Tehama Custom Report Generator

A feature of the Tehama Wireless system is the ability of the DCAP to send out customizable report files with information about the meter reads, optional sensor values, and RF network health statistics. Additionally the report files can be delivered via email or directly to your FTP site.   You can use one of Tehama's standard report formats, or work with Tehama' staff to create your own customized version. ReportGen scripts are installed in your DCAPs using the CIT software, and by installing your customized ReportGen script to all your DCAPs, you will get consistent formatting of your daily reports from all your DCAPs.

This document covers the format and installation of the Tehama ReportGen system.

Report Format

Tehama can work with you to modify our standard scripts to meet your specific needs, be it different data points, column ordering, sequencing of data, or reporting destinations.

Tehama supports two standard ReportGen formats, one with just the reads data, and an extended version that includes network statistics for each device. Examples of each format are shown below. The reports are formatted and sent as a Comma Separated Values file (CSV), which is easily imported into Excel or other spreadsheet programs, or can be parsed automatically by your back-end data processing center.

Standard CSV Format:

RadioID-Dec	RadioID-Hex	Status	Addr	Building	Apt	Reading	Units	Read_time
2164261252	81000184	OK	654A Natoma	1	22	27473	KWatt_Hours	1/22/13 23:01
2164261265	81000191	OK	654A Natoma	1	27	82358	KWatt_Hours	1/22/13 23:01
2164265368	81001198	OK	654A Natoma	1	28	66.67	Fahrenheit	24_hour Average
2164265368	81001198	OK	654A Natoma	1	28	2349	Minute	1/22/13 23:00
2164265372	8100119C	OK	654A Natoma	1	29	334984	Gallons	1/22/13 22:59
2164266420	810015B4	OK	654A Natoma	1	30	69.68	Fahrenheit	1/22/13 22:52
2164266420	810015B4	OK	654A Natoma	1	30	39.19	Rh%	1/22/13 22:52
2181038346	8200010A	OK	654A Natoma	1	31	45125	Minutes	1/22/13 23:00

Extended CSV Format:

RadioID-Dec	RadioID-Hex	Status	Addr	Building	Apt	Reading	Units	Read_time	RSSI-Avg	LQ-Avg	BattVolt	LP
2164261252	81000184	OK	654A Natoma	1	22	27473	KWatt_Hours	1/22/13 23:01	100	94.4	3.4	EA00027E
2164261265	81000191	OK	654A Natoma	1	27	82358	KWatt_Hours	1/22/13 23:01	103.8	92.8	2.7	EA000260
2164265368	81001198	OK	654A Natoma	1	28	66.67	Fahrenheit	24_hour Average	103.5	96.5	2.9	E0000117
2164265368	81001198	OK	654A Natoma	1	28	2349	Minute	1/22/13 23:00				
2164265372	8100119C	OK	654A Natoma	1	29	334984	Gallons	1/22/13 22:59	88.3	95.3	3	EA0004DB
2164266420	810015B4	OK	654A Natoma	1	30	69.68	Fahrenheit	1/22/13 22:52	83.4	85.1	3	E0000108
2164266420	810015B4	OK	654A Natoma	1	30	39.19	Rh%	1/22/13 22:52				
2181038346	8200010A	OK	654A Natoma	1	31	45125	Minutes	1/22/13 23:00	92.8	94.5	3.3	E8200100

The Extended format has the same data as the Standard format but with the addition of four extra columns of RF Network statics data. For those MDTs that report more than one piece of information (Pulse count plus Temperature for example), the statistical data is only provided on the first entry for each MDT.

Email vs FTP

The daily report can be sent by email or sent to your private FTP server. The script can also be customized to send the CSV file to both locations. If you choose to use FTP, we recommend you have the ReportGen script send the CSV file to the FTP site and to send a status summary by email.

The status summary contains four parts:

- List of units that have not reported in over the last 24 hours
- List of Alerts that are active
- Information about the DCAP including version information that Tehama Support might need
- The definitions of the status codes that appear in the CSV file.

The following is a sample status summary:

```
Daily Email from dailyReportScript.sh version 110-Components  Options: S1 , I0

*** The following units have not reported in over the last 24 hours:

12000837  1 Main  Bldg 1  Apt 3

*** The following Alerts are active:

81000115    Min_Threshold_Alert    BatteryVoltage    2221
81000075    Min_Threshold_Alert    BatteryVoltage    1915

*** DCAP Information:
Internal IP Address = 172.31.1.241
External IP Address = 192.168.2.1
MAC Address = 00:50:C2:9B:20:08
WAMLogger1.20n:2043    1.3.0    1996    f0000105    5.07G    2660    1

*** Status Code Definitions
OK - Indicates the transmitter or Repeater is operating correctly.
B - Indicates a low battery.
I - Indicates the MDT/Repeater has not been heard from in the last 24 hrs
P - Indicates Repeater is unplugged and running on battery.
```
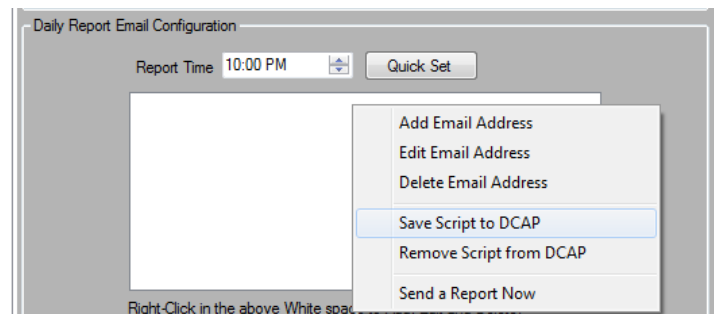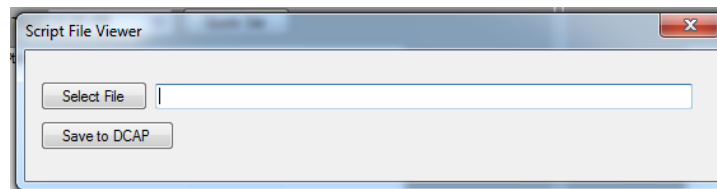
Installation

After working with Tehama Wireless regarding the default report style for your company and the details of the customization you need, we will send you the ReportGen script packaged together in one encrypted zip file that you upload to all your DCAPs using the CIT software. It will process the file, decrypting it and sending it to the DCAP to which you are connected.

1: In the Configuration -> DCAP View -> Site Configuration tab, *right* click in the white area of the Daily Report Email Configuration area to see a context menu as shown here:

2: Select the Save Scripts to DCAP option. This will open a Script File viewer window as shown:

3: Click on the Select File button to open a file browser window. Select the ReportGen script that Tehama has send you and click the Open button (or double click on the file). The full path to the file will be shown in the white space.

4: Click the Save to DCAP. This will cause the CIT to open the file, decrypt it, extract the files within it, and send them to the DCAP. You will see some activity in the bottom area of the CIT.

5: Once the file has been uploaded to the DCAP, you can verify the report is working by selecting the "Send a Report" now option. This will instruct the DCAP to run the report and send the CSV file to the expected location.   *Make sure you have an email address entered in the Daily Report Email Configuration space* if you expect the report to be sent by email.

Contact us:

Tehama Wireless
2431 5th Street
Berkeley, CA 94710
415.495.7344
info@TehamaWireless.com
www.TehamaWireless.com