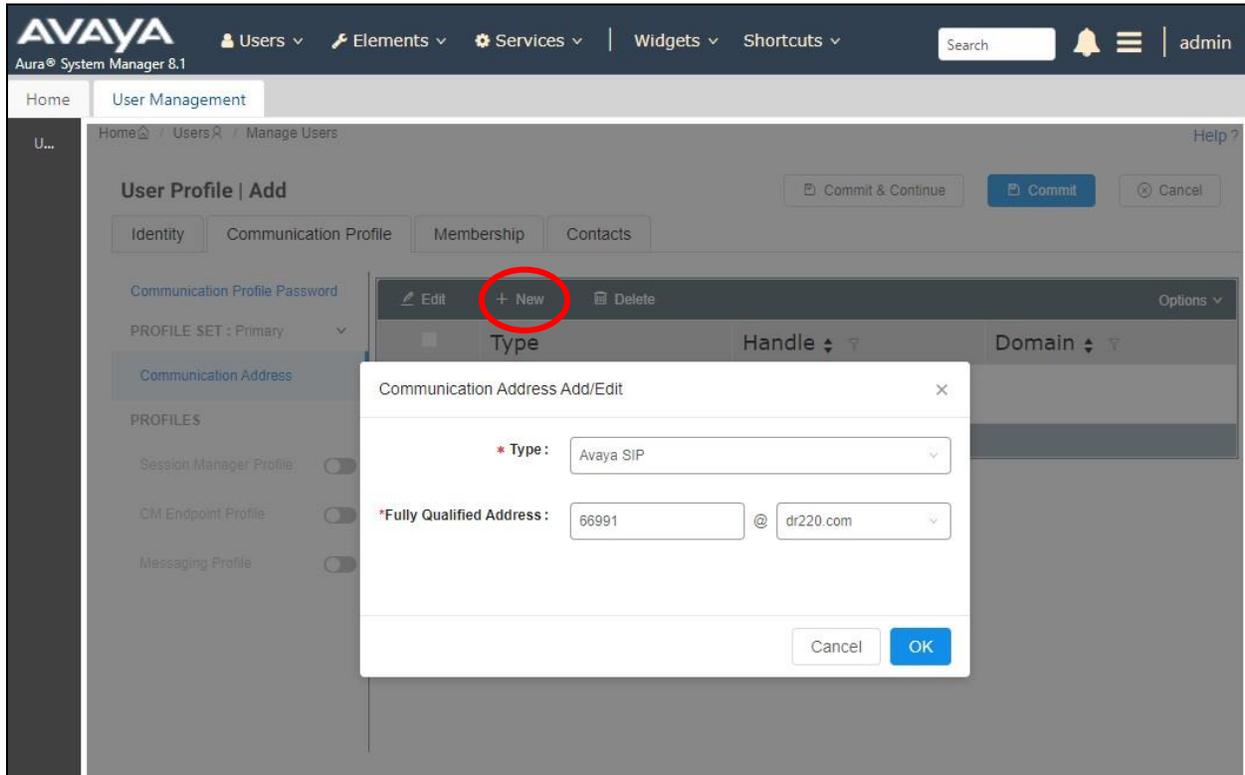
Select the **Communication Profile** tab, followed by **Communication Profile Password** to display the **Comm-Profile Password** pop-up box.

For **Communication-Profile Password** and **Re-enter Comm-Profile Password**, enter the desired password for the virtual SIP user to use for registration.



Select **Communication Address** from the left pane, followed by **New** to display the **Communication Address Add/Edit** pop-up box.

For **Type**, select “**Avaya SIP**”. For **Fully Qualified Address**, enter and select the SIP user extension and domain name to match the login name from **Section 7.3.1**.



Select **Session Manager Profile**. For **Primary Session Manager**, **Origination Sequence**, **Termination Sequence**, and **Home Location** (not shown), select values that correspond to applicable Session Manager and Communication Manager as shown below. Retain the default values in the remaining fields.

The screenshot displays the Avaya Aura System Manager 8.1 interface for adding a user profile. The 'User Profile | Add' form is shown with the 'Communication Profile' tab selected. The 'PROFILES' section on the left has the 'Session Manager Profile' toggle enabled. The 'SIP Registration' section contains the following fields:

- Primary Session Manager: DR-SM
- Secondary Session Manager: Start typing...
- Survivability Server: Start typing...
- Max. Simultaneous Devices: Select

The 'Application Sequences' section shows:

- Origination Sequence: DR220-CM-APP-Sequence
- Termination Sequence: DR220-CM-APP-Sequence

Buttons for 'Commit & Continue' and 'Commit' are located at the top right of the form.

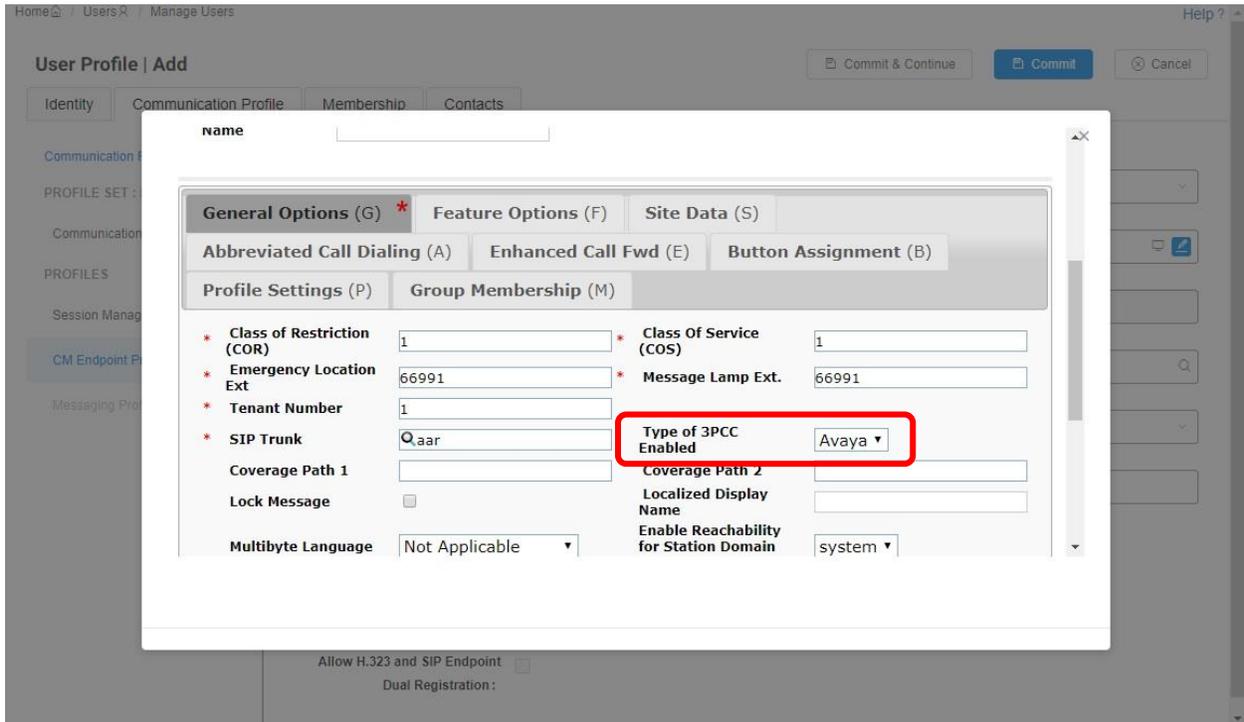
Select **CM Endpoint Profile** from the left pane. For **System**, select value that corresponds to applicable Communication Manager. For **Template**, select “9641SIP_DEFAULT_CM_8_1”. For **Extension**, enter the SIP user extension from **Section 7.3.1**. Retain the default values in the remaining fields.

Click on the **Editor** icon shown below.

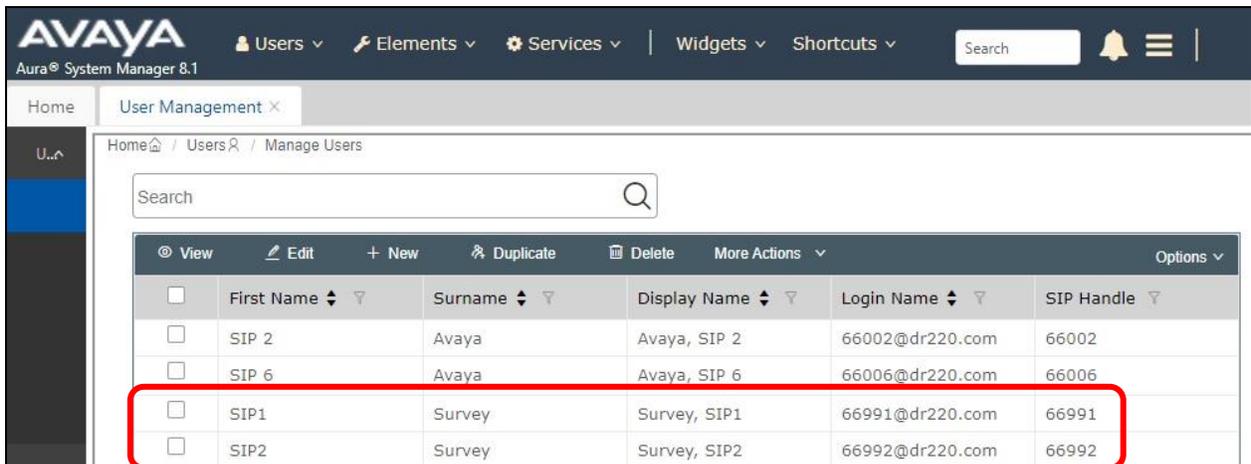
The screenshot shows the 'User Profile | Add' configuration page in Avaya Aura System Manager 8.1. The page is divided into several sections:

- Navigation:** Home, User Management, and Manage Users.
- Buttons:** Commit & Continue, Commit, and Cancel.
- Tabs:** Identity, Communication Profile, Membership, and Contacts.
- Left Panel (PROFILES):** Communication Profile Password, PROFILE SET: Primary, Communication Address, Session Manager Profile (toggle on), **CM Endpoint Profile** (toggle on), and Messaging Profile (toggle off).
- Main Form Fields:**
 - * System:** DR-CM
 - * Profile Type:** Endpoint
 - Use Existing Endpoints:**
 - * Extension:** 66991 (highlighted with a red circle and an editor icon)
 - * Template:** 9641SIP_DEFAULT_CM_8_1
 - * Set Type:** 9641SIP
 - Security Code:** Enter Security Code
 - Port:** IP
 - Voice Mail Number:** (empty)
 - Preferred Handle:** Select
 - Calculate Route Pattern:**
 - Sip Trunk:** aar
 - SIP URI:** Select
 - Enhanced Callr-Info Display for 1-line phones:**
 - Delete on Unassign from User or on Delete User:**
 - Override Endpoint Name and Localized Name:**
 - Allow H.323 and SIP Endpoint Dual Registration:**

In the pop-up screen, locate the **Type of 3PCC Enabled** parameter, and select “Avaya” from the drop-down list as shown below. Retain the existing values in the remaining fields.



Repeat **Section 7.3** to add the desired number of virtual SIP users. In the compliance testing, two SIP users with extensions “66991” and “66992” were created for two simultaneous connections to Survey.



7.4. Administer Session Manager Entity

Select **Elements** → **Routing** → **SIP Entities** from the top menu to display the **Routing** tab, followed by the applicable SIP entity for Session Manager from the left pane (not shown), in this case “DR-SM”. The **SIP Entity Details** screen is displayed.

The screenshot shows the AVAYA Aura System Manager 8.1 interface. The top navigation bar includes 'Users', 'Elements', 'Services', 'Widgets', and 'Shortcuts'. The main content area is titled 'SIP Entity Details' and contains the following fields:

- Name:** DR-SM
- IP Address:** 10.64.101.238
- SIP FQDN:** (empty)
- Type:** Session Manager
- Notes:** TLT DR SM
- Location:** DR-Loc
- Outbound Proxy:** (empty)
- Time Zone:** America/New_York
- Minimum TLS Version:** Use Global Setting
- Credential name:** (empty)

Scroll down to **Listen Ports** sub-section and verify that the transport protocol to be used by Survey is specified in the list, in this case “UDP”. Also verify that the corresponding **Endpoint** column is checked, as shown below.

The screenshot shows the AVAYA Aura System Manager 8.1 interface with the 'Listen Ports' sub-section. It displays a table with 3 items:

<input type="checkbox"/>	Listen Ports	Protocol	Default Domain	Endpoint	Notes
<input type="checkbox"/>	5060	TCP	dr220.com	<input checked="" type="checkbox"/>	
<input type="checkbox"/>	5060	UDP	dr220.com	<input checked="" type="checkbox"/>	
<input type="checkbox"/>	5061	TLS	dr220.com	<input checked="" type="checkbox"/>	

Select : All, None

8. Configure OpenText Qfiniti Survey

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

- Launch SysConfig web interface
- Administer switches
- Administer CTI server
- Administer board configuration
- Administer general
- Administer machines
- Administer components
- Administer CTI sources
- Administer phone interface
- Administer VRM
- Administer line data
- Enable use
- Launch Qfiniti web interface
- Administer agents
- Administer triggers
- Administer alerts
- Start services

The configuration of Qfiniti is performed by OpenText field service engineers. The procedural steps are presented in these Application Notes for informational purposes.

Prior to configuration, the pertinent Survey forms and questions are assumed to be pre-configured and ready for use.

8.1. Launch SysConfig Web Interface

Access the SysConfig web interface by using the URL “<http://ip-address/sysconfig>” in an Internet browser window, where “**ip-address**” is the IP address of Qfiniti.

The screen below is displayed. Log in using the appropriate credentials.



The image shows the Opentext login interface. It features a dark blue background with the 'opentext™' logo at the top center. Below the logo, the text 'Sign in to continue to qfiniti-system-configuration' is displayed. There are two white input fields: the top one is labeled 'User name' and the bottom one is labeled 'Password'. Both labels are in a light gray font.

In the subsequent screen, select the **Cross System** tab to display the screen below.



The image shows the Opentext SysConfig CE 20.4 web interface. At the top left is the 'opentext™ | Qfiniti SysConfig CE 20.4' header, and at the top right is a 'Logout Qfiniti Administrator' link. Below the header are two tabs: 'General' and 'Cross System', with 'Cross System' being the active tab. Under the 'Cross System' tab, there are two buttons: 'Save' and 'Refresh'. Below these are four expandable sections, each with a dropdown arrow on the right: 'Switches', 'CTI Server', 'Board Configuration', and 'Simulated CTI Scripts'.

8.2. Administer Switches

Expand the **Switches** sub-section and click the **New Item** icon to add a new entry for connection with Session Manager. Enter the following values for the specified fields and retain the default values for the remaining fields.

- **Name:** A descriptive name, in this case “AvayaSM”.
- **Switch Model:** “SIP”
- **Interface Type:** “Network Tap”

The screenshot displays the Qfiniti SysConfig CE 20.4 interface. The main window is titled "Switch" and contains a form for configuring a new switch. The form fields are as follows:

Name:	AvayaSM
Switch Model:	SIP
Vendor:	
Post Release Delay:	0
Observe Mode:	-- select one --
Observe String:	
Interface Type:	Network Tap
Use CTI Source for Alias:	<input type="checkbox"/>
Vlan Support:	False
Trigger Type:	Signaling
RTP Segmentation Rate (0-100):	20
Ring Timer (0-600):	5
Digit Collection (0-600):	5
Drop Duplicates:	Do not drop duplicates
SIP Identifier:	Call-ID
Transport:	UDP
SIP Recording Type:	None
SBC Recording Type:	None
IP fragmentation:	False
Extension IP Address Mapping:	Default

On the right side of the interface, there is a "Use CTI Source for Alias" section with a red circle around the "+" icon, indicating the "New Item" button.

8.3. Administer CTI Server

Expand the **CTI Server** sub-section and click the **New Item** icon to add a new entry for TSAPI connection. Enter the following values for the specified fields and retain the default values for the remaining fields.

- **Name:** A descriptive name, in this case “AvayaTSAPI”.
- **Type:** “Avaya TSAPI”
- **Available Switch:** Select the switch name from **Section 8.2**.
- **ServerName:** The host name of Application Enablement Services.
- **User Name:** The Survey user credentials from **Section 6.4**.
- **Password:** The Survey user credentials from **Section 6.4**.
- **Vendor:** “AVAYA”
- **Driver:** The relevant switch connection name from **Section 6.3**.
- **Service:** “CSTA”

The screenshot shows the 'opentext | Qfiniti SysConfig CE 20.4' interface. The 'CTI Server' dialog box is open, displaying the following configuration details:

Name:	AvayaTSAPI
Type:	Avaya TSAPI
Available Switch:	AvayaSM
ServerName:	AES7
User Name:	qfiniti
Password:
Vendor:	AVAYA
Driver:	CM7
Service:	CSTA
BackUp ServerName:	
BackUp User Name:	
BackUp Password:	
BackUp Vendor:	
BackUp Driver:	
BackUp Service:	
ConnID Location:	CALL ID
UCID prefix:	
Query VDN/Split name:	No

Buttons for 'Ok' and 'Cancel' are visible at the bottom of the dialog box. In the background interface, a red circle highlights a '+' icon in the 'CTI Server' section of the left-hand navigation pane.

8.4. Administer Board Configuration

Expand the **Board Configuration** sub-section and click the **New Item** icon. Enter the following values for the specified fields and retain the default values for the remaining fields.

- **Name:** A descriptive name, in this case “NIC”.
- **Model:** “Network Interface Card (NIC)”
- **Active 1:** “True”
- **Network Card Identifier 1:** A desired value for identifier.
- **Network Card Description 1:** A desired description.
- **Network Card IP Address 1:** IP address of the Survey server.

The screenshot shows the Qfiniti SysConfig CE 20.4 interface. The main window has a top bar with the logo and version, and a right bar with a logout link. The left sidebar contains a tree view with categories like 'General', 'Cross System', 'Switches', 'CTI Server', 'Board Configuration', 'Name', and 'Simulated CTI Scripts'. The 'Board Configuration' section is expanded, showing a list of items. The 'New Item' icon (a plus sign) is circled in red. A dialog box titled 'Board Configuration' is open, showing a form with the following fields and values:

Field	Value
Name	NIC
Model	Network Interface Card (NIC)
Active 1	True
Network Card Identifier 1	Card 1
Network Card Description 1	Card 1
Network Card IP Address 1	10.64.101.202
Network Card Port 1	5060
Active 2	False
Network Card Identifier 2	
Network Card Description 2	
Network Card IP Address 2	
Network Card Port 2	5060
Active 3	False
Network Card Identifier 3	
Network Card Description 3	
Network Card IP Address 3	
Network Card Port 3	5060
Active 4	False

Buttons at the bottom of the dialog box are 'Add', 'Ok', and 'Cancel'.

8.5. Administer General

Select the **General** tab. Expand the **General** sub-section and click the **New** icon to add a new system. Enter the following values for the specified fields and retain the default values for the remaining fields.

- **Name:** A desired name, in this case “Survey System”.
- **Switch:** Select the switch name from **Section 8.2**.
- **System Type:** Check **Survey**.

The screenshot displays the Opentext Qfiniti SysConfig CE 20.4 web interface. The top navigation bar includes the Opentext logo, the product name, and a 'Logout Qfiniti Administrator' link. Below the navigation bar, there are tabs for 'General' and 'Cross System'. A toolbar contains icons for 'New' (circled in red), 'Save', 'Refresh', 'Start', 'Stop', 'Schedule Restart', and 'Delete'. The left sidebar shows a 'Systems' section with a 'Quick Find' input and a tree view containing 'DMCC Logger'. The main content area is titled 'General' and contains the following fields:

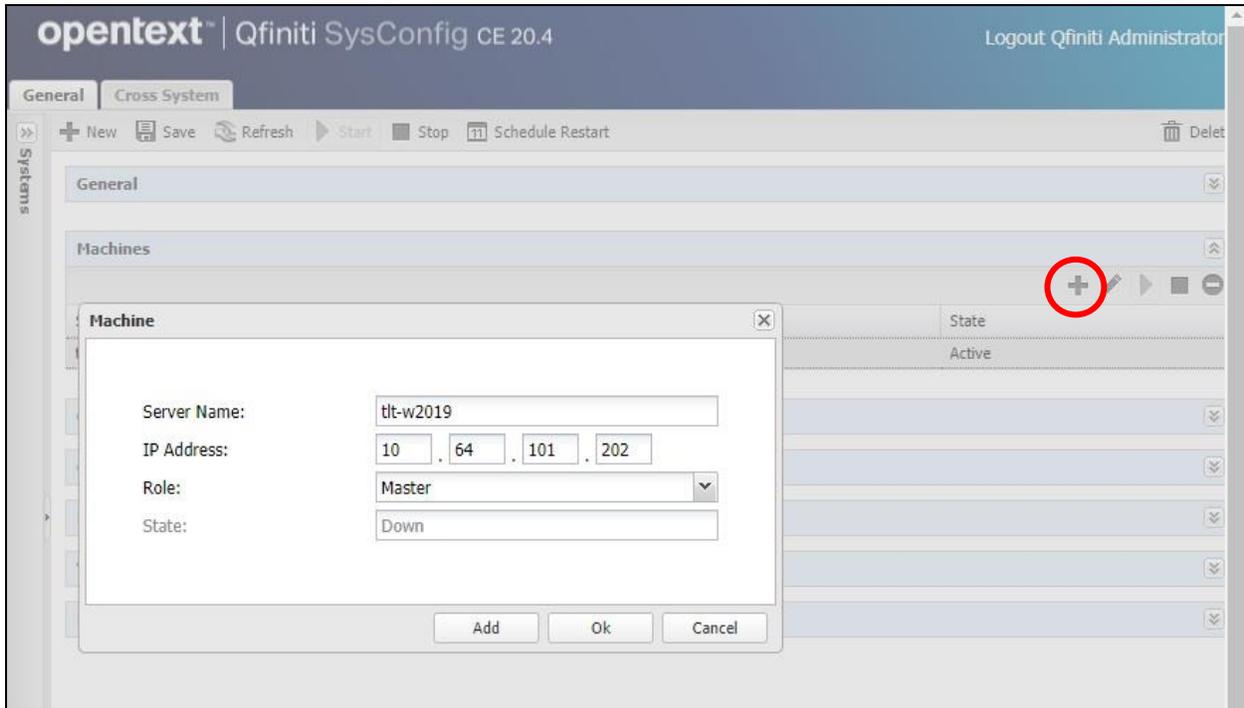
- Name:** Survey System
- Switch:** AvayaSM
- System Type:** A list of checkboxes including:
 - Voice Recording - Logging
 - Voice Recording - QA
 - Screen Recording
 - Remote Screen Site
 - Explore
 - Survey
 - Backup
 - Cloud Connector
- Description:** An empty text area.
- Available for Use
- NAT Environment

Below the 'General' section are several expandable sections: Machines, Components, CTI Sources, Phone Interface, VRM, and Line Data.

8.6. Administer Machines

Expand the **Machines** sub-section and click the **New Item** icon to add a new machine. Enter the following values for the specified fields and retain the default values for the remaining fields.

- **Server Name:** The host name of the Survey server.
- **IP Address:** The IP address of the Survey server.
- **Role:** “Master”.



8.7. Administer Components

Expand the **Components** sub-section and follow reference [4] to assign and configure the required components, including **Archive Manager**, **Qfiniti File Server**, and **Survey**.

For the **Survey** component under **Assigned Components**, scroll the section as necessary to enter the following values for the specified fields (not all are shown below) and retain the default values for the remaining fields. In the compliance testing, the **Default Route** was set to the first skill group extension in **Section 3**.

- **Survey Switch Type:** “Lucent Definity G3”
- **Default Route:** A desired route destination when there is no match on DNIS.
- **Dial String:** Blank out the default value.
- **Recording Path:** The pertinent directory path on Survey server for recordings.
- **Voice Message Path:** The pertinent directory path on Survey server for voice messages.
- **Front End Condition:** Set to “Disabled” when there is no separate front end IVR system.
- **SIP Registration Proxy:** IP address of Session Manager signaling interface.
- **SIP URI Address:** The SIP domain name from **Section 3**.

The screenshot displays the Opentext Qfiniti SysConfig CE 20.4 web interface. The top navigation bar includes the Opentext logo, the product name 'Qfiniti SysConfig CE 20.4', and a 'Logout Qfiniti Administrator' link. Below the navigation bar, there are tabs for 'General' and 'Cross System'. The main interface is divided into a left sidebar and a main content area. The sidebar shows a tree view of systems, with 'Survey System' selected under 'tlt-w2019'. The main content area features a toolbar with icons for '+ New', 'Save', 'Refresh', 'Start', 'Stop', 'Schedule Restart', and 'Delete'. Below the toolbar, there is a 'Quick Find' search box and a 'Survey' component icon. The central part of the interface is titled 'Component Data' and contains a list of configuration fields for the Survey component. The fields and their values are as follows:

Field	Value
Front End Condition:	Disabled
Enable Recordings:	Enabled
Call Handling:	Default Route
Default Trigger:	
CTI Init:	Individual
Inter Digit Delay:	3
SIP Registration Proxy:	10.64.101.238
SIP URI Address:	dr220.com
Starting RTP Port:	17384
Default Username:	
Default Password:	
Default Contact:	
Prompt Folder:	

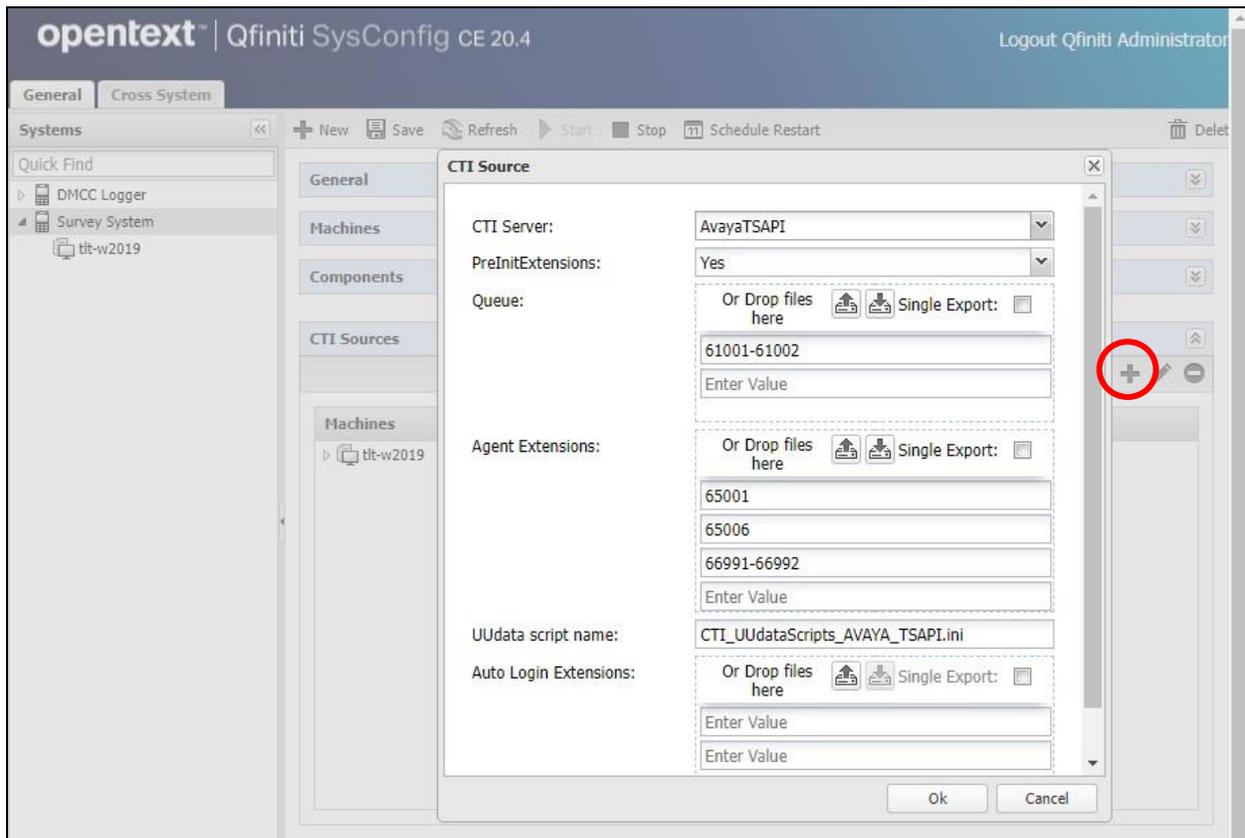
At the bottom of the interface, there is a section for 'CTI Sources' with a dropdown arrow.

8.8. Administer CTI Sources

Expand the **CTI Sources** sub-section. Select the applicable machine server name from **Section 8.6**, followed by the **Add CTI Source** icon. Enter the following values for the specified fields and retain the default values for the remaining fields.

- **CTI Server:** Select the CTI server name from **Section 8.3**.
- **Queue:** The skill group extensions from **Section 3**.

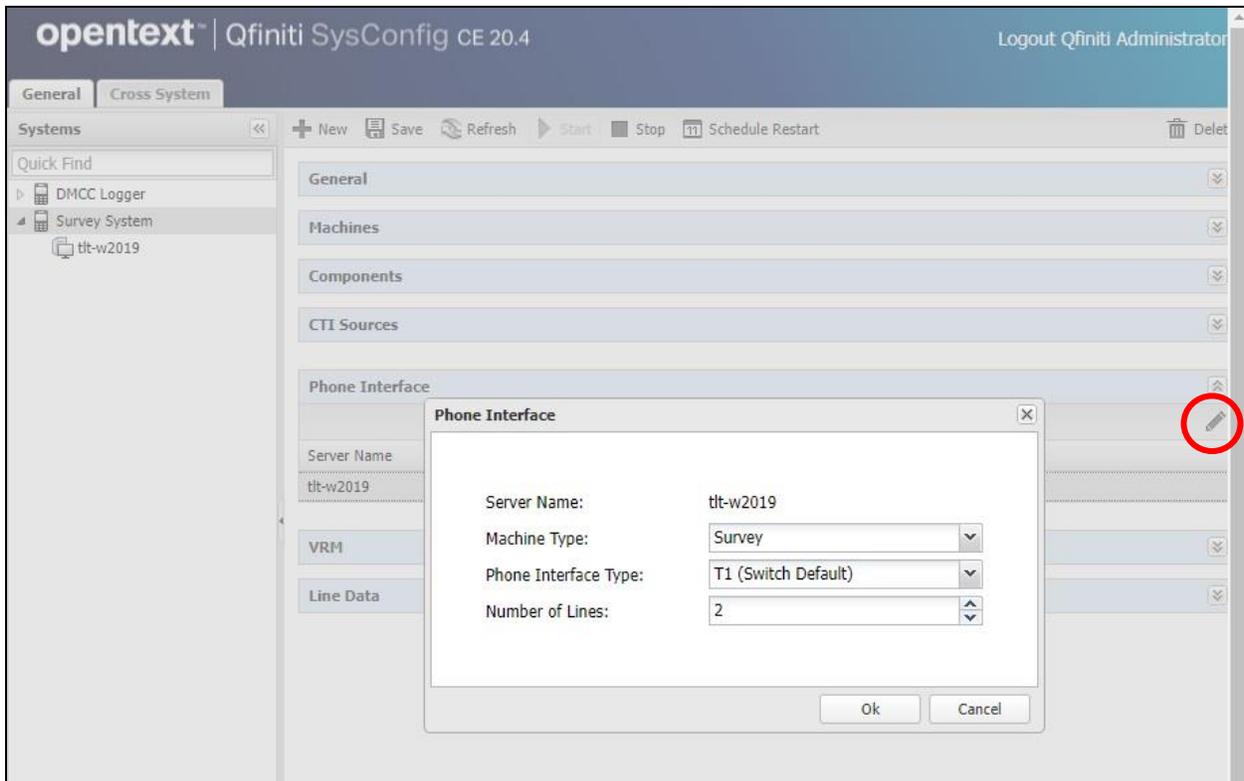
For **Agent Extensions**, enter the agent station extensions from **Section 3** and the virtual SIP user extensions from **Section 7.3**, as shown below.



8.9. Administer Phone Interface

Expand the **Phone Interface** sub-section (not shown). Select the machine server name from **Section 8.6**, and click on the **Edit** icon to edit the entry. Enter the following values for the specified fields and retain the default values for the remaining fields.

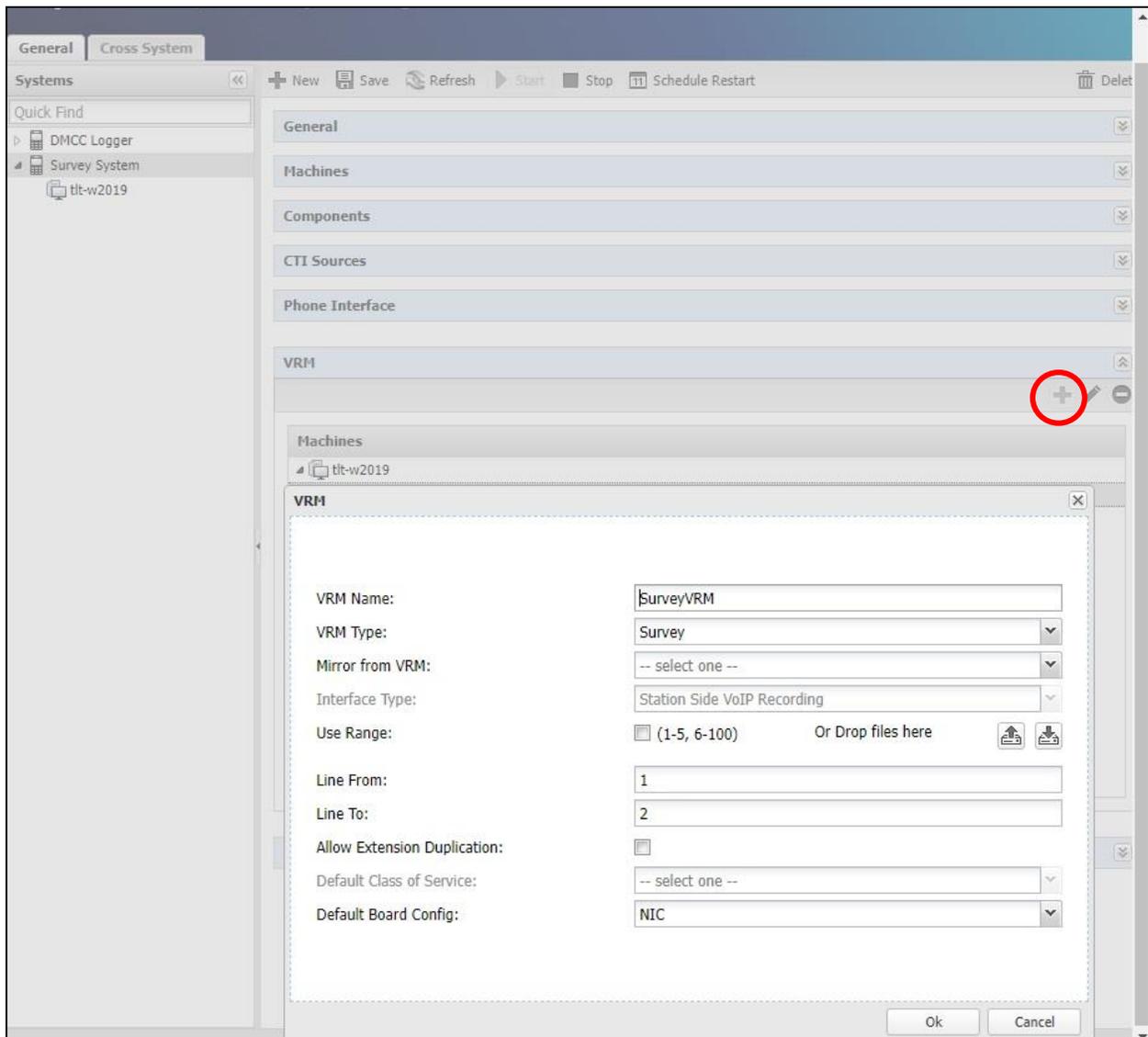
- **Machine Type:** “Survey”
- **Phone Interface Type:** “T1 (Switch Default)”
- **Number of Lines:** The total number of virtual SIP users from **Section 7.3**.



8.10. Administer VRM

Expand the **VRM** sub-section. Select the machine server name from **Section 8.6**, followed by the **Add VRM** icon. Enter the following values for the specified fields.

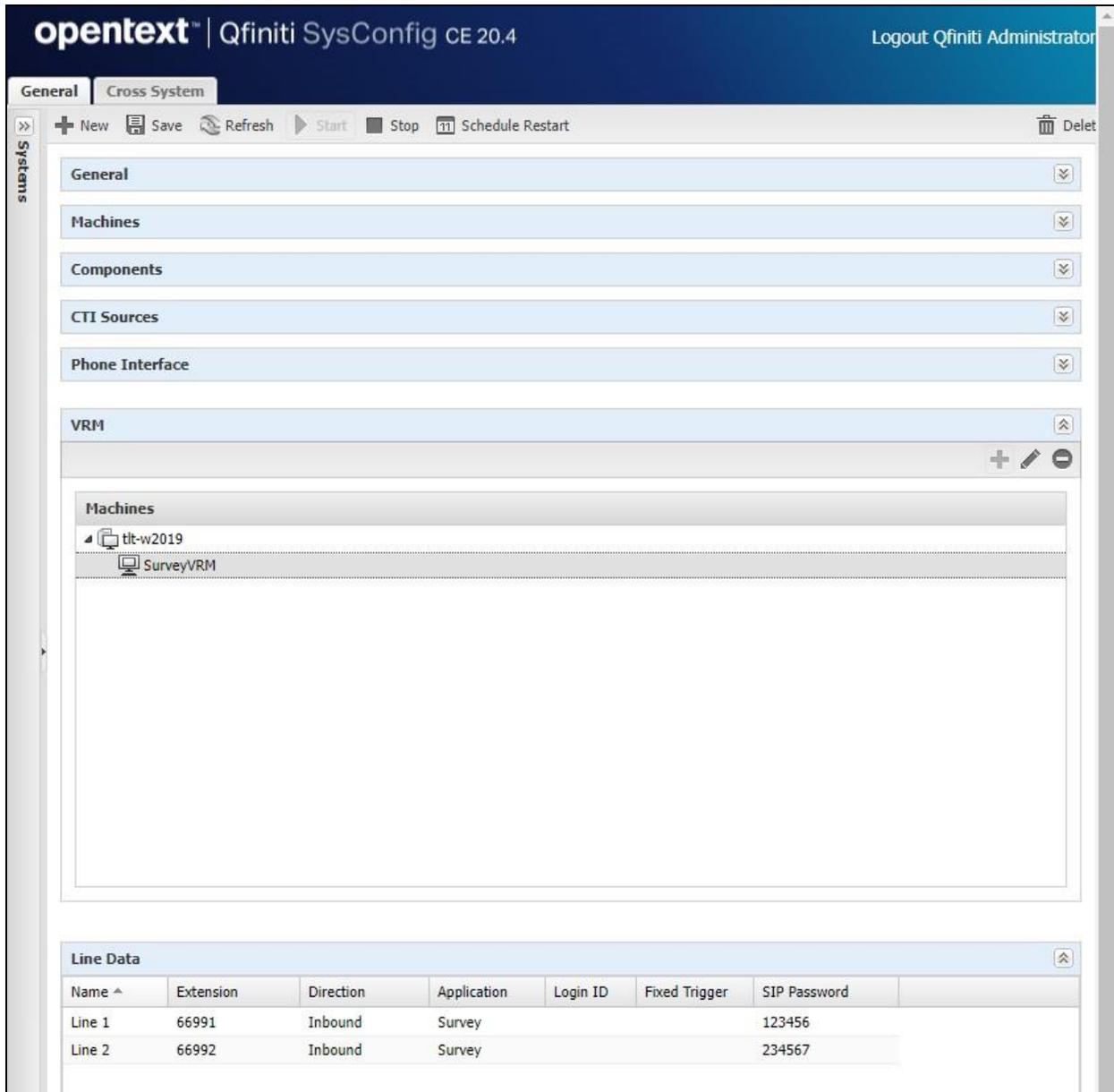
- **VRM Name:** A desired name, in this case “SurveyVRM”.
- **VRM Type:** “Survey”
- **Line From and Line To:** Range of virtual SIP users, in this case two users so “1” to “2”.
- **Default Board Config:** Select the board name from **Section 8.4**.



8.11. Administer Line Data

Select the newly added VRM from **Section 8.10**, and expand the **Line Data** sub-section. Select the first line. For **Extension** and **SIP Password**, enter the first virtual SIP user extension and the associated communication profile password from **Section 7.3** respectively. Retain the default values in the remaining fields.

Repeat this section to administer all virtual SIP users from **Section 7.3**, as shown below.

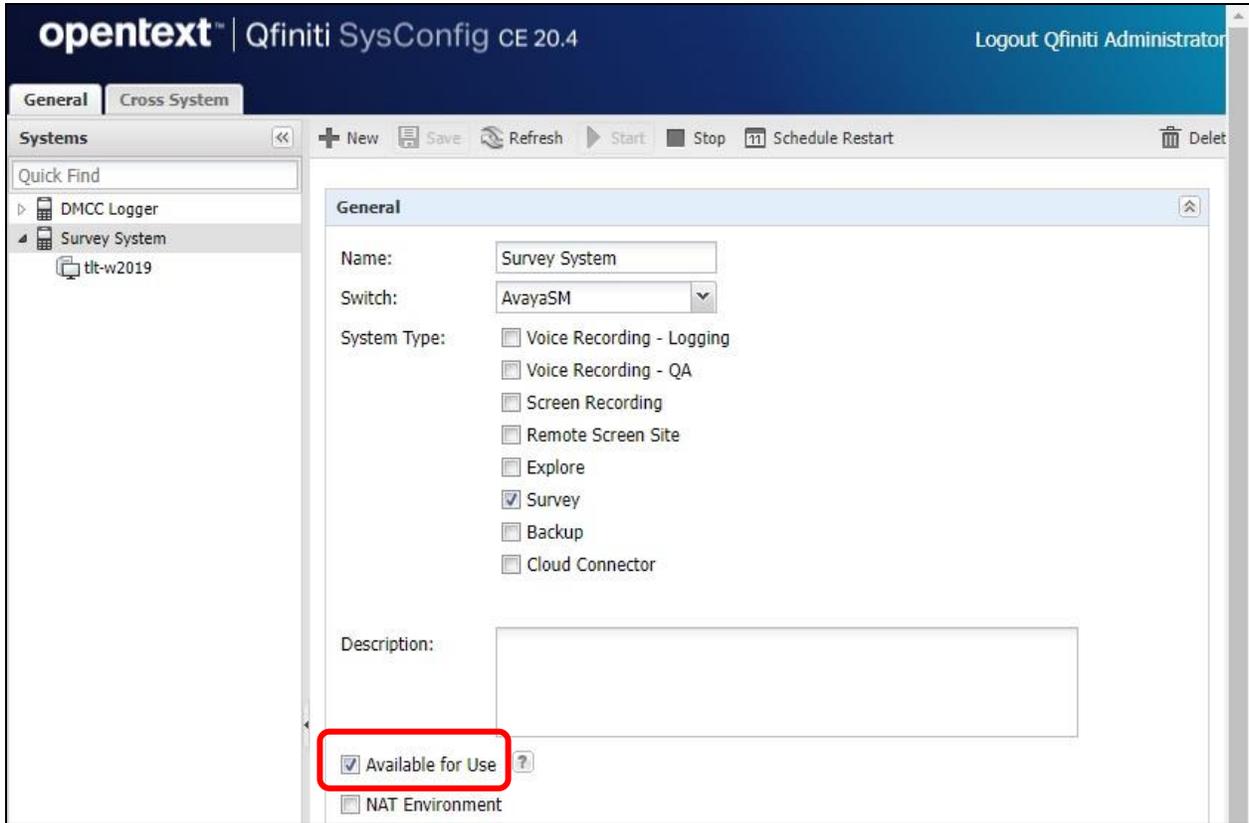


The screenshot displays the opentext Qfiniti SysConfig CE 20.4 interface. The top navigation bar includes the logo and version information, along with a 'Logout Qfiniti Administrator' link. The main content area is divided into several sections: 'General', 'Cross System', 'Systems', 'VRM', and 'Line Data'. The 'VRM' section is expanded to show a list of machines, including 'tlt-w2019' and 'SurveyVRM'. The 'Line Data' section is also expanded, showing a table with the following data:

Name ^	Extension	Direction	Application	Login ID	Fixed Trigger	SIP Password
Line 1	66991	Inbound	Survey			123456
Line 2	66992	Inbound	Survey			234567

8.12. Enable Use

Scroll up the right pane and expand the **General** sub-section. Check **Available for Use**.



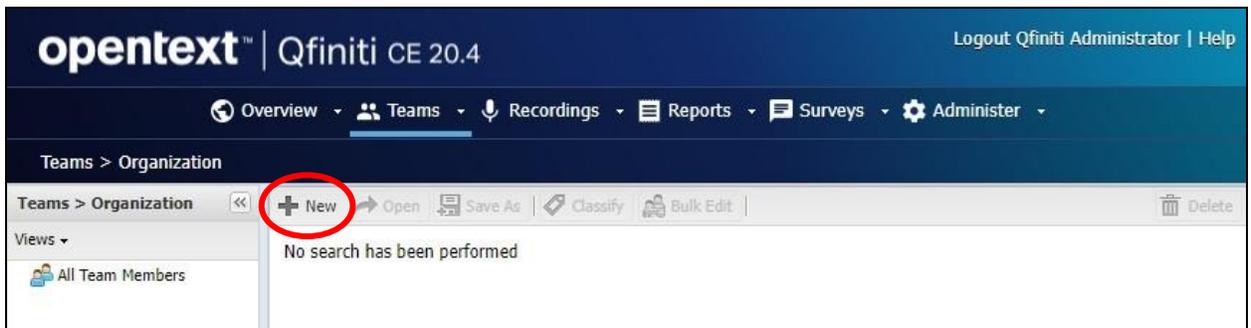
8.13. Launch Qfiniti Web Interface

Access the Qfiniti web interface by using the URL “<http://hostname/qwa>” in an Internet browser window, where “**hostname**” is the hostname of the Qfiniti server. The screen below is displayed. Log in using the appropriate credentials.



8.14. Administer Agents

Select **Teams** → **Organization** from the top menu to display the screen below. Select the **New** icon in the right pane to add an agent.



In the pop-up screen below, enter the following values for the specified fields, and retain the default values for the remaining fields.

- **First Name:** A desired first name for the first agent from **Section 3**.
- **Last Name:** A desired last name for the first agent from **Section 3**.
- **Role:** Select a desired and existing role.
- **Username:** The desired login credentials for the agent.
- **Password:** The desired login credentials for the agent.
- **Confirm Password:** The same desired login credential for the agent.
- **Partition:** “Qfiniti”

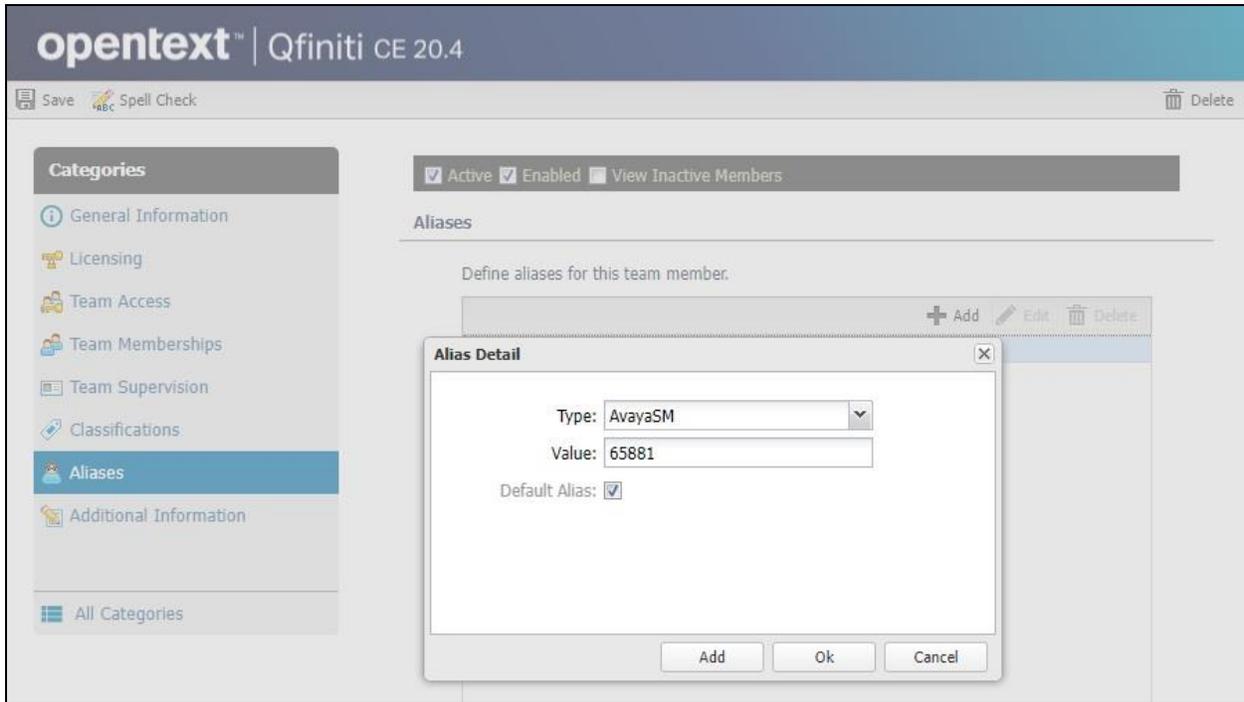
The screenshot shows the OpenText Qfiniti CE 20.4 user management interface. The left sidebar contains a 'Categories' menu with options: General Information (selected), Licensing, Team Access, Team Memberships, Team Supervision, Classifications, Aliases, and Additional Information. The main content area is titled 'General Information' and includes a header with checkboxes for 'Active', 'Enabled', and 'View Inactive Members'. The form fields are as follows:

- Id: 4
- * First Name: Agent1
- Middle Name: (empty)
- * Last Name: Avaya
- Email Address: (empty)
- Role: Administrators (dropdown menu with '+ Add Role' button)
- * Username: agent1
- Password: (masked with asterisks)
- Confirm Password: (masked with asterisks)
- * Partition: Qfiniti (dropdown menu)

Follow reference [4] to configure subsequent steps for the new agent (not shown). Upon reaching the **Aliases** step, click the **Add** icon to create an alias.

The screenshot shows the OpenText Qfiniti CE 20.4 user management interface at the 'Aliases' step. The left sidebar is the same as in the previous screenshot, but 'Aliases' is now selected. The main content area is titled 'Aliases' and includes a header with checkboxes for 'Active', 'Enabled', and 'View Inactive Members'. Below the header, it says 'Define aliases for this team member.' and shows a table with a red circle around the '+ Add' button, along with 'Edit' and 'Delete' buttons.

The **Alias Detail** pop-up screen is displayed. For **Type**, select the switch server name from **Section 8.2**. For **Value**, enter the agent ID for the first agent in **Section 3**, in this case “**65881**”. Retain the default value in the remaining field.

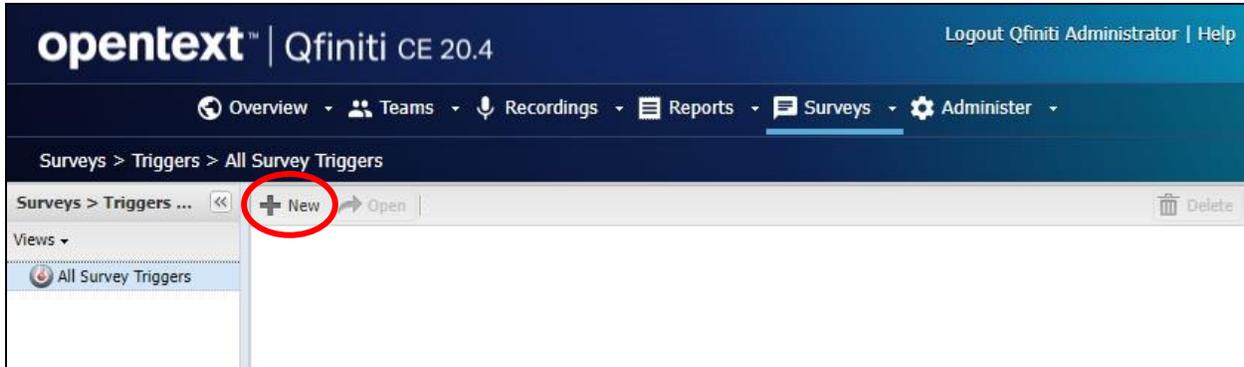


Repeat this section to add a team member for each agent from **Section 3**. In the compliance testing, two team members with alias values “**65881**” and “**65882**” were configured.

First Name	Middle Name	Last Name	Login ID	Status	Account Disabled
Qfiniti		Administrator	administrator	Active	No
Agent1		Avaya	agent1	Active	No
Agent2		Avaya	agent2	Active	No

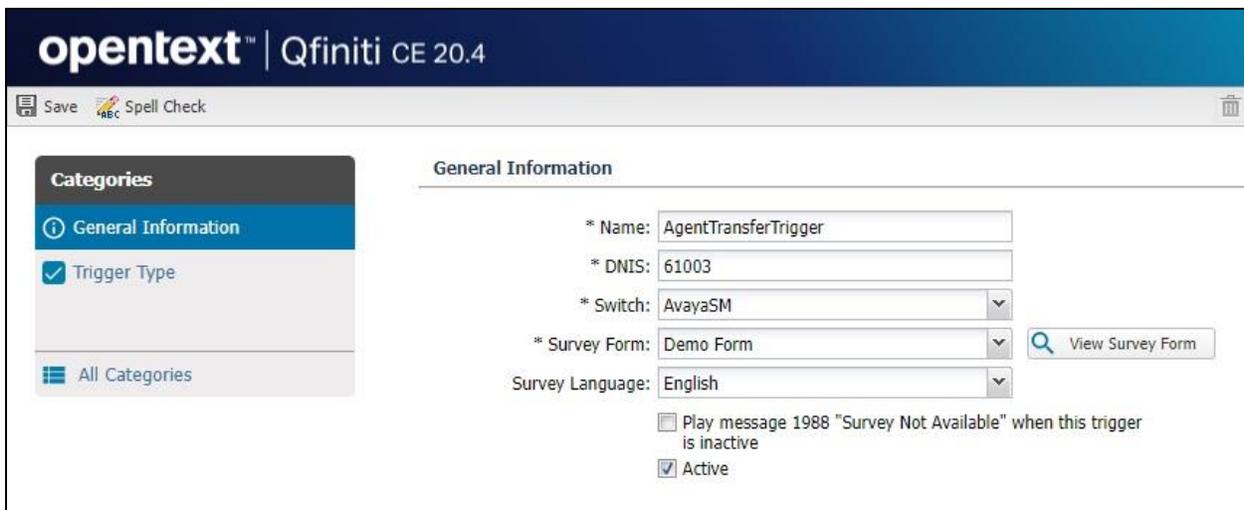
8.15. Administer Triggers

Select **Surveys** → **Triggers** from the top menu to display the screen below. Select the **New** icon in the right pane to add a trigger.



In the pop-up screen below, enter the following values for the specified fields and retain the default values for the remaining fields.

- **Name:** A descriptive trigger name, in this case “AgentTransferTrigger”.
- **DNIS:** The hunt group extension from **Section 5.3**.
- **Switch:** The switch name from **Section 8.2**.
- **Survey Form:** Select an existing survey form.

The screenshot shows the 'General Information' form for creating a new trigger. The interface includes a 'Categories' sidebar with 'General Information' selected. The form fields are: '* Name: AgentTransferTrigger', '* DNIS: 61003', '* Switch: AvayaSM', '* Survey Form: Demo Form', and 'Survey Language: English'. There is a 'View Survey Form' button next to the Survey Form field. At the bottom, there are two checkboxes: 'Play message 1988 "Survey Not Available" when this trigger is inactive' (unchecked) and 'Active' (checked). The top of the form has 'Save' and 'Spell Check' buttons.

Select **Trigger Type** from the left pane to display the **Trigger Type** screen. For **Type**, select “**Mode 2: Agent transfers caller to Survey**” as shown below. Retain the default values in the remaining fields.

opentext™ | Qfiniti CE 20.4

Save Spell Check

Categories

- General Information
- Trigger Type**
- All Categories

Trigger Type

Type: Mode 2: Agent transfers caller to Survey

Outbound Extension:

ANI Limit:

If call is Transferred: Do not offer a survey

Dial Mode: Standard Dial

Record the call when this trigger activates a survey

Limit the number of Completed Surveys generated

Max Per Day: Sun 0, Mon 0, Tue 0, Wed 0, Thu 0, Fri 0, Sat 0

Max Per Hour: Sun 0, Mon 0, Tue 0, Wed 0, Thu 0, Fri 0, Sat 0

8.16. Administer Alerts

Select **Surveys** → **Questions** from the top menu to display the list of pre-configured survey questions. Select the desired entry to set the criteria for immediate transfer to supervisor.

opentext™ | Qfiniti CE 20.4 Logout Qfiniti Administrator | Help

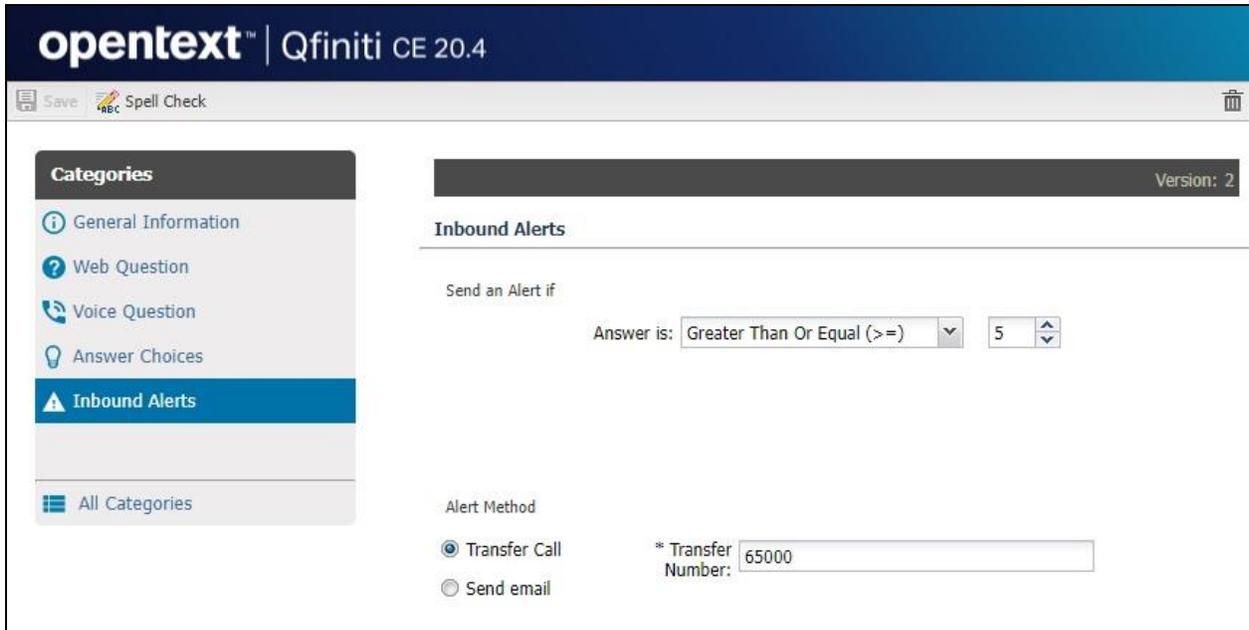
Overview Teams Recordings Reports Surveys Administrator

Surveys > Questions > All Survey Questions

Surveys > Questio... << + New Open Save As Delete

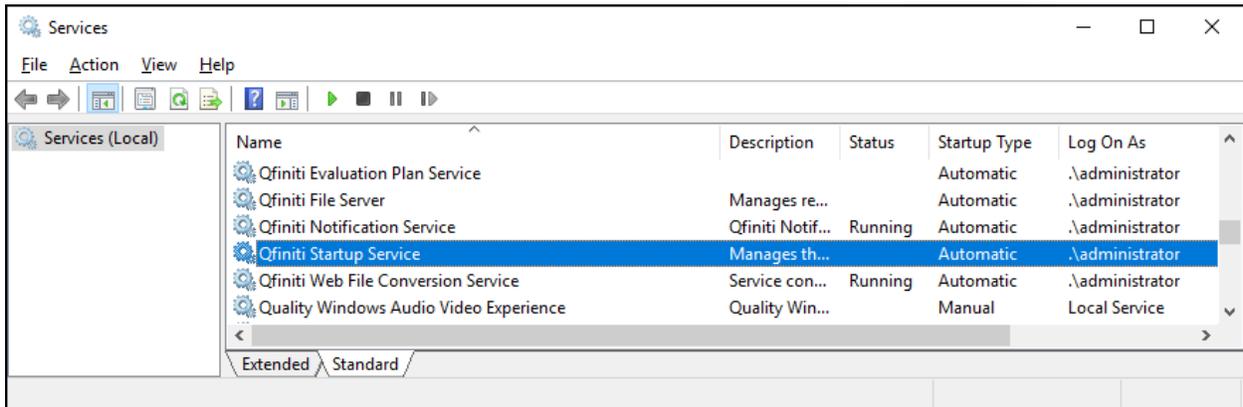
Views	Question Name	Voice Question ...	Type	Prompt	Alert Type	Alert Data	Version
? All Survey Questions	Press 1 to 5	Pres 1 2 3 4 or 5	Quantitative	2011	Transfer		2
	Voice Message	Would you like t...	Comment	2012	Transfer		1
	Yes or no	Yes or no	Yes/No	2010	Transfer		1

The screen below is displayed. Select **Inbound Alerts** in the left pane. For **Send an Alert if**, set the desired criteria. For **Alert Method**, set **Transfer Number** to the supervisor extension from **Section 3**.



8.17. Start Services

From the Qfiniti server, select **Windows** → **Control Panel** → **Administrative Tools** → **Services** to display the **Services** screen. Start the **Qfiniti Startup Service** shown below.



9. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Communication Manager, Application Enablement Services, Session Manager, and Survey.

9.1. Verify Avaya Aura® Communication Manager

On Communication Manager, verify status of the administered CTI link by using the “**status aesvcs cti-link**” command. Verify that the **Service State** is “**established**” for the CTI link number administered in **Section 5.2**, as shown below.

```
status aesvcs cti-link
```

AE SERVICES CTI LINK STATUS						
CTI Link	Version	Mnt Busy	AE Services Server	Service State	Msgs Sent	Msgs Rcvd
1	12	no	aes7	established	31	29

9.2. Verify Avaya Aura® Application Enablement Services

On Application Enablement Services, verify status of the TSAPI service by selecting **Status** → **Status and Control** → **TSAPI Service Summary** (not shown) from the left pane. The **TSAPI Link Details** screen is displayed.

Verify that the **Status** is “**Talking**” for the TSAPI link administered in **Section 6.3**, and that the **Associations** column reflects the total number of monitored skill groups and agent stations from **Section 3** plus the total number of virtual SIP users from **Section 7.3**, in this case “**6**”.



Application Enablement Services

Management Console

Welcome: User
 Last login: Tue Feb 1 10:37:13 2022 from 192.168.200.20
 Number of prior failed login attempts: 0
 HostName/IP: aes7/10.64.101.239
 Server Offer Type: VIRTUAL_APPLIANCE_ON_VMWARE
 SW Version: 8.1.3.3.0.4-0
 Server Date and Time: Tue Feb 01 11:57:26 EST 2022
 HA Status: Not Configured

Status | Status and Control | TSAPI Service Summary
Home | Help | Logout

- ▶ AE Services
- ▶ Communication Manager Interface
- ▶ High Availability
- ▶ Licensing
- ▶ Maintenance
- ▶ Networking
- ▶ Security
- ▼ Status
 - Alarm Viewer
 - ▶ Logs
 - ▶ Log Manager
 - ▼ Status and Control

TSAPI Link Details

Enable page refresh every seconds

Link	Switch Name	Switch CTI Link ID	Status	Since	State	Switch Version	Associations	Msgs to Switch	Msgs from Switch	Msgs Period
1	cm7	1	Talking	Mon Jan 31 13:52:13 2022	Online	18	6	29	31	30

For service-wide information, choose one of the following:

9.3. Verify Avaya Aura® Session Manager

From the System Manager Web interface, select **Elements** → **Session Manager** → **System Status** → **User Registrations** to display the **User Registrations** screen.

Verify that all virtual SIP users from **Section 7.3** are registered, as shown below with a checkmark in the **Registered Prim** column.

	Details	Address	First Name	Last Name	Actual Location	IP Address	Remote Office	Shared Control	Simult. Devices	AST Device	Registered			
											Prim	Sec	Surv	Visiting
<input type="checkbox"/>	▶ Show	66006@dr220.com	SIP 6	Avaya	DR-Loc	192.168.200.169	<input type="checkbox"/>	<input type="checkbox"/>	1/1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> (AC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	▶ Show	66991@dr220.com	SIP1	Survey	DR-Loc	10.64.101.202	<input type="checkbox"/>	<input type="checkbox"/>	1/1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	▶ Show	66992@dr220.com	SIP2	Survey	DR-Loc	10.64.101.202	<input type="checkbox"/>	<input type="checkbox"/>	1/1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9.4. Verify OpenText Qfiniti Survey

Establish an ACD call from PSTN with an available agent. At end of ACD call, agent uses the phone to perform unsupervised transfer of PSTN caller to the Survey hunt group. Verify that PSTN caller hears the first Survey question and can use DTMF to respond to quantitative questions and leave voice messages for open-ended questions to complete the survey.

From the Qfiniti web interface, select **Surveys** → **Survey Results**, followed by **Todays Completed Surveys** (not shown) in the left pane to display the screen below. Verify that there is an entry corresponding to last survey with proper values in the pertinent fields. Double click on the entry.

Surv...	Survey Date	DNIS	Inbo...	ANI	Login...	First ...	Last ...	Mode	Voice ...	Status
	02/01/2022 1:25:00 PM	61003	66991	65001	65881	Agent1	Avaya	Call Transfer	Yes	Survey Completed

Verify that a pop-up screen is displayed with proper captured response for each survey question as shown below. Click on the **Play** option associated with **Voice Message**.

The screenshot shows the opentext Qfiniti CE 20.4 interface. At the top, there are buttons for 'Save', 'Play', 'Classify', and 'Delete'. Below this is a table with the following data:

Name	Survey Type	Date:	Team Member Name:	DNIS:
Demo Form (Version:2)	Inbound	2/1/2022 1:25:31 PM	Avaya, Agent1	61003

Below the table are three survey questions:

- 1: Press 1 to 5
Pres 1 2 3 4 or 5 3
- 2: Yes or no
Yes or no Yes
- 3: Voice Message
Would you like to leave a voice message?

At the bottom right of the third question, there is a 'Delete Transcript' button and a 'Play' button circled in red.

Verify that the voice response left by the PSTN caller can be played back.

The screenshot shows the opentext Qfiniti CE 20.4 interface for a voice recording. At the top right, it displays 'Agent1 Avaya', 'Date: 2/1/2022 1:26:37 PM UTC +00:00', and 'Trans Id: 387 ANI: DNIS:'. Below this is a navigation bar with buttons for 'Export', 'Call Analysis', 'Evaluate', 'Classify', 'Markers', 'Stopwatch', 'Attachments', and 'My Timezone'. The main area shows a progress bar for a recording with a total length of '00:00:31'. The current playback position is '00:00:06'. Below the progress bar are playback controls including 'Original Size', '10s' buttons, a play/pause button, a '1x' speed button, a volume icon, and a '1/1' button. The 'Player Status' is 'Playing'.

10. Conclusion

These Application Notes describe the configuration steps required for OpenText Qfiniti Survey 20.4 to successfully interoperate with Avaya Aura® Communication Application Enablement Services 8.1.3 and Avaya Aura® Session Manager 8.1.3. All feature and serviceability test cases were completed with observations noted in **Section 2.2**.

11. Additional References

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

1. *Administering Avaya Aura® Communication Manager*, Release 8.1.x, Issue 12, July 2021, available at <http://support.avaya.com>.
2. *Administering Avaya Aura® Application Enablement Services*, Release 8.1.x, Issue 12, October 2021, available at <http://support.avaya.com>.
3. *Administering Avaya Aura® Session Manager*, Release 8.1.x, Issue 10, September 2021, available at <http://support.avaya.com>.
4. *OpenText Qfiniti Survey Configuration Guide*, Rev. 2019-Nov-14, available to existing customers at <https://knowledge.opentext.com/knowledge/llisapi.dll>.

©2022 Avaya Inc. All Rights Reserved.

Avaya and the Avaya Logo are trademarks of Avaya Inc. All trademarks identified by ® and ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners. The information provided in these Application Notes is subject to change without notice. The configurations, technical data, and recommendations provided in these Application Notes are believed to be accurate and dependable, but are presented without express or implied warranty. Users are responsible for their application of any products specified in these Application Notes.

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