Avaya Solution & Interoperability Test Lab

Application Notes for Algo 3226 Analog Trunk Port FXO Doorphone with Avaya Communication Server 1000 Release 7.5 – Issue 1.0

Abstract

These Application Notes describe a solution comprised of Avaya Communication Server 1000 SIP Line Release 7.5 and Algo 3226 Trunk Port FXO Doorphone. During the compliance testing, the Algo 3226 was able to interoperate with the Communication Server 1000 release 7.5. The Algo 3226 Trunk Port FXO Doorphone was able to place and receive calls from the Communication Server 1000 Release 7.5 telephones.

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 provide detailed configurations for the Avaya Communication Server 1000 release 7.5 (hereafter referred to as CS1000) and the Algo 3226 Trunk Port FXO Doorphone (hereafter referred to as Algo 3226) firmware version 1.01 used during the compliance testing. All the applicable telephony feature test cases of release 7.5 were executed on the Algo 3226 , where applicable, to ensure interoperability with the CS1000.

2. General Test Approach and Test Results

The general test approach was primarily to verify if the Algo 3226 controller can be integrated with a CS1000 Analog Trunk and enable a telephone on the CS1000 to ring when activated from the Algo 3226.

2.1. Interoperability Compliance Testing

The focus of this compliant testing is to verify that the Algo 3226 was able to interoperate with the telephones residing on the CS1000 system. The following interoperability areas were covered:

- Algo 3226 Doorphone can successfully ring a telephone on the CS1000 and ensure two way speech paths.
- Telephones on the CS1000 can seize the analog trunk and open a conversation with the Algo 3226 Doorphone.
- Telephones on the CS1000 can send required DTMF tones and therefore ensure the remote door release features work successfully.

2.2. Test Results

The objectives outlined in **Section 2.1** were verified. The following observations were made during the compliance testing:

- Avaya has not performed audio performance testing or reviewed the Algo 3226 compliance to required industry standards.

2.3. Support

For technical support on Algo 3226, please contact the Algo technical support team:

- **Telephone:** 1-877-884-2546
- **Email:** support@algosolutions.com
- **Web Site:** http://www.algosolutions.com/3226

3. Reference Configuration

Figure 1 illustrates the test configuration used during the compliance testing between the Avaya CS1000 and the Algo 3226.

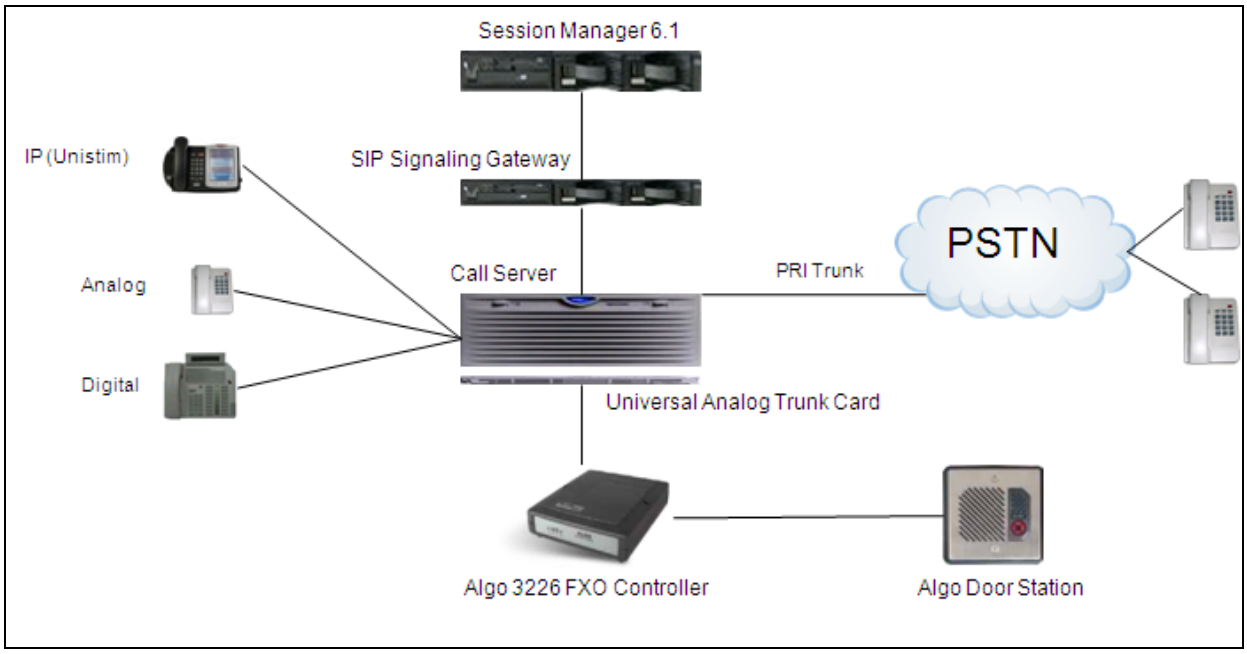

Figure 1: Network Configuration Diagram

4. Equipment and Software Validated

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

Equipment	Software Version
Avaya CS1000E	Call Server (CPPM): 7.50Q Signaling Server (CPPM): 7.50.17 Universal Analog Trunk Card
Avaya CallPilot™ Messaging System	5.0.1
Avaya IP Soft Phone 2050 Avaya IP Phone 1140 Avaya IP Phone 2004P2 Avaya IP Phone 2002P2 Avaya Analog Phone Avaya Digital Phone	3.04.0003 0625C6O 0692D93 0604DC5 Any Any
Algo 3226 Analog Trunk FXO Door Phone	Firmware version 1.01

5. Configure Avaya CS 1000

This section describes the steps to configure the Avaya CS1000 using the Element Manager EM). A command line interface (CLI) option is available to provision any other application on the CS1000 system. For detailed information on how to configure and administer the CS1000, please refer to the **Section 9 [1]**.

5.1. Prerequisite

This document assumes that the CS1000 has:

- Been installed with CS1000 Release 7.5 Linux Base.
- Joined CS1000 Release 7.5 Security Domain.
- A Physical Universal Analog Trunk card that has been inserted in a slot of CS1000 chassis.

5.2. Log in to Unified Communications Management (UCM) and Element Manager (EM)

Use the Microsoft Internet Explorer browser to launch CS1000 UCM web portal at http://<IP Address or FQDN> where <IP address or FQDN> is the UCM Framework IP address or FQDN for UCM server.

Log in with the username/password which was defined during the primary security server configuration, the UCM home page appears as shown in the **Figure 2** below.

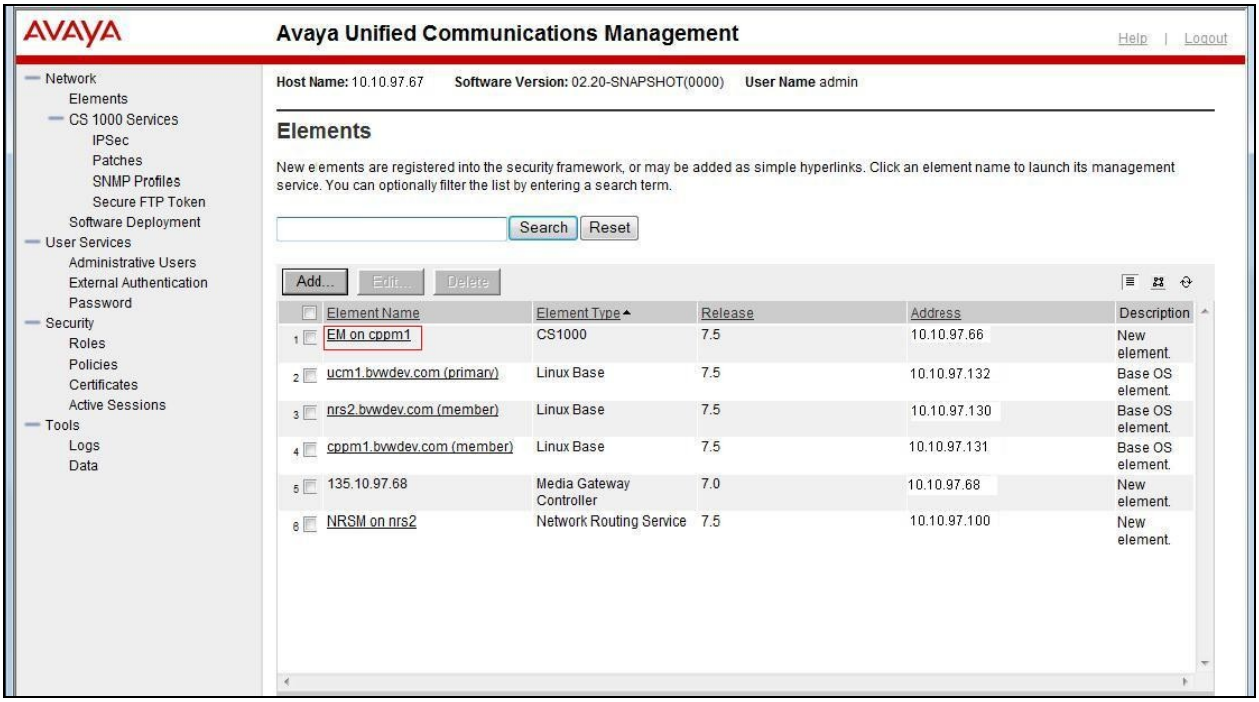

Figure 2: The UCM Home Page of CS 1000 Release 7.5

On the UCM home page, under the **Element Name** column, click on the EM name of the CS1000 system that needs to be configured, in this sample that is **EM on cppm1**. The CS1000 Element Manager page appears as shown in **Figure 3** below.

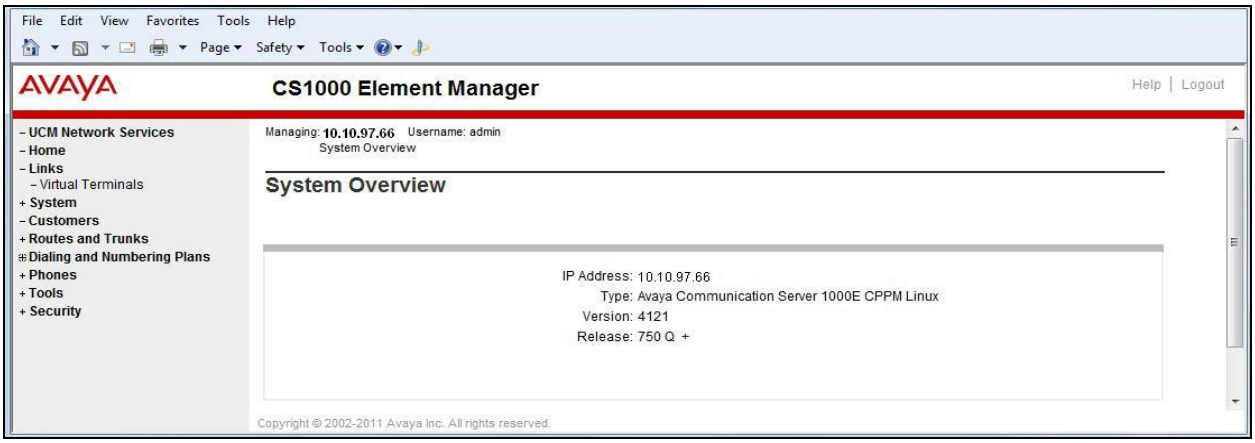

Figure 3: CS 1000 Release 7.5 EM Home Page

5.3. Configure Routes for Analog Universal Trunk

On the EM page, select **Routes and Trunks** on the left menu column. Then click on the **Add route** button to add a new route as shown in **Figure 4**.

Figure 4: Routes and Trunks Page

A new route configuration page will appear as show in **Figure 5**.

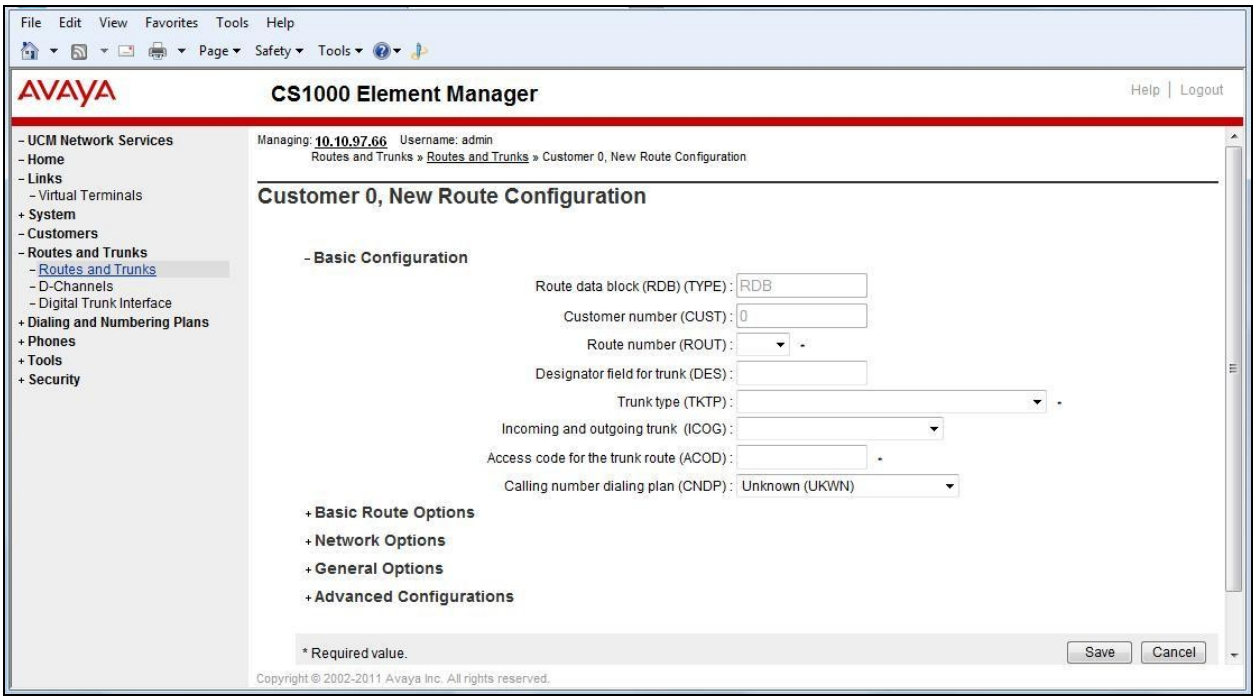

Figure 5: New Route Configuration Page

Enter the parameters for the route configuration highlighted in the red box as show in **Figure 6**. Other fields are left at their default values.

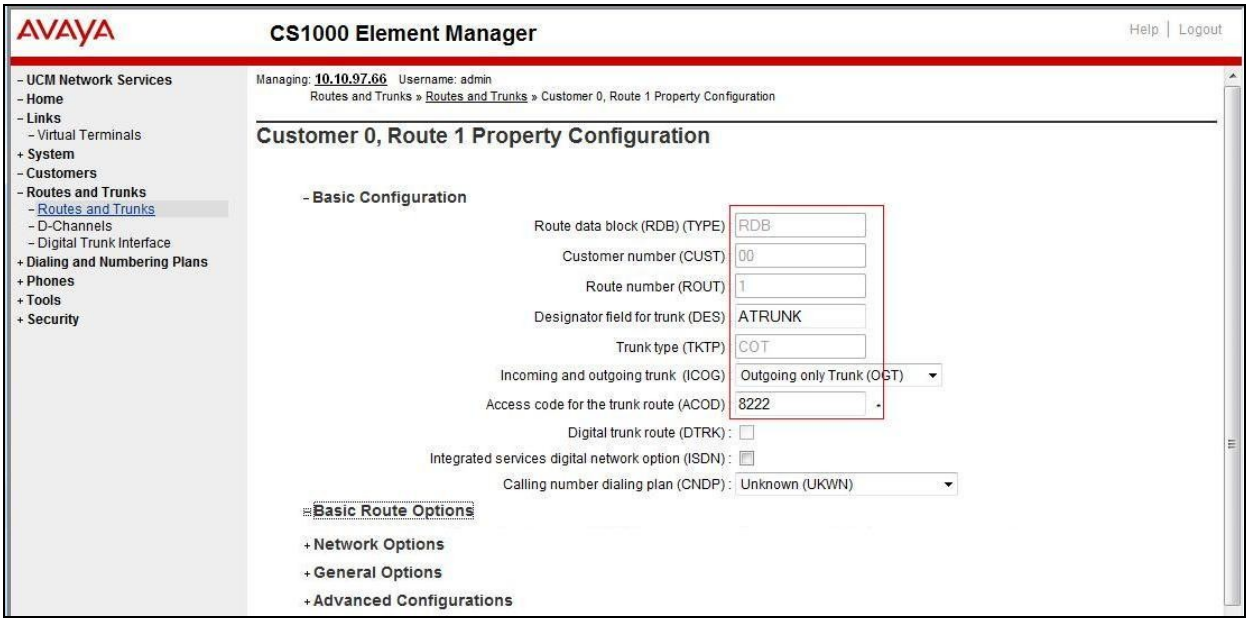

Figure 6: New Route Basic Configuration Page

Select **Network Options** and **Advanced Configurations** to enter the parameters highlighted in the red box as shown in **Figure 7**. Other fields are left at their default values. Click on the **Save** button (not shown).

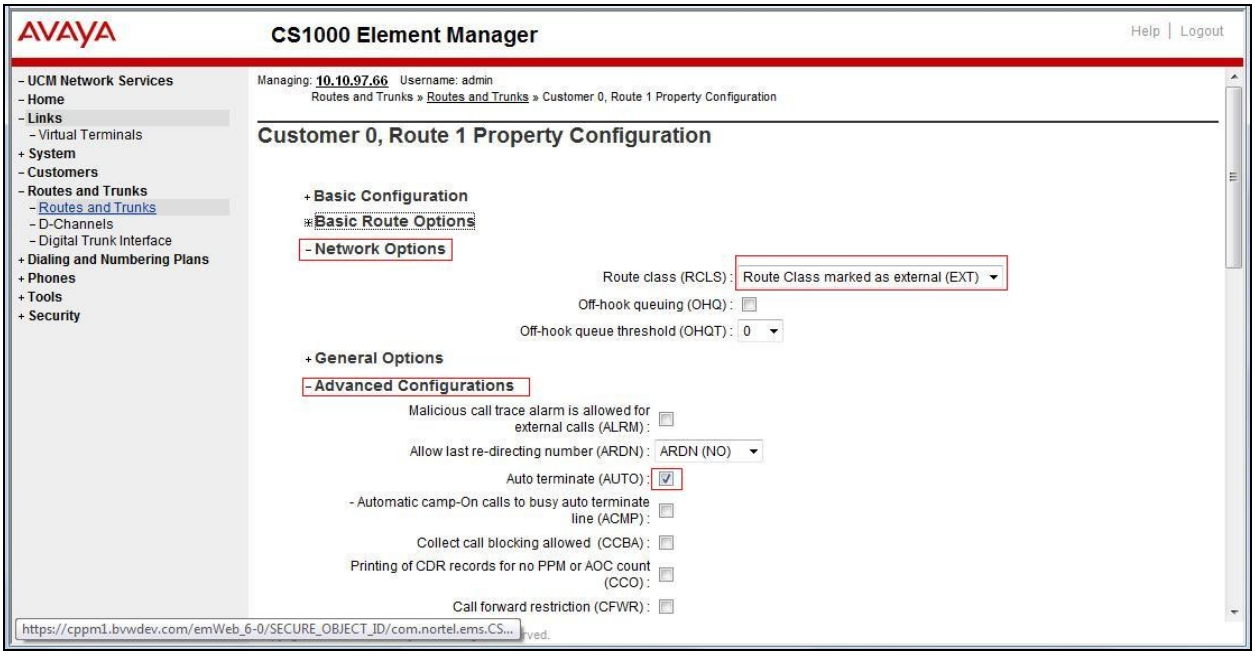

Figure 7: New Route Network and Advanced Configuration Page

5.4. Configure Trunk for Analog Universal Trunk

This section describes how to configure a trunk for the Analog Universal Trunk which will be used by the Universal trunk card. From the CS1000 Element Manager page, select **Routes and Trunks** -> **Customer 0** -> **Routes 1** (not shown). Click **Add trunk** to add a new trunk on the newly created route (Route 1 in this example) in **Section 5.3** as shown in **Figure 8**.

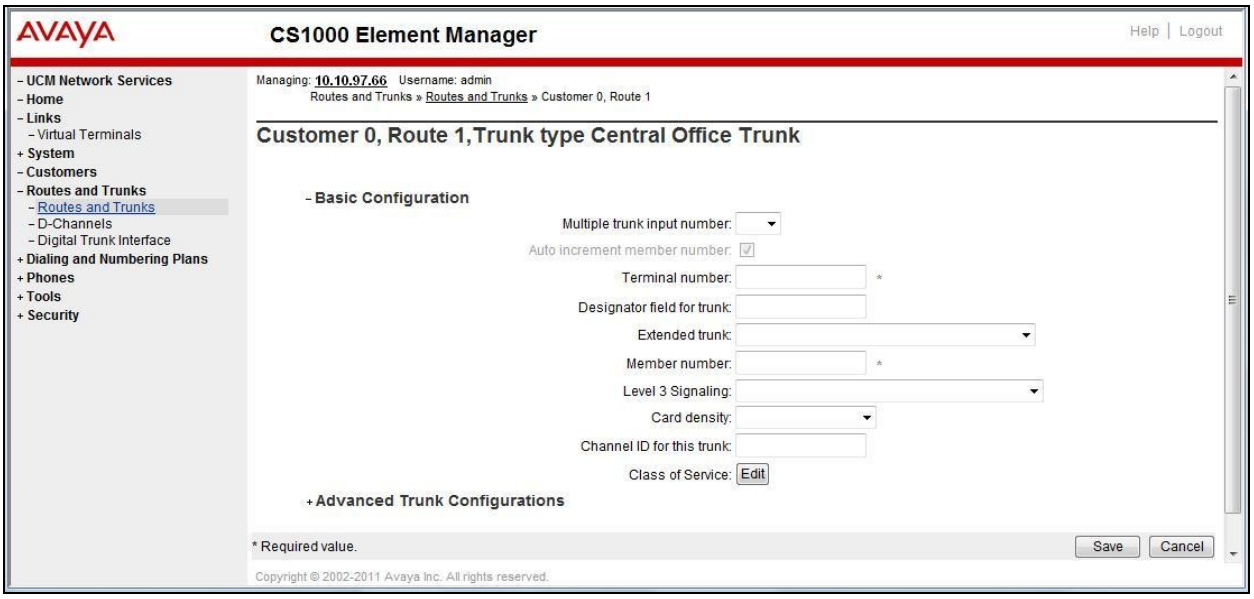

Figure 8: New Trunk Configuration Page

Enter the parameters in the **Basic Configuration** page to create the new trunk highlighted in the red box as shown in **Figure 9**. Other fields are left at their default values.

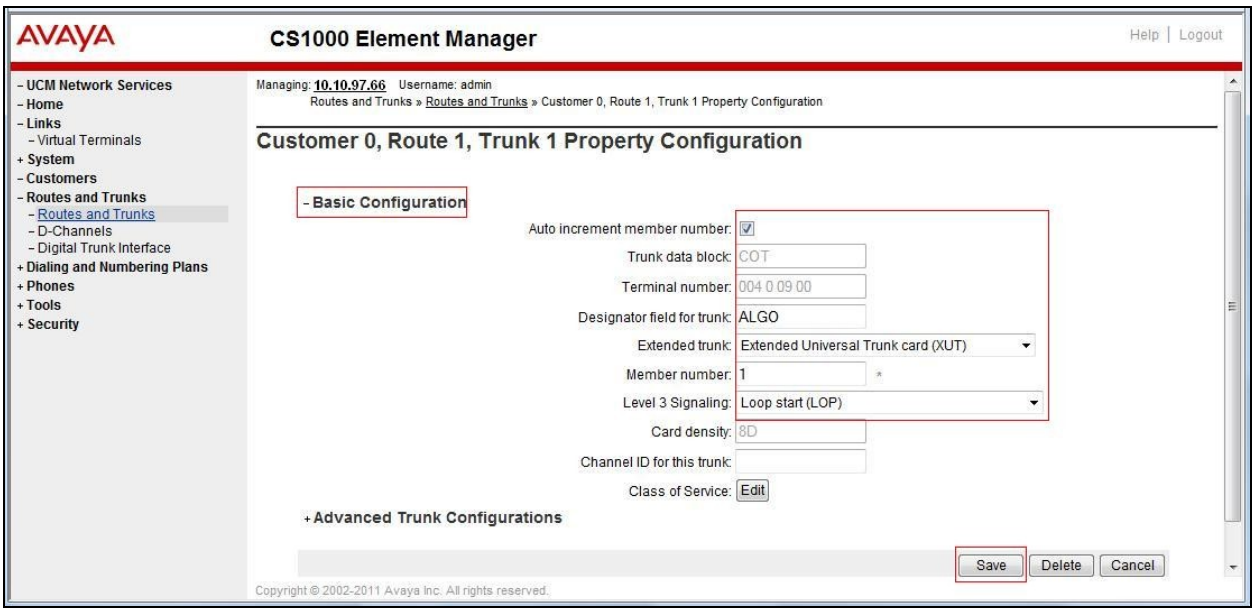

Figure 9: New Trunk Basic Configuration Page

Select **Advanced Trunk Configurations** and enter the parameter highlighted in the red box as shown in **Figure 10** below. Other fields are left at their default values. Click **Save** to complete the trunk configuration.

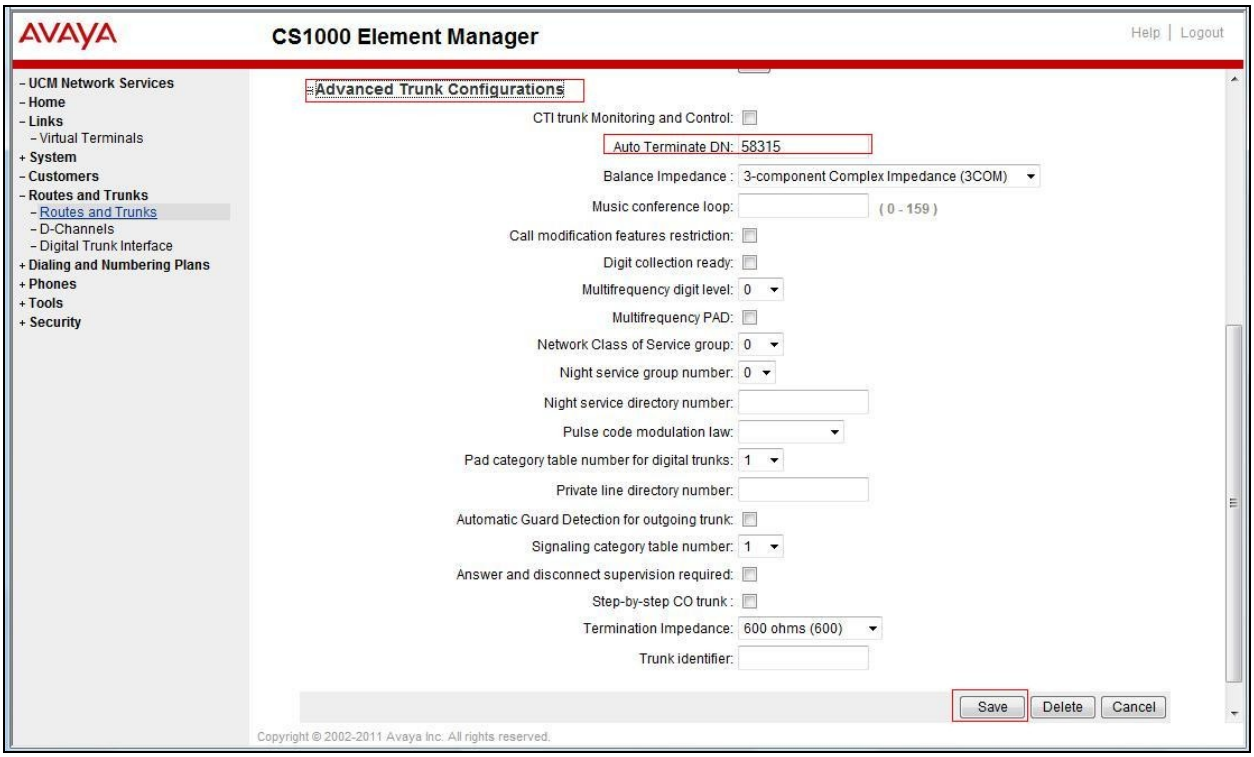

Figure 10: New Trunk Advanced Configuration Page

Note: The **Auto Terminate DN** parameter value is the phone DN. When the button on the Door station is pressed, it will ring this phone.

6. Configuring the Algo 3226

The assumption is made that all the required wiring between the Algo 3226 controller and the Doorphone is successfully completed. For complete information on the Algo 3226 installation and configuration refer to **Section 9[2]**.

7. Verification Steps

The following tests were conducted to verify the solution between the Algo 3226 and Avaya CS1000.

- Verify that when the button on the Door Station is pressed the telephone on the CS1000 rings and a clear two way speech path is established.
- Verify that when the CS1000 telephone goes off hook a line is accessed and a trunk is seized that connects to the Door Station. Clear two way speech path is established.
- Verify that the solution works on various Avaya telephones and that DTMF tones from all these different telephone types works with the Algo 3226 controller by unlocking the door release.
- Verify that the Algo 3226 goes into an idle state when the call is completed.

8. Conclusion

All of the executed test cases have passed and met the objectives outlined in the **Section 2.1**, with some exceptions outlined in **Section 2.2**. The Algo 3226 firmware version 1.01 is considered to be in compliance with Avaya CS1000 SIP Line System Release 7.5.

9. Additional References

[1] Product documentation for the Avaya CS 1000 products may be found at:
https://support.avaya.com/css/Products/

Avaya Communication Server 1000E Installation and Commissioning
Avaya Communication Server 1000 Element Manager System Reference – Administration
Avaya Communication Server 1000 Co-resident Call Server and Signaling Server Fundamentals
Avaya Communication Server 1000 Unified Communications Management Common Services Fundamentals
Avaya Communication Server 1000 ISDN Primary Rate Interface Installation and Commissioning

[2] Product documentation for the Algo 3226 products may be found at:
www.algosolutions.com/3226

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.