



Avaya Solution & Interoperability Test Lab

Application Notes for 911 ETC Crisis Connect with Avaya Aura™ Communication Manager – Issue 1.0

Abstract

These Application Notes describe the configuration steps required for 911 ETC Crisis Connect to interoperate with Avaya Aura™ Communication Manager. 911 ETC Crisis Connect is a solution that provides automated E-911 data. In the compliance testing, the 911 ETC Crisis Connect converted relevant station user data from Avaya Aura Communication Manager, obtained using the Avaya Site Administration application, and reformatted to regional Data Service Center's NENA2 standard format.

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 911 ETC Crisis Connect to interoperate with Avaya Aura™ Communication Manager. 911 ETC Crisis Connect is a solution that provides automated E-911 data.

In the compliance testing, the 911 ETC Crisis Connect converted relevant station user data from Avaya Aura Communication Manager, obtained using the Avaya Site Administration application, and reformatted to regional Data Service Center's NENA2 standard format. The converted data can then be uploaded to the regional Automatic Locator Information (ALI) Data Center, for use by the regional Public Safety Answering Point (PSAP) call centers in identifying the location of the E-911 calls originating from users on Avaya Aura Communication Manager. The compliance testing focused on the conversion of the station user data to NENA2 standard format.

911 ETC Crisis Connect uses the AutoMAC™ custom loader to perform the data conversion. The AutoMAC custom loader uses information pre-provided by the customer to convert extensions to proper DID numbers, convert building codes to proper addresses, and generate a report summarizing the conversion results with appropriate warnings and errors for incomplete and erroneous entries.

The station user data exported from Avaya Site Administration can be provided to 911 ETC Crisis Connect via email or FTP methods. The Avaya Site Administration can be scheduled to export the relevant station user data on a regular basis, and a script can be written to pull and FTP the exported data to 911 ETC Crisis Connect. The 911 ETC Crisis Connect can also be configured to automatically look for the exported data on a regular basis and to process for any updates. For ease of compliance testing, the manual methods were used.

1.1. Interoperability Compliance Testing

The interoperability compliance testing focused on verifying the following on 911 ETC Crisis Connect:

- Using the pre-provided building code addresses and DID prefix to convert station extension, room, floor, and building to proper NENA2 format.
- Proper flagging of entries with missing building code, invalid building code, and extension outside of the pre-provided range.
- Proper generation of records for entries with changed room, floor, or building in subsequent submissions.

1.2. Support

Technical support on 911 ETC Crisis Connect can be obtained through the following:

- **Phone:** (425) 368-2911
- **Web:** www.911etc.com/contact.html

2. Reference Configuration

As shown in **Figure 1**, a separate PC was used to host Avaya Site Administration. The relevant station user data on Avaya Aura Communication Manager were exported using the Avaya Site Administration application, and manually emailed over the WAN to 911 ETC Crisis Connect.

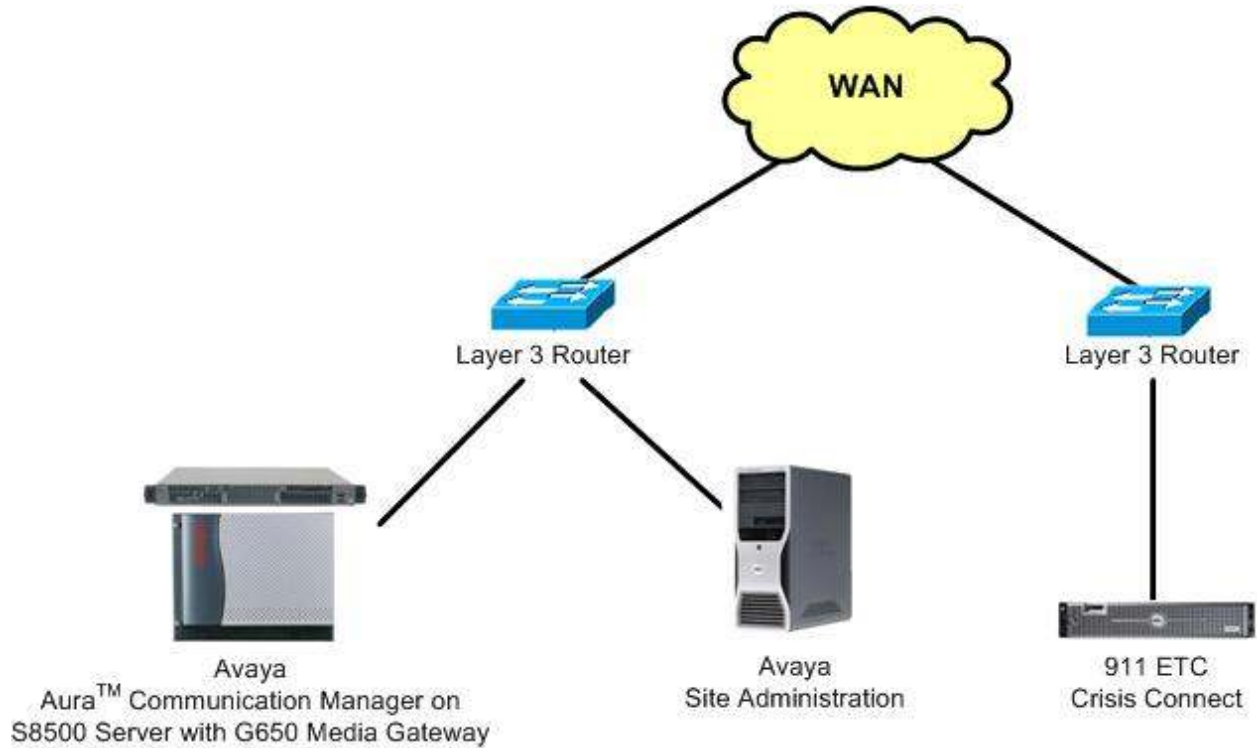


Figure 1: 911 ETC Crisis Connect with Avaya Aura Communication Manager

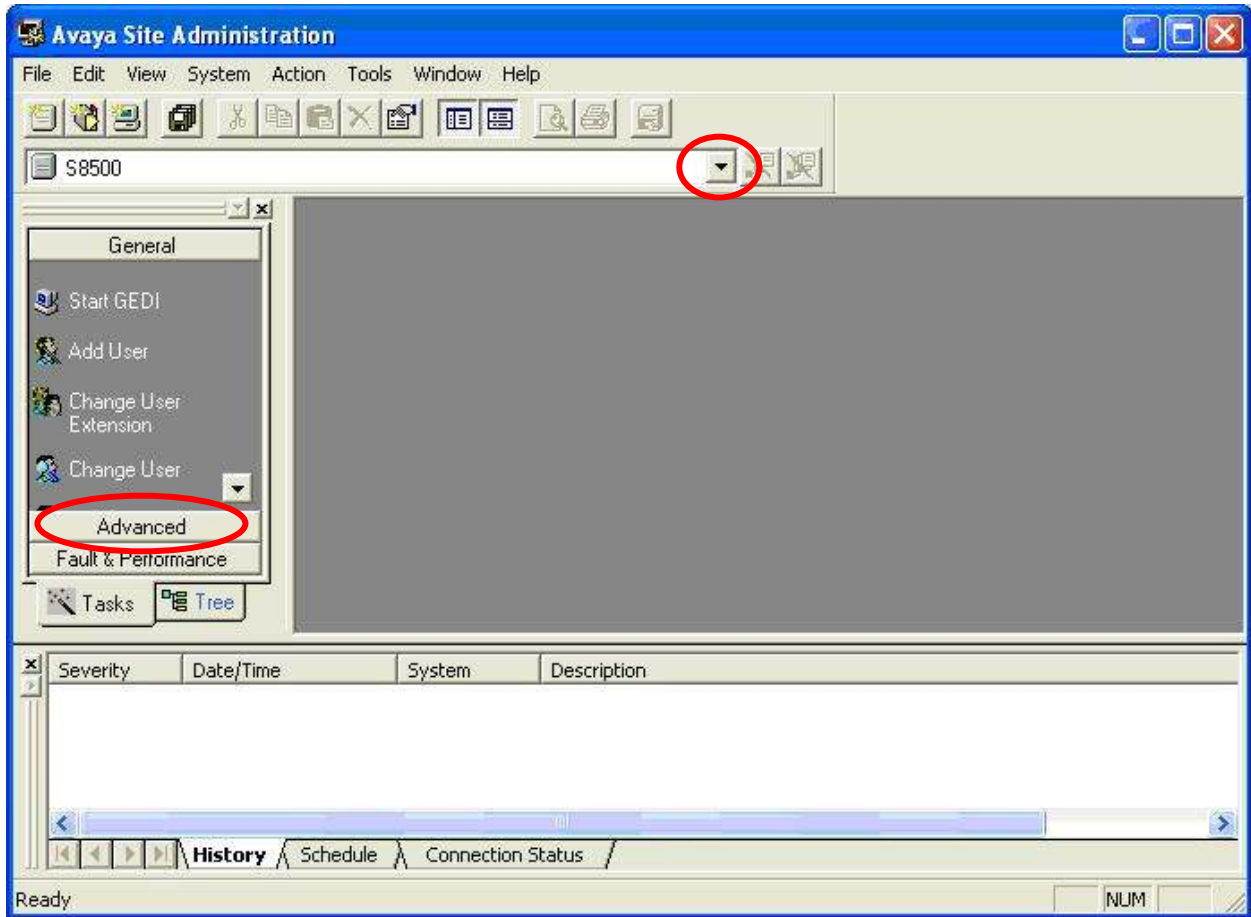
3. Equipment and Software Validated

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

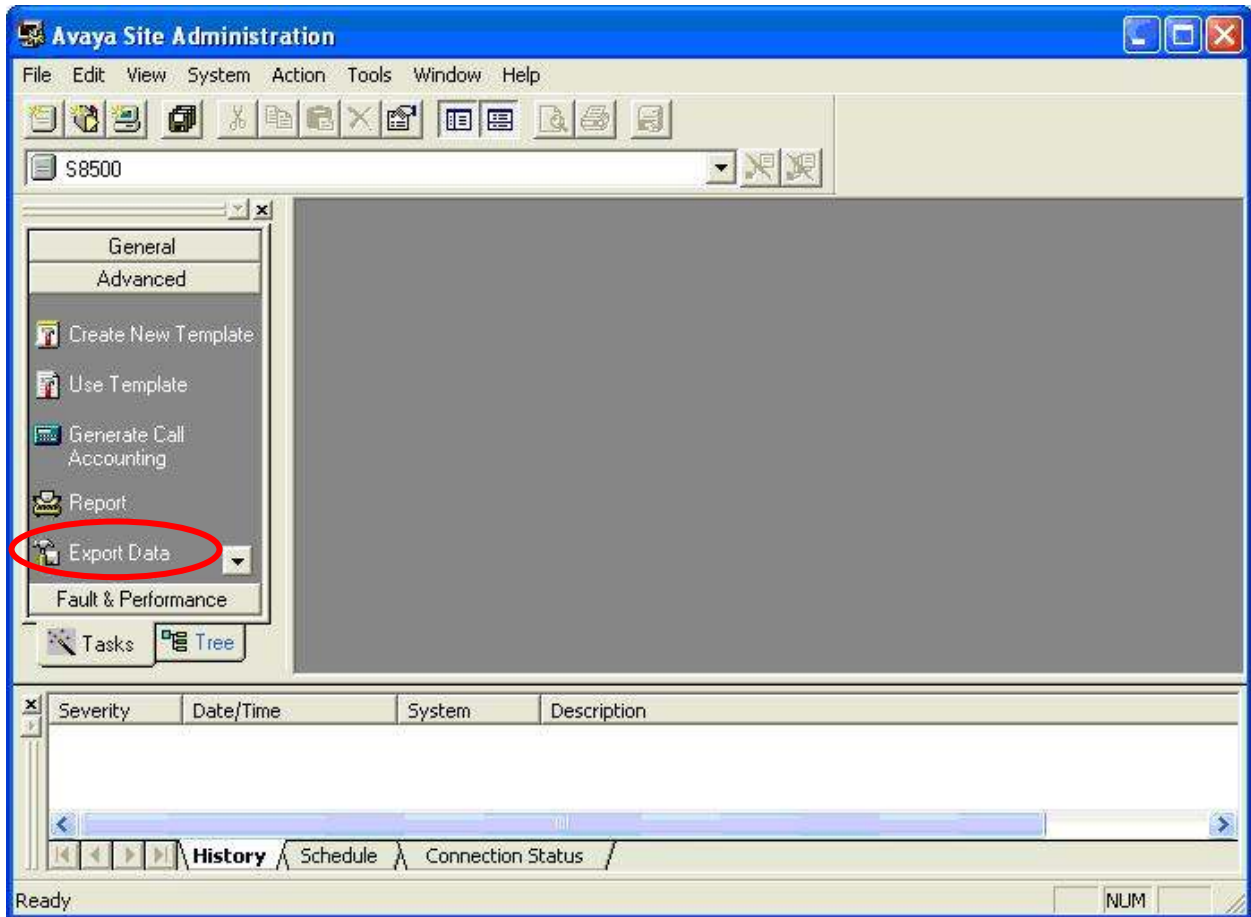
Equipment	Software
Avaya Aura Communication Manager	R015x.02.0.947.3
Avaya MCC1 Media Gateway <ul style="list-style-type: none"> • TN799DP C-LAN Circuit Pack 	HW01 FW032
Avaya Site Administration	5.0.11
911 ETC Crisis Connect	6.0

4. Configure Avaya Site Administration

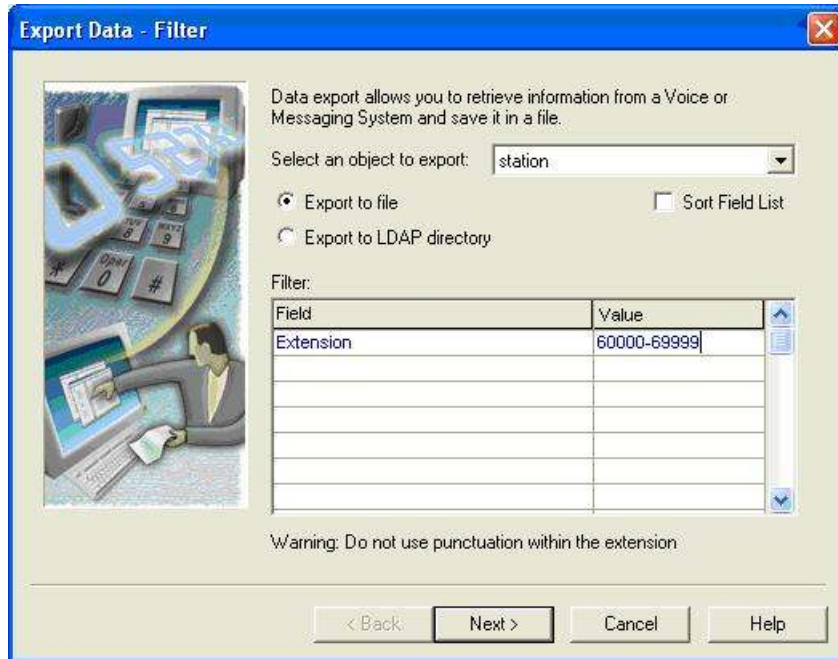
From the PC running Avaya Site Administration, select **Start > All Programs > Avaya > Site Administration**. In the **Avaya Site Administration** screen below, select the relevant Communication Manager from the drop-down list (in this case, "S8500"). Click on the **Advanced** tab in the left pane to expand it. These Application Notes assume the Avaya Site Administration has been installed with configuration in place to connect to the proper Communication Manager.



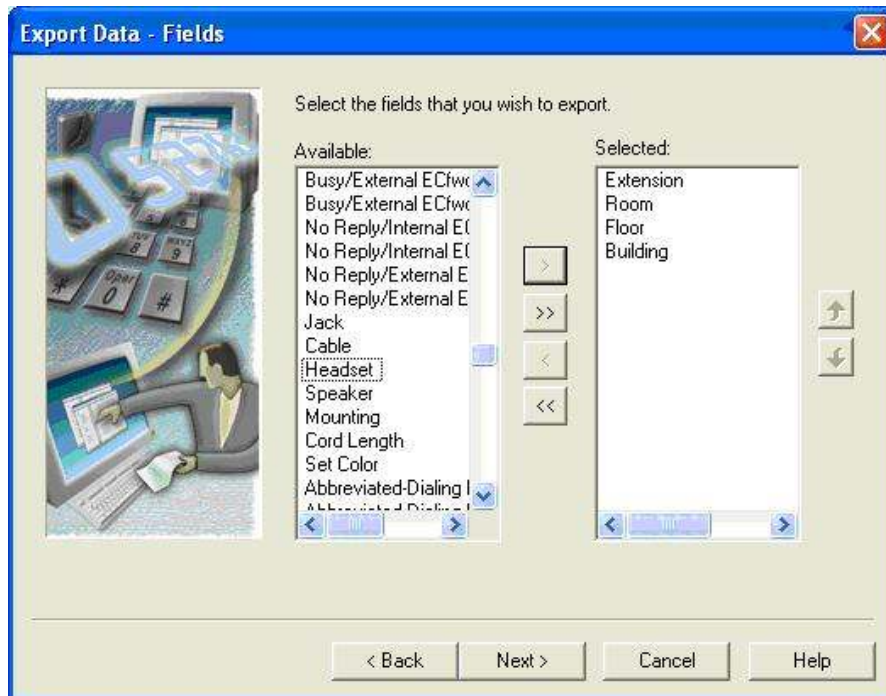
In the updated **Avaya Site Administration** screen below, click **Advanced > Export Data** in the left pane.



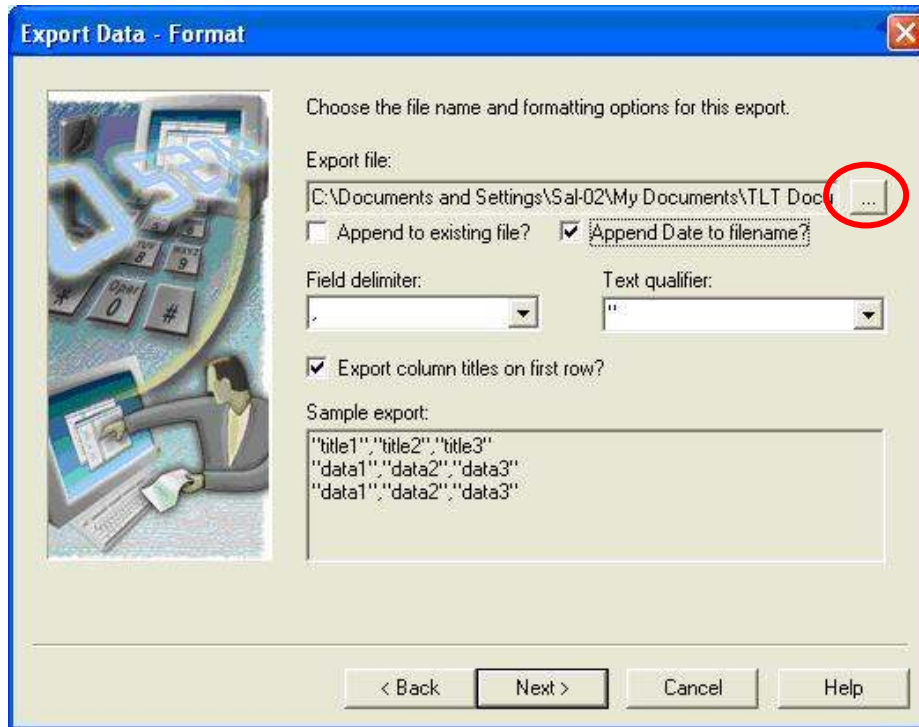
The **Export Data – Filter** screen is displayed. Select “station” from the **Select an object to export** drop-down list, and retain the radio button for **Export to file**. In the **Filter** section, enter any desired filtering. In the compliance testing, a filter was created for station extensions in the range of 60000-69999. Click **Next**.



The **Export Data – Fields** screen is displayed next. Select the relevant fields in the **Available** section, and use the single-arrow icon to move each to the **Selected** section. Click **Next**.



The **Export Data – Format** screen is displayed. Check **Append Data to filename** if desired, and retain the default values for the remaining fields. Click on the browse icon for **Export file**.

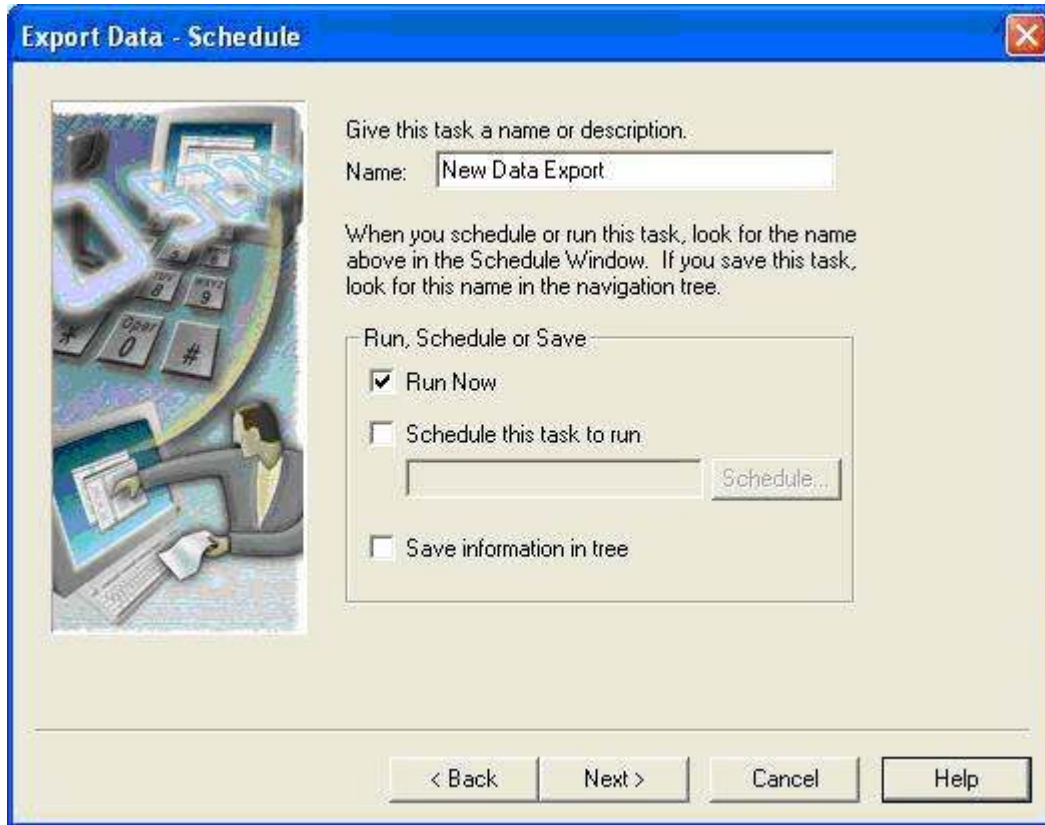


The **Save As** dialog box is displayed. Navigate to the desired directory, and enter a descriptive **File name**. Click **Save**, followed by **Next** in the subsequent screen.



The **Export Data – Schedule** screen is displayed next. If the task will be scheduled to run on a regular basis or at a future time, then enter a descriptive **Name**, select **Schedule this task to run**, and click **Schedule** to configure the scheduling details.

In the compliance testing, **Run Now** was selected. Click **Next**, followed by **Finish** in the subsequent screen.



5. Configure 911 ETC Crisis Connect

The configuration of 911 ETC Crisis Connect is the responsibility of 911 ETC. For more information, refer to **Section 1.2** for 911 ETC technical support.

6. General Test Approach and Test Results

The feature test cases were performed manually. Avaya Aura Communication Manager station user data were manually exported from Avaya Site Administration and emailed to 911 ETC Crisis Connect. The 911 ETC Crisis Connect AutoMAC custom loader was manually started to perform the conversion. The conversion summary report and the converted NENA2 output from the custom loader were manually verified.

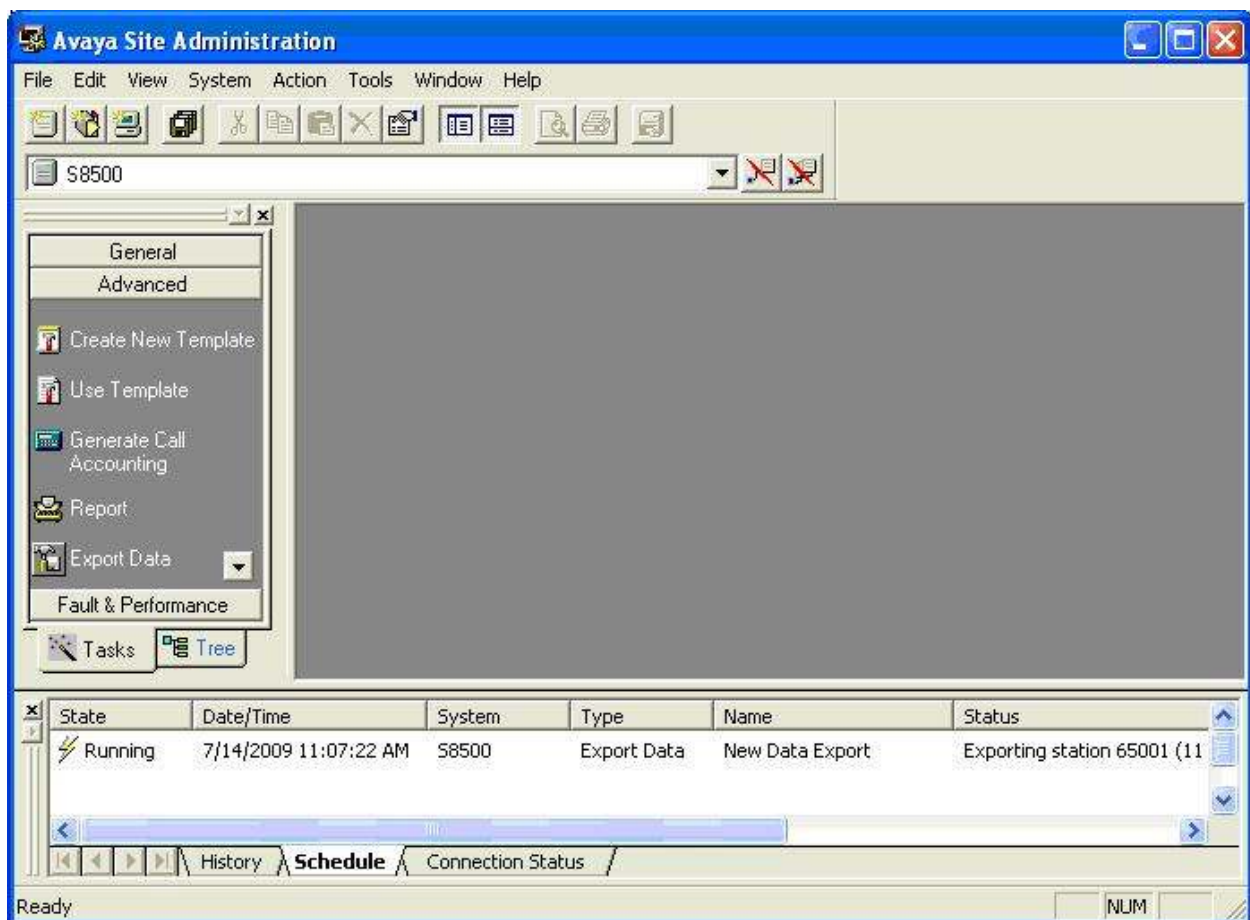
All test cases were executed and passed.

7. Verification Steps

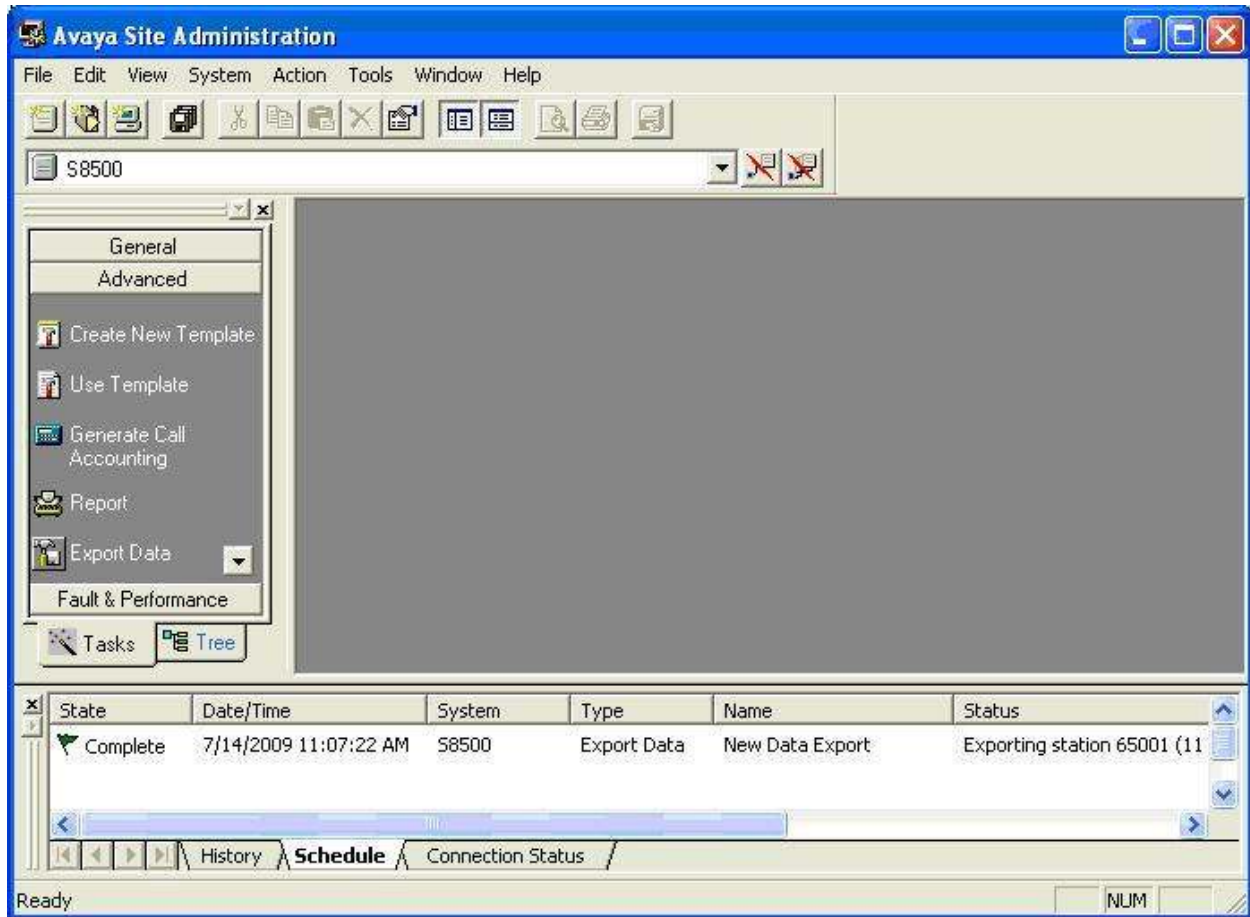
This section provides the tests that can be performed to verify proper configuration of Avaya Site Administration and 911 ETC Crisis Connect.

7.1. Verify Avaya Site Administration

From the Avaya Site Administration screen, click the **Schedule** tab in the bottom of the screen. Verify that the **State** associated with the relevant task entry is accurate, in this case “Running”.

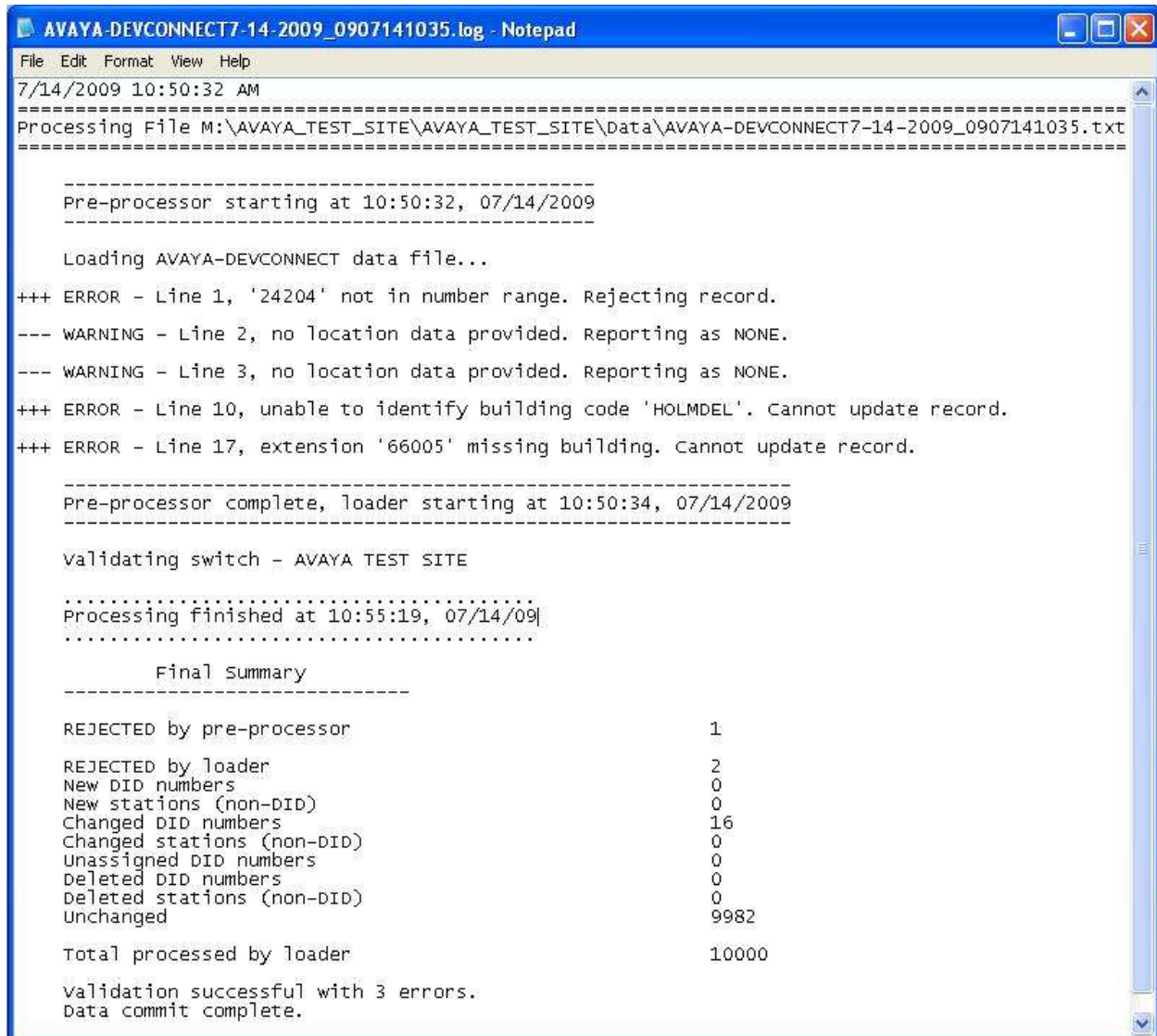


Verify that when the export is completed, the **State** of the task is updated to “Complete”, as shown below.



7.2. Verify 911 ETC Crisis Connect

From 911 ETC Crisis Connect, open the conversion results generated by the AutoMAC custom loader. Verify that entries with invalid extension range, missing room, missing floor, invalid building code, and missing building code are flagged as shown below.



```
AVAYA-DEVCONNECT7-14-2009_0907141035.log - Notepad
File Edit Format View Help
7/14/2009 10:50:32 AM
=====
Processing File M:\AVAYA_TEST_SITE\AVAYA_TEST_SITE\Data\AVAYA-DEVCONNECT7-14-2009_0907141035.txt
=====

-----
Pre-processor starting at 10:50:32, 07/14/2009
-----

Loading AVAYA-DEVCONNECT data file...

+++ ERROR - Line 1, '24204' not in number range. Rejecting record.
--- WARNING - Line 2, no location data provided. Reporting as NONE.
--- WARNING - Line 3, no location data provided. Reporting as NONE.
+++ ERROR - Line 10, unable to identify building code 'HOLMDEL'. Cannot update record.
+++ ERROR - Line 17, extension '66005' missing building. Cannot update record.

-----
Pre-processor complete, loader starting at 10:50:34, 07/14/2009
-----

Validating switch - AVAYA TEST SITE

.....
Processing finished at 10:55:19, 07/14/09
.....

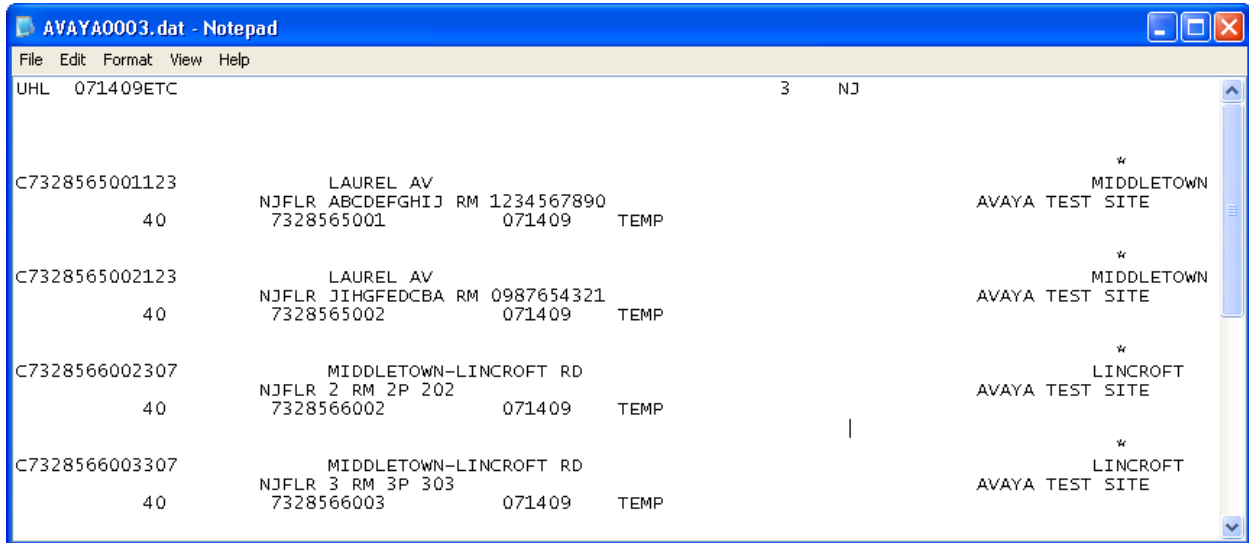
-----
Final summary
-----

REJECTED by pre-processor                1
REJECTED by loader                       2
New DID numbers                          0
New stations (non-DID)                   0
Changed DID numbers                       16
Changed stations (non-DID)                0
Unassigned DID numbers                   0
Deleted DID numbers                       0
Deleted stations (non-DID)                0
Unchanged                                 9982

Total processed by loader                 10000

validation successful with 3 errors.
data commit complete.
```

Open the converted NENA2 format file. Verify that the converted entries contain the proper DID number, room, floor, and building address, as shown below.



```
AVAYA0003.dat - Notepad
File Edit Format View Help
UHL 071409ETC                               3   NJ

C7328565001123      LAUREL AV                *
                    NJFLR ABCDEFGHIJ RM 1234567890  MIDDLETOWN
                    7328565001          071409  TEMP  AVAYA TEST SITE

C7328565002123      LAUREL AV                *
                    NJFLR JIHGFEDCBA RM 0987654321  MIDDLETOWN
                    7328565002          071409  TEMP  AVAYA TEST SITE

C7328566002307      MIDDLETOWN-LINCROFT RD  *
                    NJFLR 2 RM 2P 202                LINCROFT
                    7328566002          071409  TEMP  AVAYA TEST SITE

C7328566003307      MIDDLETOWN-LINCROFT RD  *
                    NJFLR 3 RM 3P 303                LINCROFT
                    7328566003          071409  TEMP  AVAYA TEST SITE
```

8. Conclusion

These Application Notes describe the configuration steps required for 911 ETC Crisis Connect to successfully interoperate with Avaya Aura Communication Manager. All feature test cases were completed.

9. Additional References

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

1. *Administering Avaya AuraTM Communication Manager*, Document 03-300509, Issue 5.0, Release 5.2, May 2009, available at <http://support.avaya.com>.
2. Integrated Management Site Administration Stand-alone Help System, May 2009, available at <http://support.avaya.com>.
3. *Crisis Connect for Avaya Communication Manager*, Rev 2.1, June 2009, available at http://www.911etc.com/E911_solutions/crisis_connect.html.

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