

Avaya Solution & Interoperability Test Lab

Application Notes for Zeacom Communications Center Record and Evaluate with Avaya Aura® Communication Manager using Avaya Aura® Application Enablement Services 6.3 – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for Zeacom Communications Center Record and Evaluate to interoperate with Avaya Aura® Communication Manager using Avaya Aura® Application Enablement Services 6.3.

Zeacom Communications Center is a multi-channel and multi-contact solution that can handle voice, fax, web, and email contacts. Record and Evaluate is an optional feature that provides voice recording, evaluation, and coaching. The compliance testing focused on the voice recording integration with Avaya Aura® Communication Manager via the Avaya Aura® Application Enablement Services Device, Media, and Call Control interface.

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 Zeacom Communications Center Record and Evaluate to interoperate with Avaya Aura® Communication Manager using Avaya Aura® Application Enablement Services 6.3.

Zeacom Communications Center is a multi-channel and multi-contact solution that can handle voice, fax, web, and email contacts. Record and Evaluate is an optional feature that provides voice recording, evaluation, and coaching. The compliance testing focused on the voice recording integration with Avaya Aura® Communication Manager via the Avaya Aura® Application Enablement Services Device, Media, and Call Control (DMCC) interface.

The DMCC interface is used by Zeacom Communications Center Record and Evaluate to register a virtual IP softphone against each monitored agent station to pick up the media for call recording. When there is an active call at the monitored agent station, Zeacom Communications Center is informed of the call via event reports from the TSAPI interface as part of the basic voice integration, and can start the call recording by using the media from the virtual IP softphone associated with the monitored agent station.

These Application Notes assume the Zeacom Communications Center basic voice integration with Avaya Aura® Communication Manager and Avaya Aura® Application Enablement Services is already in place as described in [3]. These Application Notes will focus on the additional configuration required to support the optional voice recording integration using the Record and Evaluate feature from Zeacom Communications Center, and the Multiple Registration feature from Avaya Aura® Application Enablement Services DMCC.

2. General Test Approach and Test Results

The feature test cases were performed both automatically and manually. Upon start of the application, Record and Evaluate automatically registered a recording device for each monitored station using DMCC.

For the manual part of the testing, each call was handled manually on the monitored station with generation of unique audio content for the recordings. Necessary user actions such as hold and reconnect were performed from the monitored stations running the Zeacom Executive Desktop application, to test the different call scenarios.

The serviceability test cases were performed manually by disconnecting and reconnecting the Ethernet connection to the Communications Center server.

The verification of tests included using the Communications Center logs for proper message exchanges, and using the Record & Evaluate client application for proper logging and playback of the calls.

DevConnect Compliance Testing is conducted jointly by Avaya and DevConnect members. The jointly-defined test plan focuses on exercising APIs and/or standards-based interfaces pertinent to the interoperability of the tested products and their functionalities. DevConnect Compliance Testing is not intended to substitute full product performance or feature testing performed by DevConnect members, nor is it to be construed as an endorsement by Avaya of the suitability or completeness of a DevConnect member's solution.

2.1. Interoperability Compliance Testing

The interoperability compliance test included feature and serviceability testing.

The feature testing focused on verifying the following from Record and Evaluate:

- Use of DMCC registration services to register and un-register the recording devices.
- Use of DMCC monitoring services and media control events to obtain the media from the recording devices.
- Proper recording, logging, and playback of calls for scenarios involving inbound, outbound, internal, external, ACD, non-ACD, hold, reconnect, simultaneous, conference, and transfer.

The serviceability testing focused on verifying the ability of Record and Evaluate to recover from adverse conditions, such as disconnecting/reconnecting the Ethernet connection to the Communications Center server.

2.2. Test Results

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

- All voicemail calls are recorded by design.
- Multiple calls at the agent are lumped into a single recording entry and used the call information from the first call.
- Blind transfer and conference scenarios involving two agents included an extra null recording entry for the transferred-to/conferenced-to agent that cannot be played back. Note that audio for the entire scenarios were captured by the other recording entries.
- For conference scenarios involving two agents, one of the recording entries for the conferenced-to agent contained a blank call type.
- Calls that experienced any Ethernet disruptions were not recorded by design.

2.3. Support

Technical support on Record and Evaluate can be obtained through the following:

Phone: (800) 513-9002Web: www.zeacom.com

• Email: usasupport@zeacom.com

3. Reference Configuration

These Application Notes assume the Zeacom Communications Center basic voice integration with Avaya Aura® Communication Manager and Avaya Aura® Application Enablement Services is already in place as described in [3]

The detailed administration of basic connectivity between Communication Manager and Application Enablement Services is not the focus of these Application Notes and will not be described.

The contact center devices used in the compliance testing are shown in the table below.

Device Type	Device Number/Extension
VDNs	45901-45908
Vectors	900-905, 908
Agent stations	45001-45002
Supervisor & Failure covering station	45000

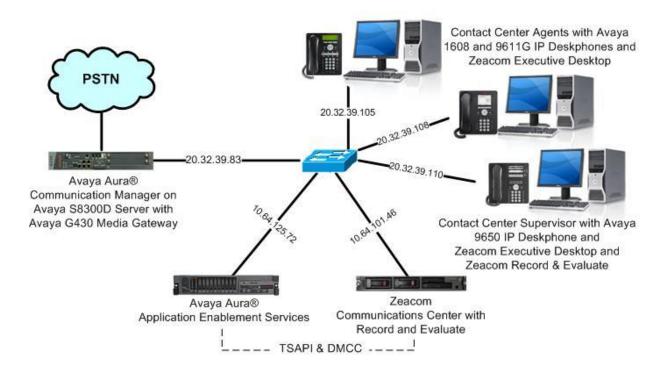


Figure 1: Compliance Testing Configuration

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 on Avaya S8300D Server with Avaya G430 Media Gateway	6.3.2 (R016x.03.0.124.0-21053)
Avaya Aura® Application Enablement Services	6.3.1 (6.3.1.0.19-0)
Avaya 1608 IP Deskphone (H.323)	1.340B
Avaya 9611G IP Deskphone (H.323)	6.3037
Avaya 9650 IP Deskphone (H.323)	3.210A
Zeacom Communications Center on Windows Server 2008 R2 Enterprise • AnnouncePort.exe • Avaya TSAPI Windows Client • Avaya DMCC XML	7.0.0.1288 SP1 7.0.0.1400 6.3.1.502 6.2
Zeacom Executive Desktop	7.0.0.1288
Zeacom Record & Evaluate	10.2.0.48 GR

5. Configure Avaya Aura® Communication Manager

This section provides the procedures for configuring Communication Manager.

Use the "change station n" command, where "n" is first existing agent station extension from **Section 3**.

For **Security Code**, enter the same value as the extension number, which is required by Record and Evaluate. Enable **IP Softphone**. These settings will allow Record and Evaluate to register a recording device against the station.

```
change station 45001
                                                                             Page 1 of
                                            STATION
                                           Lock Messages? n
Security Code: 45001
Coverage Path 1: 7
Coverage Path 2:
Hunt-to Station:
Extension: 45001
                                                                                     BCC: 0
     Type: 1608
                                                                                      TN: 1
                                                                                    COR: 1
     Port: S00000
     Name: G430 Station 1
                                                                                     cos: 1
                                                                                  Tests? y
STATION OPTIONS
                                                  Time of Day Lock Table:
                Loss Group: 19 Personalized Ringing Pattern: 1
        Message Lamp Ext: 49
Speakerphone: 2-way
Display Language: english

Message Lamp Ext: 49
Mute Button Enabled? y
Button Modules: 0
                                                         Message Lamp Ext: 45001
 Survivable GK Node Name:
          ble GK Node Name:
Survivable COR: internal
                                                        Media Complex Ext:
   Survivable Trunk Dest? y
                                                               IP SoftPhone? v
                                                        IP Video Softphone? n
                                    Short/Prefixed Registration Allowed: default
```

Repeat this section for all agent stations. In the compliance testing, two agent stations were configured as shown below.

```
list station 45001 count 2
                            STATIONS
Ext/
Hunt-to
                                          Room/ Cv1/ COR/ Cable/
          Port/ Name/
Ext/
                                          Data Ext Cv2 COS TN Jack
           Type Surv GK NN
                                  Move
           S00000 G430 Station 1
                                                        1
45001
                                                        1 1
            1608
                                    no
45002
           S00008 G430 Station 2
                                                        1
                                                        1
                                                            1
            9611
```

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
- Obtain switch connection and H.323 gatekeeper
- Obtain Zeacom user

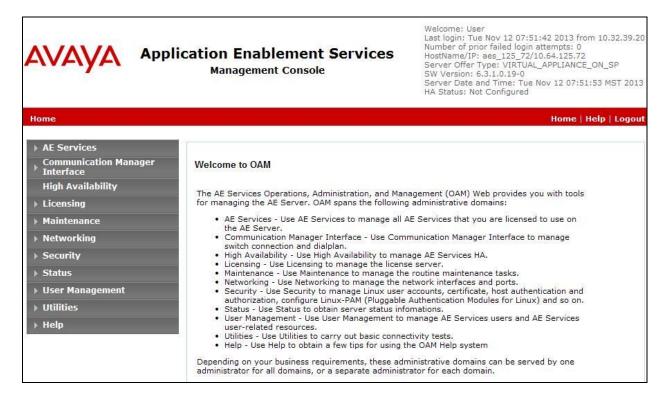
6.1. Launch OAM Interface

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



6.2. Obtain Switch Connection and H.323 Gatekeeper

Select Communication Manager Interface \rightarrow Switch Connections from the left pane. The Switch Connections screen shows a listing of existing switch connections.

Locate the connection name associated with the relevant Communication Manager and make a note of the value, in this case "S8300D". Select the corresponding radio button, and click **Edit H.323 Gatekeeper**.



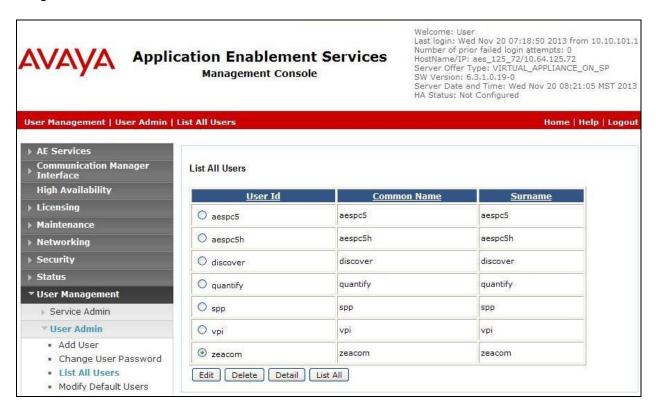
The **Edit H.323 Gatekeeper** screen is displayed. Make a note of the listed IP address, in this case "10.32.39.83" as shown below.



6.3. Obtain Zeacom User

Select User Management \rightarrow User Admin \rightarrow List All Users from the left pane, to display the List All Users screen in the right pane.

Make a note of the Zeacom user, in this case "zeacom", which will be used later to configure Record and Evaluate. Note that the Zeacom user was created as part of the basic voice integration described in [3].



7. Configure Zeacom Communication Center Record and Evaluate

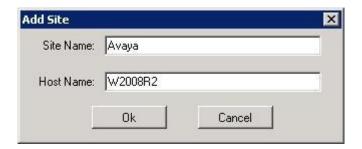
This section provides the procedures for configuring Record and Evaluate. The procedures include the following areas:

- Launch Configure Server
- Administer recorder service
- Administer tasks
- Administer scheduled recording
- Restart services

The configuration of Record and Evaluate is typically performed by Zeacom installation technicians or third party resellers. The procedural steps are presented in these Application Notes for informational purposes.

7.1. Launch Configure Server

From the Communications Center server, select Start → All Programs → Record & Evaluate v10 → Configure Server. Upon initial launch, the Add Site screen is displayed. Enter a desired Site Name, and the server computer name for Host Name, as shown below.



The **Configure Server** screen is displayed next.



7.2. Administer Recorder Service

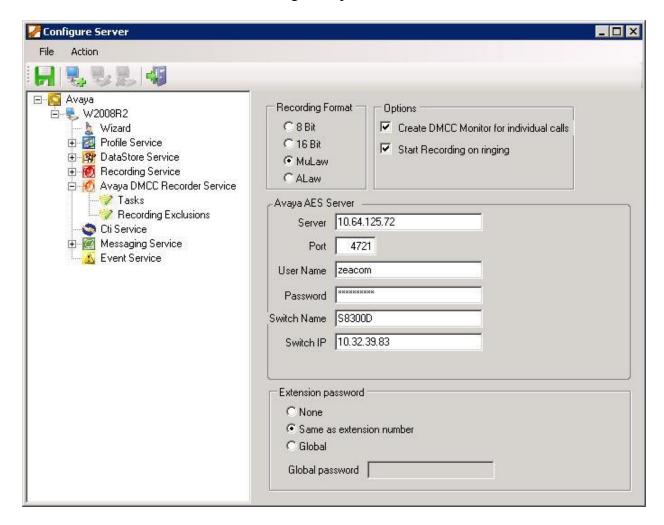
Expand and select Avaya \rightarrow W2008R2 \rightarrow Avaya DMCC Recorder Service from the left pane, where Avaya and W2008R2 is the site and host names from Section 7.1 respectively.

Check Create DMCC Monitor for individual calls and Start Recording on ringing. Enter the following values for the specified fields, and retain the default values for the remaining fields.

• **Server:** IP address of Application Enablement Services.

User Name: Zeacom user credential from Section 6.3.
 Password: Zeacom user credential from Section 6.3.
 Switch Name: Switch connection name from Section 6.2.

• **Switch IP:** IP address of H.323 gatekeeper from **Section 6.2**.

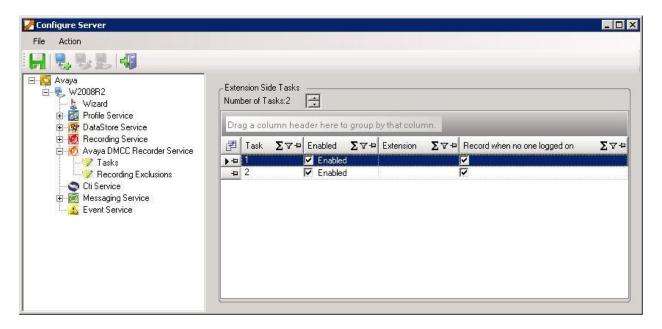


7.3. Administer Tasks

Select Avaya → W2008R2 → Avaya DMCC Recorder Service → Tasks from the left pane, to display the screen below.

For **Number of Tasks**, use the arrows to create the desired maximum number of simultaneous recording tasks. In the compliance testing, two recording tasks were created to support simultaneous recording of two monitored agent stations. Note that agent stations were already configured on Communications Center as part of the basic voice integration described in [3].

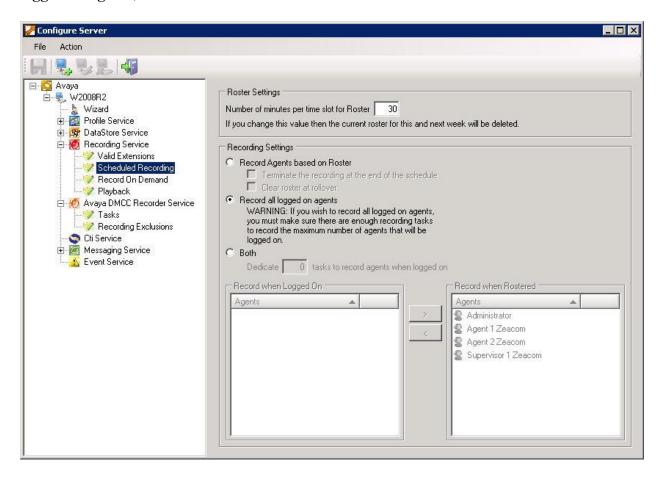
Make certain **Enabled** is checked for each task entry, and check the corresponding **Record** when no one logged on parameter as desired.



7.4. Administer Scheduled Recording

Select Avaya → W2008R2 → Recording Service → Scheduled Recording from the left pane, to display the screen below.

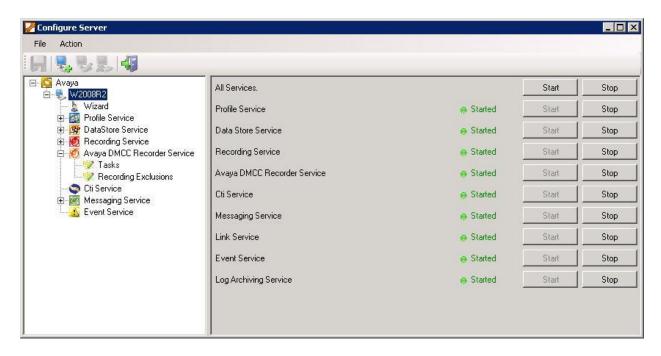
Recording can take place based on a schedule, or when agents are logged in. Configure the **Recording Settings** as desired. In the compliance testing, the method chosen was to **Record all logged on agents**, as shown below.



7.5. Restart Services

Select Avaya → W2008R2 from the left pane, to display the screen below.

For **All Services**, select **Stop**, followed by **Start** to restart all services.



8. Verification Steps

This section provides the tests that can be performed to verify proper configuration of Communication Manager, Application Enablement Services, and Communications Center Record and Evalute.

Prior to verification, follow [3] to establish an incoming call to the Zeacom Sales application with an available agent, in this case agent "45001".

8.1. Verify Avaya Aura® Communication Manager

On Communication Manager, verify the status of the administered CTI link by using the "status aesvcs cti-link" command. Verify that the **Service State** is "established", as shown below.

```
status aesvcs cti-link

AE SERVICES CTI LINK STATUS

CTI Version Mnt AE Services Service Msgs Msgs
Link Busy Server State Sent Rcvd

1 6 no aes_125_72 established 49 32
```

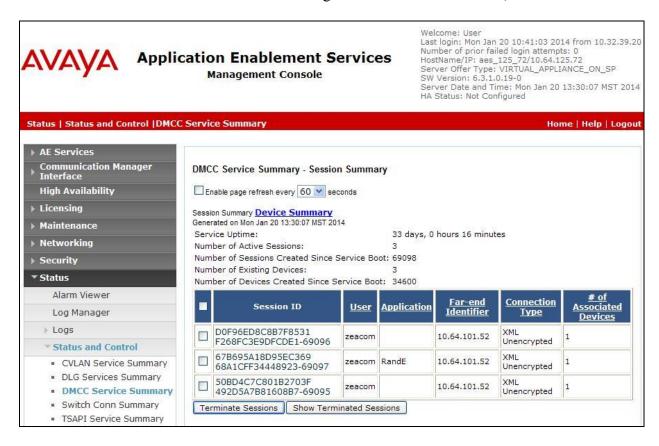
Verify the registration status of the virtual recording devices by using the "list registered-ip-stations" command. Verify that there is a virtual recording entry for each agent that's active on a call, in this case "45001". Also verify the entry displayed the IP address of Application Enablement Services as **Station IP Address**.

		REGIST	ERED	IP STATIONS
				Station IP Address/ Gatekeeper IP Address
45000		IP_Phone 3.210A		10.32.39.106 10.32.39.83
45001	1608		У	10.32.39.104 10.32.39.83
45001	_		У	10.64.125.72 10.32.39.83
45002			У	10.32.39.105 10.32.39.83
45991	4624		У	10.32.39.83 10.64.125.72 10.32.39.83
45992	4624	IP_API_A 3.2040	У	10.32.39.83 10.64.125.72 10.32.39.83

8.2. Verify Avaya Aura® Application Enablement Services

Verify the status of the DMCC link by selecting **Status** → **Status** and **Control** → **DMCC Service Summary** from the left pane. The **DMCC Service Summary** – **Session Summary** screen is displayed.

In the lower portion of the screen, verify that there is an active session with the Zeacom user name from **Section 6.3** and with "RandE" as **Application**. Also verify that the **# of Associated Devices** for the session reflects the number of agents that are active on calls, in this case "1".



8.3. Verify Zeacom Communications Center Record and Evaluate

Prior to verification, complete the active call on the agent, in this case agent "45001".

From the supervisor PC, select Start → All Programs → Record & Evaluate → Zeacom Record & Evaluate to display the Record & Evaluate screen. Enter the appropriate credentials. For Server, enter the IP address of the Communications Center server.



The **Zeacom Record & Evaluate** screen is displayed next. Select **General** → **Search** in the left pane, to display the **Search** screen.

Expand the **Users** sub-section in the middle pane, and select **All Users**.

Expand the **Date/Time Range** sub-section in the middle pane, and configure a desired range, as shown below. Click **Start Search**.



The **Zeacom Record & Evaluate** screen is updated with a list of call recordings in the right pane. Verify that there is an entry reflecting the last call, with proper values in the relevant fields.

Double click on the entry to listen to the playback, and verify that the call recording can be played back.



9. Conclusion

These Application Notes describe the configuration steps required for Zeacom Communications Center Record and Evaluate to successfully interoperate with Avaya Aura® Communication Manager using Avaya Aura® Application Enablement Services 6.3. All feature and serviceability test cases were completed with observations noted in **Section 2.2**.

10. Additional References

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

- **1.** Administering Avaya Aura® Communication Manager, Document 03-300509, Issue 9, Release 6.3, October 2013, available at http://support.avaya.com.
- **2.** Avaya Aura® Application Enablement Services Administration and Maintenance Guide, Release 6.3, Issue 2, October 2013, available at http://support.avaya.com.
- **3.** Application Notes for Zeacom Communications Center with Avaya Aura® Communication Manager using Avaya Aura® Application Enablement Services 6.3, Issue 1.0, available at http://support.avaya.com.
- **4.** Communication Manager Installation Manual, Zeacom Library Version 7.0, available via Communication Manager training course provided by Zeacom.

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