

Yukon Data Export Resources, Analytics, and More

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Powering Business Worldwide

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Eaton Introductions

- Jimmy Kreuz – Project Manager
- David Sutton – Software Product Manager
- Michael Sharp – Product Manager
- Rena Wang – Customer Training Manager

Data Export

Data Export

Export Formats

Format: ▼ Edit Copy + Create

Devices: *(No Devices Selected)* 🚩

Create New Format ×

Fixed Attribute
Results will contain at most one row per device. Data points (attributes) defined as columns within the format. Commonly used for exporting most recent reading for one or more devices.

Dynamic Attribute
Results may contain multiple rows per device and attribute. Data points (attributes) are selected at run time. Commonly used for exporting multiple readings over a given date range for one or more devices.

Use Template
Create a format from a pre-defined template.

Cancel Create

Data Export – Fixed Vs. Dynamic Attribute

- **Fixed Export:**
 - 1 row per device
 - Data points/attributes defined as columns within format editor
 - Often multiple attributes included
 - One reading per point, per device
 - Export latest, highest, lowest value for data points, for one or more devices
- **Why use?**
 - **Fixed:** Look across large set of devices for 'something' – review large data set to identify cases you may want to dig deeper into

Data Export – Fixed Vs. Dynamic Attribute



- **Dynamic Export**
 - Multiple rows per device, attribute
 - Data points (attributes) selected at run time
 - Typically 1 data point/attribute
 - Multiple readings across date range
- **Why use?**
 - **Dynamic:** Comprehensive data dive. Investigate an individual site(s) in elaborate detail.
 - Used for MyMeter consumer portal, MDMs such as NISC, SEDC, etc.

Voltage Report – Fixed Export

Setup









































- Device Type (Selected when running/scheduling report)
 - C2SX / RFN-420 Meters
 - C1SX / RFN-410 Meters
- Attribute Selections
 - Voltage
 - Data Selection: Max, within 31 days + Min, within 31 days
- Column Selections
 - Device Name
 - Meter Number
 - Voltage, Max
 - Date (MM/dd/yyyy) + Time (HH:mm:ss) + Value (####)
 - Voltage, Min
 - Date (MM/dd/yyyy) + Time (HH:mm:ss) + Value (####)

Attribute Setup

Attribute	Data Selection	Days Previous		
Voltage	Max	31		
Voltage	Min	31		
Peak Demand Daily	Max	31		

[+ Add](#)

Field Setup

Field	Data Type	Data Selection	Days Previous	Missing Value	Rounding	Pattern	Field Size	Padding				
Device Name				Leave Blank			No Max	None				
Meter Number				Leave Blank			No Max	None				
Voltage	Timestamp	Min	31	Leave Blank		MM/dd/yyyy	No Max	None				
Voltage	Timestamp	Min	31	Leave Blank		HH:mm:ss	No Max	None				
Voltage	Value	Min	31	Leave Blank	Half Even	#####	No Max	None				
Voltage	Timestamp	Max	31	Leave Blank		MM/dd/yyyy	No Max	None				
Voltage	Timestamp	Max	31	Leave Blank		HH:mm:ss	No Max	None				
Voltage	Value	Max	31	Leave Blank	Half Even	#####	No Max	None				
Peak Demand Daily	Timestamp	Max	31	Leave Blank		MM/dd/yyyy	No Max	None				
Peak Demand Daily	Value	Max	31	Leave Blank	Half Even	####.##	No Max	None				

[+ Add](#)

Preview

10	20	30	40	50	60	70	80	90	100	110	120	130
.....												
Device Name,Meter Number,MinVolt Date,MinVolt Time,MinVolt Value,MaxVolt Date,MaxVolt Time,MaxVolt Value,Pk Dmd												
Default Device,11111111,04/18/2023,12:21:01,1234546,04/18/2023,12:21:01,1234546,04/18/2023,1234546.01												

Alternative Settings – Modify To Fit Need!

Attribute Setup [?](#)

Attribute	Data Selection	Days Previous		
Voltage	Max	31		
Voltage	Min	31		
Peak Demand Daily	Max	31		

[+ Add](#)

Field Setup

Field	Data Type	Data Selection	Days Previous	Missing Value	Rounding	Pattern	Field Size	Padding				
Device Name				Leave Blank			No Max	None				
Meter Number				Leave Blank			No Max	None				
Voltage	Timestamp	Min	31	Leave Blank		MM/dd/yyyy	No Max	None				
Voltage	Timestamp	Min	31	Leave Blank		HH:mm:ss	No Max	None				
Voltage	Value	Min	31	Leave Blank	Half Even	#####	No Max	None				
Voltage	Timestamp	Max	31	Leave Blank		MM/dd/yyyy	No Max	None				
Voltage	Timestamp	Max	31	Leave Blank		HH:mm:ss	No Max	None				
Voltage	Value	Max	31	Leave Blank	Half Even	#####	No Max	None				
Peak Demand Daily	Timestamp	Max	31	Leave Blank		MM/dd/yyyy	No Max	None				
Peak Demand Daily	Value	Max	31	Leave Blank	Half Even	####.##	No Max	None				

Format Settings

Name of Format:

Min Max Voltage Export

Delimiter:

Comma (,)

Header:

Device Name, Meter Number, MinVolt Date, MinVolt Time, MinVolt Value, MaxVolt Date, MaxVolt Time, MaxVolt Value, Pk Dmd

Footer:

Time Zone Format:

Local

Exclude Readings with Abnormal Quality [?](#)

Attribute Setup [?](#)

Attribute	Data Selection	Days Previous		
Voltage	Max	31		
Voltage	Min	31		

Fixed Report - 'Export Now'

The screenshot shows a software interface for exporting data. The main window is titled "Export Formats" and contains the following elements:

- Format:** A dropdown menu set to "Min Max Voltage Export" with an "Edit" button to its right.
- Devices:** A text field containing "Device Group / Single Phase Meters" with a search icon.
- Device Count:** A text field showing "5522".
- Buttons:** Two buttons labeled "Export Now" and "Schedule".
- Preview:** A section showing a progress indicator with markers at 10, 20, and 30, and a line of text: "Default Device, 11111111, 03/29/2023, 1".

A "Run" dialog box is overlaid on the main window, featuring:

- Title:** "Run" with a close button (X).
- Option:** A radio button labeled "End Date" is selected.
- Date Field:** A text input field containing "03/29/2023" with a calendar icon to its right.
- Buttons:** "Cancel" and "OK" buttons at the bottom right.

Results

	A	B	C	D	E	F	G	H	I	J
1	Device Name	Meter Number	MinVolt Date	MinVolt Time	MinVolt Value	MaxVolt Date	MaxVolt Time	MaxVolt Value	Pk Dmd	
2	Device Name70	Meter Number70	3/3/2023	16:00:00	236	3/10/2023	18:00:00	246	3/22/2023	6.06
3	Device Name71	Meter Number71	3/27/2023	11:00:00	242	2/27/2023	1:00:00	248	3/8/2023	7.77
4	Device Name72	Meter Number72	3/3/2023	19:00:00	227	3/23/2023	2:00:00	242	3/6/2023	7.53
5	Device Name73	Meter Number73	3/14/2023	9:00:00	238	3/27/2023	7:00:00	245	3/1/2023	3.22
6	Device Name74	Meter Number74	3/14/2023	16:00:00	231	3/5/2023	21:00:00	245	3/12/2023	14.42
7	Device Name75	Meter Number75	3/11/2023	11:00:00	240	3/23/2023	2:00:00	245	3/21/2023	3.51
8	Device Name76	Meter Number76	2/26/2023	21:00:00	231	3/23/2023	2:00:00	244	2/27/2023	0
9	Device Name77	Meter Number77	3/12/2023	14:00:00	238	3/23/2023	2:00:00	246	3/11/2023	5.49
10	Device Name78	Meter Number78	2/28/2023	19:00:00	239	3/7/2023	8:00:00	245	2/28/2023	6.98
11	Device Name79	Meter Number79	3/25/2023	10:00:00	241	3/27/2023	1:00:00	246	3/10/2023	6.92
12	Device Name80	Meter Number80	3/27/2023	12:00:00	230	2/27/2023	1:00:00	241	3/19/2023	7.37
13	Device Name81	Meter Number81	3/6/2023	11:00:00	236	3/7/2023	8:00:00	244	3/21/2023	3.57
14	Device Name82	Meter Number82	3/20/2023	10:00:00	239	3/26/2023	1:00:00	247	3/3/2023	5.56
15	Device Name83	Meter Number83	3/4/2023	6:00:00	239	3/4/2023	3:00:00	244	3/19/2023	6.93
16	Device Name84	Meter Number84	3/3/2023	10:00:00	234	3/23/2023	2:00:00	243	3/28/2023	6.98
17	Device Name85	Meter Number85	3/27/2023	8:00:00	242	3/15/2023	15:00:00	248	3/13/2023	5.76
18	Device Name86	Meter Number86	2/27/2023	20:00:00	238	3/26/2023	0:00:00	246	3/7/2023	8.25
19	Device Name87	Meter Number87	3/12/2023	11:00:00	238	2/27/2023	15:00:00	244	3/18/2023	7.91
20	Device Name88	Meter Number88	3/13/2023	20:00:00	242	3/27/2023	15:00:00	245	3/25/2023	5.43
21	Device Name89	Meter Number89	3/27/2023	17:00:00	240	3/15/2023	17:00:00	245	3/22/2023	10.08
22	Device Name90	Meter Number90	3/14/2023	9:00:00	238	3/23/2023	2:00:00	244	3/4/2023	2.05
23	Device Name91	Meter Number91	2/27/2023	6:00:00	238	3/23/2023	23:00:00	246	3/25/2023	10.73
24	Device Name92	Meter Number92	3/20/2023	12:00:00	233	3/23/2023	2:00:00	243	2/27/2023	8.96
25	Device Name93	Meter Number93	3/27/2023	10:00:00	244	3/27/2023	1:00:00	248	3/13/2023	3.64

Sort - Min

The image shows the Microsoft Excel interface with the **Data** ribbon selected. The ribbon includes options for 'Get Data', 'Queries & Connections', and 'Data Types'. A 'Sort' button is visible in the top right corner of the ribbon. Below the ribbon, the formula bar shows 'Device Name70'. The spreadsheet grid has columns A through H and rows 1 through 9. The headers are: A: Device Name, B: Meter Number, C: MinVolt Date, D: MinVolt Time, E: MinVolt Value, F: MaxVolt Date, G: MaxVolt Time, H: MaxVolt Value. A 'Sort' dialog box is open, showing the following settings:

- Column: MinVolt Value
- Sort On: Cell Values
- Order: Smallest to Largest
- My data has headers:

	A	B	C	D	E	F	G	H
1	Device Name	Meter Number	MinVolt Date	MinVolt Time	MinVolt Value	MaxVolt Date	MaxVolt Time	MaxVolt Value
2	Device	70	1/2/2022	15:00:00	225	2/10/2022	15:00:00	246
3	Device	70	2/2/2022	15:00:00	248			
4	Device	70	2/2/2022	15:00:00	242			
5	Device	70	2/2/2022	15:00:00	245			
6	Device	70	2/2/2022	15:00:00	245			
7	Device	70	2/2/2022	15:00:00	245			
8	Device	70	2/2/2022	15:00:00	244			
9	Device	70	2/2/2022	15:00:00	246			

Sort – Min: Results

	A	B	C	D	E	F	G	H	I	J
1	Device Name	Meter Number	MinVolt Date	MinVolt Time	MinVolt Value	MaxVolt Date	MaxVolt Time	MaxVolt Value	Pk Dmd	
2	Device Name35	Meter Number35	3/26/2023	22:00:00	114	3/3/2023	15:00:00	122	3/14/2023	0.7
3	Device Name13	Meter Number13	3/28/2023	7:00:00	119	3/24/2023	15:00:00	122	3/26/2023	0.61
4	Device Name30	Meter Number30	3/25/2023	7:00:00	119	3/15/2023	15:00:00	122	3/18/2023	0.25
5	Device Name30	Meter Number30	3/16/2023	14:00:00	119	3/18/2023	11:00:00	122	3/1/2023	0.44
6	Device Name32	Meter Number32	3/28/2023	7:00:00	119	3/3/2023	23:00:00	122	2/26/2023	0.29
7	Device Name39	Meter Number39	3/21/2023	14:00:00	119	3/18/2023	23:00:00	123	3/2/2023	0.8
8	Device Name38	Meter Number38	2/26/2023	23:00:00	120	3/3/2023	15:00:00	122	3/22/2023	0.26
9	Device Name28	Meter Number28	3/7/2023	20:00:00	121	3/2/2023	15:00:00	123	3/20/2023	0.73
10	Device Name39	Meter Number39	3/6/2023	8:00:00	121	2/26/2023	11:00:00	126	2/26/2023	0.12
11	Device Name42	Meter Number42	3/6/2023	7:00:00	121	2/28/2023	1:00:00	124	2/27/2023	0
12	Device Name53	Meter Number53	3/3/2023	17:00:00	121	3/15/2023	17:00:00	244	3/4/2023	7.51
13	Device Name15	Meter Number15	3/27/2023	10:00:00	210	3/6/2023	3:00:00	215	2/27/2023	0.39
14	Device Name51	Meter Number51	3/17/2023	8:00:00	218	3/8/2023	14:00:00	243	3/20/2023	12.97
15	Device Name16	Meter Number16	3/21/2023	8:00:00	223	3/22/2023	3:00:00	240	3/19/2023	11.5

Sort - Max

File Home Insert Draw Page Layout Formulas **Data** Review View Developer Help

Get Data ▾ From Text/CSV From Web From Table/Range Recent Sources Existing Connections Refresh All ▾ Queries & Connections Properties Edit Links Stocks Geography Sort

Get & Transform Data Queries & Connections Data Types

D2 10:00:00 PM

	A	B	C	D	E	F	G	H	
1	Device Name	Meter Number	MinVolt Date	MinVolt Time	MinVolt Value	MaxVolt Date	MaxVolt Time	MaxVolt Value	Pk
2	Devic						0:00	122	3/1
3	Devic						0:00	122	3/2
4	Devic						0:00	122	3/1
5	Devic						0:00	122	3/
6	Devic						0:00	122	2/2
7	Devic						0:00	123	3/
8	Devic						0:00	122	3/2
9	Devic						0:00	123	3/2

Sort

+ Add Level X Delete Level Copy Level ^ v Options... My data has headers

Column	Sort On	Order
Sort by MaxVolt Value	Cell Values	Largest to Smallest

Sort – Max: Results





































	A	B	C	D	E	F	G	H	I	J
1	Device Name	Meter Number	MinVolt Date	MinVolt Time	MinVolt Value	MaxVolt Date	MaxVolt Time	MaxVolt Value	Pk Dmd	
2	Device Name44	Meter Number44	3/25/2023	11:00:00	254	2/27/2023	1:00:00	261	3/10/2023	7.43
3	Device Name13	Meter Number13	3/25/2023	11:00:00	255	3/15/2023	15:00:00	261	3/1/2023	0
4	Device Name13	Meter Number13	3/25/2023	11:00:00	255	3/15/2023	15:00:00	261	3/17/2023	1.18
5	Device Name53	Meter Number53	3/28/2023	21:00:00	257	3/28/2023	16:00:00	260	3/28/2023	0.02
6	Device Name42	Meter Number42	3/28/2023	7:00:00	247	3/23/2023	2:00:00	256	2/27/2023	0.43
7	Device Name43	Meter Number43	3/28/2023	7:00:00	247	3/23/2023	2:00:00	256	3/18/2023	0.58
8	Device Name36	Meter Number36	3/6/2023	8:00:00	241	3/5/2023	15:00:00	254	3/5/2023	16.5
9	Device Name36	Meter Number36	3/27/2023	10:00:00	243	3/5/2023	15:00:00	254	2/27/2023	13.23
10	Device Name36	Meter Number36	3/27/2023	8:00:00	244	3/5/2023	15:00:00	254	3/18/2023	15.34
11	Device Name37	Meter Number37	3/27/2023	10:00:00	244	3/5/2023	15:00:00	254	3/17/2023	11.48
12	Device Name37	Meter Number37	3/27/2023	10:00:00	244	3/5/2023	15:00:00	254	3/18/2023	14.21
13	Device Name37	Meter Number37	3/27/2023	10:00:00	245	3/5/2023	15:00:00	254	3/12/2023	9.15
14	Device Name27	Meter Number27	3/21/2023	13:00:00	245	3/26/2023	1:00:00	253	3/1/2023	5.7
15	Device Name45	Meter Number45	3/25/2023	7:00:00	248	2/27/2023	1:00:00	253	3/2/2023	11.84
16	Device Name49	Meter Number49	3/25/2023	7:00:00	248	2/27/2023	1:00:00	253	3/24/2023	4.04
17	Device Name50	Meter Number50	3/25/2023	7:00:00	248	2/27/2023	1:00:00	253	3/7/2023	4.3
18	Device Name52	Meter Number52	3/25/2023	7:00:00	248	2/27/2023	1:00:00	253	2/28/2023	3.55
19	Device Name52	Meter Number52	3/25/2023	7:00:00	248	2/27/2023	1:00:00	253	3/5/2023	4.98
20	Device Name53	Meter Number53	3/25/2023	7:00:00	248	2/27/2023	1:00:00	253	3/27/2023	6.96
21	Device Name53	Meter Number53	3/25/2023	7:00:00	248	2/27/2023	1:00:00	253	3/20/2023	5.1
22	Device Name47	Meter Number47	3/3/2023	19:00:00	241	3/20/2023	23:00:00	250	3/18/2023	11.42

Voltage Report – Dynamic Export

Setup

- Device Type (Selected when running/scheduling report)
 - C2SX / RFN-420 Meters
 - C1SX / RFN-410 Meters
- Attribute Selections (*Selected when running/scheduling report)
 - *Whereas attribute selection for **fixed** exports selected during format creation
 - Voltage
- Column Selections
 - Device Name
 - Meter Number
 - Timestamp – Date (MM/dd/yyyy)
 - Timestamp - Time (HH:mm:ss)
 - Value (####)
 - Extras (if desired) – latitude, longitude, point name, unit of measure, etc.

Field Setup

Field	Data Type	Data Selection	Days Previous	Missing Value	Rounding	Pattern	Field Size	Padding	
Device Name				Leave Blank			No Max	None	   
Meter Number				Leave Blank			No Max	None	   
Timestamp				Leave Blank		MM/dd/yyyy	No Max	None	   
Timestamp				Leave Blank		HH:mm:ss	No Max	None	   
Value				Leave Blank	Half Even	#####	No Max	None	   
Point Name				Leave Blank			No Max	None	   
Unit of Measure				Leave Blank			No Max	None	   
Latitude				Leave Blank			No Max	None	   
Longitude				Leave Blank			No Max	None	   

 Add

Preview

```

      10      20      30      40      50      60      70      80      90     100     110     120     130
.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....|.....
Device Name,Meter Number,Volt Date,Volt Time,Volt Value,Point Name,UoM,Lat,Long
Default Device,11111111,04/18/2023,12:23:52,1234546,kWh,kWh,43.9787,15.3846
    
```

Dynamic Report - 'Export Now'

☆ Data Export

Export Formats

Format: Voltage Export - Dynamic ▼ Edit Copy + Create

Devices: Device Group /Single Phase Meters 📌 🔍

Device Count: 55

Attribute: **voltage** ▼

📄 Export Now

Preview

Device Name	Meter Nu	Default Device	11111
10	2		
.....			
Average Voltage			
Average Voltage (Phase A)			
Average Voltage (Phase B)			
Average Voltage (Phase C)			
Battery Voltage			

90 100 110 120 130

.....|.....|.....|.....|.....|.....|

Dynamic Report - 'Export Now'

The image shows a software interface for generating reports. The main window is titled "Export Formats" and contains the following information:

- Format: Voltage Export - Dynamic
- Devices: Device Group /Single Phase Meters
- Device Count: 5538
- Attribute: Voltage

There are two buttons: "Export Now" and "Schedule". Below this is a "Preview" section showing a table with columns for "Device Name", "Meter Number", "Volt", and "Date". The first row of data is: "Default Device, 1111111111, 04/17/2023".

A "Schedules" section is visible at the bottom, with a table containing "CYCLE 1" and "CYCLE 2".

A "Run" dialog box is open over the "Export Now" button. It has the following options:

- Date Range: 02/28/2023 to 03/29/2023
- Previous Days: 1
- Include Exact Time Only: 00:00
- Include Interval Times Only: 5 Minutes

Buttons for "Cancel" and "OK" are at the bottom right of the dialog.

Results

	B	D	E	F	G	H	I	J	K
1	Device Name	Meter Number	Volt Date	Volt Time	Volt Value	Point Name	UoM	Lat	Long
2	Device Name1	Meter Number1	2/28/2023	1:00:00	242	Voltage	Volts	41.46727	-84.5494
3	Device Name1	Meter Number1	2/28/2023	2:00:00	240	Voltage	Volts	41.46727	-84.5494
4	Device Name1	Meter Number1	2/28/2023	3:00:00	242	Voltage	Volts	41.46727	-84.5494
5	Device Name1	Meter Number1	2/28/2023	4:00:00	241	Voltage	Volts	41.46727	-84.5494
6	Device Name1	Meter Number1	2/28/2023	5:00:00	241	Voltage	Volts	41.46727	-84.5494
7	Device Name1	Meter Number1	2/28/2023	6:00:00	240	Voltage	Volts	41.46727	-84.5494
8	Device Name1	Meter Number1	2/28/2023	7:00:00	238	Voltage	Volts	41.46727	-84.5494
9	Device Name1	Meter Number1	2/28/2023	8:00:00	240	Voltage	Volts	41.46727	-84.5494
10	Device Name1	Meter Number1	2/28/2023	9:00:00	240	Voltage	Volts	41.46727	-84.5494
11	Device Name1	Meter Number1	2/28/2023	10:00:00	239	Voltage	Volts	41.46727	-84.5494
12	Device Name1	Meter Number1	2/28/2023	11:00:00	241	Voltage	Volts	41.46727	-84.5494
13	Device Name1	Meter Number1	2/28/2023	12:00:00	242	Voltage	Volts	41.46727	-84.5494
14	Device Name1	Meter Number1	2/28/2023	13:00:00	243	Voltage	Volts	41.46727	-84.5494
15	Device Name1	Meter Number1	2/28/2023	14:00:00	242	Voltage	Volts	41.46727	-84.5494
16	Device Name1	Meter Number1	2/28/2023	15:00:00	242	Voltage	Volts	41.46727	-84.5494
17	Device Name1	Meter Number1	2/28/2023	16:00:00	240	Voltage	Volts	41.46727	-84.5494
18	Device Name1	Meter Number1	2/28/2023	17:00:00	241	Voltage	Volts	41.46727	-84.5494
19	Device Name1	Meter Number1	2/28/2023	18:00:00	240	Voltage	Volts	41.46727	-84.5494
20	Device Name1	Meter Number1	2/28/2023	19:00:00	239	Voltage	Volts	41.46727	-84.5494
21	Device Name1	Meter Number1	2/28/2023	20:00:00	240	Voltage	Volts	41.46727	-84.5494
22	Device Name1	Meter Number1	2/28/2023	21:00:00	239	Voltage	Volts	41.46727	-84.5494
23	Device Name1	Meter Number1	2/28/2023	22:00:00	238	Voltage	Volts	41.46727	-84.5494

Many rows,
per device

Filter On Specific Device

The screenshot shows the Microsoft Excel interface with the 'Data' tab selected. The ribbon includes options for 'Get & Transform Data', 'Queries & Connections', 'Data Types', and 'Sort & Filter'. The 'Filter' button is highlighted in the 'Sort & Filter' group. Below the ribbon, the formula bar shows the date '3/29/2023'. The main area displays a table with columns: Device Name, Meter Number, Volt Date, Volt Time, Voltage, Point Name, UoM, Lat, and Long. A filter dropdown is open for the 'Device Name' column, showing a search for 'device name44'. The table data is as follows:

Device Name	Meter Number	Volt Date	Volt Time	Voltage	Point Name	UoM	Lat	Long
		2/8/2023	1:00:00	242	Voltage	Volts	41.46727	-84.5494
		2/8/2023	2:00:00	240	Voltage	Volts	41.46727	-84.5494
		2/8/2023	3:00:00	242	Voltage	Volts	41.46727	-84.5494
		2/8/2023	4:00:00	241	Voltage	Volts	41.46727	-84.5494
		2/8/2023	5:00:00	241	Voltage	Volts	41.46727	-84.5494
		2/8/2023	6:00:00	240	Voltage	Volts	41.46727	-84.5494
		2/8/2023	7:00:00	238	Voltage	Volts	41.46727	-84.5494
		2/8/2023	8:00:00	240	Voltage	Volts	41.46727	-84.5494
		2/8/2023	9:00:00	240	Voltage	Volts	41.46727	-84.5494
		2/8/2023	10:00:00	239	Voltage	Volts	41.46727	-84.5494
		2/8/2023	11:00:00	241	Voltage	Volts	41.46727	-84.5494
		2/8/2023	12:00:00	242	Voltage	Volts	41.46727	-84.5494
		2/8/2023	13:00:00	243	Voltage	Volts	41.46727	-84.5494
		2/8/2023	14:00:00	242	Voltage	Volts	41.46727	-84.5494
		2/8/2023	15:00:00	242	Voltage	Volts	41.46727	-84.5494

File Home Insert Draw Page Layout Formulas **Data** Review View Developer Help

Get Data ▾ From Text/CSV From Web From Table/Range Recent Sources Existing Connections

Refresh All ▾ Queries & Connections Properties Edit Links

Stocks Geography

Get & Transform Data Queries & Connections Data Types

E923039 3/29/2023

	B	D	E	F	G	H	I	J	K
1	Device Name	Meter Number	Volt Date	Volt Tin	Volt Va	Point N	UoM	Lat	Long
Sort A to Z			8/2023	1:00:00	242	Voltage	Volts	41.46727	-84.5494
Sort Z to A			8/2023	2:00:00	240	Voltage	Volts	41.46727	-84.5494
Sort by Color			8/2023	3:00:00	242	Voltage	Volts	41.46727	-84.5494
Sheet View			8/2023	4:00:00	241	Voltage	Volts	41.46727	-84.5494
Clear Filter From "Device Name"			8/2023	5:00:00	241	Voltage	Volts	41.46727	-84.5494
Filter by Color			8/2023	6:00:00	240	Voltage	Volts	41.46727	-84.5494
Text Filters			8/2023	7:00:00	238	Voltage	Volts	41.46727	-84.5494
device name44			8/2023	8:00:00	240	Voltage	Volts	41.46727	-84.5494
(Select All Search Results)			8/2023	9:00:00	240	Voltage	Volts	41.46727	-84.5494
Add current selection to filter			8/2023	10:00:00	239	Voltage	Volts	41.46727	-84.5494
Device Name44			8/2023	11:00:00	241	Voltage	Volts	41.46727	-84.5494
Device Name440			8/2023	12:00:00	242	Voltage	Volts	41.46727	-84.5494
Device Name4400			8/2023	13:00:00	243	Voltage	Volts	41.46727	-84.5494
Device Name44000			8/2023	14:00:00	242	Voltage	Volts	41.46727	-84.5494
Device Name440000			8/2023	15:00:00	242	Voltage	Volts	41.46727	-84.5494
Device Name4400001			8/2023	16:00:00	240	Voltage	Volts	41.46727	-84.5494
Device Name4400002			8/2023	17:00:00	241	Voltage	Volts	41.46727	-84.5494
Device Name4400003			8/2023	18:00:00	240	Voltage	Volts	41.46727	-84.5494
Device Name4400004			8/2023	19:00:00	239	Voltage	Volts	41.46727	-84.5494
Device Name4400005			8/2023	20:00:00	240	Voltage	Volts	41.46727	-84.5494
Device Name4400006			8/2023	21:00:00	239	Voltage	Volts	41.46727	-84.5494
Device Name4400007			8/2023	22:00:00	238	Voltage	Volts	41.46727	-84.5494
Device Name4400008			8/2023	23:00:00	240	Voltage	Volts	41.46727	-84.5494
Device Name4400009			8/2023	0:00:00	241	Voltage	Volts	41.46727	-84.5494

⚠ Not all items showing

OK Cancel

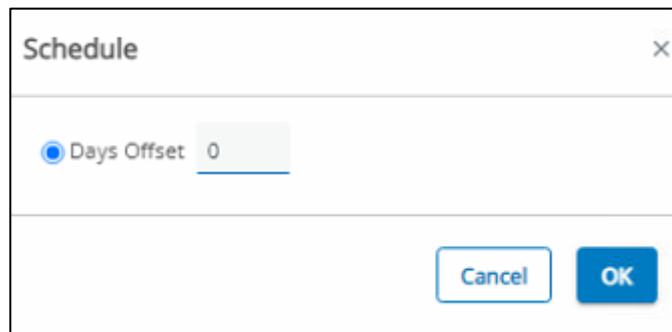
Filter – Results

	B	D	E	F	G	H	I	J	K
1	Device Name	Meter Number	Volt Date	Volt Tir	Volt Va	Point N	UoM	Lat	Long
923040	Device Name44	Meter Number 44	3/1/2023	10:00:00	259	Voltage	Volts		
923041	Device Name44	Meter Number 44	3/1/2023	11:00:00	261	Voltage	Volts		
923042	Device Name44	Meter Number 44	3/1/2023	12:00:00	261	Voltage	Volts		
923043	Device Name44	Meter Number 44	3/1/2023	13:00:00	259	Voltage	Volts		
923044	Device Name44	Meter Number 44	3/1/2023	14:00:00	261	Voltage	Volts		
923045	Device Name44	Meter Number 44	3/1/2023	15:00:00	259	Voltage	Volts		
923046	Device Name44	Meter Number 44	3/1/2023	16:00:00	260	Voltage	Volts		
923047	Device Name44	Meter Number 44	3/1/2023	17:00:00	260	Voltage	Volts		
923048	Device Name44	Meter Number 44	3/1/2023	18:00:00	260	Voltage	Volts		
923049	Device Name44	Meter Number 44	3/1/2023	19:00:00	260	Voltage	Volts		
923050	Device Name44	Meter Number 44	3/1/2023	20:00:00	261	Voltage	Volts		
923051	Device Name44	Meter Number 44	3/1/2023	21:00:00	259	Voltage	Volts		
923052	Device Name44	Meter Number 44	3/1/2023	22:00:00	260	Voltage	Volts		
923053	Device Name44	Meter Number 44	3/1/2023	23:00:00	260	Voltage	Volts		
923054	Device Name44	Meter Number 44	3/2/2023	0:00:00	259	Voltage	Volts		
923055	Device Name44	Meter Number 44	3/2/2023	1:00:00	260	Voltage	Volts		
923056	Device Name44	Meter Number 44	3/2/2023	2:00:00	259	Voltage	Volts		
923057	Device Name44	Meter Number 44	3/2/2023	3:00:00	260	Voltage	Volts		
923058	Device Name44	Meter Number 44	3/2/2023	4:00:00	259	Voltage	Volts		
923059	Device Name44	Meter Number 44	3/2/2023	5:00:00	259	Voltage	Volts		
923060	Device Name44	Meter Number 44	3/2/2023	6:00:00	258	Voltage	Volts		
923061	Device Name44	Meter Number 44	3/2/2023	7:00:00	259	Voltage	Volts		
923062	Device Name44	Meter Number 44	3/2/2023	8:00:00	259	Voltage	Volts		
923063	Device Name44	Meter Number 44	3/2/2023	9:00:00	260	Voltage	Volts		
923064	Device Name44	Meter Number 44	3/2/2023	10:00:00	258	Voltage	Volts		
923065	Device Name44	Meter Number 44	3/2/2023	11:00:00	258	Voltage	Volts		

Scheduling an Export

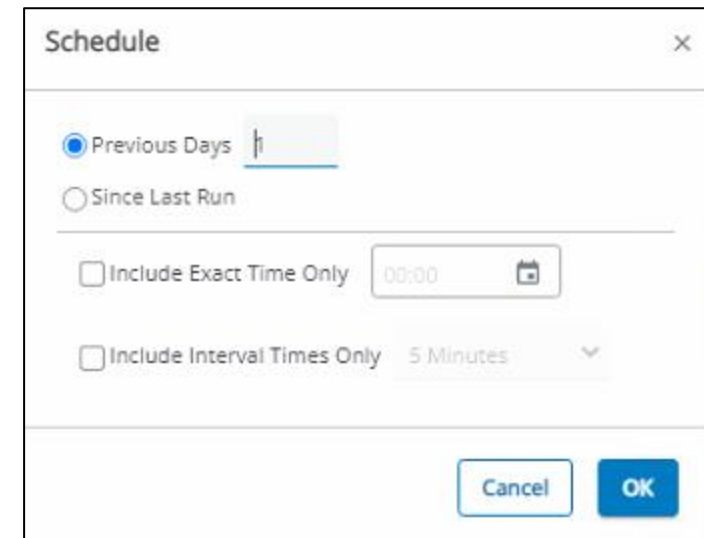
- Why use them?
 - Ongoing collection of curated results at fingertips
 - Saves time collecting frequented data
- Creating Scheduled Exports:

Scheduling Fixed Reports:



The screenshot shows a 'Schedule' dialog box with a close button (X) in the top right corner. It features a radio button labeled 'Days Offset' which is selected, followed by a text input field containing the number '0'. At the bottom of the dialog, there are two buttons: 'Cancel' and 'OK'.

Scheduling Dynamic Reports:





The screenshot shows a 'Schedule' dialog box with a close button (X) in the top right corner. It features two radio buttons: 'Previous Days' (selected) and 'Since Last Run'. Below these is a text input field containing '1'. Further down, there are two checkboxes: 'Include Exact Time Only' (unchecked) with a time input field set to '00:00' and a calendar icon, and 'Include Interval Times Only' (unchecked) with a dropdown menu set to '5 Minutes'. At the bottom, there are 'Cancel' and 'OK' buttons.

Creating a Scheduled Export - Blink Report

- Blink Report Purpose: Identify blinks within device group, across 24 hour periods
- Setup: Fixed data export, latest blink value in 24 hours





















Create Report Format

Attribute Setup ?

Attribute	Data Selection	Days Previous	
RFN Blink Count	Latest	1	 

[+ Add](#)

Field Setup


Field	Data Type	Data Selection	Days Previous	Missing Value	Rounding	Pattern	Field Size	Padding	
Device Name				Leave Blank			No Max	None	   
Meter Number				Leave Blank			No Max	None	   
RFN Blink Count	Timestamp	Latest	1	Leave Blank		MM/dd/yyyy	No Max	None	   
RFN Blink Count	Timestamp	Latest	1	Leave Blank		HH:mm:ss	No Max	None	   
RFN Blink Count	Value	Latest	1	Leave Blank	Half Even	#####	No Max	None	   

[+ Add](#)

Preview

10	20	30	40	50	60	70	80	90	100	110	120	130
.....												
Default Device,11111111,04/18/2023,10:29:16,1234546												

Export Schedule Settings

Devices: **Devices Selected:** 325 Device Group /System/Meters/All Meters/All RFN Meters/All RF Electric Meters 

Format Name: Blink Data

Format Type: Fixed Attribute

Data Range: 1 Days Offset

Schedule Parameters

Schedule Name: Blink Data - Last 24 Hrs

Same as Schedule Name

Export File Name:



Append Date to File Name


Override Default Filename Extension

Include Exported File Copy

Schedule:

Daily 

5 

: 00 

AM 

Every Day

Every Weekday

Status:

Scheduled

Submit

Cancel

Accessing Export History

Schedules				
Name	Schedule	Next Run	Status	
1-Day SETO (2)	Daily, at 02:45 PM	04/18/2023 14:45	Scheduled	
1-Day SETO_ERL	Daily, at 02:00 AM	04/19/2023 02:00	Scheduled	
1-Day SETO_ROCK	Daily, at 02:00 AM	04/19/2023 02:00	Scheduled	
Blink Data - Last 24 Hrs	Daily, at 05:00 AM	04/19/2023 05:00	Scheduled	⋮
Wadena Received kWh	Mondays, at 08:00 AM	04/24/2023 08:00	Scheduled	⋮

📄 View History
🚫 Disable

Output Example

	A	B	C	D	E
1	Device Name	Meter	Date	Time	Blink Count
2	Device Name1	Meter1	4/10/2023	19:08:57	4
3	Device Name2	Meter2	4/10/2023	19:08:55	22
4	Device Name3	Meter3			
5	Device Name4	Meter4			
6	Device Name5	Meter5			
7	Device Name6	Meter6	4/10/2023	19:08:55	512
8	Device Name7	Meter7	4/10/2023	14:08:55	2

Device Groups - Use Case

Device Groups – Use Case

- Create group(s) capturing meters for follow up
 - Identify subset of devices warranting review
 - Copy meter numbers into Notepad
 - Save file as a CSV
 - Import into Device Groups!
- Why use?
 - **Preserve** the subset of interesting devices for future review
 - **Group manipulation** on subset including map view, attribute reads, additional data exports

	A	B	C	D	E	F	G	H	I	J
1	Device Name	Meter Number	MinVolt Date	MinVolt Time	MinVolt Value	MaxVolt Date	MaxVolt Time	MaxVolt Value	Pk Dmd	
2	Device Name35	Meter Number35	3/26/2023	22:00:00	114	3/3/2023	15:00:00	122	3/14/2023	0.7
3	Device Name39	Meter Number39	3/21/2023	14:00:00	119	3/18/2023	23:00:00	123	3/2/2023	0.8
4	Device Name13	Meter Number13	3/28/2023	7:00:00	119	3/24/2023	15:00:00	122	3/26/2023	0.61
5	Device Name30	Meter Number30	3/25/2023	7:00:00	119	3/15/2023	15:00:00	122	3/18/2023	0.25
6	Device Name30	Meter Number30	3/16/2023	14:00:00	119	3/18/2023	11:00:00	122	3/1/2023	0.44
7	Device Name32	Meter Number32	3/28/2023	7:00:00	119	3/3/2023	23:00:00	122	2/26/2023	0.29
8	Device Name38	Meter Number38	2/26/2023	23:00:00	120	3/3/2023	15:00:00	122	3/22/2023	0.26
9	Device Name53	Meter Number53	3/3/2023	17:00:00	121	3/15/2023	17:00:00	244	3/4/2023	7.51
10	Device Name39	Meter Number39	3/6/2023	8:00:00	121	2/26/2023	11:00:00	126	2/26/2023	0.12
11	Device Name42	Meter Number42	3/6/2023	7:00:00	121	2/28/2023	1:00:00	124	2/27/2023	0
12	Device Name28	Meter Number28	3/7/2023	20:00:00	121	3/2/2023	15:00:00	123	3/20/2023	0.73
13	Device Name15	Meter Number15	3/27/2023	10:00:00	210	3/6/2023	3:00:00	215	2/27/2023	0.39
14	Device Name51	Meter Number51	3/17/2023	8:00:00	218	3/8/2023	14:00:00	243	3/20/2023	12.97
15	Device Name47	Meter Number47	3/27/2023	16:00:00	223	3/8/2023	14:00:00	241	3/27/2023	9.58

*Untitled - Notepad

File Edit Format View Help

Meter Number3593
Meter Number3927
Meter Number1369
Meter Number3033
Meter Number3053
Meter Number3280

AutoSave Off

File Home Insert Draw Page Layout

Get Data Refresh All

Queries & Connections Properties Edit Links

Get & Transform Data Queries & Connections

Save As

This PC > Downloads

Organize New folder

Desktop
Kreuz, Jimmy R
This PC
3D Objects
Desktop
Documents
Downloads

Name

Today (4)

- Blink_Data_202304181133.csv
- Blink_Data_202304181128.csv
- Blink_Data_202304181126.csv
- Blink_Data_-_Last_24_hrs.csv

File name: MeterNumbersForNewDeviceGroup.CSV

Save as type: All Files (*.*)

Encoding: UTF-8

Save Cancel

	B	C	
	Meter Number	MinVolt Date	Min
35	Meter Number35	3/26/2023	
39	Meter Number39	3/21/2023	
13	Meter Number13	3/28/2023	
30	Meter Number30	3/25/2023	
30	Meter Number30	3/16/2023	
32	Meter Number32	3/28/2023	
38	Meter Number38	2/26/2023	
53	Meter Number53	3/3/2023	
39	Meter Number39	3/6/2023	
42	Meter Number42	3/6/2023	
28	Meter Number28	3/7/2023	
15	Meter Number15	3/27/2023	
51	Meter Number51	3/17/2023	
47	Meter Number47	3/27/2023	
16	Meter Number16	3/21/2023	
69	Meter Number69	3/21/2023	
71	Meter Number71	3/21/2023	
Max_Voltage_Export_20230417			

★ Device Groups

EDITOR

UPLOAD

Groups



search



Groups

- Badger Water Events Test
- Edge Addressing
- Meters
- Monitors
- RF Test
- Service

Add Subgroup



Group Name:

Low Voltage Meters

Group Type:

Basic

Create

Groups



search

- Groups
 - Badger Water Events Test
 - Edge Addressing
 - Low Voltage Meters
- Meters
- Monitors
- RF Test
- Service
- System
- test

Operations: /Low Voltage Meters

Edit Group

Edit Group Name | Delete Group | Move Group

Modify Group

Add Subgroup | Add Devices | Copy Contents

Generate Reports

ADD BY: DEVICE GROUP ADDRESS **FILE** X

Type of data: **Meter Number** (one per line) ▼

Upload

Data file:
MeterNumbersForNewDeviceGroup.CSV

Cancel

OK

Groups

+ - search

- Groups
 - Badger Water Events Test
 - Edge Addressing
 - Low Voltage Meters
 - Meters
 - Monitors
 - RF Test
 - Service
 - System
 - test

Operations: /Low Voltage Meters

Edit Group

[Edit Group Name](#) | [Delete Group](#) | [Move Group](#)

Modify Group

[Add Subgroup](#) | [Add Devices](#) | [Copy Contents](#)

Generate Reports

[HTML](#) | [CSV](#) | [PDF](#)

Collection Actions

[Send Command](#) | [Mass Change](#) | [Other Actions...](#)

Members: /Low Voltage Meters

6 devices

Subgroups

▼ Select Action

Commands



Send Command

Issue a command to multiple devices.



Read Attribute

Read an attribute of multiple devices.



Locate Route

Find route that devices respond on.



Disconnect

Control disconnect of multiple devices.



Demand Reset

Send demand reset to multiple devices.

Config Actions



Device Configs

Change, Upload, Validate or Remove a config for a collection of devices.



C&I Meter Programming

Assign meter programming to a collection of devices.



Configure Data Streaming

Configure data streaming for a collection of devices.



Remove Data Streaming

Remove data streaming from a collection of devices.

Editing



Mass Change

Change same value on multiple devices (example: status or route).



Change Type

Change the device type of devices.



Mass Delete

Delete multiple devices.

Group Management



Add To Group

Add devices to a Device Group.



Remove From Group

Remove devices from a Device Group.

Points



Add Points

Add points to multiple devices.



Update Points

Update points on multiple devices.



Remove Points

Remove points from multiple devices.

Reporting



Device Report

View a report detailing devices.



Data Analysis

View a report detailing archived reads.



Data Export

Export archived point data.



Map Devices

View device locations on a map.

Other Yukon Reports - Dashboard

Bonus: Dashboard Tip - Adding Widgets

Home / EAS Conference

☆ Dashboard: EAS Conference

Data Collection - All RF Electric Meters

Device Group: /System/Meters/All Meters/All RFN Meters/All RF Electric Meters

78 Available: 24%
0 Expected: 0%
3 Outdated: <1%
244 Unreported: 75.1%

Include Disabled

04/27/2023 11:37:42 AM

Actions

- Aggregate Interval Data Report
- Archive Data Analysis
- Meter Events Report
- Phase Detect
- Usage Threshold Report
- Water Leak Report

Monitors

Device Data	Violations	Monitoring
RF Electric Meters Outage Status	101	325
Outage		
Maintenance Monitor	122	541
Test OD	84	541
Outage Notification		
Default All Meters		722
Porter Response		
Default All PLC Meters		0
Validation		
Default All Meters	400.0 kWh/day	575

+ Create

Home / Dashboard Edit

Edit Dashboard: EAS Conference

+ Add Widgets Edit Details

Data Collection

Device Group: /System/Meters/All Meters/All RFN Meters/All RF Electric Meters

Include Disabled

AMI Actions

Save Cancel

Home / Dashboard Edit

Edit Dashboard: EAS Conference

Add Widgets

search

Widget Category

- All 16
- AMI 8
- Demand Response 2
- Other 6

Monitor Subscriptions

Displays the Monitors you have subscribed to and the # of Violations, Monitoring.

+ Add Widget

Notes Search

Displays all Notes matching the filter values selected.

+ Add Widget

Inter-Service Messaging Statistics

Displays messaging statistics between services running on your system.

+ Add Widget

OK

Notes Search Report

Dashboard Reports – Note Search Widget

- Use Case: Easily search for notes for devices
- Setup: Meter Page
- Shows User & Date

The screenshot displays a dashboard interface with several widgets. The 'Meter Readings' widget shows usage data for 05/09/2023 20:00:00, including a usage reading of 18,220.173 kWh, total consumption of 0.000, peak demand of 0.000 kW, demand of 0.000 kW, and voltage of 238.3 Volts. The 'Network Information' widget shows a 'Ready' communication status obtained at 05/10/2023 00:19, with groups including 915rollback-gw211. The 'Notes' widget is the central focus, featuring a text input field for 'Note Text (255 characters max)', a '+ Create' button, and a list of existing notes. The notes list includes 'Feeder 10' and 'Dog on Premise', both attributed to 'yukon' on '04/27/2023' at '11:35:40' and '11:35:33' respectively. Each note entry has edit and delete icons. A sidebar on the right contains navigation links for 'Notes', 'Feeder', 'Dog on', and 'All Note'. At the bottom right, a status bar indicates 'Total Blinks and Outages: 52 Counts 03/04/2023 12:43:43?'.

Dashboard Reports – Note Search Widget

Home / Notes

★ Notes

Filter By: Dog Devices: All Group Selected ?

Create Date: to Created By: Any User

Filtered Results: 3 Note(s) :

Device Name	Type	Note Text	Created By	Create Date ↓	Edited by	Edit Date	:
069085119	RFN-420cD	Dog on Premise	yukon	04/27/2023 11:35:33			
07543790	RFN-430A3R	Dog on Premise	yukon	04/27/2023 11:33:12			
07543786	RFN-430A3R	Dog on Premise	yukon	04/27/2023 11:33:08			

Rows per page: 25 1 - 3 of 3 < >

Dashboard Reports – Note Search Widget

Home / Notes

★ Notes

Filter By: Dog Devices: All Group Selected

Create Date: [] to [] Created By: Any User Filter

Filtered Results: 3 Note(s)


Dev	Note Text	Created By	Create Date ↓	Edited by	Edit Date	
069	Dog on Premise	yukon	04/27/2023 11:35:33			
07543786	Dog on Premise	yukon	04/27/2023 11:33:12			
07543786	RFN-430A3R Dog on Premise	yukon	04/27/2023 11:33:08			

Rows per page: 25 1 - 3 of 3

Collection Actions
Download
Map Devices
Read Attribute
Send Command

Actions Widget Reports

Actions Widget

Actions 

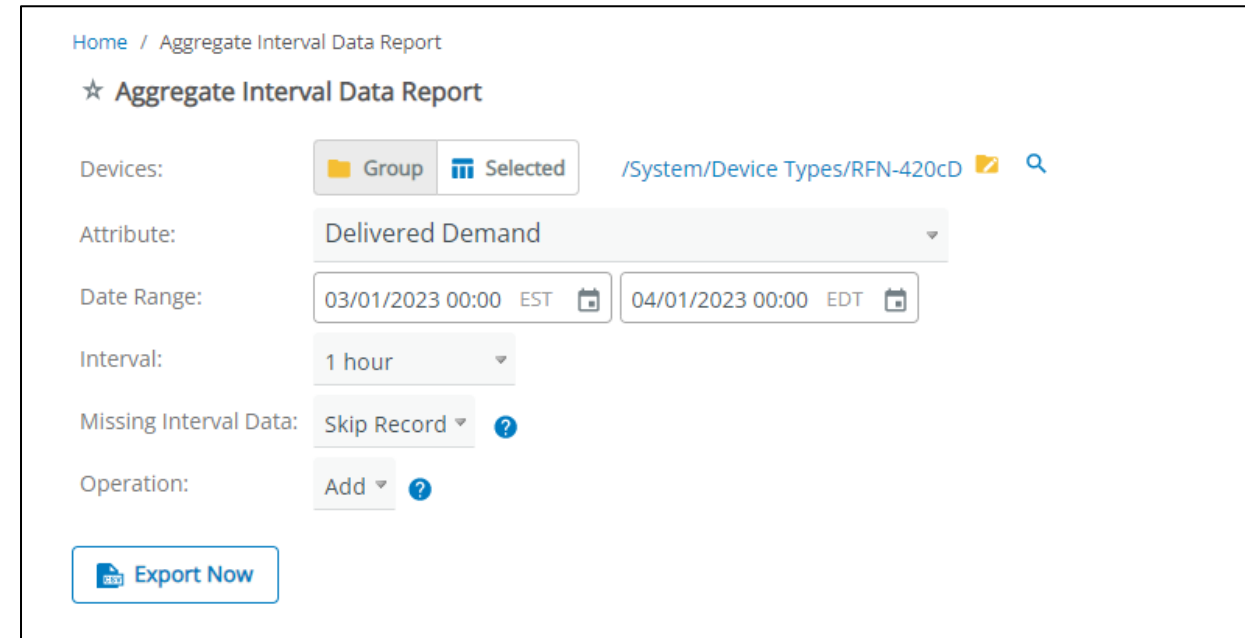
- Aggregate Interval Data Report
- Archive Data Analysis
- Meter Events Report
- Phase Detect
- Usage Threshold Report
- Water Leak Report

**Phase Detect is a legacy PLC report*

Aggregate Interval Data Report

Actions Widget – Aggregate Interval Data Report

- Report of a calculated, aggregate point of a Device Group or individual device
 - *Can be used in place of Virtual Device*
- Use Cases:
 - Total Solar Generation
 - Load Shed Comparisons
 - Monitoring Disconnect Meters for usage



The screenshot displays the 'Aggregate Interval Data Report' interface. At the top, there is a breadcrumb trail: 'Home / Aggregate Interval Data Report'. Below this is a star icon followed by the title 'Aggregate Interval Data Report'. The interface includes several configuration fields: 'Devices:' with buttons for 'Group' and 'Selected', and a path '/System/Device Types/RFN-420cD' with a search icon; 'Attribute:' with a dropdown menu set to 'Delivered Demand'; 'Date Range:' with two date pickers showing '03/01/2023 00:00 EST' and '04/01/2023 00:00 EDT'; 'Interval:' with a dropdown menu set to '1 hour'; 'Missing Interval Data:' with a dropdown menu set to 'Skip Record' and a help icon; and 'Operation:' with a dropdown menu set to 'Add' and a help icon. At the bottom left, there is a blue button labeled 'Export Now' with a download icon.

Archive Data Analysis

Actions Widget – Archive Data Analysis

- Report of any archived data for individual or group of devices
- Use Cases:
 - Providing usage reports to residential consumers

★ Collection Actions Recent Results

> Device Selection: 69 temporary collection 🔍

▼ Select Action

Commands	Config Actions	Editing
Send Command Issue a command to multiple devices.	Device Configs Change, Upload, Validate or Remove a config for a collection of devices.	Mass Change Change same value on multiple devices (example: status or route).
Read Attribute Read an attribute of multiple devices.	C&I Meter Programming Assign meter programming to a collection of devices.	Change Type Change the device type of devices.
Locate Route Find route that devices respond on.	Configure Data Streaming Configure data streaming for a collection of devices.	Mass Delete Delete multiple devices.
Disconnect Control disconnect of multiple devices.	Remove Data Streaming Remove data streaming from a collection of devices.	
Demand Reset Send demand reset to multiple devices.		
Group Management	Points	Reporting
Add To Group Add devices to a Device Group.	Add Points Add points to multiple devices.	Device Report View a report detailing devices.
Remove From Group Remove devices from a Device Group.	Update Points Update points on multiple devices.	Data Analysis View a report detailing archived reads.
	Remove Points Remove points from multiple devices.	View a report detailing archived reads. Export archived point data.

Actions Widget – Archive Data Analysis

[Home](#) / [Collection Actions](#) / [Archive Data Analysis](#)

☆ **Archive Data Analysis**

Analysis

Devices Selected: **69** temporary collection 🔍

Note: Some attributes may not be supported by all selected devices.

Start Date: (Exclusive)

Stop Date: (Inclusive)

Interval:

Attribute:

Include Only Normal Qualities

Analyze



Actions Widget – Archive Data Analysis

Home / Collection Actions / Archive Data Analysis / Results





☆ Archive Data Analysis Results

Devices Selected: 69 Archive Data Analysis

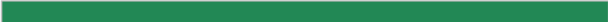






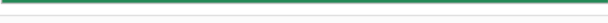


Analysis Parameters

Attribute: Delivered kWh
Date Range: 05/08/2023 00:00 to 05/09/2023 00:00
Interval: 1 hour
Point Quality: Include All Qualities

Actions

-  [Export CSV](#)
 -  [View Timeline Results](#)
 -  [Re-run Analysis](#)
 -  [Collection Actions](#)
- Generate a comma-separated values file of this data.

Analysis Results

Device Name ↑	Device Type	Meter Number	Intervals Missing	Timeline (24 intervals)
069085119	RFN-420cD	069085119	0	
07543786	RFN-430A3R	07543786	0	
07543790	RFN-430A3R	07543790	0	
08486808	RFN-430A3R	08486808	0	
088635987	RFN-420cD	088635987	0	
103399147	RFN-520fAX	103399147	0	
103399195	RFN-410fX	103399195	0	
104262806	RFN-420fD	104262806	0	
104262807	RFN-410fD	104262807	0	
109129078	RFN-420fL	109129078	0	

Rows per page: 10 ▾ 1 - 10 of 69 < >

Actions Widget – Archive Data Analysis

	A	B	C	D	E	F	G	H	I	J	K	L	M	
1	Device Name	5/8/2023 1:00	5/8/2023 2:00	5/8/2023 3:00	5/8/2023 4:00	5/8/2023 5:00	5/8/2023 6:00	5/8/2023 7:00	5/8/2023 8:00	5/8/2023 9:00	5/8/2023 10:00	5/8/2023 11:00	5/8/2023 12:00	5/8/
2	109129087	730.225	730.225	730.225	730.225	730.225	730.225	730.225	730.225	730.225	730.225	730.225	730.225	
3	74276605	4.466	4.466	4.466	4.466	4.466	4.466	4.466	4.466	4.466	4.466	4.466	4.466	
4	79440981	426.75	426.75	426.75	426.75	426.75	426.75	426.75	426.75	426.75	426.75	426.75	426.75	
5	C2SX_01	203.382	203.382	203.382	203.382	203.382	203.382	203.382	203.382	203.382	203.382	203.382	203.382	
6	68498678	23.019	23.019	23.019	23.019	23.019	23.019	23.019	23.019	23.019	23.019	23.019	23.019	
7	98532056	26.231	26.231	26.231	26.231	26.231	26.231	26.231	26.231	26.231	26.231	26.231	26.231	
8	88638106	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	
9	104262807	36.634	36.634	36.634	36.634	36.634	36.634	36.634	36.634	36.634	36.634	36.634	36.634	
10	179274160	639.848	639.96	640.046	640.181	640.294	640.378	640.515		640.833	640.924	641.059		
11	103399195	0.525	0.525	0.525	0.525	0.525	0.525	0.525	0.525	0.525	0.525	0.525	0.525	
12	320958750	1730111.799	1730111.799	1730111.799	1730111.799	1730111.799	1730111.799	1730111.799	1730111.799	1730111.799	1730111.799	1730111.799	1730111.799	1
13	13860334	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	0.069	
14	109129363	322.185	322.185	322.185	322.185	322.185	322.185	322.185	322.185	322.185	322.185	322.185	322.185	
15	109129361	111.048	111.048	111.048	111.048	111.048	111.048	111.048	111.048	111.048	111.048	111.048	111.048	
16	330950123	0.067	0.067	0.067	0.067	0.067	0.067	0.067	0.067	0.067	0.067	0.067	0.067	
17	133374544	3.001	3.001	3.001	3.001	3.001	3.001	3.001	3.001	3.001	3.001	3.001	3.001	
18	98462274	7.659	7.659	7.659	7.659	7.66	7.66	7.66	7.66	7.66	7.66	7.66	7.66	
19	69085119	18220.173	18220.173	18220.173	18220.173	18220.173	18220.173	18220.173	18220.173	18220.173	18220.173	18220.173	18220.173	

Usage Threshold Report

Actions Widget – Usage Threshold Report

- Generating a report of devices that exceed or are below a usage threshold
- Use Cases:
 - Identifying devices with no usage
 - Water meters with reverse flow


The screenshot shows a web interface for configuring a Usage Threshold Report. The breadcrumb path is 'Home / AMI / Usage Threshold Report'. The page title is '★ Usage Threshold Report'. Under the 'Criteria' section, the following settings are visible:






- Devices:** A dropdown menu is set to 'Group', with a 'Selected' button and a search path '/System/Device Types/RFW-201'.
- Attribute:** A dropdown menu is set to 'Usage Reading'.
- Date Range:** Two date pickers are both set to '04/26/2023'.
- Threshold (initial):** A dropdown menu is set to '<= ' and a text input field contains '0.0'.

A blue 'Run' button is located at the bottom left of the configuration area.

Actions Widget – Usage Threshold Report

Usage Threshold Results

Devices: RFW-201 (184 Devices)
 Attribute: Usage Reading
 Start Date: 04/26/2023
 End Date: 04/26/2023
 Report Run at: 04/27/2023 04:40 PM 

	0039084938	0039084938	RFW-201	GW221	-50500 Gallons	64,835,705.000 Gallons 04/26/2023 00:00:00	64,785,205.000 Gallons 04/27/2023 00:00:00
	0054758028	0054758028	RFW-201	GW219		No reading found	No reading found
	00761089	00761089	RFW-201	GW219	0 Gallons	58,960.000 Gallons 04/26/2023 20:00:00	58,960.000 Gallons 04/26/2023 20:00:00
	044861957	044861957	RFW-201	Unknown		No reading found	No reading found
	047663721	047663721	RFW-201	GW219	0 Gallons	17,811.000 Gallons 04/26/2023 20:00:00	17,811.000 Gallons 04/26/2023 20:00:00

Meter Events Report

Actions Widget - Meter Events Report

The screenshot displays the Eaton Deployment Manager interface. At the top, there is a search bar and a user profile dropdown for 'Utility Operator'. Below this is a navigation menu with the Eaton logo and the tagline 'Powering Business Worldwide', followed by menu items: AMI, Demand Response, Volt/Var, Assets, Tools, and Admin. The main content area shows a breadcrumb trail 'Home / Deployment Manager' and a 'Dashboard: Deployment Manager' header with an 'Actions' dropdown button. The dashboard contains several widgets: 'Data Collection - Composed - Active Electric RFNs', 'Infrastructure Warnings', 'Actions' (expanded to show 'Aggregate Interval Data Report', 'Archive Data Analysis', 'Meter Events Report', 'Phase Detect', 'Usage Threshold Report', and 'Water Leak Report'), 'Notes Search', 'My Pages', 'Monitor Subscriptions', 'Meter Trend - *100093 RF Demo 2 Itron', and 'Gateway Streaming Capacity'. The 'Meter Events Report' option in the 'Actions' widget is circled in blue. At the bottom right, there are links for 'Network Manager', 'Site Map', and 'Support'.

Quickly examine status point histories

Meter Events

Device Name	Meter Number	Device Type	Date ↓	Event	Value
*100093 RF Demo 2 Itron	309494272	RFN-420cD	05/02/2023 07:58:39	Outage Status	Power On
*100093 RF Demo 2 Itron	309494272	RFN-420cD	05/02/2023 07:58:11	Outage Status	Power On
*100094 RF Demo 2 L+G	114120754	RFN-420fD	05/02/2023 07:57:57	Outage Status	Power On
*100094 RF Demo 2 L+G	114120754	RFN-420fD	05/02/2023 07:36:55	Outage Status	Power On
*100093 RF Demo 2 Itron	309494272	RFN-420cD	05/02/2023 07:25:51	Outage Status	Power On
*100093 RF Demo 2 Itron	309494272	RFN-420cD	05/02/2023 07:25:22	Outage Status	Power On
*100094 RF Demo 2 L+G	114120754	RFN-420fD	05/02/2023 07:25:10	Outage Status	Power Outage
*100093 RF Demo 2 Itron	309494272	RFN-420cD	05/02/2023 07:22:14	Outage Status	Power On
*100094 RF Demo 2 L+G	114120754	RFN-420fD	05/02/2023 07:22:03	Outage Status	Power On
*100094 RF Demo 2 L+G	114120754	RFN-420fD	05/02/2023 07:16:38	Outage Status	Power Outage
*100093 RF Demo 2 Itron	309494272	RFN-420cD	05/02/2023 07:16:32	Outage Status	Power Outage
*100094 RF Demo 2 L+G	114120754	RFN-420fD	05/02/2023 05:00:00	Tamper - No Usage over 24 hours	Active
*100094 RF Demo 2 L+G	114120754	RFN-420fD	05/02/2023 04:00:00	Tamper - No Usage over 24 hours	Cleared
*100094 RF Demo 2 L+G	114120754	RFN-420fD	04/30/2023 15:00:00	Tamper - No Usage over 24 hours	Active
*100094 RF Demo 2 L+G	114120754	RFN-420fD	04/29/2023 20:00:00	Tamper - No Usage over 24 hours	Cleared
*100094 RF Demo 2 L+G	114120754	RFN-420fD	04/29/2023 19:42:36	Outage Status	Power On

Rows per page: 25 1 - 16 of 16

★ Meter Events Report

Filter

Selected: Device Group - /Demonstration (View Group)

Include Disabled Devices

Count: 90

Date Range: 04/25/2023 05/02/2023

Only Latest Event ?

Only Abnormal Events ?

Event Types: 83 selected

Update

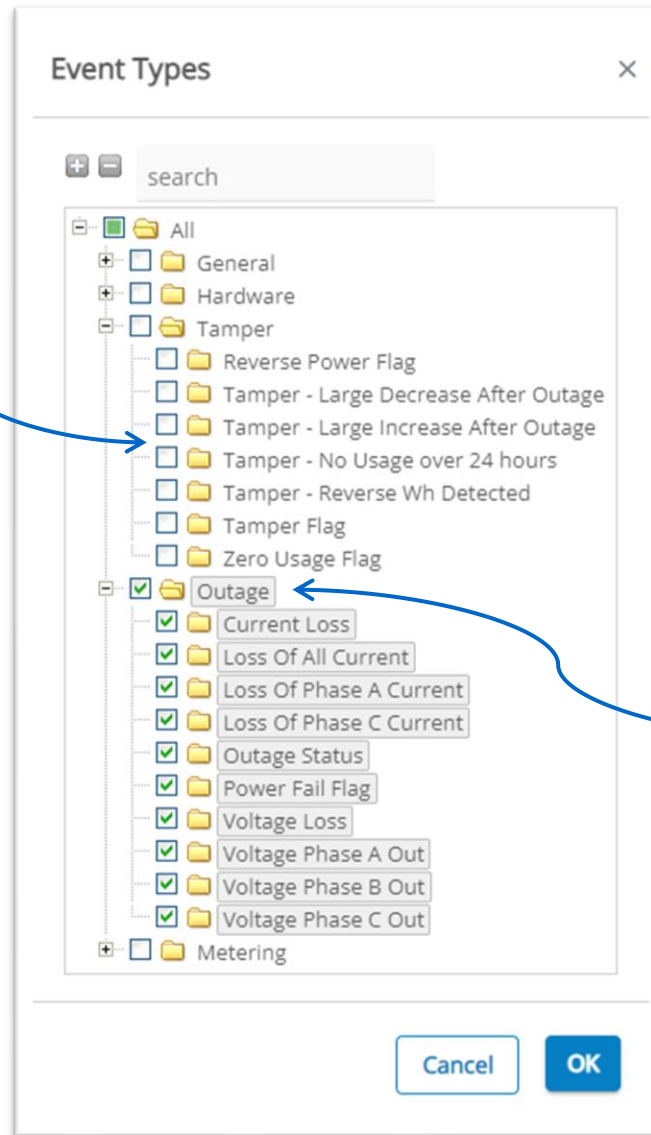
Schedule

Download

Three primary filters

83+ categorized event types to pick from

New Tamper Events Available




Pick Entire Outage Category

All outage event types over the date range

★ Meter Events Report

Filter


Selected: Device Group - /Demonstration  (View Group)

Include Disabled Devices

Count: 90

Date Range:  

Only Latest Event 

Only Abnormal Events 

Event Types:  [10 selected](#)


Update

 Schedule

 Download

Filtered to bad outage states

Meter Events

Device Name	Meter Number	Device Type	Date ↓	Event	Value	
*100093 RF Demo 2 Itron	309494272	 RFN-420cD	05/02/2023 07:58:11	Outage Status	 Power Outage	
*100094 RF Demo 2 L+G	114120754	 RFN-420fD	05/02/2023 07:57:57	Outage Status	 Power Outage	
*100093 RF Demo 2 Itron	309494272	 RFN-420cD	05/02/2023 07:25:22	Outage Status	 Power Outage	
*100094 RF Demo 2 L+G	114120754	 RFN-420fD	05/02/2023 07:25:10	Outage Status	 Power Outage	
*100094 RF Demo 2 L+G	114120754	 RFN-420fD	05/02/2023 07:16:38	Outage Status	 Power Outage	
*100093 RF Demo 2 Itron	309494272	 RFN-420cD	05/02/2023 07:16:32	Outage Status	 Power Outage	

Rows per page: 10  1 - 6 of 6  

Current outage statuses

☆ Meter Events Report

Filter

Selected: Device Group - /Demonstration 🔍 (View Group)

Include Disabled Devices

Count: 90

Date Range:

04/25/2023 📅

05/02/2023 📅

Only Latest Event ?

Only Abnormal Events ?

Event Types: 🗑️ 10 selected

Update

📅 Schedule

📄 Download

Meter Events

Device Name	Meter Number	Device Type	Date ↓	Event	Value	⋮
*100094 RF Demo 2 L+G	114120754	🔌 RFN-420fD	05/02/2023 07:57:57	Outage Status	🔴 Power Outage	

Filtered to bad outage states that are the most recent value received from a meter

Meter Events Report can email critical information regularly

Schedule Report ×

Days Previous:

Schedule Name:

Same as Schedule Name

Export File Name:
 Append Date to File Name
 Override Default Filename Extension
 Include Exported File Copy

Schedule: ▼

▼ : ▼ ▼

Every Day
 Every Weekday

Send Email:

Flexible Report Scheduler

Schedules

✔ Event report "Daily Outages" updated successfully. ✕

Name	Schedule	Next Run	Status	⋮
Daily Outages	Daily, at 06:00 AM	05/03/2023 06:00	Scheduled	
Monthly Misc Metering Events	Last day of month, at 11:55 PM	05/31/2023 23:55	Scheduled	
Weekly Tamper Events	Mondays, at 01:00 AM	05/08/2023 01:00	Scheduled	

Water Leak Detection

Actions Widget - Water Leak Report

The screenshot displays the Eaton Deployment Manager web interface. At the top, there is a search bar and a user profile dropdown for 'Utility Operator'. Below this is a navigation menu with the Eaton logo and the tagline 'Powering Business Worldwide', followed by menu items: AMI, Demand Response, Volt/Var, Assets, Tools, and Admin. The breadcrumb trail shows 'Home / Deployment Manager'. The main content area is titled 'Dashboard: Deployment Manager' and includes an 'Actions' dropdown button. The 'Actions' dropdown menu is open, listing several options: 'Aggregate Interval Data Report', 'Archive Data Analysis', 'Meter Events Report', 'Phase Detect', 'Usage Threshold Report', and 'Water Leak Report'. The 'Water Leak Report' option is circled in blue. Other dashboard widgets include 'Data Collection - Composed - Active Electric RFNs', 'Infrastructure Warnings', 'My Pages', 'Monitor Subscriptions', 'Meter Trend - *100093 RF Demo 2 Itron', and 'Gateway Streaming Capacity'. A 'Notes Search' widget is also present. At the bottom right, there are links for 'Network Manager', 'Site Map', and 'Support'.

Leak Detection Report – Filter options

☆ Water Leak Report

Filter


Devices:

/System/Meters/All Meters/All RFN Meters/All RFW Meters  

Include Disabled Devices


Date Range:

04/03/2023 13:00 CDT 

04/04/2023 13:00 CDT 

Threshold (gal):

0.0 

Threshold (gal) 

If all readings during the filter period are above this value, the device is considered leaking.

Water Leaks

[Algorithm Details](#)

<input type="checkbox"/>	Device Name	Meter Number	Device Type	Leak Rate ↓	Customer Info	⋮
<input type="checkbox"/>	*100099 RF Water Commercial	100099	 RFW-Meter	3.000 gal/hr	View Details	
<input type="checkbox"/>	*100104 RF Water	100104	 RFW-Meter	1.000 gal/hr	View Details	

Rows per page: 10  1 - 2 of 2  

Find leaks, save homeowners \$\$ and headaches

☆ Water Leak Report

Filter

Devices: Group Selected /System/Meters/All Meters/All RFN Meters/All RFW Meters 🔍

Include Disabled Devices

Date Range:

Threshold (gal): ?

[Search](#) [Schedule](#) [Download](#)

Water Leaks Algorithm Details

<input type="checkbox"/>	Device Name	Meter Number	Device Type	Leak Rate ↓	Customer Info	⋮
<input type="checkbox"/>	*100099 RF Water Commercial	100099	RFW-Meter	3.000 gal/hr	View Details	
<input type="checkbox"/>	*100104 RF Water	100104	RFW-Meter	1.000 gal/hr	View Details	

Rows per page: 10 1 - 2 of 2

Flexible monitor rules allow excluding high usage 24/7 type accounts or separating customer types

Links to Water Meter Detail Pages

View customer data in leak detection report

☆ Water Leak Report

Filter

Devices: Group Selected /System/Meters/All Meters/All RFN Meters/All RFW Meters

Include Disabled Devices

Date Range: 04/03/2023 13:00

Threshold (gal): 0.0

[Search](#) [Schedule](#) [Download](#)

Water Leaks

<input type="checkbox"/>	Device Name	Leak Rate ↓	Customer Info	
<input type="checkbox"/>	*100099 RF Water Commercial	3.000 gal/hr	View Details	
<input type="checkbox"/>	*100104 RF Water	1.000 gal/hr	View Details	

Rows per page: 10 1 - 2 of 2

Water Leak Report - Account Info

Customer Information:

Name:

Address:

Service Location

Address:


MultiSpeak connection to a CIS allows viewing customer info right from the report

1 gallon is the lowest interval usage



Home / AMI / Water Leak Report / Interval Data

★ Interval Data

Devices Selected: 1 devices from Water Leak Report - Interval Data

 Indicates a Leak

[Download](#) [Collection Action](#)

Device Name	Meter Number	Device Type	Usage	Date ↓	
*100104 RF Water	100104	RFW-Meter	11.000	04/04/2023 13:00:00	
*100104 RF Water	100104	RFW-Meter	11.000	04/04/2023 12:00:00	
*100104 RF Water	100104	RFW-Meter	18.000	04/04/2023 11:00:00	
*100104 RF Water	100104	RFW-Meter	17.000	04/04/2023 10:00:00	
*100104 RF Water	100104	RFW-Meter	6.000	04/04/2023 09:00:00	
*100104 RF Water	100104	RFW-Meter	17.000	04/04/2023 08:00:00	
*100104 RF Water	100104	RFW-Meter	10.000	04/04/2023 07:00:00	
*100104 RF Water	100104	RFW-Meter	5.000	04/04/2023 06:00:00	
 *100104 RF Water	100104	RFW-Meter	1.000	04/04/2023 05:00:00	
*100104 RF Water	100104	RFW-Meter	4.000	04/04/2023 04:00:00	
 *100104 RF Water	100104	RFW-Meter	1.000	04/04/2023 03:00:00	
*100104 RF Water	100104	RFW-Meter	3.000	04/04/2023 02:00:00	
*100104 RF Water	100104	RFW-Meter	8.000	04/04/2023 01:00:00	

Setup your leak reports to run automatically

☆ Water Leak Report

Filter

Devices: Group Selected /System/Meters/All Meters/All RFN Meters/All RFW Meters 🔍

Include Disabled Devices

Date Range: 04/03/2023 13:00 CDT 04/04/2023 13:00 CDT

Threshold (gal): 0.0

Water Leaks Algorithm Details

<input type="checkbox"/>	Device Name	Meter Number	Device Type	Leak Rate ↓	Customer Info	⋮
<input type="checkbox"/>	*100099 RF Water Commercial	100099	RFW-Meter	3.000 gal/hr	View Details	
<input type="checkbox"/>	*100104 RF Water	100104	RFW-Meter	1.000 gal/hr	View Details	

Rows per page: 10 1 - 2 of 2

Once you like your report settings, schedule it to run automatically!

Email the results

Schedule Report ✕

Devices: Group Selected

[/System/Meters/All Meters/All RFN Meters/All RFW Meters](#) 📄 🔍

Include Disabled Devices

Days Offset:

Hours Previous:

Threshold (gal):

Schedule Name:

Same as Schedule Name

Export File Name:

Append Date to File Name

Override Default Filename Extension

Include Exported File Copy

Schedule:

:

Every Day

Every Weekday

Send Email: No Yes

Cancel OK

Device Data Monitor

Device Data Monitor

- Device Data Monitors allow you to set threshold and state rules to evaluate incoming data for possible field issues
- Common status monitors are evaluating outage and disconnect status
- Common value monitors are evaluating minimum or maximum voltage for high and low values

The screenshot displays the 'Dashboard: AMI Dashboard' interface. It features a 'Monitors' table with columns for 'Device Data', 'Violations', and 'Monitoring'. A red circle highlights the 'Approaching Max Voltage' row. To the right is a 'Meter Search' panel with input fields for 'Quick Search', 'Meter Number', 'Device Name', 'Device Type', 'Address/Serial', and 'Route', along with a 'Search' button. Below the search panel is an 'Actions' section with a list of report types. At the bottom, there is a 'Review Flagged Points' indicator with a red '14' and a '+ Create' button.

Device Data	Violations	Monitoring
All Current Outages	37	260
Approaching Max Voltage	0	3
Disconnected Meters	0	12
High Temperature Alarms	0	2
Low Battery Warning	0	15
Min Voltage Monitor	1	5
Possible Tampering	0	3
Renewable Generation Sites	0	7
Voltage High (HV)	0	38
Voltage Low (LV)	0	47

Outage	Violations	Monitoring
Frequent Blinks	3	252
Outage tamper	0	52
Seasonal Residence	0	6
Underground Fault Starting	0	90

Status Point	Monitoring
Device Status	585
Faulted Circuit Indicators	3
Last Gasp and Restoration for OMS	585

Validation	Threshold	Monitoring
15S Meter Validation	1,500.0 kWh/day	8
2S Meter Validation	600.0 kWh/day	211
3S Meter Validation	75.0 kWh/day	131
4S Meter Validation	75.0 kWh/day	5
9S Meter Validation	125.0 kWh/day	277
Soft Disconnect	2.0 kWh/day	3

Device Data Monitor

Evaluating the Maximum Voltage Daily attribute

- Select the meters to evaluate, the attribute and the warning threshold
- In this case, Yukon will evaluate Maximum Voltage Daily from this set of meters each time data is reported
- The meter will be added and removed from the violations group based on whether the attribute value is greater than 246 volts

Home / AMI / Device Data Monitor / Approaching Max Voltage

★ Approaching Max Voltage

Settings ?

Name: Approaching Max Voltage
Violations: 0
Monitoring: 3

Supported Count: 1 missing attribute: Maximum Voltage Daily ?

Device Group: [/Demonstration/Bellwether Voltage Meters](#) :

Violations Group: [/Monitors/DeviceData/Approaching Max Voltage](#) :

Status: Enabled
Notify On Alarms Only: Disabled

Status Processors ?

No processors

Value Processors ?

Attribute	Rule
Maximum Voltage Daily	Greater than 246.0

Device Data Monitor

Another example, let's look at the monitor for "All Current Outages"

- There are 37 devices in the outage state currently based on the summary data in the widget
- From the kebab menu (three dots), the user may go directly to a mapped visualization of the outage
- From the menu, the user can download another data set
- Note: From the page, the user can make other actions

	A	B	C	D	E	F
	NAME	METER_NUMBER	LATITUDE	LONGITUDE	LAST_CHANGED_DATE	LAST_CHANGED_TIME
1	10001001	10600075	44.97209	-93.38322		
2	10001003	10600225	44.98737	-93.39281		
3	10001004	10600300	45.011626	-93.385363	2/8/2017	11:03:51
4	10001005	10600375	44.97087	-93.36836	2/8/2017	11:03:52
5	10001006	10600450	44.95241	-93.3972	2/8/2017	11:03:52
6	10001007	10600525	45.01625	-93.37708	2/8/2017	11:03:53
7	10001008	10600600	44.98472	-93.37121	2/8/2017	11:03:53
8	10001009	10600675	44.96005	-93.44423	2/8/2017	11:03:54
9	10001010	10600750	45.0059	-93.36099		
10	10001011	10600825	44.98434	-93.35994	2/8/2017	11:03:55

Device Details Pages

Device Details Pages

Many individual device types have “details” pages that allow the user to review more information about the individual device.

These pages are useful when investigating specific issues related to the device itself

The screenshot displays the Eaton device details page for a specific LCR-6200 (RFN) 1 device. The page is divided into several sections:

- Meter Information:** Device Name: *100093 RF Demo 2 Itron, Meter Number: 309484272, Type: RFN-420d, Serial Number: 309484272, Manufacturer: ITRN, Model: C25X-6D, Status: Enabled. Notes: Load is not in service. D... (View All)
- Meter Readings:** Usage Reading: 373.311 KWH 10/20/2018 16:20:00, Previous Usage Reading: 373.307 KWH 10/20/2018 16:00:00, Total Consumption: 0.004, Peak Demand: 0.012 kW 10/20/2018 16:20:00, Demand: 0.012 kW 10/20/2018 16:20:00, Voltage: 122.1 Volts 10/20/2018 16:20:00.
- Trend:** A line graph showing usage over time for the meter *100093 RF Demo 2 Itron.
- Device Info:** Switch Type: LCR-6200 (RFN), Serial Number: 1, Device Name: 1, Label: LCR-6200 (RFN), All Tracking Number: 120/120, Voltage: 120/120, Field Install Date: 02/02/2015, Field Receive Date: 02/02/2015, Field Remove Date: 10/20/2018 09:00:00, Notes: Available, Status: Available, Asset Availability: Active.
- Service And Storage:** Service Company: Acme Installations, Warehouse: (none), Install Notes: (none).
- Network Information:** Comm Status: Ready, Comm Status Obtained At: 10/20/2018 16:30, Groups: Demonstration, Neighbor Count: 3, Node Serial Number: 3380000053, Primary Gateway: AMI Demo 2 (166.130.52.78), Primary Gateway Hop Count: 1.
- Gateway Information:** Name: Gateway (7500000015), Serial No: 7800000127, Hardware Version: GW2.0, Software Version: R_8_2_0, Upper Stack Version: R_8_2_0_0_1, Radio Version: R4.2.2q, Release Version: 8.2.0, Version Conflicts: None, Application Mode: Normal, Streaming Capacity: 60%.
- Location:** Latitude: 44.995033, Longitude: -93.390244. A map shows the location near Golden Valley, MN.
- Infrastructure Warnings:** Gateway communications interrupted since 10/13/2018 14:40:07.
- Gateway Metrics:** Ready Nodes: 1 Counts 10/20/2018 16:50:28, Streaming Capable Device Count: 0 Counts 10/20/2018 16:04:10, Streaming Active Device Count: 0 Counts 10/20/2018 16:04:10.
- Gateway Node Information:** Ready Nodes: 33.33%, Nodes with Info: 33.33%, Nodes with Serial Numbers: 33%.

Meter Details

The Meter Details page allows you to review data from an individual meter.

There are a number of different options to navigate to the details page including searching by meter number, device name or some other criteria

The screenshot shows the Eaton Meter Details page for meter *100093 RF Demo 2 Itron. The page is divided into several sections:

- Meter Information:** Device Name: *100093 RF Demo 2 Itron, Meter Number: 309494272, Type: RFN-420cD, Serial Number: 309494272, Manufacturer: ITRN, Model: C2SX-SD, Status: Enabled, Notes: Customer complained high ... (View All). An Edit button is present.
- Meter Readings:** Usage Reading: 684.278 kWh 04/18/2023 20:25:00, Previous Usage Reading: 684.278 kWh 04/18/2023 20:25:00, Total Consumption: 0.000, Peak Demand: 0.012 kW 04/18/2023 20:25:00, Demand: 0.012 kW 04/18/2023 20:25:00, Voltage: 121.2 Volts 04/18/2023 20:25:00. View All and Quick View buttons are present.
- Network Information:** Comm Status: Ready, Comm Status Obtained At: 04/18/2023 09:55, Groups: Demonstration, Hop Count: 1, Neighbor Count: 3, Node Serial Number: 3360000053, Primary Forward: AMI Demo 2, Reverse Lookup: AMI Demo 2. A Refresh button is present.
- CIS Information:** (Section header visible).
- Meter Trend:** A line graph showing kWh/day and Temperature from May '22 to Jan '23. The graph includes a legend for Voltage Profile, Daily Usage, Demand, Sum kWh per Interval, and Delivered kWh per Interval. Graph Type: Voltage Profile | Daily Usage | Demand | Sum kWh per Interval | Delivered kWh per Interval. Time Period: 1D | 1W | 1M | 3M | 1Y | Custom. Temperature: . Chart Style: Line | Bar. Archived Usage Data: HTML | CSV | PDF. Daily Usage Data: HTML | CSV | PDF.
- Disconnect:** Disconnect Status: Connected 12/08/2022 14:05:19. Buttons: Disconnect, Connect, Query.
- Meter Events:** A table listing events with columns for Timestamp, Event, and State.

Timestamp	Event	State
12/12/2022 13:07:49	Outage Status	Power On
12/12/2022 13:07:24	Outage Status	Power Outage
12/08/2022 14:00:42	Outage Status	Power On
12/08/2022 13:56:58	Outage Status	Power Outage
10/26/2022 18:56:43	Outage Status	Power On
10/26/2022 18:55:12	Outage Status	Power Outage

Meter Details

The widgets included on this page reflect the data most often needed for investigating billing issues, outages and other service related questions or actions.

The screenshot displays a dashboard for a specific meter, identified as *100093 RF Demo 2 Itron. The dashboard is composed of several overlapping widgets:

- Meter Information:** A sidebar menu with options like Device, Meter, Type, Serial, Manuf, Model, Status, and Notes.
- Meter Readings:** A panel showing usage metrics: Usage Reading, Previous Usage Reading, Total Consumption, Peak Demand, Demand, and Voltage. It includes 'View All' and 'Quick View' links.
- Meter Trend:** A line chart titled 'Meter Trend' showing 'kWH / day' for 'May '22'. It compares 'Previous Year's' usage (green area) with current usage (blue line). The y-axis ranges from 0 to 0.25. Below the chart are settings for Graph Type, Time Period (1D), Temperature (checked), Chart Style (Line), and data export options (HTML, CSV, PDF).
- Outages:** A panel displaying summary statistics: Outage Count, Total Blinks and Outages, Blink Restore Count, and Blink Count. It features an 'RFN Outages Log' table with columns for Start and End times.
- Meter Events:** A table listing events with columns for Timestamp, Event, and State. The table shows a sequence of 'Power On' and 'Power Outage' events. A 'Show All' link and a 'Refresh' button are located at the bottom.

Meter Details

Archived data for an attribute is just a click away

Recent Archived Usage Reading Readings

Only showing first 1,536 results

1 Month

Timestamp ↑ Value

Timestamp	Value
04/18/2023 20:40:00	684.280 kWh
04/18/2023 20:35:00	684.279 kWh
04/18/2023 20:30:00	684.278 kWh
04/18/2023 20:25:00	684.278 kWh
04/18/2023 20:20:00	684.277 kWh
04/18/2023 20:15:00	684.276 kWh
04/18/2023 20:10:00	684.276 kWh
04/18/2023 20:05:00	684.275 kWh
04/18/2023 20:00:00	684.274 kWh
04/18/2023 19:55:00	684.274 kWh

0 kWh 04/18/2023 20:40:00

78 kWh 04/18/2023 20:25:00

W 04/18/2023 20:40:00

W 04/18/2023 20:40:00

Volts 04/18/2023 20:40:00

Download the data to a CSV or view it on a trend from here.

	A	B	C	D	E	F
1	Device Name	Point Name	Timestamp	Value	Units	Quality
2	*100093 RF Demo 2 Itron	Delivered kWh	4/18/2023 20:50	684.281	kWh	Normal
3	*100093 RF Demo 2 Itron	Delivered kWh	4/18/2023 20:45	684.28	kWh	Normal
4	*100093 RF Demo 2 Itron	Delivered kWh	4/18/2023 20:40	684.28	kWh	Normal
5	*100093 RF Demo 2 Itron	Delivered kWh	4/18/2023 20:35	684.279	kWh	Normal
6	*100093 RF Demo 2 Itron	Delivered kWh	4/18/2023 20:30	684.278	kWh	Normal
7	*100093 RF Demo 2 Itron	Delivered kWh	4/18/2023 20:25	684.278	kWh	Normal
8	*100093 RF Demo 2 Itron	Delivered kWh	4/18/2023 20:20	684.277	kWh	Normal

Meter Details

How might I use this feature?

- Investigation of frequent
b
R
d
F
 - Outage Count
 - Outage Restore Count
 - Outage Status
 - Outages
 - Over Voltage
- Widget, click view All
- Click on the Outages attribute
 - View on a trend or download the durations

The screenshot displays a web interface with several components:

- Outages** header with a help icon and an expand/collapse arrow.
- Total Blinks and Outages:** A summary section with a 'Meter Readings' link.
- Recent Archived Outage Log Readings** modal window:
 - Time range: 1 Year
 - Download icon (CSV)
 - Refresh icon
 - Line graph showing 'Seconds' over time (May '22 to Sep '22).
 - Table with columns: Device Name, Point Name, Timestamp, Value, Units, Quality.
 - Summary: 48.000 Seconds
 - Timestamp: 02/17/2023 12:53:09.000 PM
 - 'Read' button

	A	B	C	D	E	F
1	Device Name	Point Name	Timestamp	Value	Units	Quality
2	68498683	Outages	2/17/2023 12:53	48	Seconds	Normal
3	68498683	Outages	1/12/2023 14:29	30	Seconds	Normal
4	68498683	Outages	1/12/2023 11:14	1	Seconds	Normal
5	68498683	Outages	1/12/2023 11:13	49	Seconds	Normal
6	68498683	Outages	1/11/2023 14:23	3	Seconds	Normal
7	68498683	Outages	1/11/2023 14:22	40	Seconds	Normal
8	68498683	Outages	1/11/2023 9:37	0	Seconds	Normal
9	68498683	Outages	1/11/2023 9:36	46	Seconds	Normal

Meter Details

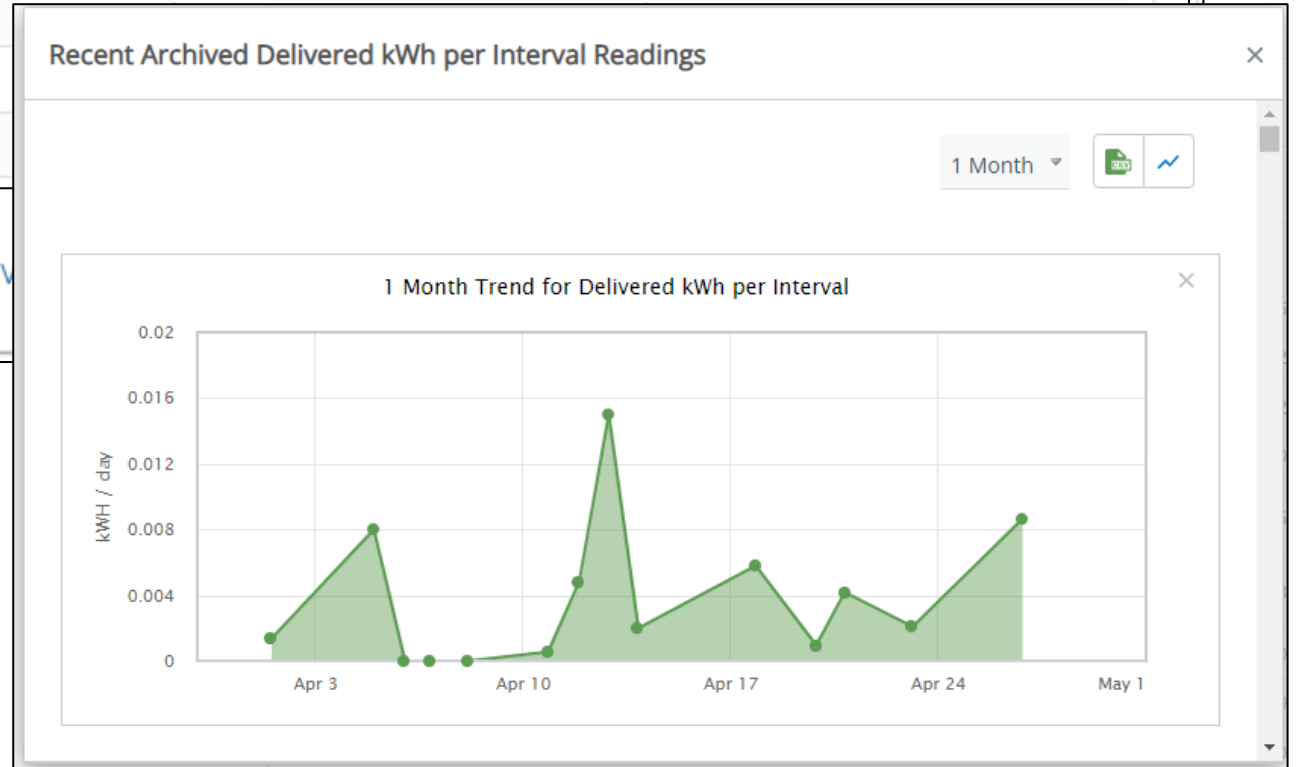
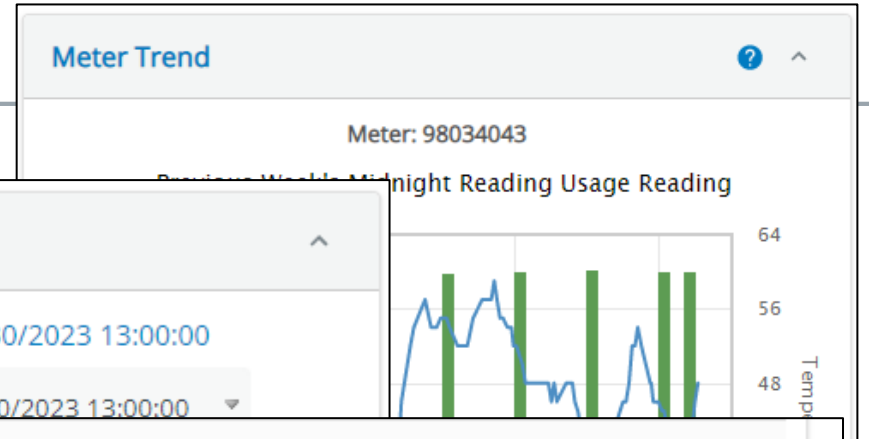
How might I use this feature?

- Investigation of high bill complaints
- Standard widget
 - Delivered kW Load Profile
 - Delivered kWh
 - Delivered kWh per Interval
- From the Meter Readings widget, click 'View All'
- Click on the Delivered kWh per Interval attribute
- Review the load curve or download the data

Delivered kW Load Profile	Load Profile (+1 more)
Delivered kWh	Usage Reading (+1 more)
Delivered kWh per Interval	Delivered kWh per Interval

data directly from this widget

[View All](#) | [Quick View](#)



Same options for any attribute in the system

Demand Response Devices

☆ Points: LCR-6200 (RFN) 1

7635957777
Cooper Power
505 N Highway #169
#1200
Minneapolis, MN 55441



ACCOUNT
CONTACTS
RESIDENCE
METERING
CONTROL HISTORY
ENROLLMENT
OPT OUT
APPLIANCES
HARDWARE
WORK ORDER
ACCOUNT LOG

Device Points

Filter By: Select Point Type(s) **Filter** Download

Point Name ↑	Attribute	Value/State	Date/Time
Blink Count	Blink Count	75 Counts	04/18/2023 10:04:
Control Status	Control St		
Recording Interval	Recording		
Relay 1 kW Load Size	Relay 1 kW		
Relay 1 Remaining Control Time	Relay 1 Re Control Ti		
Relay 1 Run Time Data Log	Relay 1 Ru Log		
Relay 1 Shed Time Data Log	Relay 1 Sh Log		
Reporting Interval	Reporting		
Service Status	Service St		

Recent Archived Relay 1 Shed Time Data Log Rea... X

1 Month  

1	Device Name	Point Name	Timestamp	Value	Units	Quality
2	1	Relay 1 Shed Time Data Log	4/18/2023 10:00	0	Minutes	Normal
3	1	Relay 1 Shed Time Data Log	4/17/2023 10:00	0	Minutes	Normal
4	1	Relay 1 Shed Time Data Log	4/16/2023 10:00	0	Minutes	Normal
5	1	Relay 1 Shed Time Data Log	4/15/2023 10:00	0	Minutes	Normal
6	1	Relay 1 Shed Time Data Log	4/14/2023 10:00	0	Minutes	Normal
7	1	Relay 1 Shed Time Data Log	4/13/2023 10:00	0	Minutes	Normal
8	1	Relay 1 Shed Time Data Log	4/12/2023 10:00	0	Minutes	Normal
9	1	Relay 1 Shed Time Data Log	4/11/2023 10:00	0	Minutes	Normal
10	1	Relay 1 Shed Time Data Log	4/10/2023 10:00	0	Minutes	Normal
11	1	Relay 1 Shed Time Data Log	4/9/2023 10:00	0	Minutes	Normal
12	1	Relay 1 Shed Time Data Log	4/8/2023 10:00	0	Minutes	Normal

Anywhere you see a timestamp link

RFN Gateways

Gateway Information

Name: AMI Demo 2
Type: RF Gateway
Serial Number: 750000017
Hardware Version: 1000750_01
Software Version: R_9_3_3
Upper Stack Version: R_9_3_3_0_1
Radio Version: R4.4.3L
Release Version: 9.3.4
Version Conflicts: None
Application Mode: Normal
Streaming Capacity: Unsupported

Location

Latitude: 44.985685 Longitude: -93.404238

Notes

Note Text (255 characters max)

No notes to display.
All Notes

Communication

Admin: admin
Super Admin: super
Connection Type: TCP/IP
IP Address: 10.129.24
NM IP Address: 127.0.0.1
EkaNet 9
MAC Add
Version: V
Radios: EkaNet 9
MAC Add
Version: D
Connection Status: ■ Connected
Communication: Successful

Gateway Metrics

Device Name	Port	Comm Status	Timestamp	Mode
Gateway(1.5)-02	Co			
Gateway(1.5)-02	Co			
Gateway(1.5)-02	Co			
Gateway(1.5)-02	Co			
Gateway(1.5)-02	Comm Status	4/12/2023 23:50	Connected	Normal

Recent Archived Ready Nodes Readings

1 Month

1 Month Trend for Ready Nodes

Counts

Mar 20, Mar 27, Apr 3, Apr 10, Apr 17

Date	Counts
Mar 20	22
Mar 21	22
Mar 22	24
Mar 23	24
Mar 24	24
Mar 25	24
Mar 26	24
Mar 27	22
Mar 28	21
Mar 29	20
Mar 30	16
Mar 31	16
Apr 1	16
Apr 2	17
Apr 3	17
Apr 4	17
Apr 5	17
Apr 6	17
Apr 7	17
Apr 8	17
Apr 9	17
Apr 10	17
Apr 11	18
Apr 12	18
Apr 13	18
Apr 14	18
Apr 15	22
Apr 16	22
Apr 17	22

Network Performance Report

Network Performance Report

- Comprehensive report of all devices and their network status
- Identifying devices with
 - High Descendent counts
 - Poor link quality
 - No coordinates
 - Not Ready Comm. Status

Home / Gateways

★ Gateways Actions ▾

⚠ Duplicate gateway colors detected: 1 (GW224, GW230-ERL) 2 (GW225-Phi, GW226) 3 (GW216, GW206, GW183) 6 (GW222) 255 (VCGW228, VCGW162)

Gateway Information

Name ↑	Streaming Capacity	Serial Number	IP Address	Firmware Version	Last Communication	Data Collection
GW183	Unsupported	1560000001	10.106.171.183	9.7.0	Successful	100%
GW190	Unsupported	1560000081	10.106.171.190	5.3.8	Successful	100%
GW202	Unsupported	1560000748	10.106.171.202	9.5.10	Successful	85.71%
GW203	0.00%	7800002084	10.106.171.203	9.4.0	Successful	100%
GW204-DEC	0.00%	7800003290	10.106.171.204	9.3.3	Successful	100%
GW206	Unsupported	1560000757	10.106.171.206	6.0.6	Successful	100%
GW211	0.00%	7800000128	10.106.171.211	9.5.11	Successful	100%

Actions menu options: Create, Comprehensive Map, Download Network Info, Manage Certificates, Manage Firmware, Update NM IP Address/Port

Assets - Gateways

Misc. Reports – Network Performance Report

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Device	Meter Number	Type	Sensor S/N	Latitude	Longitude	Primary Forward	Comm Status	MAC Address	Node S/N	Link Quality	Hop Count	Descendant Count	Next Hop	Path Cost
2	54758028	54758028	RFW-201	54758028	39.09099	-77.20505	GW219	Unknown	00:14:08:11:A2:0E	4260041814		3	0	109129078	7
3	133374544	133374544	RFN-520fAXeD	133374544	39.09555	-77.19858	GW219	Ready	00:14:08:0A:BF:03	5010000073	Excellent	1	0	3 GW219	1
4	HSIRIRHS	HSIRIRHS	RFG-301A	HSIRIRHS	39.09688	-77.19912	GW219	Unknown	00:14:08:FF:FE:05	MAC001408FFFE05		2	0	0	6
5	75148708	75148708	RFN-410cL	75148708	39.15069	-77.22327	GW202	Ready	00:14:08:09:F7:64	4110032619	Excellent	2	0	104262807	3
6	723019712		LCR-6700-DER RFN	723019712			GW204-DEC	Not Ready	00:14:08:26:0D:36	6700020213	Evaluating	1	0	0 GW204-DEC	8
7	723019714		LCR-6700-DER RFN	723019714			GW204-DEC	Not Ready	00:14:08:26:0D:4A	6700020233	Excellent	1	0	0 GW204-DEC	1
8	B62858667	B62858667	RFW-Meter	B62858667	39.12582	-77.20397	GW219	Unknown	11:00:14:08:0A:BF:54	3260085329		2	0	0 127689442	6
9	723019713		LCR-6700-DER RFN	723019713			GW204-DEC	Not Ready	00:14:08:26:0D:5C	6700020251	Excellent	1	1	1 GW204-DEC	1
10	4310000129		RFN Relay	4310000129	39.09191	-77.19975	GW219	Ready	00:14:08:07:9E:B7	4310000129	Excellent	1	4	4 GW219	1
11	723019716		LCR-6700-DER RFN	723019716			GW204-DEC	Not Ready	00:14:08:26:0D:77	6700020278	Excellent	1	0	0 GW204-DEC	1
12	47663721	47663721	RFW-201	47663721	39.09639	-77.18302	GW219	Ready	00:14:08:1A:80:2A	4260106727		2	0	1	6
13	75150429	75150429	RFN-410cL	75150429	39.16443	-77.20412	GW202	Ready	00:14:08:0A:1D:B6	4110036874	Excellent	1	0	0 GW202	2
14	723019715		LCR-6700-DER RFN	723019715			GW204-DEC	Not Ready	00:14:08:26:0D:75	6700020276	Excellent	1	0	0 GW204-DEC	1
15	83737227	83737227	RFW-201	83737227	39.09714	-77.20924	GW219	Unknown	06:00:14:08:03:9B:E6	4260016696		3	0	109129078	7
16	182920246	182920246	RFN-530S4x	182920246			GW204-DEC	Ready	00:14:08:27:65:0B	5010165446	Excellent	1	1	1 GW204-DEC	1
17	182920244	182920244	RFN-530S4x	182920244			GW204-DEC	Ready	00:14:08:27:65:17	5010165458	Excellent	1	1	1 GW204-DEC	2
18	9876543210	9876543210	RFG-301R	9876543210	39.10103	-77.19186	GW219	Ready	00:14:08:FF:FE:0D	MAC001408FFFE0D		2	0	0	6
19	111111	111111	RFG-301R	111111			GW219	Unknown	00:14:08:FF:FE:0B	3400000160		2	0	0	6
20	75150154	75150154	RFN-410cL	75150154	39.16916	-77.21594	GW202	Ready	00:14:08:0A:1E:C4	4110037144	Excellent	2	0	104262807	3
21	84315382	84315382	RFW-201	84315382	39.10614	-77.19534	GW219	Unknown	00:14:08:10:03:C4	4260016183		2	0	0	7
22	9079130150	9079130150	RFW-201	9079130150	39.09769	-77.20653	GW219	Ready	00:14:08:04:F0:01	MAC00140804F001		2	0	4.2E+09	6
23	109129087	109129087	RFN-420fL	109129087	39.09814	-77.20287	GW219	Ready	00:14:08:03:E2:BA	MAC00140803E2BA	Excellent	2	0	127689442	2
24	63604092	63604092	RFW-201	63604092	39.09005	-77.19627	GW219	Ready	00:14:08:14:49:16	4260065453		2	0	4.31E+09	6
25	84333494	84333494	RFW-201	84333494	32.53089	-92.63669	GW219	Unknown	00:14:08:1A:7F:C0	4260106621		2	0	0	7
26	1		LCR-6200 RFN	1	39.09772	-77.19571	GW219	Ready	00:14:08:04:89:E1	4510000256	Excellent	1	7	7 GW219	1
27	0		LCR-6200 RFN	0	39.12006	-77.15653	GW219	Ready	00:14:08:04:36:4D	4510000148	Excellent	1	0	0 GW219	1
28	4200042199		RFN Relay	4200042199	39.09359	-77.1983	GW219	Ready	00:14:08:04:66:79	4200042199	Excellent	1	1	1 GW219	1
29	7543790	7543790	RFN-430A3R	7543790			GW219	Ready	00:14:08:03:CB:03	MAC00140803CB03	Excellent	1	0	0 GW219	1
30	109129112	109129112	RFN-420fX	109129112	39.09521	-77.19536	GW219	Ready	00:14:08:03:E2:9B	MAC00140803E29B	Excellent	2	0	8486808	2
31	47962367	47962367	RFW-201	47962367			GW219	Unknown		MAC0014080CDA5B		2	0	0	6
32	62584800	62584800	RFW-Meter	62584800	39.11238	-77.00813	GW219	Unknown	00:14:08:08:34:95	3260049815		2	0	0	6
33	MAC001408064A6E		RFN Relay	MAC001408064A6E			GW219	Ready	00:14:08:06:4A:6E	MAC001408064A6E	Excellent	1	0	0 GW219	1
34	62584801	62584801	RFW-Meter	62584801	39.08498	-77.1997	GW219	Unknown	00:14:08:08:32:28	3260049194		2	0	4.31E+09	6
35	182920269	182920269	RFN-530S4x	182920269			GW204-DEC	Ready	00:14:08:28:20:12	5010170296	Excellent	1	0	0 GW204-DEC	2
36	62968600	62968600	RFN-420cL	62968600	39.09899	-77.20133	GW219	Ready	00:14:08:09:9B:B6	4210109506	Excellent	1	0	0 GW219	2
37	75149016	75149016	RFN-410cL	75149016	39.0424	-77.22714	GW206	Ready	00:14:08:09:F8:73	4110032890	Excellent	1	0	0 GW206	0
38	70427504	70427504	RFW-201	70427504	39.10267	-77.19365	GW219	Ready	00:14:08:11:A8:8E	4260043478		2	0	1	6
39	4200042167		RFN Relay	4200042167	39.09277	-77.19659	GW219	Ready	00:14:08:04:66:59	4200042167	Excellent	1	4	4 GW219	1
40	761089	761089	RFW-201	761089			GW219	Ready	00:14:08:1A:81:46	4260107011		2	0	127689442	6
41	75149651	75149651	RFN-410cL	75149651	39.05261	-77.24319	GW206	Ready	00:14:08:09:F7:FE	4110032773	Excellent	1	0	0 GW206	0
42	98462274	98462274	RFN-420fL	98462274	39.09661	-77.19719	GW219	Ready	00:14:08:03:44:82	4200000047	Excellent	2	0	133374544	2

Questions?



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