



## Avaya Solution & Interoperability Test Lab

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# Application Notes for 911 ETC CrisisConnect<sup>®</sup> for TDM with Avaya Aura<sup>®</sup> Communication Manager – Issue 1.0

### Abstract

These Application Notes describe configuration steps required for 911 ETC CrisisConnect<sup>®</sup> for TDM to interoperate with Avaya Aura<sup>®</sup> Communication Manager. 911 ETC CrisisConnect<sup>®</sup> converts data retrieved from Avaya Aura<sup>®</sup> Communication Manager into NENA2 standard format. It is then provided to the Telco-hosted 911 ALI database that is accessed by PSAP (Public Safety Answering Point) 911 dispatchers.

In the compliance testing, 911 ETC CrisisConnect<sup>®</sup> for TDM converted relevant station user data from Avaya Aura<sup>®</sup> Communication Manager, obtained using the Avaya Site Administration application, and reformatted to regional Data Service Center's NENA2 standard format.

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

911 ETC CrisisConnect® provides automated E911 data. CrisisConnect® for TDM converts relevant station user data from Avaya Aura® Communication Manager (obtained using the Avaya Site Administration application) and reformats it to the regional Data Service Center's NENA2 standard format. 911 ETC provides error correction before and after data is submitted to the National Data Service Center (NDSC).

Suggested work flow for this solution is as follows:

1. A scheduled list of stations and their location data is exported to 911 ETC using Avaya Site Administration (ASA) from an enterprise workstation.
2. 911 ETC's Import Processor, AutoMAC™ parses the station location data. The data is uploaded to the Regional ALI Data Center(s) in a NENA2 format that relates a Calling Party Number (DID) to a location.

AutoMAC™ is a custom loader designed and built to translate customer specific electronic data into the required NENA2 standard formatted file. It is provided to the Telco-hosted 911 Automatic Location Information (ALI) database that is accessed by Public Safety Answering Point (PSAP) 911 dispatchers. AutoMAC™ is best designed to accept a full load electronic feed representing the entire customer's active DID numbers or extensions with each submission to 911 ETC. AutoMAC™ then scans the full load submission and automatically detects any changes that have been made since the last submission and flags the changes to be sent to the 911 ALI database.

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.

## 2. General Test Approach and Test Results

The compliance test focused on verifying that 911 ETC CrisisConnect<sup>®</sup> for TDM can translate customer specific data into NENA2 standard format.

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 compliance test validated the ability of 911 ETC CrisisConnect<sup>®</sup> for TDM to convert relevant station user specific data into standard NENA2 format. The following criteria were used to do the verification:

- Using the pre-provided building code addresses and DID prefix to convert station extension (4, 5 and 7 digits), 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.

### 2.2. Test Results

The objectives described in **Section 2.1** were verified.

- Data was correctly converted into NENA2 format.
- Appropriate warnings and errors were generated for erroneous scenarios.
- Logs showing a summary of data uploaded into 911 ETC Crisis Connect were generated.

### 2.3. Support

Technical support for 911 ETC CrisisConnect<sup>®</sup> for TDM can be obtained through the following:

- Web: <http://www.911etc.com/contact-us>
- E-mail: [support@911etc.com](mailto:support@911etc.com)
- Phone: (480) 719-8556

### 3. Reference Configuration

Figure 1 illustrates the compliance test configuration consisting of:

- Avaya Aura® Communication Manager
- Avaya Site Administration
- 911 ETC CrisisConnect®

Station data information provisioned in Communication Manager was retrieved using Avaya Site Administration. This data was saved as a .txt file. This data was emailed to 911 ETC. 911 ETC uploaded the data into 911 ETC CrisisConnect® and then to AutoMAC™.

Avaya Site Administration was installed on a Windows 10 workstation.

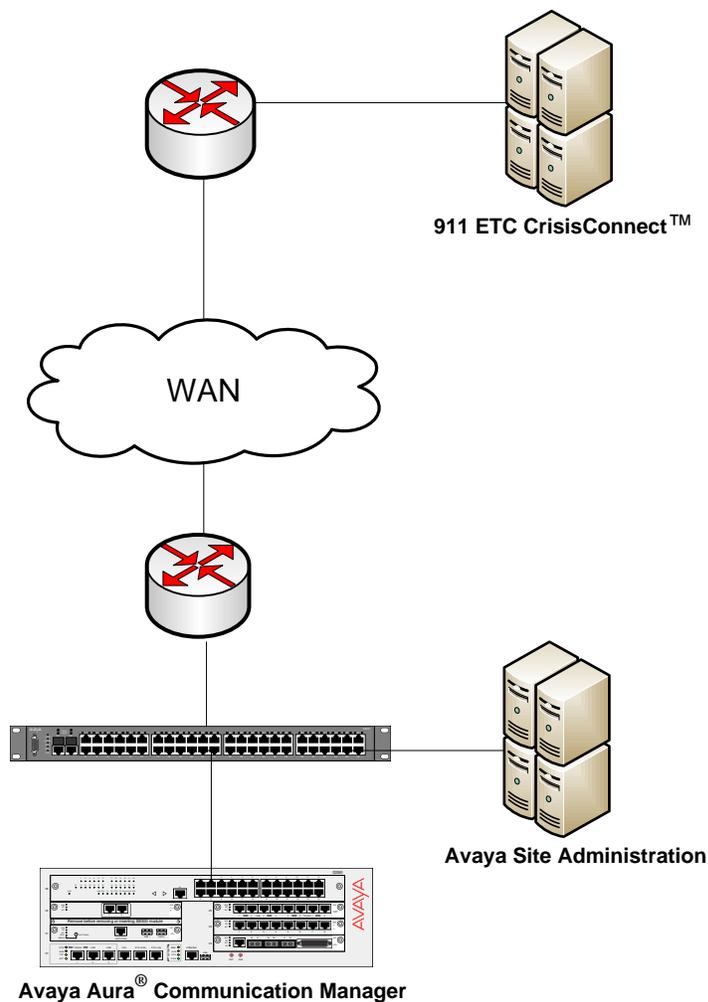


Figure 1 – Test Configuration

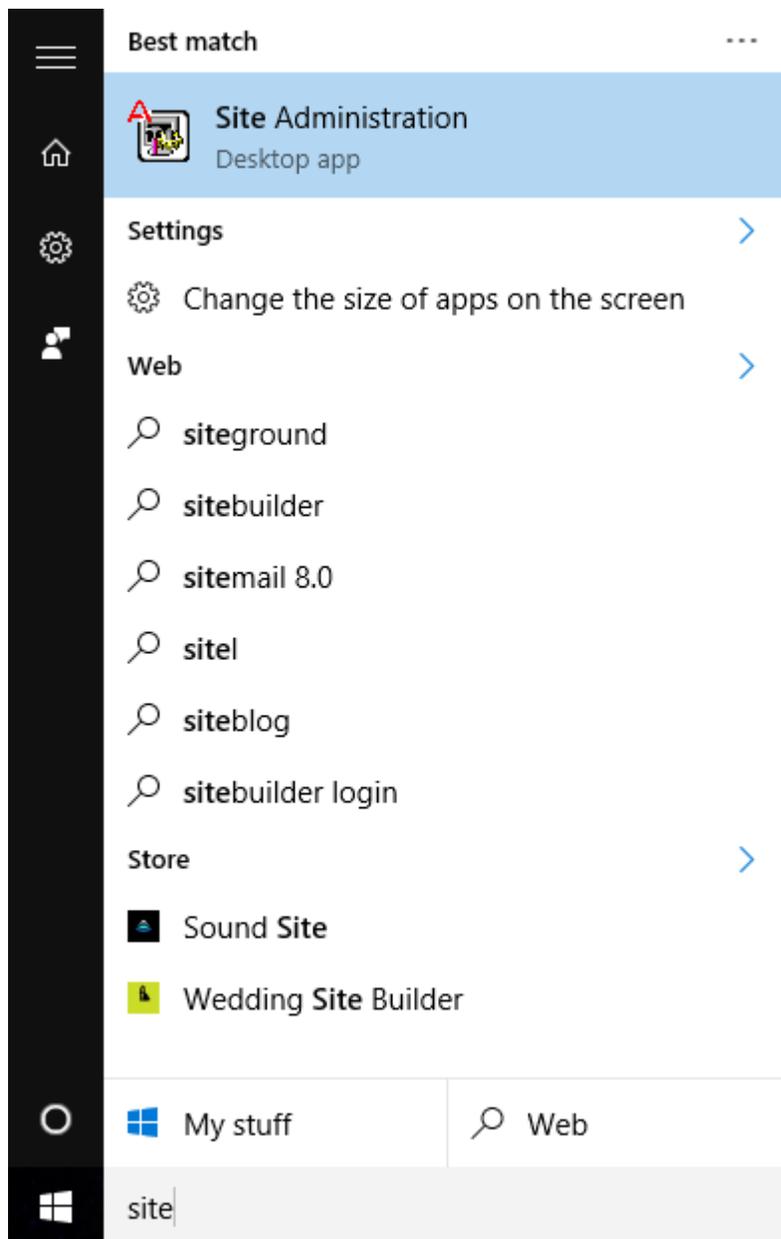
## 4. Equipment and Software Validated

The following equipment and version were used in the reference configuration described above:

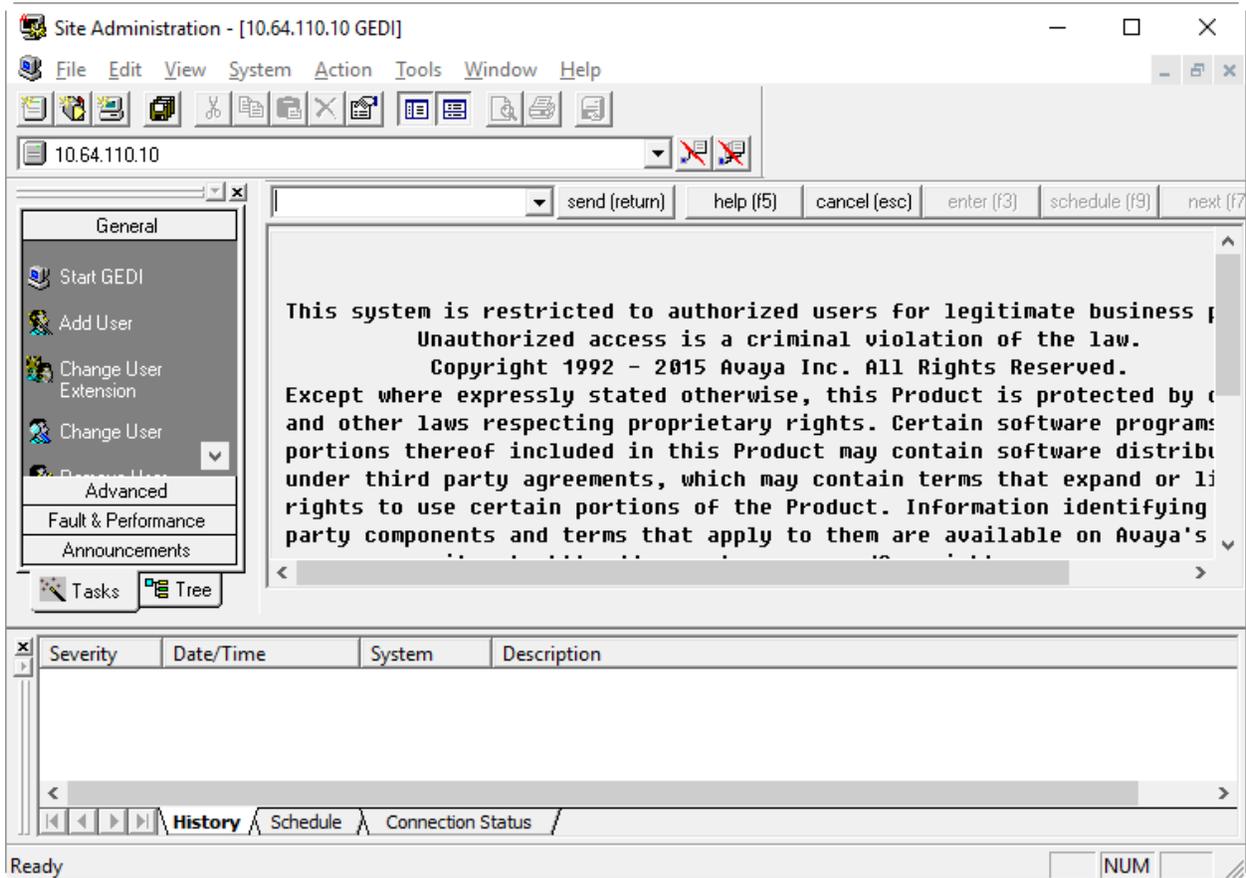
<b>Component</b>	<b>Firmware Version</b>	<b>Description</b>
Avaya Aura <sup>®</sup> Communication Manager	7.0 SP1	Runs Avaya Aura <sup>®</sup> Communication Manager call processing software.
Avaya G450 Media Gateway : MM710BP (DS1) MM712AP (DCP)	HW11, FW044 HW07, FW009	Supports analog, DCP and IP phones.
Avaya Site Administration	6.0 SP12	Administers Avaya Aura <sup>®</sup> Communication Manager
911 ETC Crisis Connect for TDM	7.1.8	Solution for converting data to standard NENA2 format

## 5. Configure Avaya Site Administration

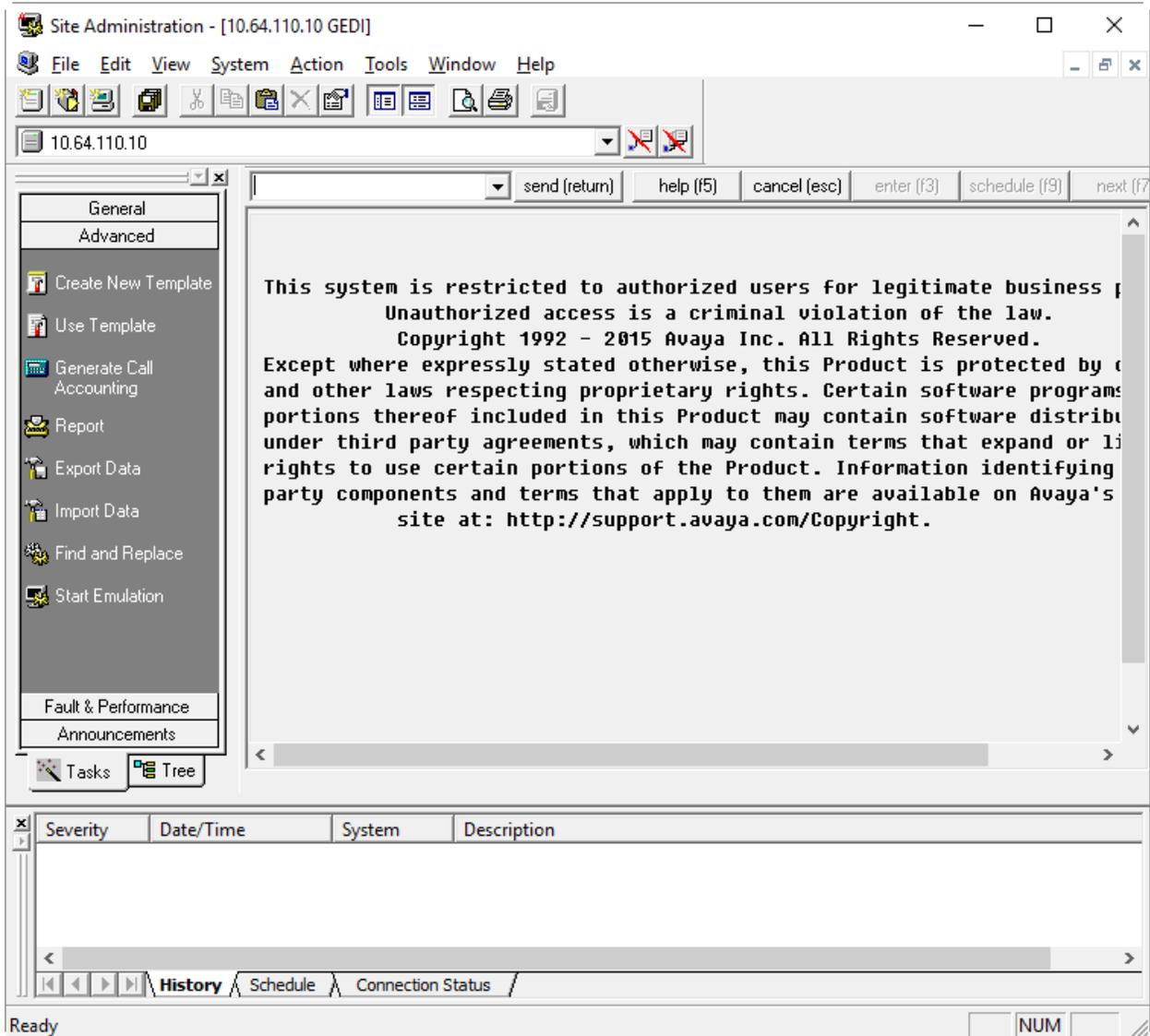
Open **Avaya Site Administration** on the workstation where it is installed:



From the drop down menu, select the relevant Communication Manager.



On the left pane, select **Advanced** > **Export Data**.



Select **station** for **Select an object to export**. Select **Export to file**. For the **field** entry under **Filter**, select **Extension**. For **Value**, type in the relevant range of extensions and click **Next**.

Export Data - Filter

Data export allows you to retrieve information from a Voice or Messaging System and save it in a file.

Select an object to export: station

Export to file  Sort Field List

Export to LDAP directory

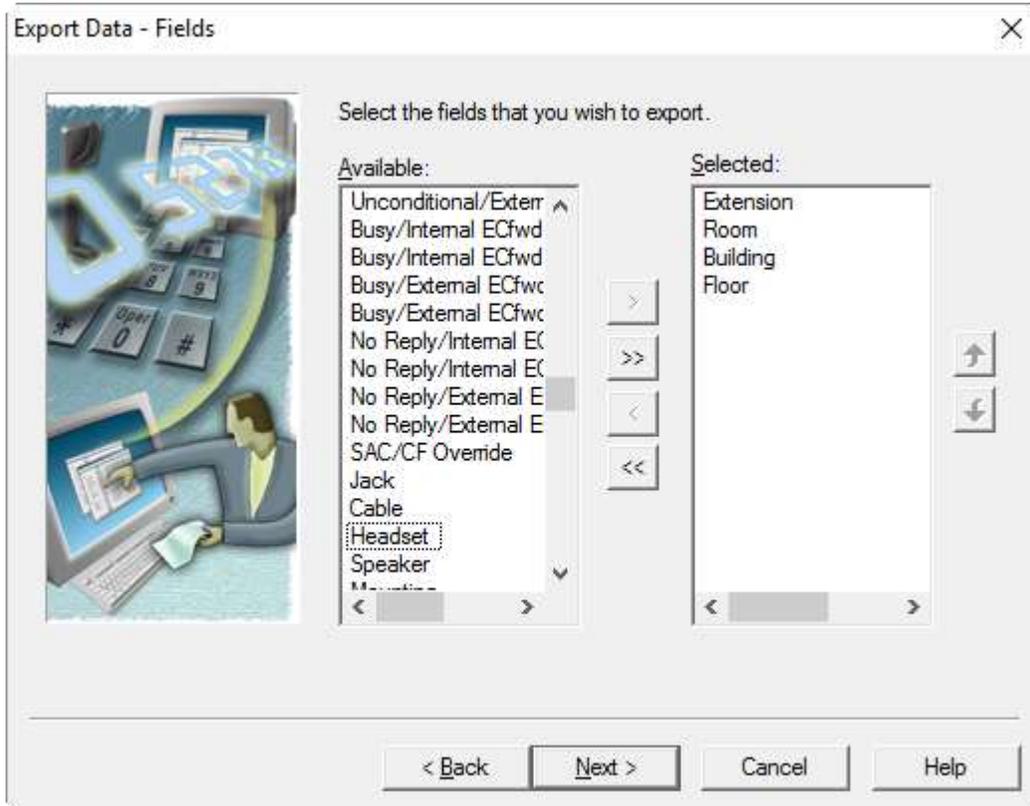
Filter:

Field	Value
Extension	11001-11010

Warning: Do not use punctuation within the extension

< Back Next > Cancel Help

Select relevant values from the **Available** fields on the left and click “>>”. In this case, Extension, Building, Room and Floor were selected. When done, click **Next**.



Under **Export File**, select the desired location and provide a name of the file. Click **Next**.

Export Data - Format

Choose the file name and formatting options for this export.

Export file:  
C:\Users\interop\AppData\Roaming\Avaya\Site Administration ...

Append to existing file?  Append Date to filename?

Field delimiter: , Text qualifier: "

Export column titles on first row?

Sample export:  
"title1","title2","title3"  
"data1","data2","data3"  
"data1","data2","data3"

< Back Next > Cancel Help

In the **Name** field type in desired name for the task. Click **Next**.

Export Data - Schedule

Give this task a name or description.  
Name:

When you schedule or run this task, look for the name above in the Schedule Window. If you save this task, look for this name in the navigation tree.

Run, Schedule or Save

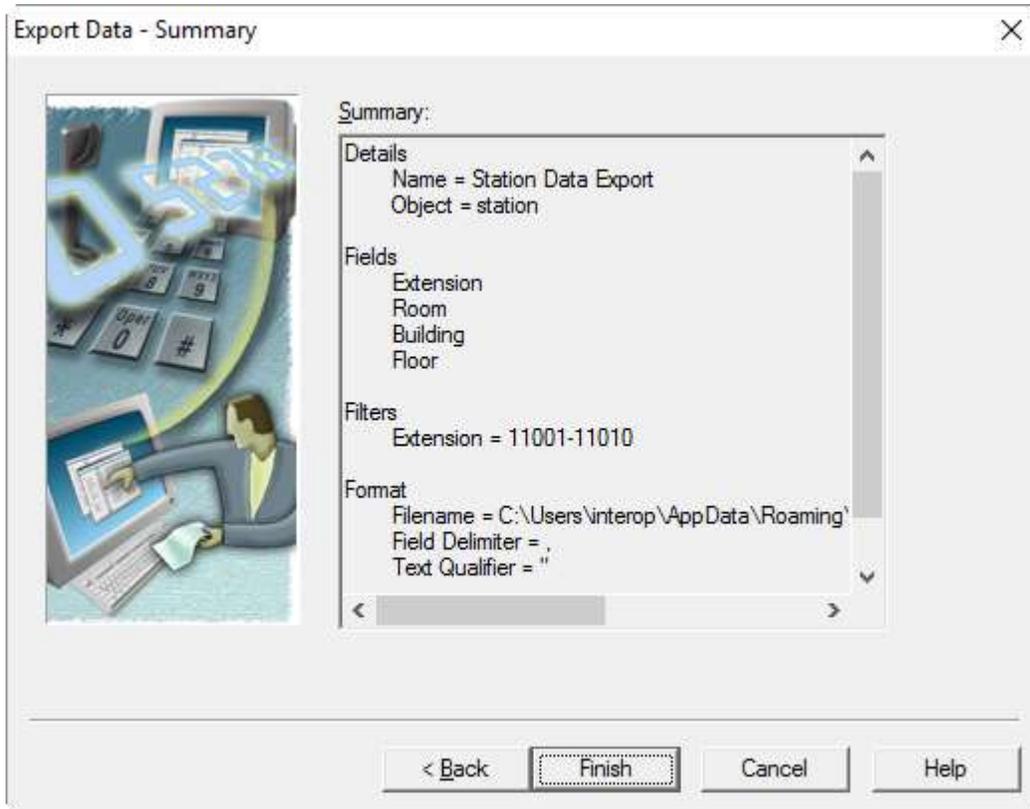
Run Now

Schedule this task to run  
 

Save information in tree

< Back   Next >   Cancel   Help

This window shows a summary of configuration under the **Summary** box. Review the information and click **Finish**.



## 6. Configure 911 ETC CrisisConnect® for TDM

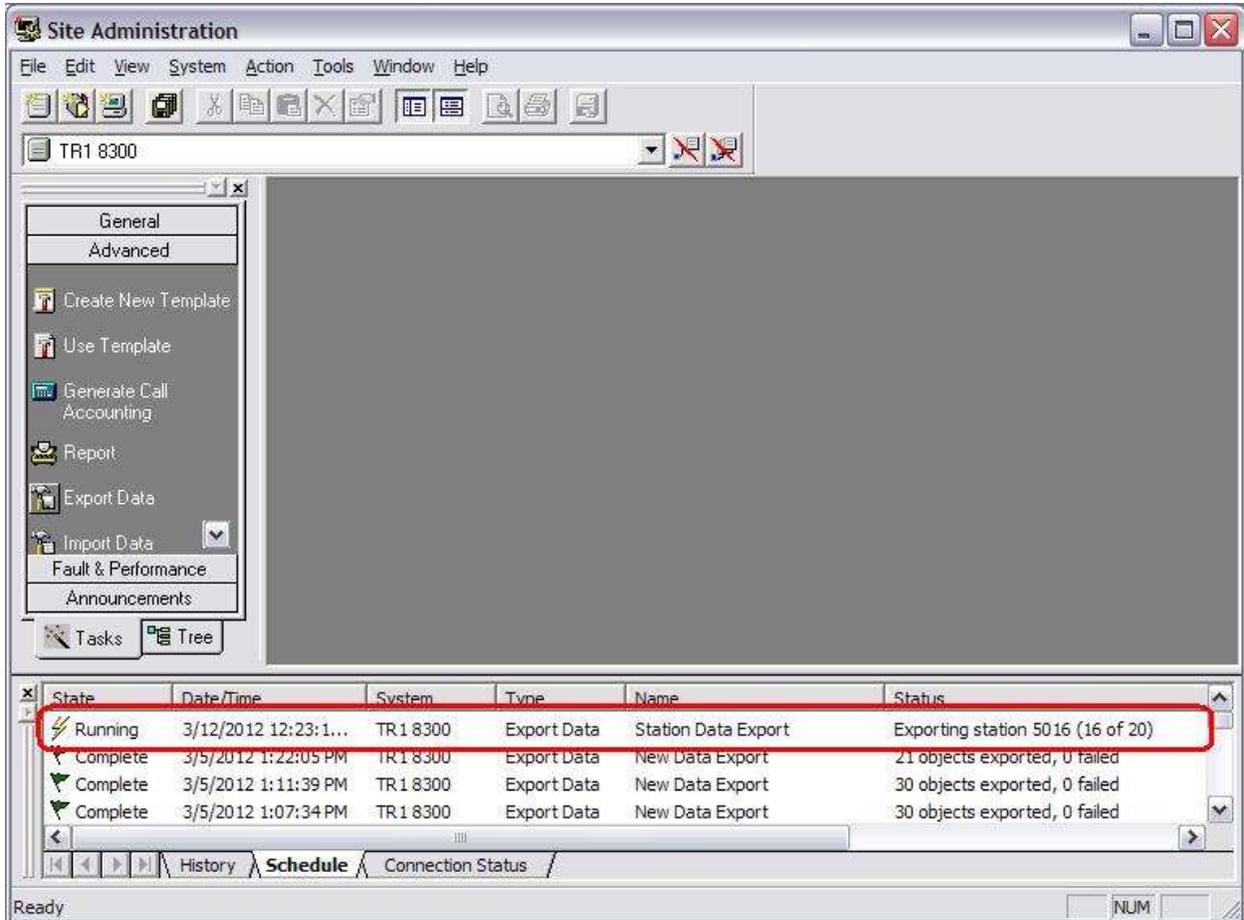
The configuration of 911 ETC CrisisConnect® for TDM is the responsibility of 911 ETC. For more information, refer to **Section 2.3** for 911 ETC technical support.

## 7. Verification Steps

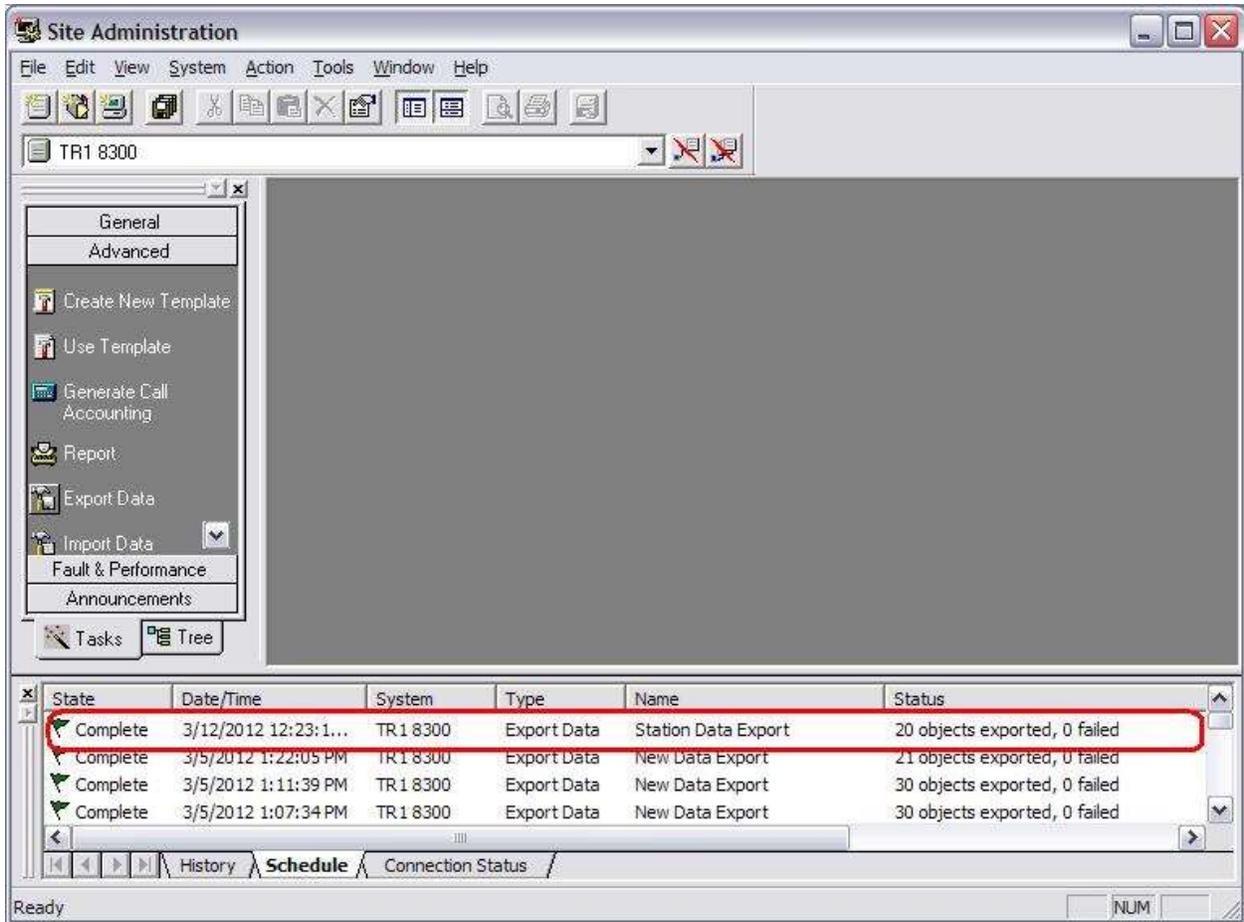
### 7.1. Avaya Site Administration

The following steps may be used to verify the configuration for Avaya Site Administration:

After the configuration steps are completed in **Section 5**, select the **Schedule** tab in the bottom pane. In this case, it shows the schedule task **Station Data Export** is currently running.

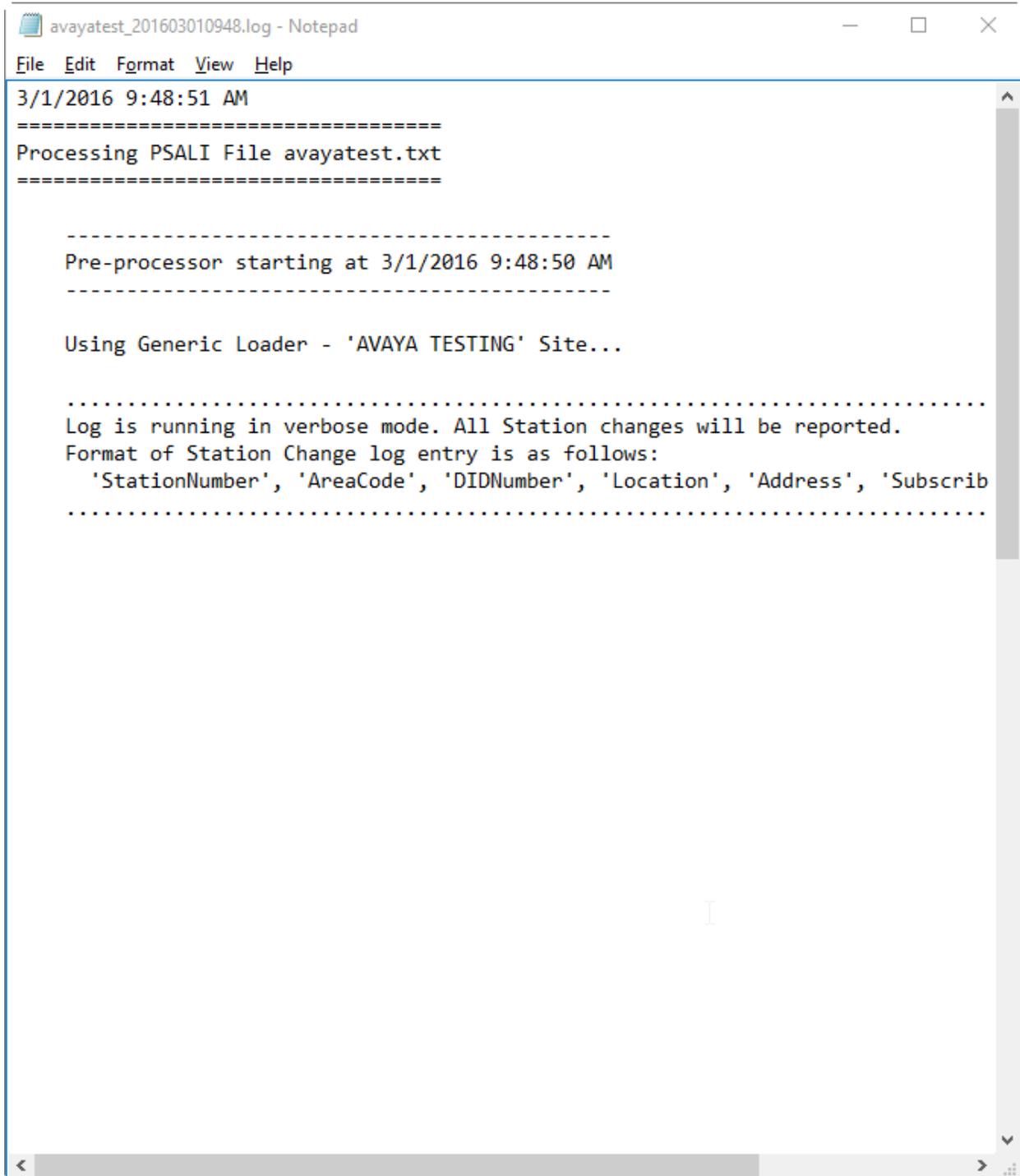


Once the task has been completed, the state will be changed to **Complete**. In this case, the state of **Station Data Export** task is **Complete**.



## 7.2. 911 ETC CrisisConnect® for TDM

Open the log file that contains the result from data upload. Verify the Errors, Warnings and Final Summary is correct.



```
avayatest_201603010948.log - Notepad
File Edit Format View Help
3/1/2016 9:48:51 AM
=====
Processing PSALI File avayatest.txt
=====

-----
Pre-processor starting at 3/1/2016 9:48:50 AM
-----

Using Generic Loader - 'AVAYA TESTING' Site...

.....
Log is running in verbose mode. All Station changes will be reported.
Format of Station Change log entry is as follows:
  'StationNumber', 'AreaCode', 'DIDNumber', 'Location', 'Address', 'Subscrib
.....
```

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

```
AvayaTEST0001.dnr - Notepad
File Edit Format View Help
UHL 030116CTL          1  AZ          PHOENIX          AZFLR 1 RM 205
I30353110011          AVAYA TESTING LN PHOENIX          AZFLR 2 RM 213
I30353110022          AVAYA TEST LN    PHOENIX          AZFLR 3 RM 313
I30353110033          AVAYA TEST LN    PHOENIX          AZFLR 1 RM 4134
I30353110041          AVAYA TESTING LN PHOENIX          AZFLR 1 RM 1100
I30353110052          AVAYA TEST LN    PHOENIX          AZFLR 2 RM 219
I30353110063          AVAYA TEST LN    PHOENIX          AZFLR 3 RM 315
I30353110071          AVAYA TESTING LN PHOENIX          AZFLR 2 RM 777
I30353110082          AVAYA TEST LN    PHOENIX          AZFLR 2 RM 222
I30353110093          AVAYA TEST LN    PHOENIX          AZFLR 1 RM 10
I30353110101          AVAYA TESTING LN PHOENIX
UTL 030116CTL          10
```

## 8. Conclusion

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

## 9. Additional References

Product documentation for Avaya products may be found at <http://support.avaya.com>.

### Avaya

[1] *Administering Avaya Aura® Communication Manager*, Release 7.0

[2] *Integrated Management Site Administration Stand-alone Help System*, March 2016, available at <http://support.avaya.com>.

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