AVAYA

Avaya Solution and Interoperability Test Lab

Application Notes for Cassidian Vesta Software Version 2.20 SP5 and Avaya Communication Server 1000 Release 7.5 and Avaya Aura® Contact Center Release 6.1 – Issue 1.0

Abstract

These Application Notes describe a solution comprised of Avaya Communication Server 1000 Release 7.5 and Avaya Aura® Contact Center Release 6.1 and Cassidian Vesta Version 2.20 SP5.

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.

KP; Reviewed:
SPOC 8/23/2011

Solution & Interoperability Test Lab Application Notes
©2011 Avaya Inc. All Rights Reserved.

1 of 27
VestaCS1000AACC

1. Introduction

The objective of this compliance test was to validate interoperability of the Cassidian Vesta with the Avaya Communication Server 1000 Release 7.5 and the Avaya Aura® Contact Center Release 6.1 in receiving, displaying and handling the emergency 911 calls.

2. General Test Approach and Test Results

The General test approach was to verify that the 81 test cases in the test plan and make sure there is no issue found during the compliance testing.

The compliance testing uses the ANI Simulator proprietary device to generate the emergency 911 calls with 8-digit, 10-digit, and 20-digit, this device is also equipped with the audio and microphone jack that can check audio speech path of the emergency calls when they are established between the ANI Simulator device and agent phone.

2.1. Interoperability Compliance Testing

The focus of this testing was to verify that the Vesta system including the Vesta server and Vesta workstation can interoperate with the Avaya Communication Server 1000 PBX and Avaya Aura® Contact Center systems to handle the emergency 911 calls which are made from the ANI Simulator proprietary device to emergency 911 number and then the emergency calls are routed to the ACD agent phones.

The following test areas were practiced in the compliance testing:
- Verify Vesta workstation Logon and Logoff functionality.
- Verify Vesta ACD functionality with 8-digit, 10-digit, and 20-digit emergency calls.
- Verify Vesta DN functionality.
- Verify Vesta Shared DN (MADN SCR) functionality.
- Verify Vesta Supervisor functionality.
- Verify Vesta CDR.

2.2. Test Results

There was an ANI 20-digit wireless issue that only happened on the Avaya IP 1140E phone. This issue was already fixed by applying the SU patch **cs1000-tps-7.50.17.16-5.i386** in the Signaling server of Communication Server 1000 system before the compliance test started.
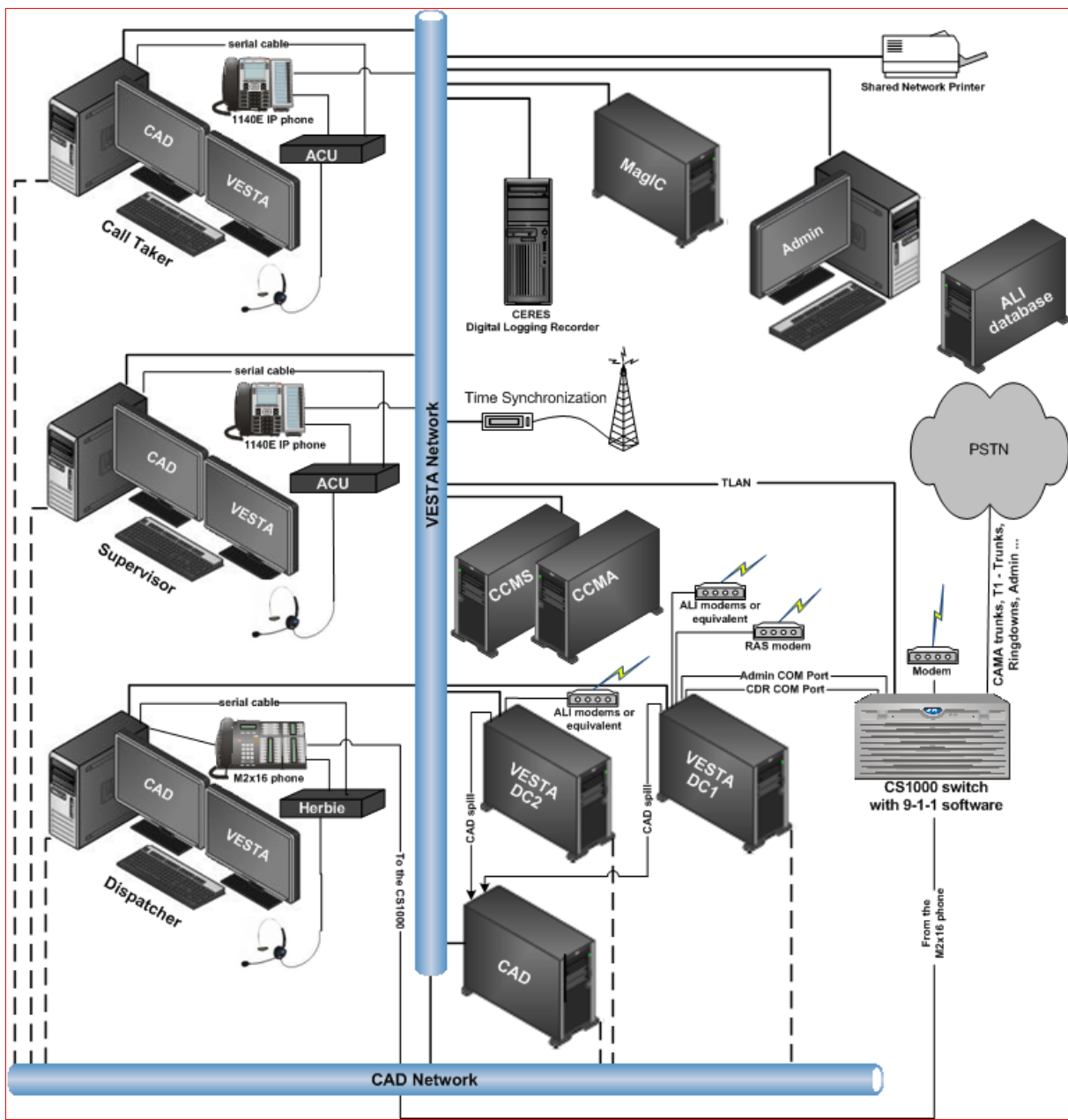
The compliance testing was successful and all objectives were verified and met. All test cases were executed and they all passed.

2.3. Support

Technical support for the Cassidian Vesta Software can be reached by contacting email at help@reverse911.com or phone **+1 (951) 719-2100**.

3. Reference Configuration

Figure 1 illustrates the network diagram configuration used during the compliance testing between the Avaya Communication Server 1000, Avaya Aura® Contact Center and the Cassidian Vesta system.

Figure 1: Network Diagram Configuration

KP; Reviewed:
SPOC 8/23/2011

Solution & Interoperability Test Lab Application Notes
©2011 Avaya Inc. All Rights Reserved.

3 of 27
VestaCS1000AACC

4. Equipment and Software Validated

The following equipment and software were used during the lab testing:

System	Software Version
Avaya Communication Server 1000E	Call Server (CPPM): 7.50 Q Signaling Server (CPPM): 7.50 Q
Avaya IP Phone 1140E	0625C7F
Avaya Digital M2216	N/A
Avaya Digital M3905	Flash: 9.0 P0 L1.8
Avaya Aura® Contact Center	6.208 SP1
Cassidian Vesta Server	2.20 SP5
Cassidian Vesta Workstation	2.20 SP5

5. Configure Avaya Communication Server 1000

This document assumes that the Avaya Communication Sever 1000 system was properly installed and configured as per the product document. For more information about how to install and configure Communication Sever 1000, please refer to **Section 10 [1]**.
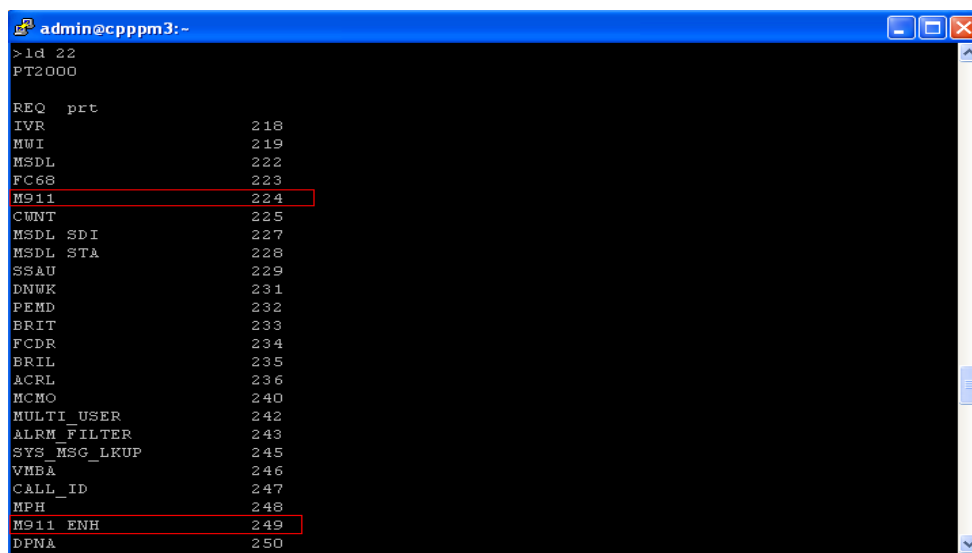
The following summarizes the tasks need to be done in the Call Server:
- Check whether the 911 and ACD packages in the Call Server are equipped or not.
- Provision the configurations for Contact Center in the Call Server.
- Provision the configurations for the emergency 911.

5.1. Check the Emergency 911 and ACD packages

Log in the Call Server as an administrator in the command line mode (overlay) and issue the command LD 22 as shown in **Figure 2** and **3** below:
- For the emergency 911 feature, make sure the packages 224 and 249 are equipped.
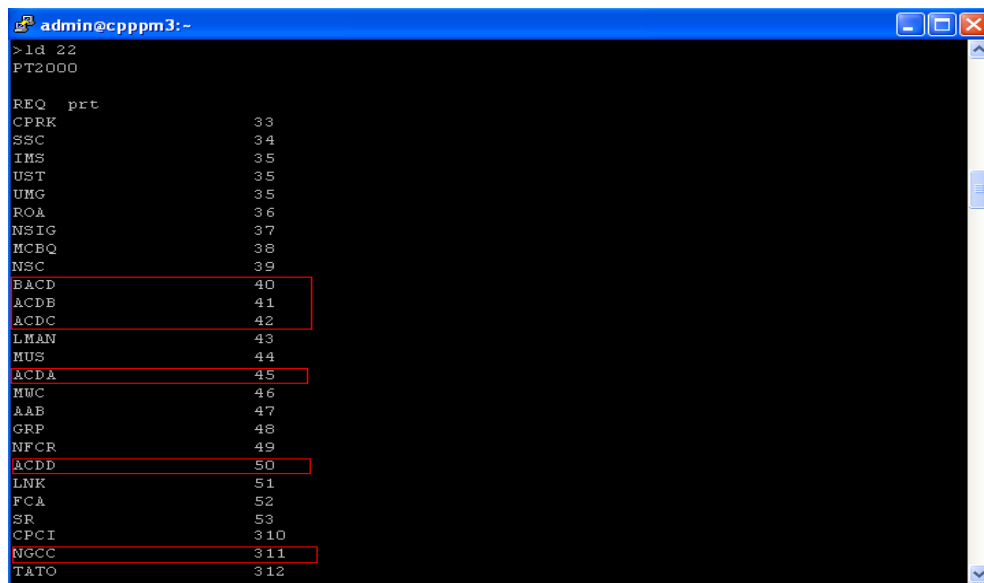
KP; Reviewed:
SPOC 8/23/2011

Solution & Interoperability Test Lab Application Notes
©2011 Avaya Inc. All Rights Reserved.

4 of 27
VestaCS1000AACC

Figure 2: The packages needed for emergency 9-1-1 feature

- For the ACD/AACC feature, make sure the packages 40, 41, 42, 45, 50, and 311 are equipped.

Figure 3: The packages needed for the ACD/CC feature

5.2. Provision the configurations for Contact Center

This section describes the steps on how to provision the configurations for the ACD feature in the Call Server.

5.2.1. Create an AML over Ethernet (ELAN) for Contact Center

Log in the Call Server as an administrator in the command line mode (overlay) and issue the command LD 17 as shown in **Figure 4** below:

Figure 4: Create the ELAN for the Contact Center application

5.2.2. Create a Value Added Server (VAS) for the ELAN

Log in the Call server as an administrator under the command line mode (overlay) and issue command LD 17 to create a Value Added Server (VAS) for the ELAN 17 above as shown in **Figure 5**.
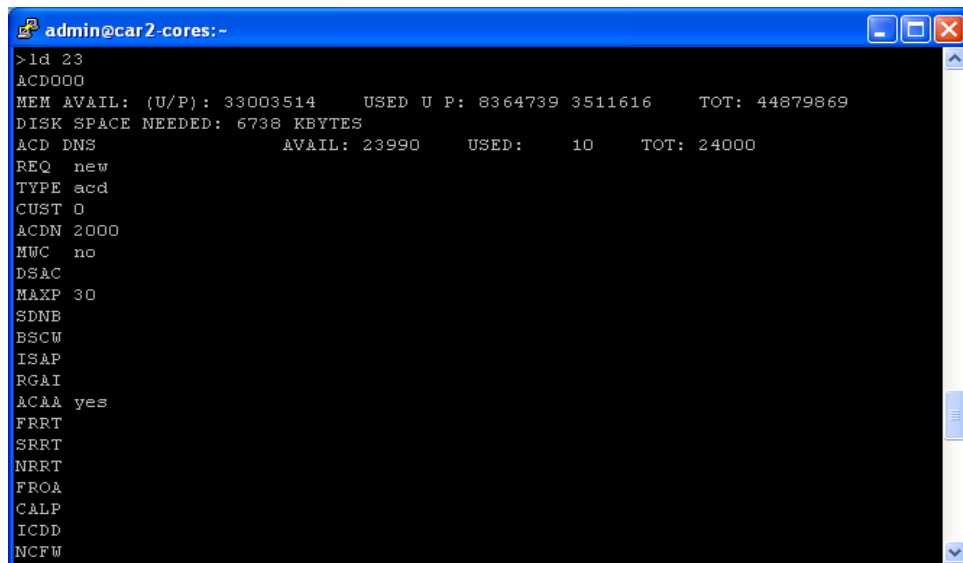
Figure 5: Create the VAS for the ELAN of Contact Center

5.2.3. Create an ACD Queue

Log in the Call server as an administrator under the command line mode (overlay) and issue command LD 23 to create an Automatic Call Distribution (ACD) DN as shown in **Figure 6**:
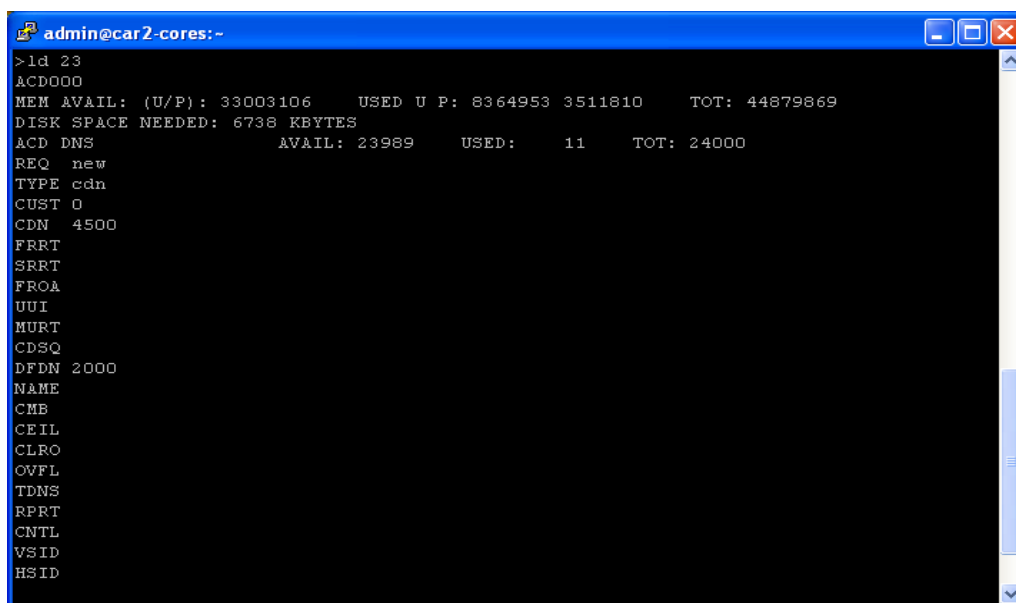
Figure 6: Create the ACD queue

5.2.4. Create a Controlled DN (CDN)

Log in the Call server as an administrator under the command line mode (overlay) and issue command LD 23 to create a Controlled DN (CDN) as shown in **Figure 7**:
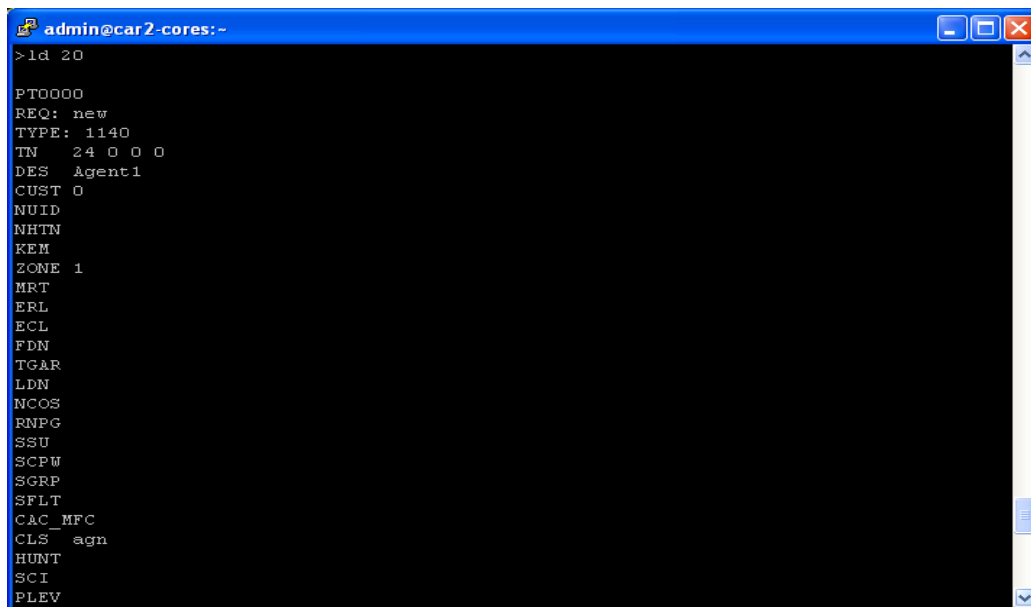

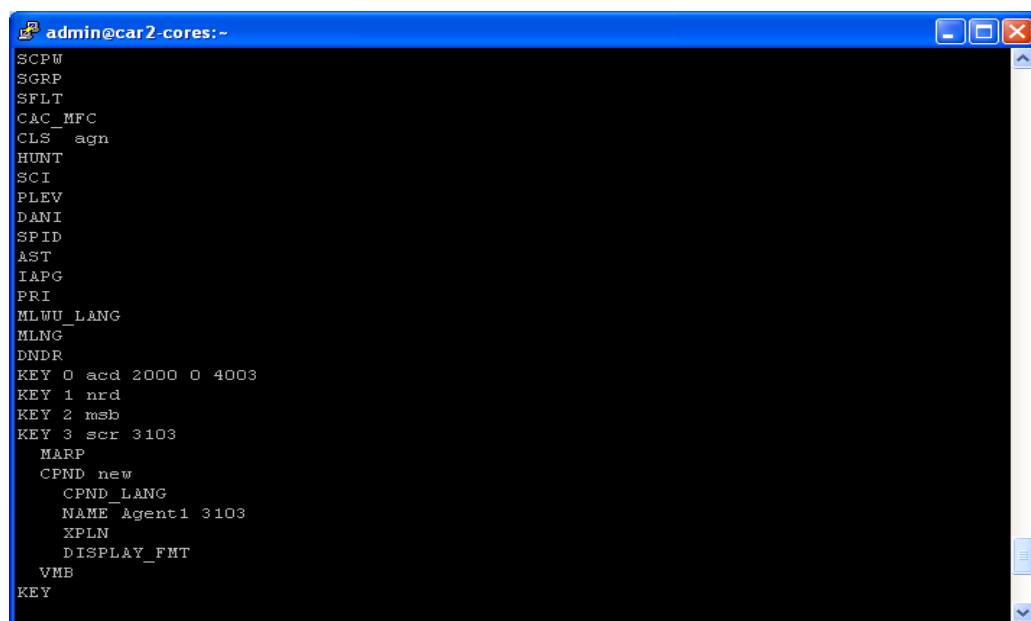**Figure 7: Create the Controlled DN for the Contact Center**

5.2.5. Create ACD Agent Phone

Log in the Call server as an administrator under the command line mode (overlay) and issue command LD 20 to create an agent phone as shown in **Figure 8** and **9**:

Solution & Interoperability Test Lab Application Notes

Figure 8: Create the ACD agent phone

Figure 9: Create the ACD agent phone (cont)

5.3. Provision the configurations for Emergency 911

This section describes the steps on how to provision the configurations for the emergency 911 feature in the Call Server.

5.3.1. Create a Route Data Block (RDB)

Log in the Call server as an administrator under the command line mode (overlay) and issue command LD 16 to create a DID Route Data Block (RDB) as shown in **Figure 10** and **11**:

KP; Reviewed:
SPOC 8/23/2011
Solution & Interoperability Test Lab Application Notes
©2011 Avaya Inc. All Rights Reserved.
8 of 27
VestaCS1000AACC

Figure 10: Create the Route Data Block for the emergency 911

Figure 11: Create the Route Data Block for the emergency 911 (cont)

5.3.2. Create Trunks for the DID Route

Log in the Call server as an administrator under the command line mode (overlay) and issue command LD 16 to create a DID Route Data Block (RDB) as shown in **Figure 11**:

Figure 12: Create the emergency 911 Trunk

6. Configure Avaya Aura® Contact Center

This document assumes that the Avaya Aura® Contact Center system was properly installed, configured and operated as per the product document, for more information about how to install, configure and administer please refer to **Section 10 [2].** This section provides additional steps in adding the new agent, configuring the CDN number, SkillSet, Route and Phone Sets in the Contact Center Manager.

To launch Contact Center Manager webpage, open the Internet Explorer browser and type IP address or name of Contact Center Manager into the address bar. In the login page of Contact Center Manager display, enter username **webadmin** and its password and then click on the **Login** button to log in as shown in **Figure 13**.
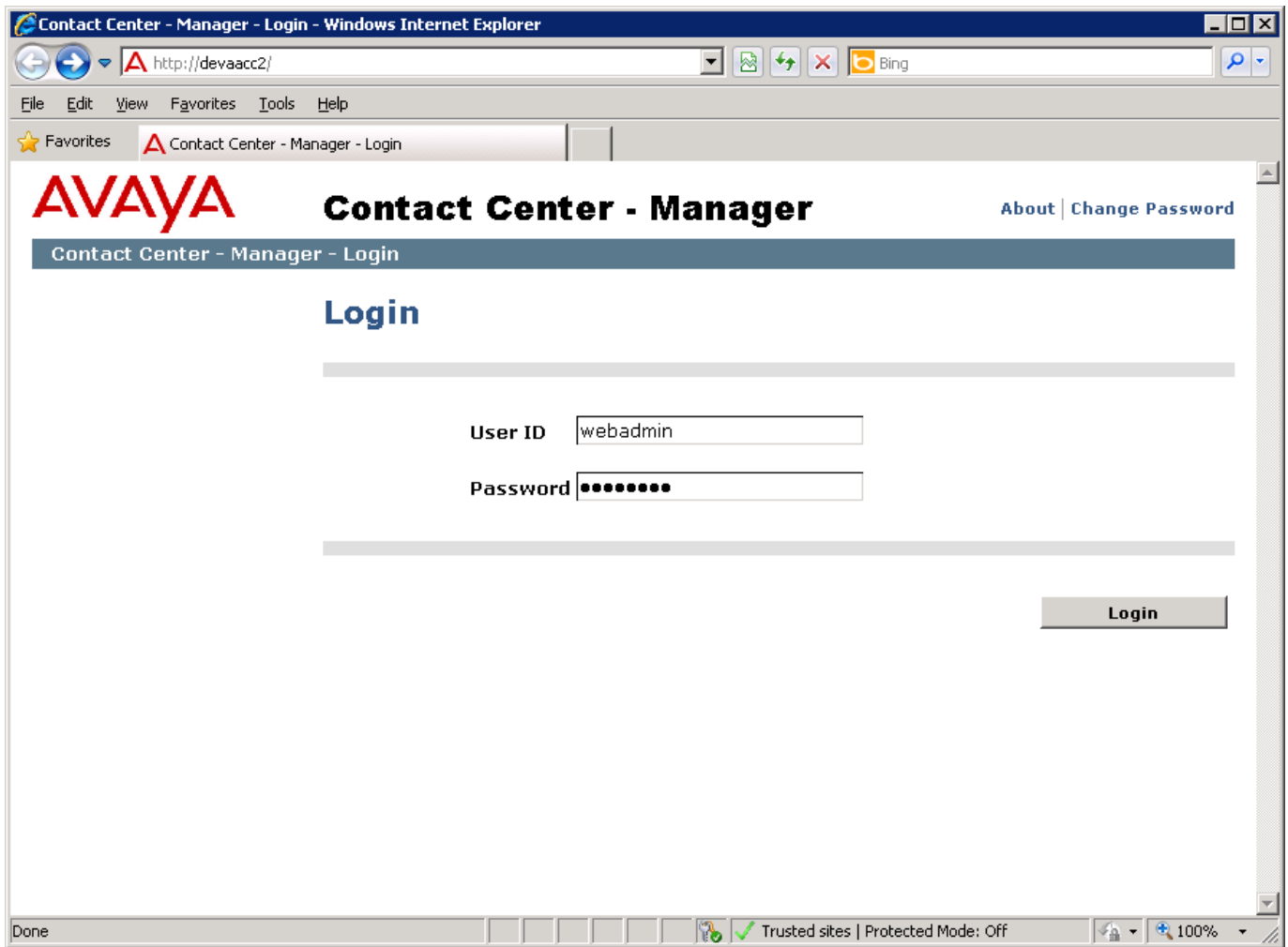
Figure 13: The Contact Center Manager login page

To configure a CDN number of Call server in the Contact Center Manager webpage, from homepage of Contact Center Manager as shown in **Figure 14**, navigate to **Launch > Configuration**.
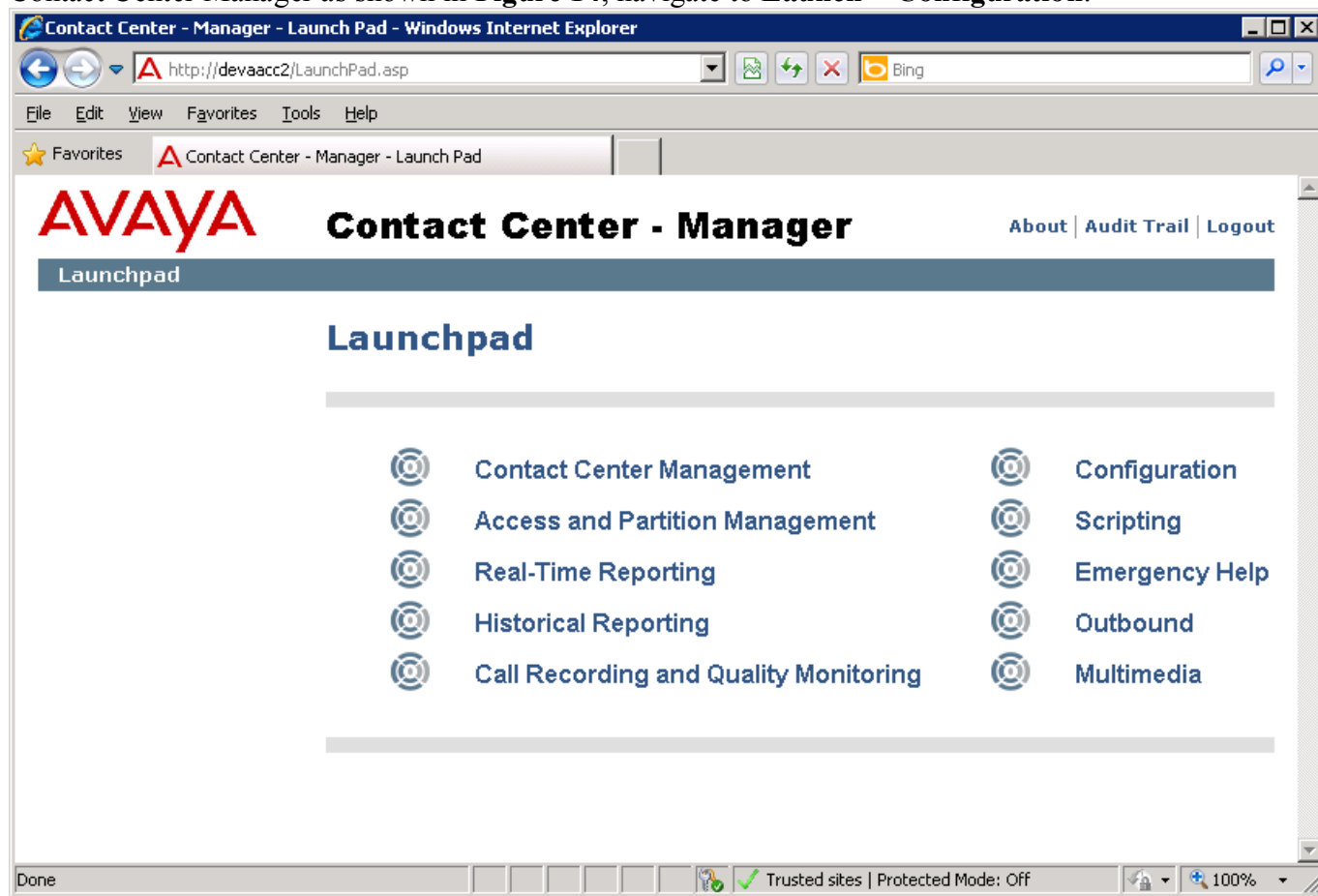
Figure 14: The Contact Center Manager Homepage

KP; Reviewed:
SPOC 8/23/2011

Solution & Interoperability Test Lab Application Notes
©2011 Avaya Inc. All Rights Reserved.

12 of 27
VestaCS1000AACC

The Configuration page displays, on left side of Configuration window, expand tree menu of Contact Center Manager (CCM) server and click on the CDNs (Route Points) folder, the CDNs (Route Points) section now appears in the right side of Configuration page, enter a name and the number of CDN number that was created in Section 5.2.4 and then check on the checkbox of Acquired? column as shown in Figure 15.
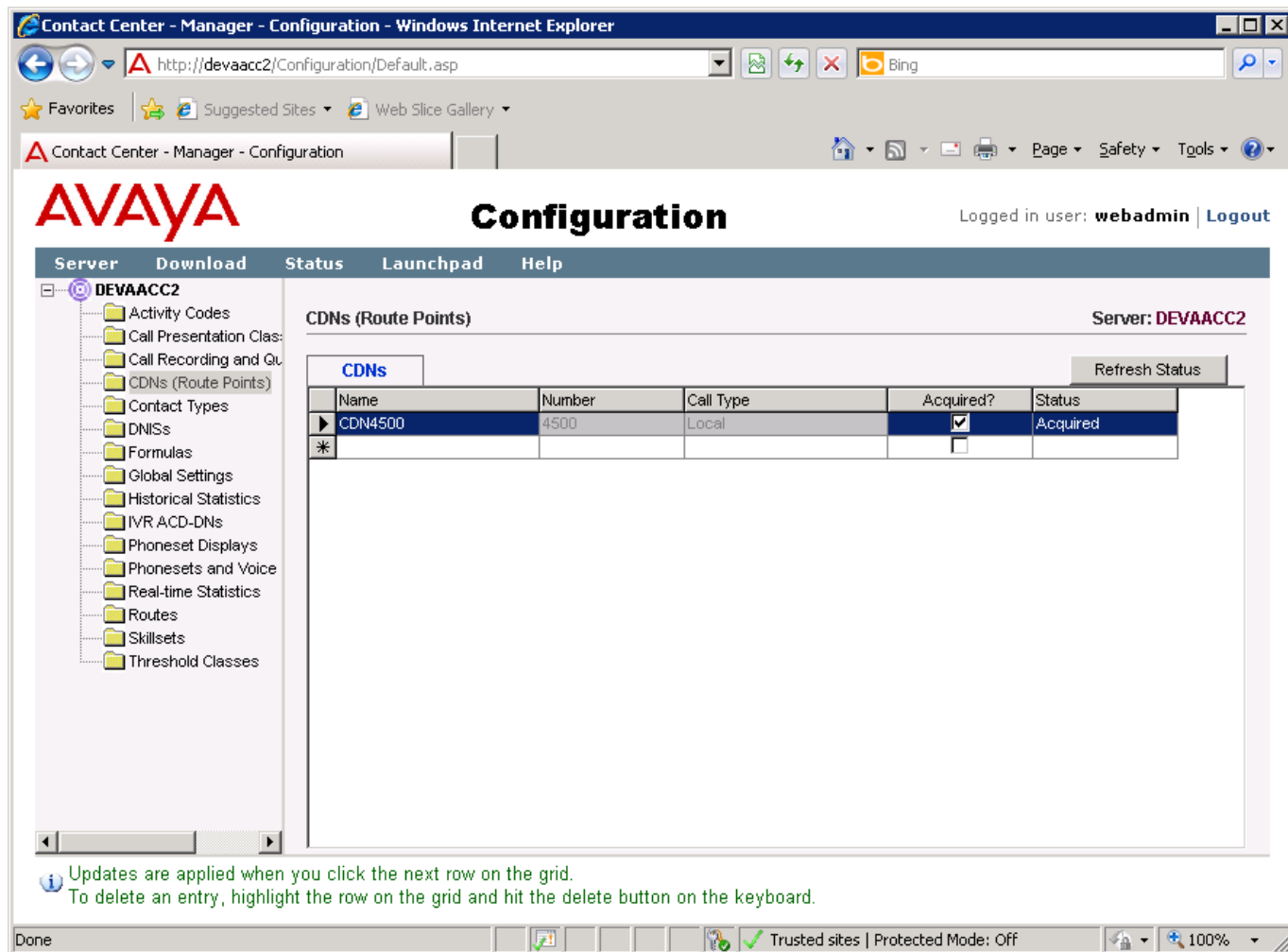
Figure 15: Configure the CDN DN in the Contact Center Manager

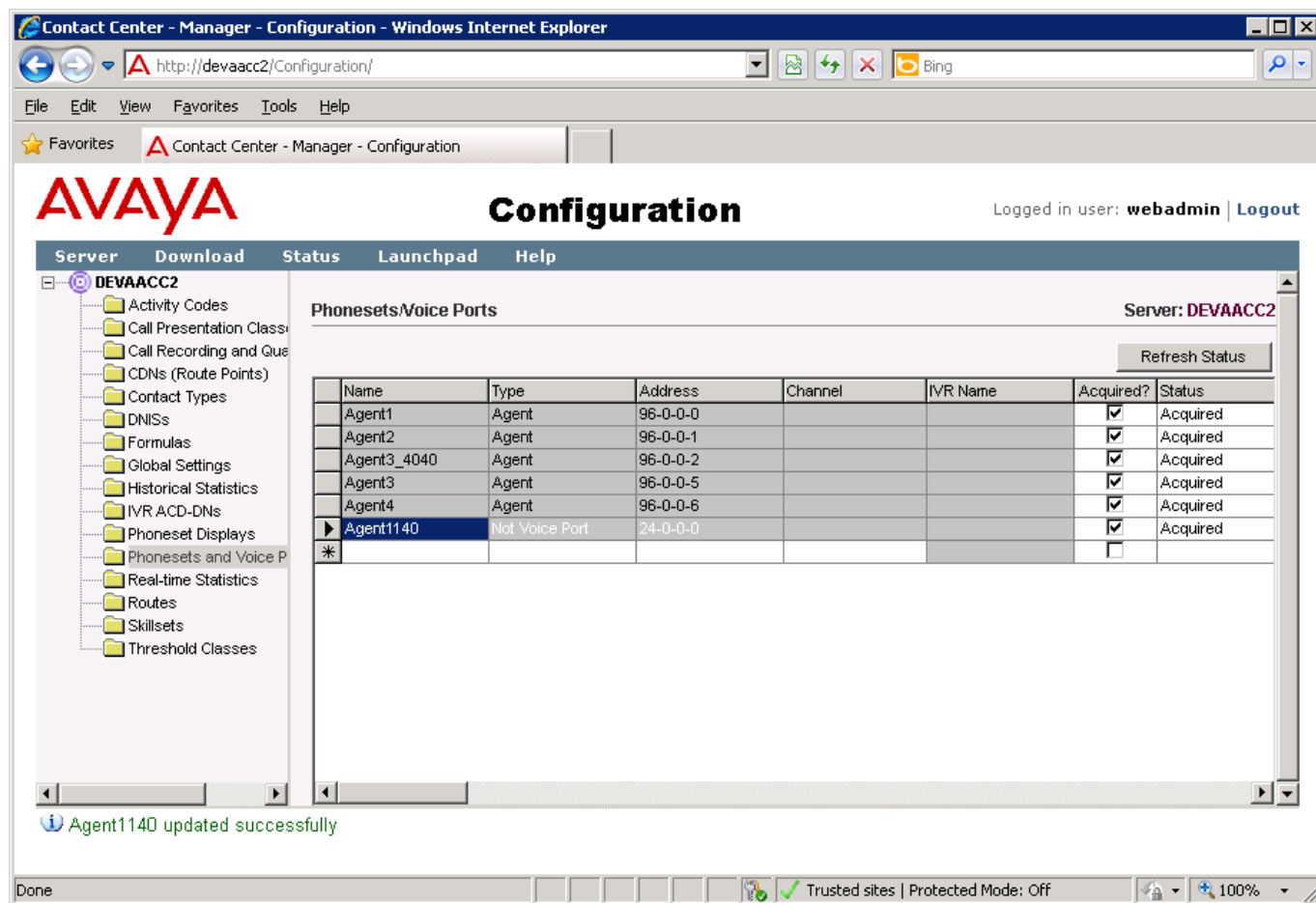To configure phone sets of agent of Call Server in the Contact Center Manager webpage, from homepage of Contact Center Manager, navigate to **Launch > Configuration**. The **Configuration** page now appears, on left side of **Configuration** window, expand tree menu of **CCM** server and click on the **Phone Sets and Voice Ports** folder, the **Phone Sets and Voice Ports** section appears in the right side of **Configuration** page, enter name and the TN addresses of agent and supervisor that were created in **Section 5.2.5** and then check on the checkbox of **Acquired?** column as shown in **Figure 16.**

Figure 16: Configure phone set for the ACD agent

To configure the Route of Call Server in the **Contact Center Manager** webpage, from homepage of Contact Center Manager, navigate to **Launch > Configuration**. The **Configuration** page now appears, on left side of **Configuration** window, expand tree menu of **CCM** server and click on the **Routes** folder, the **Routes** section appears in the right side of **Configuration** page, enter the name and route number that were created in **Section 5.3.1** and then check on the checkbox of **Acquired?** column as shown in **Figure 17.**
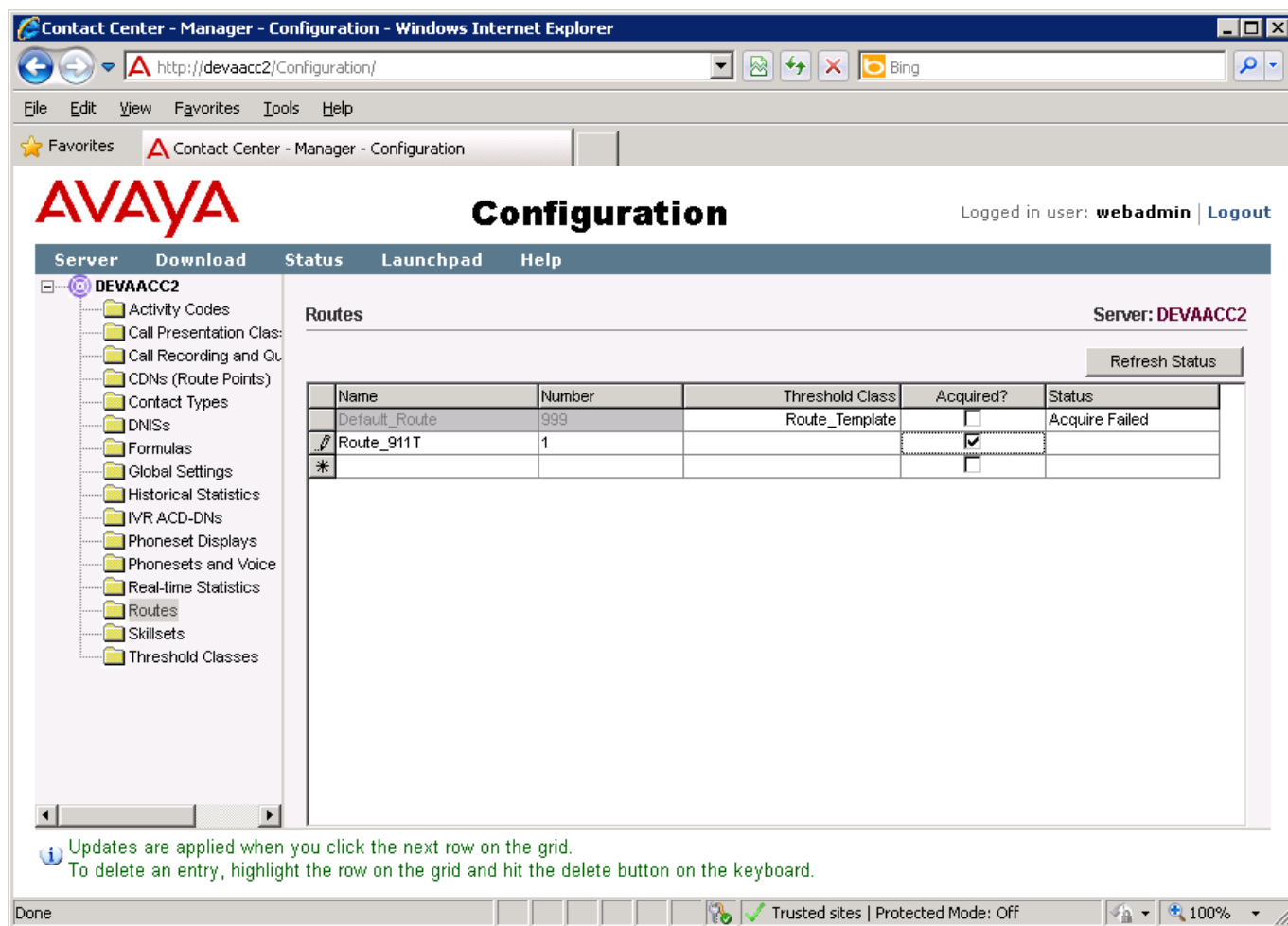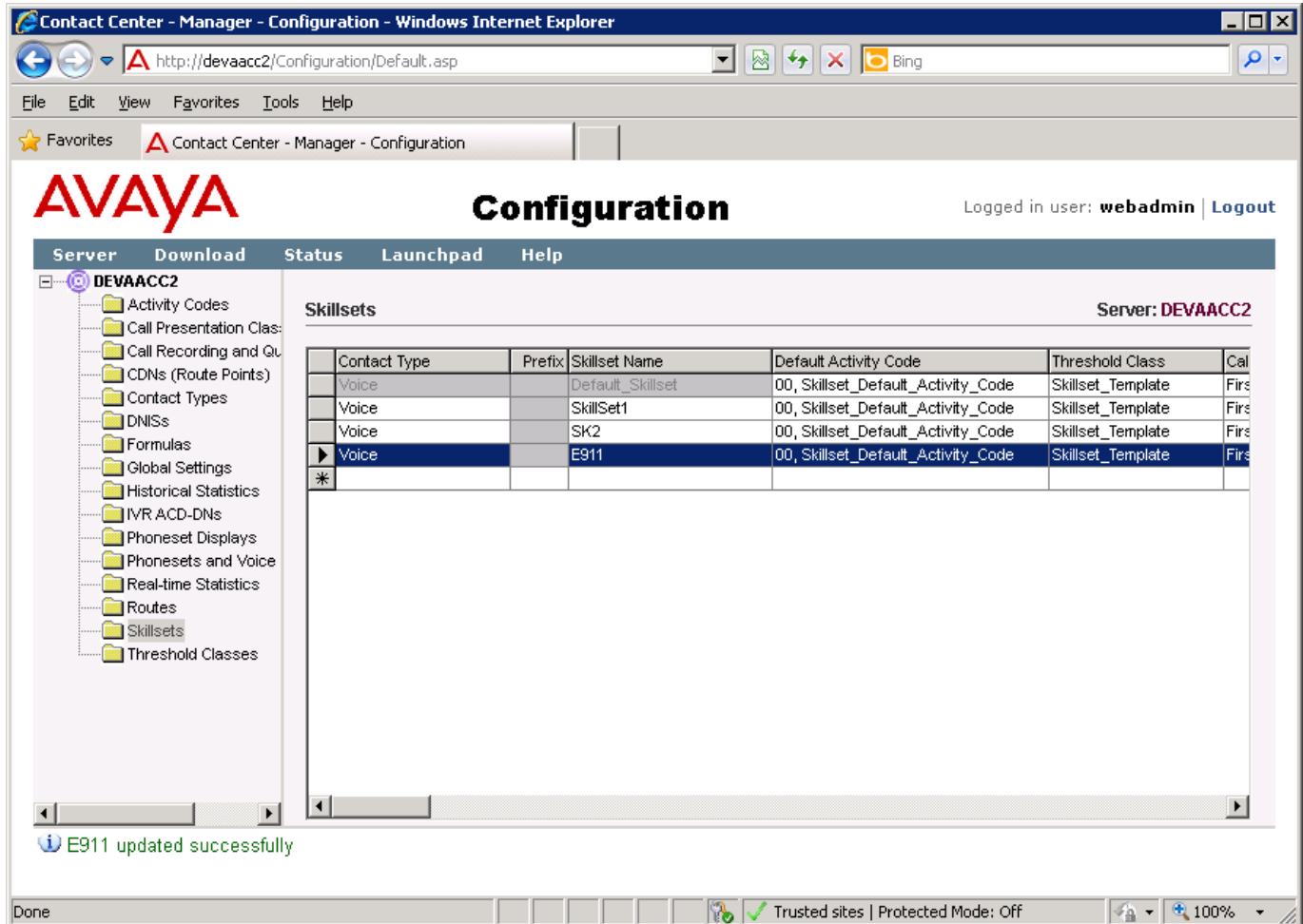

Figure 17: Configure Route in the Contact Center Manager

KP; Reviewed:
SPOC 8/23/2011

Solution & Interoperability Test Lab Application Notes
©2011 Avaya Inc. All Rights Reserved.
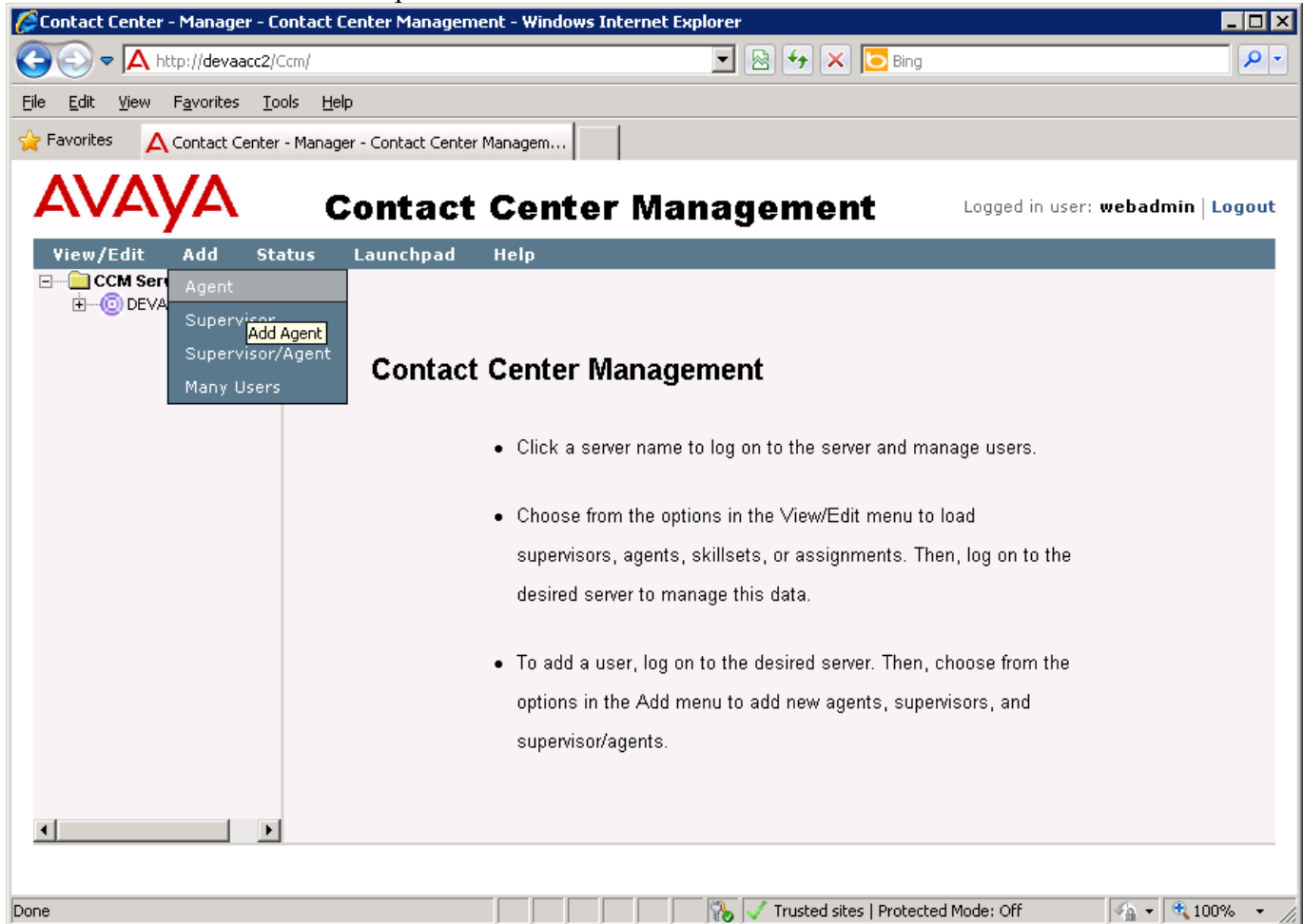
15 of 27
VestaCS1000AACC

To configure the Skillset in the Contact Center Manager webpage, from homepage of Contact Center Manager, navigate to **Launch > Configuration**. The **Configuration** page now appears, on left side of **Configuration** window, expand tree menu of **CCM** server and click on the **Skillsets** folder, the **Skillsets** section appears in the right side of **Configuration** page, enter the Contact Type and Skillset name as shown in **Figure 18**.

Figure 18: Configure the Skillset for agent in the Contact Center Manager

To create agent login in the Contact Center Manager webpage, from homepage of Contact Center Manager, navigate to **Launch > Contact Center Management** and in the **Contact Center Management** page, navigate to menu **Add** and select the **Agent** as shown in **Figure 19** and **20**.

Click the **Submit** button to complete.

Figure 19: Adding the agent login in the Contact Center Manager

KP; Reviewed:
SPOC 8/23/2011

Solution & Interoperability Test Lab Application Notes
©2011 Avaya Inc. All Rights Reserved.

17 of 27
VestaCS1000AACC

Figure 20: Adding the agent login in the Contact Center Manager (cont)

KP; Reviewed:
SPOC 8/23/2011

Solution & Interoperability Test Lab Application Notes
©2011 Avaya Inc. All Rights Reserved.

18 of 27
VestaCS1000AACC

7. Configure Vesta System

This document assumes that the Vesta system was properly installed and configured by a Cassidian Engineer. This section provides steps of how to use the Vesta application in the workstation PC to control and display the emergency 911 calls.

To log agent in by using the Vesta client application, on the workstation PC where the Vesta agent dashboard application is installed, go to the menu **Start > Program > PEI Product > Vesta**. The Vesta application login is shown in **Figure 21**, enter the login ID and password to log in the agent.
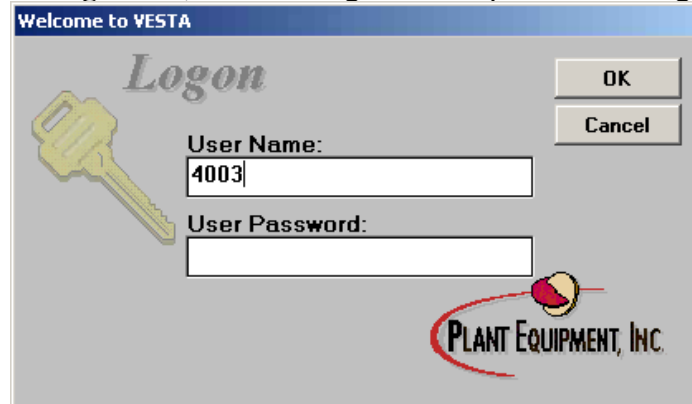

Figure 21: The Vesta login window

Figure 22 below shows the Vesta agent dashboard application successfully logged the agent in.

Figure 22: The Vesta agent dashboard window

To receive the ACD incoming call, on the Vesta agent dashboard as shown in **Figure 22**, click on the **Not Ready** button, the **Not Ready** button turns to **Ready** and the color of button changes from Red to Green and ready to receive the ACD call as shown in **Figure 23**.
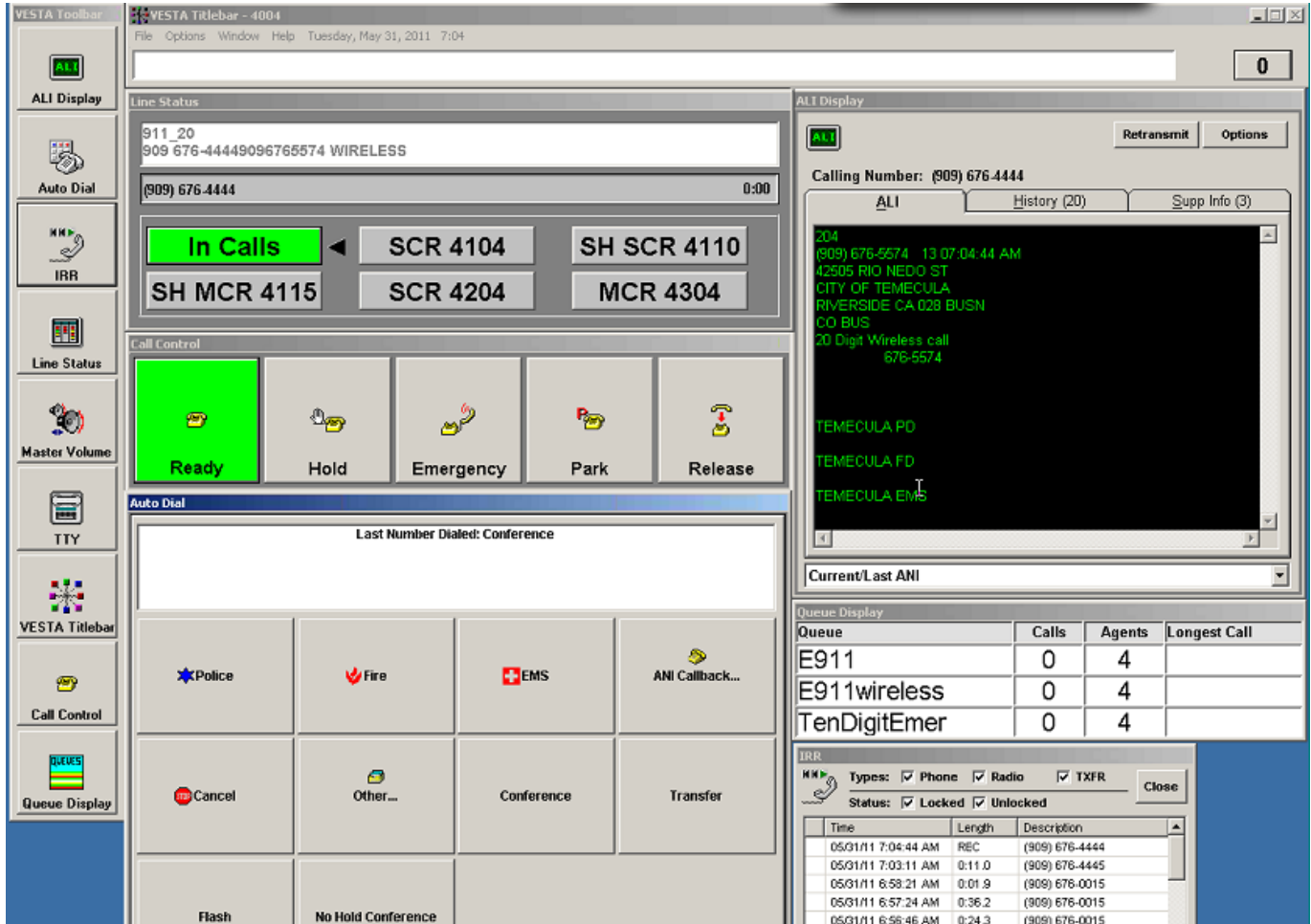
Figure 23: The Vesta agent dashboard with the Ready status

To answer the ACD incoming call, on the Vesta agent dashboard as shown in **Figure 23**, click on the **In Calls** button as shown in **Figure 24**.
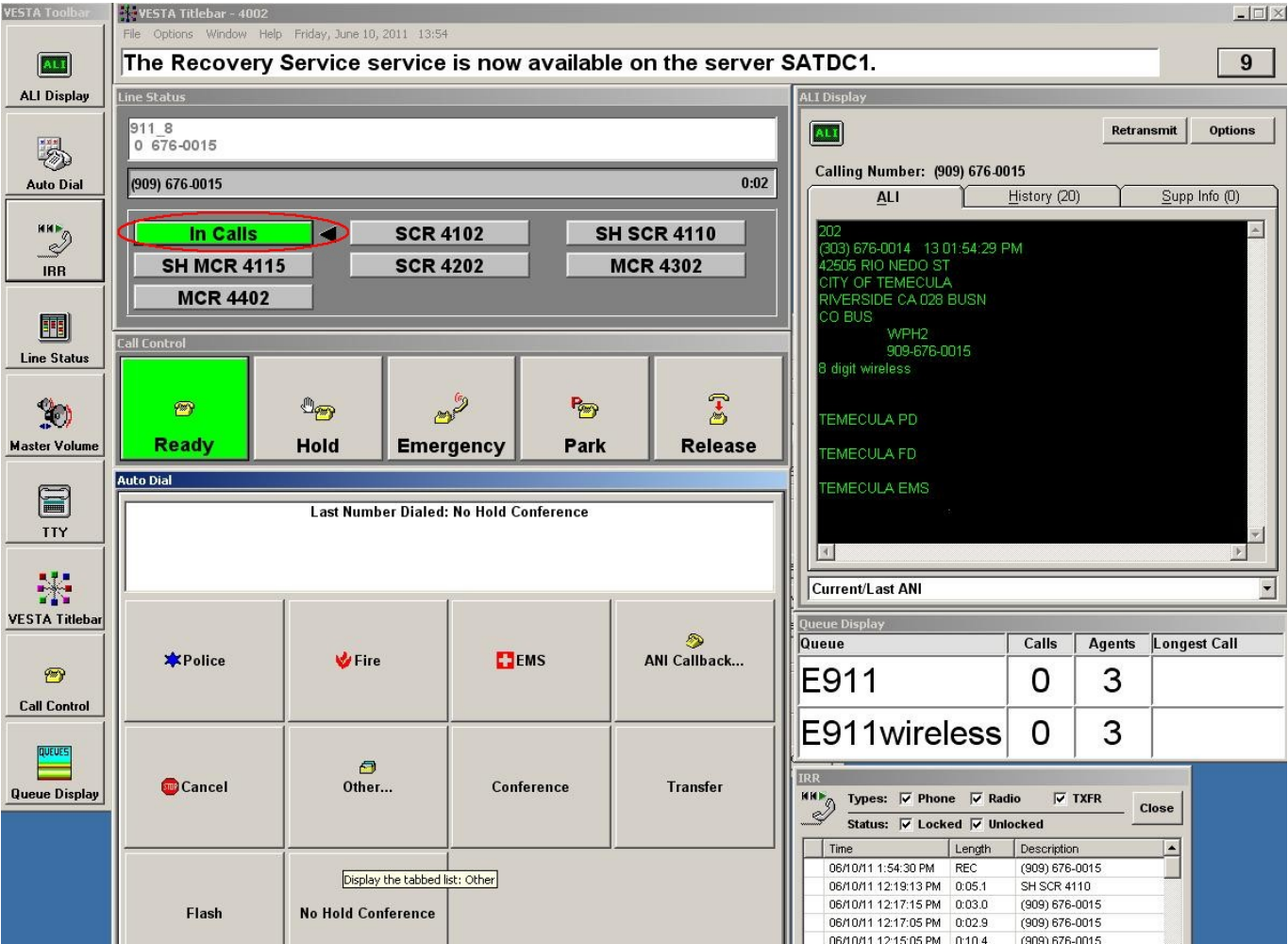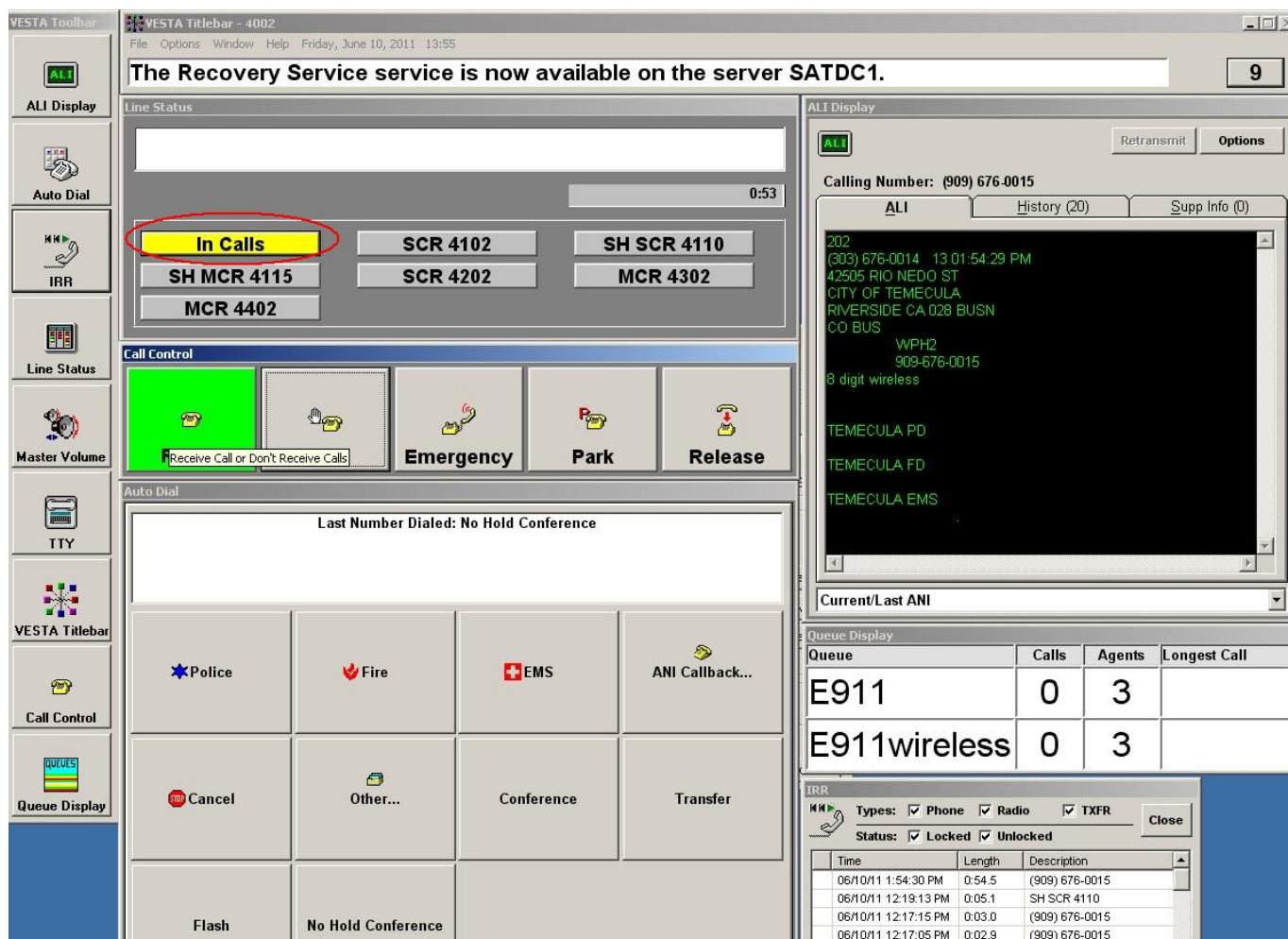

Figure 24: The Vesta agent dashboard with the In Calls status

To release the ACD call, on the Vesta agent dashboard as shown in **Figure 24**, click on the **Release** button to release the call (not shown in figure).

To hold the ACD call, on the Vesta agent dashboard as shown in **Figure 24**, click on the **Hold** button to hold the call as shown in **Figure 25** and to retrieve the call, click on the yellow **In Calls** button that are being in Yellow as the call on hold.(not shown in Figure).

Figure 25: The Vesta agent dashboard with the Hold status

KP; Reviewed:
SPOC 8/23/2011
Solution & Interoperability Test Lab Application Notes
©2011 Avaya Inc. All Rights Reserved.
22 of 27
VestaCS1000AACC

To park the ACD call, on the Vesta agent dashboard as shown in **Figure 24**, click on the **Park** button and the Park button now turns to **Unpark** as shown in **Figure 26**.
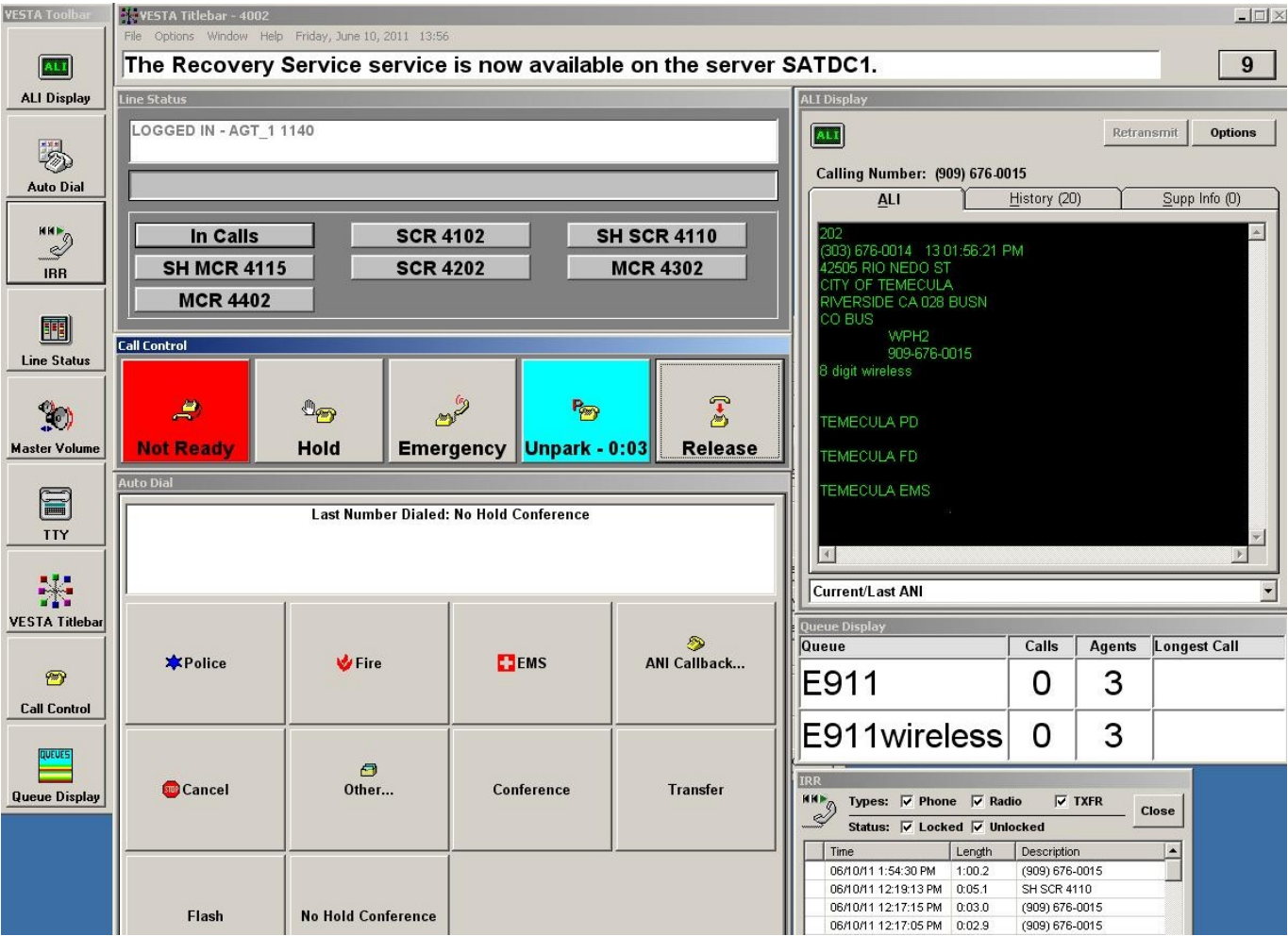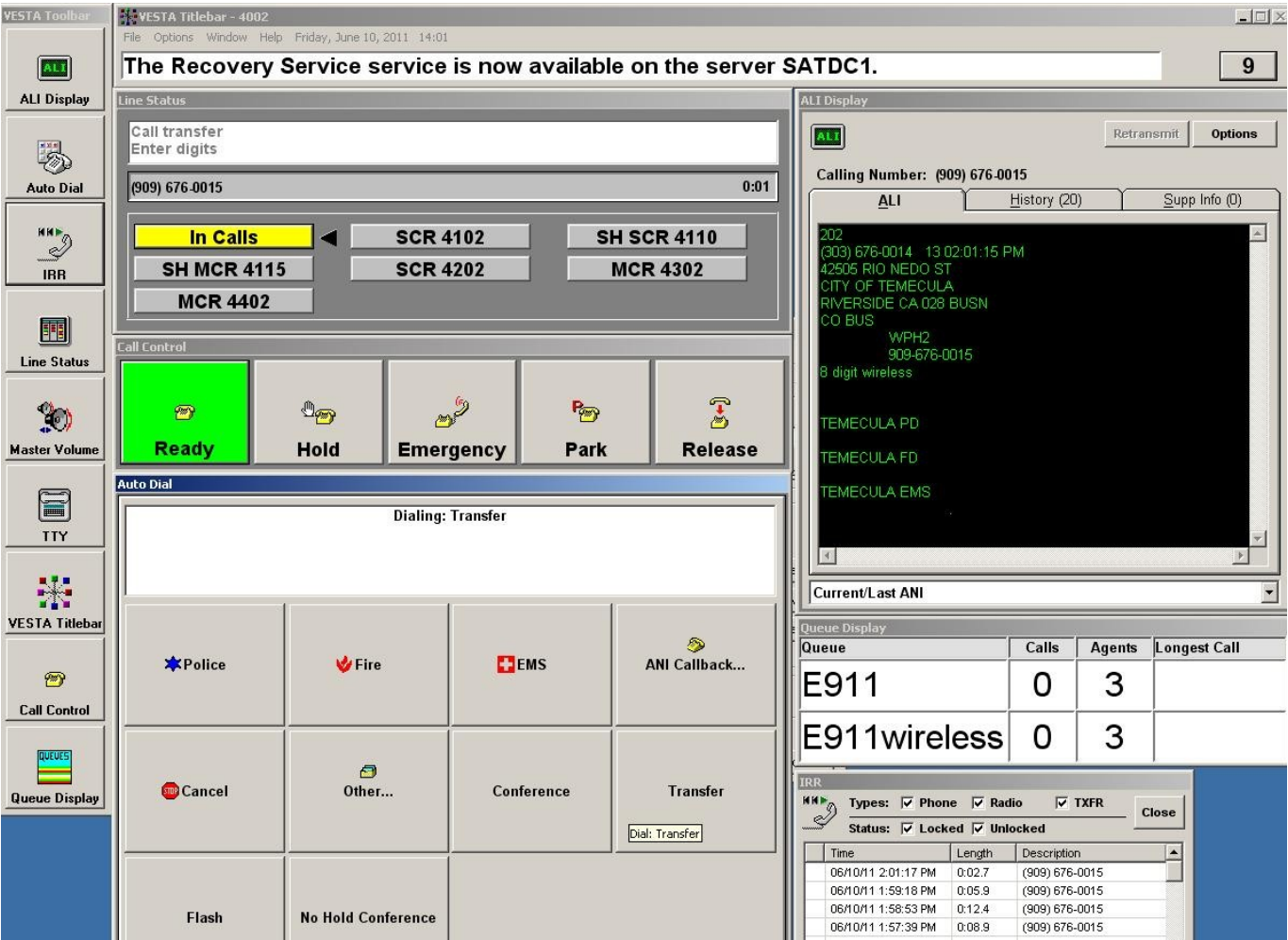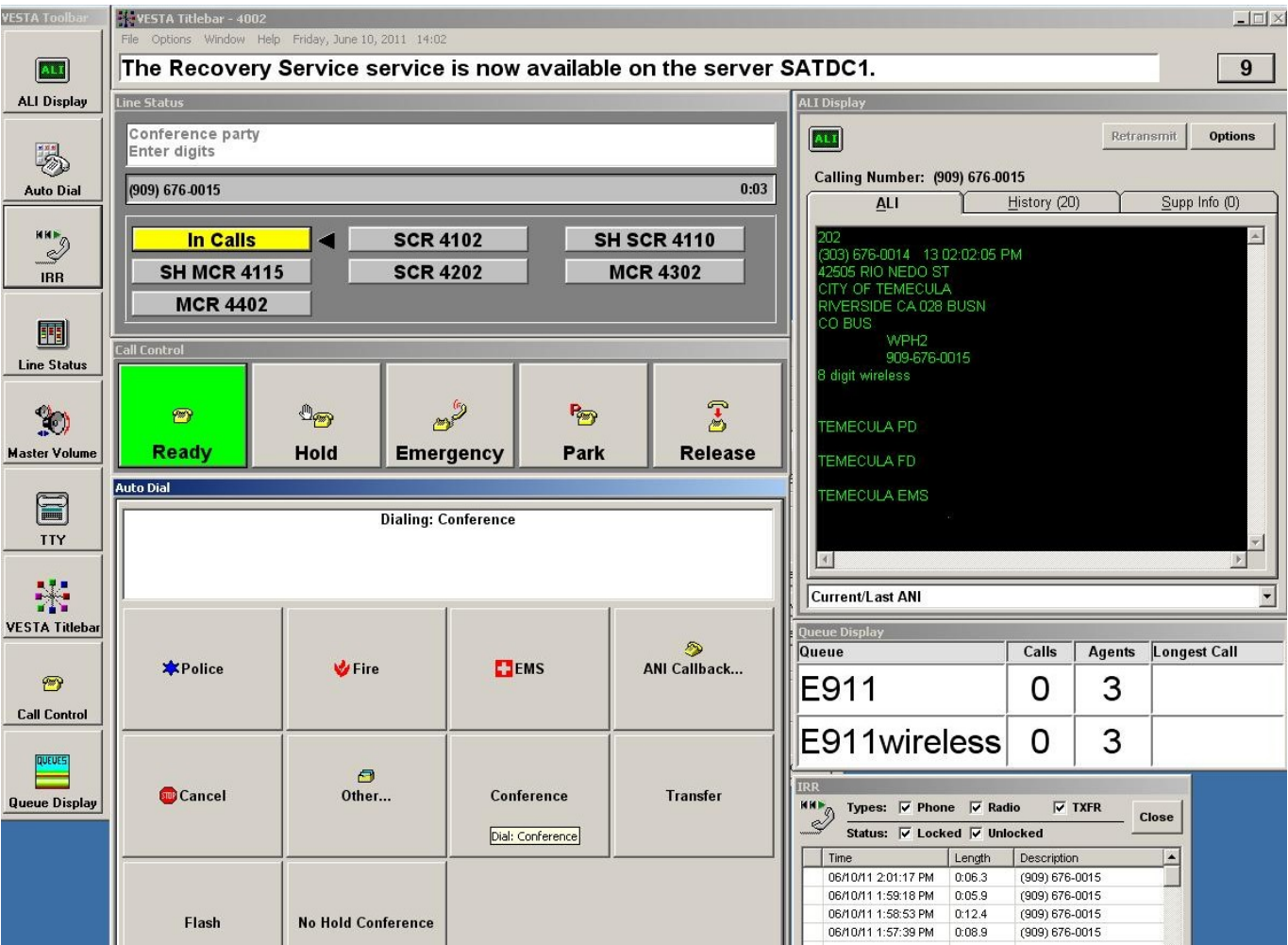

Figure 26: The Vesta agent dashboard with the call Park status.

To transfer the ACD call, on the Vesta agent dashboard as shown in **Figure 24**, click on the **Transfer** button and then enter any valid DN in the **Redial** box to transfer the call to as shown in **Figure 27**.

Figure 27: The Vesta agent dashboard in the Transfer status

To conference the ACD call with other party, on the Vesta agent dashboard as shown in **Figure 24**, click on the **Conference** button and then enter any valid DN in the **Redial** box to invite this DN into the conference as shown in **Figure 28**.

Figure 28: The Vesta agent dashboard with the Conference status

To do the No Hold Conference the ACD call with other party, on the Vesta agent dashboard as shown in **Figure 24**, click on the **No Hold Conference** button and then enter any valid DN in the **Redial** box to invite this DN into conference (not shown in figure).

8. Verification Steps

The following are typical steps to verify the interoperability between the Vesta system version 2.20 SP5 and Avaya Communication Server 1000 Release 7.5 and Avaya Aura®Contact Center 6.1

- Create 3 ACD agent Phones that consist of IP 1140E, digital 3905 and M2216 phone in Call Server.
- Acquire these agents by the Contact Center Manager.
- Use the Vesta agent dashboard to log these agents in.
- Use the ANI Simulator proprietary device to generate the emergency 911 calls.
- Configure the Vesta server to collect the information sent to agent phone from the Call Server.
- Handle the ACD calls on agent phone by using the Vesta agent dashboard.
- Check the audio path and CLID for every emergency 911 call.

9. Conclusions

All of the executed test cases have passed and met the objectives as outlined in **Section 2**. The Cassidian Vesta version 2.20 SP5 is considered compliant with Avaya Communication Server 1000 Release 7.5 and Avaya Aura® Contact Center Release 6.1.

10. Additional References

Product documentation for Avaya products may be found at:
https://support.avaya.com/css/Products/

Product documentation for Cassidian Vesta products may be found at:
http://www.cassidiancommunications.com/

[1] Avaya Communication Server 1000 Documents:
Avaya Communication Installation and Commissioning, Doc# NN43041-310, Issue 05.04, Date May 2011.
Avaya Communication Server 1000 Unified Communications Management Common Services Fundamentals, Doc # NN43001-116, Issue 05.11, Date June 2011.
Avaya Communication Server 1000 Co-resident Call Server and Signaling Server Fundamentals, Doc # NN43001-509, Issue 03.02, Date June 2011.
Avaya Communication Server 1000 Element Manager System Reference - Administration, Doc# NN43001-632, Issue 05.09, Date July 2011.

[2] Avaya Aura® Contact Center Documents:
Avaya Aura® Contact Center Planning and Engineering, Doc# NN444000-210, Issue 03.02, Date July 2011.
Avaya Aura® Contact Center Overview, Doc# NN44400-111, Issue 03.01, Date June 2011.
Avaya Aura® Contact Center Fundamentals, Doc# NN44400-110, Issue 03.01, Date June 2011.
Avaya Aura® Contact Center Installation, Doc# NN44400-311, Issue 03.01, Date June 2011. *Avaya Aura® Contact Center Server Administration*, Doc# NN44400-610, Issue 03.01, Date June, 2011.

KP; Reviewed:
SPOC 8/23/2011

Solution & Interoperability Test Lab Application Notes
©2011 Avaya Inc. All Rights Reserved.

27 of 27
VestaCS1000AACC