Using Two-Way DR Data

Jimmy Kreuz
Yash Patel
05/11/23

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Agenda

- One-Way vs Two-Way
- Broadcast Performance Report
- Asset Availability
- Relay Shed Time Report
- Relay Run Time Report
- Control Audit Report
- Commander
- Mapping
- Cellular LCR

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One-Way Data

- The Original one-way data
- Great system for the ages
- Do we know if that LCR controlled?
  - Manual M&V by hand with equipment to find runtimes & verify messages

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Two-way Data

- Can we verify these devices are powered up and have comms?
- Can we create a report to find offline devices or problem areas?
- Can we find devices that were removed or have not been powered on since “x” date?

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Broadcast Performance Report

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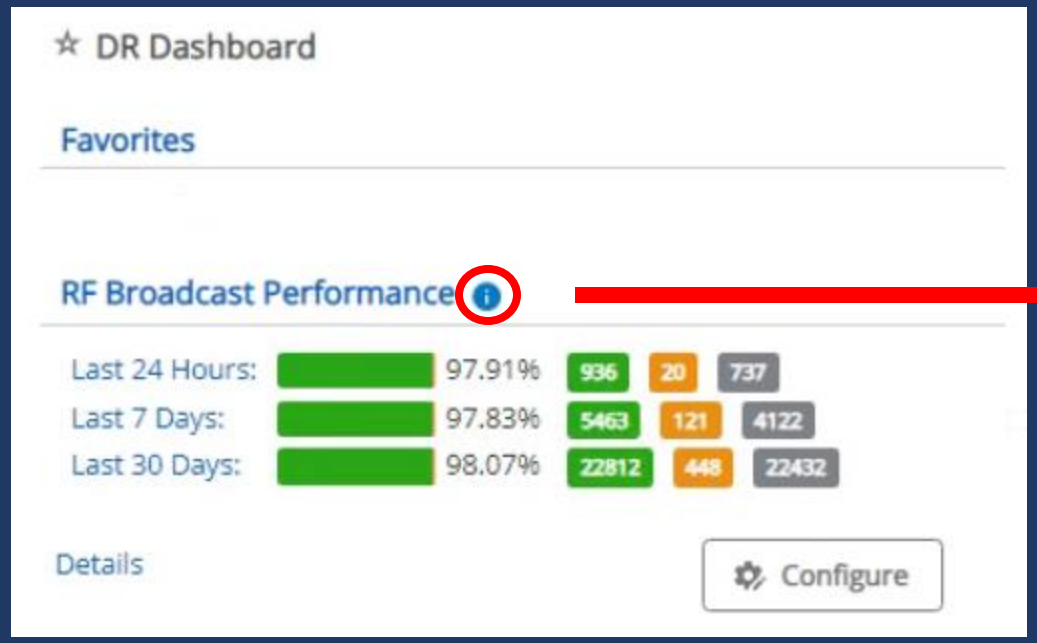
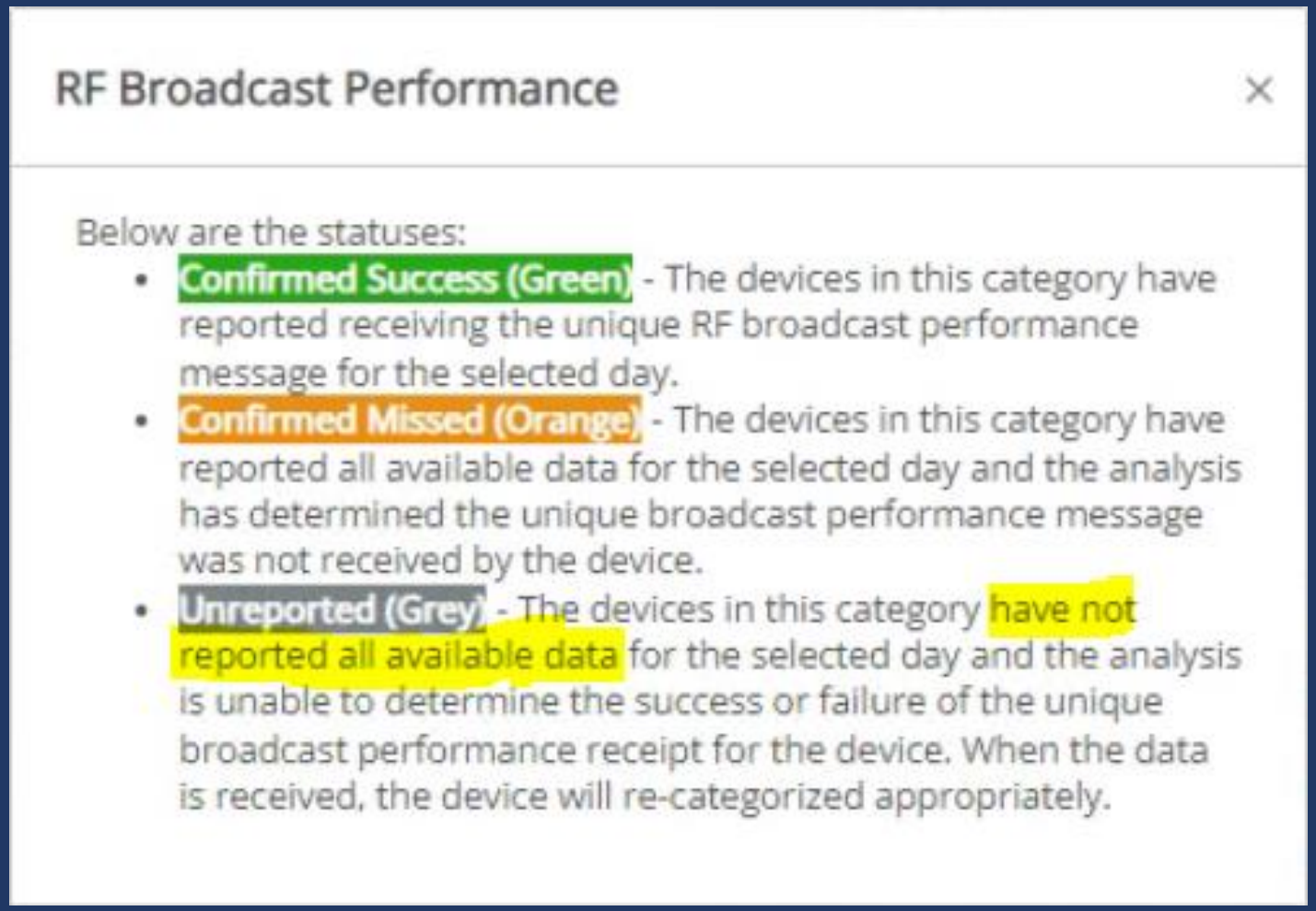
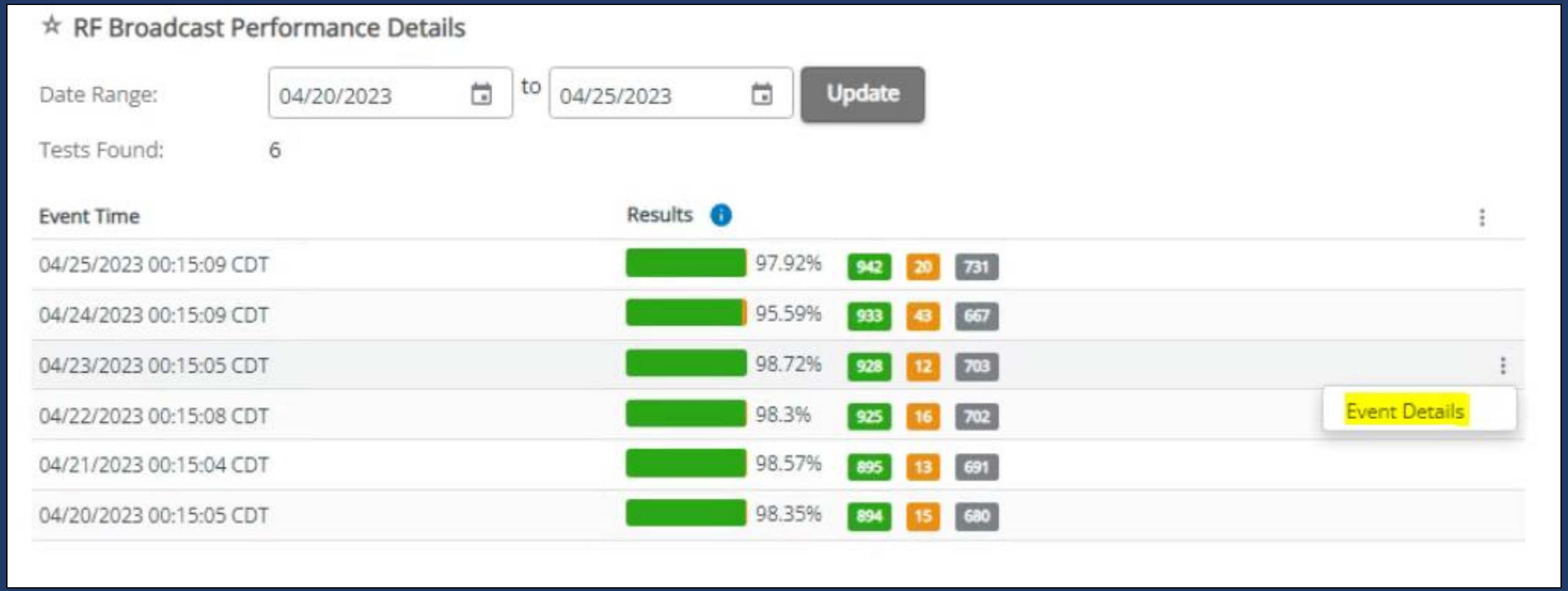
Broadcast Performance Report

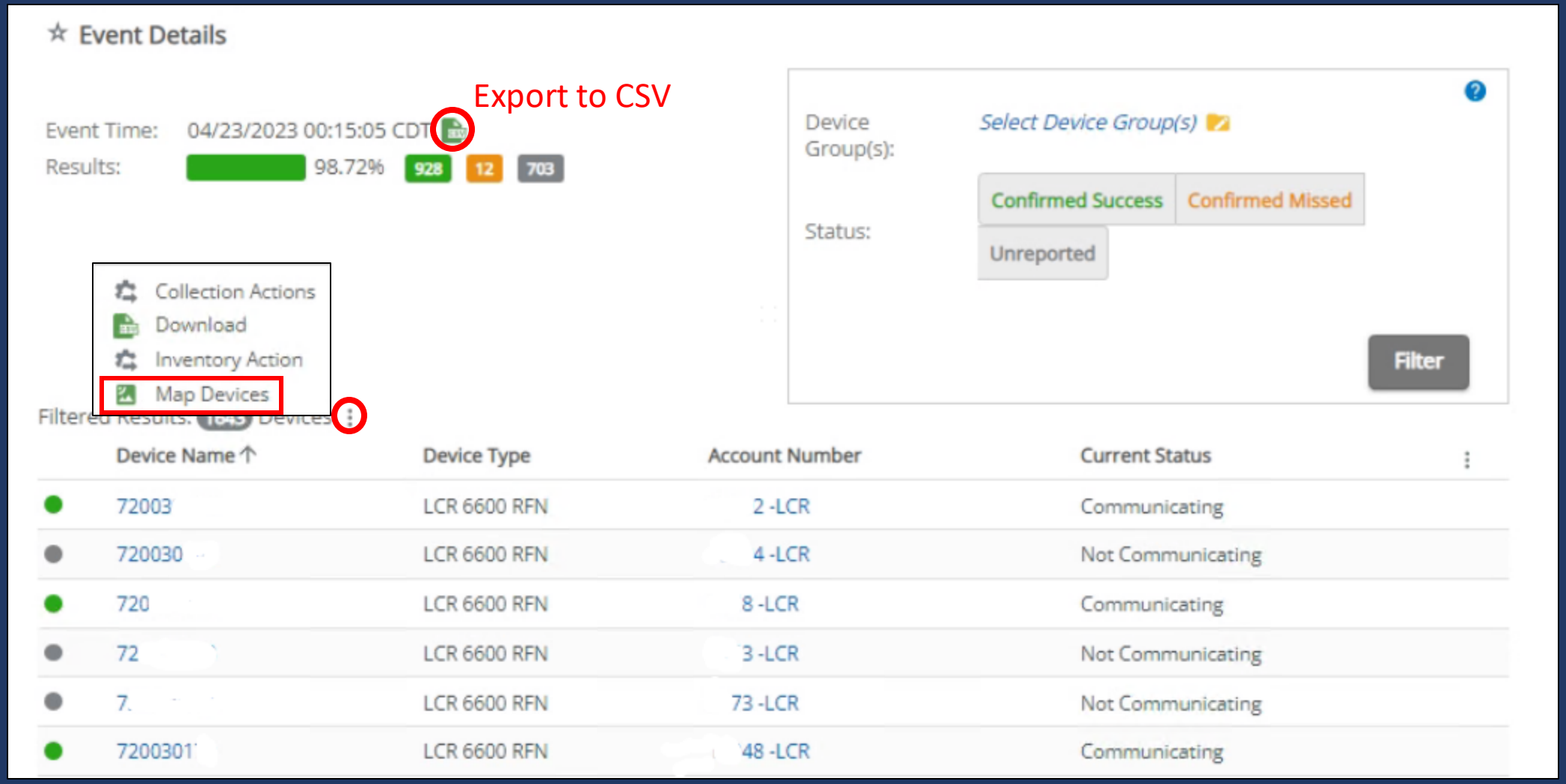


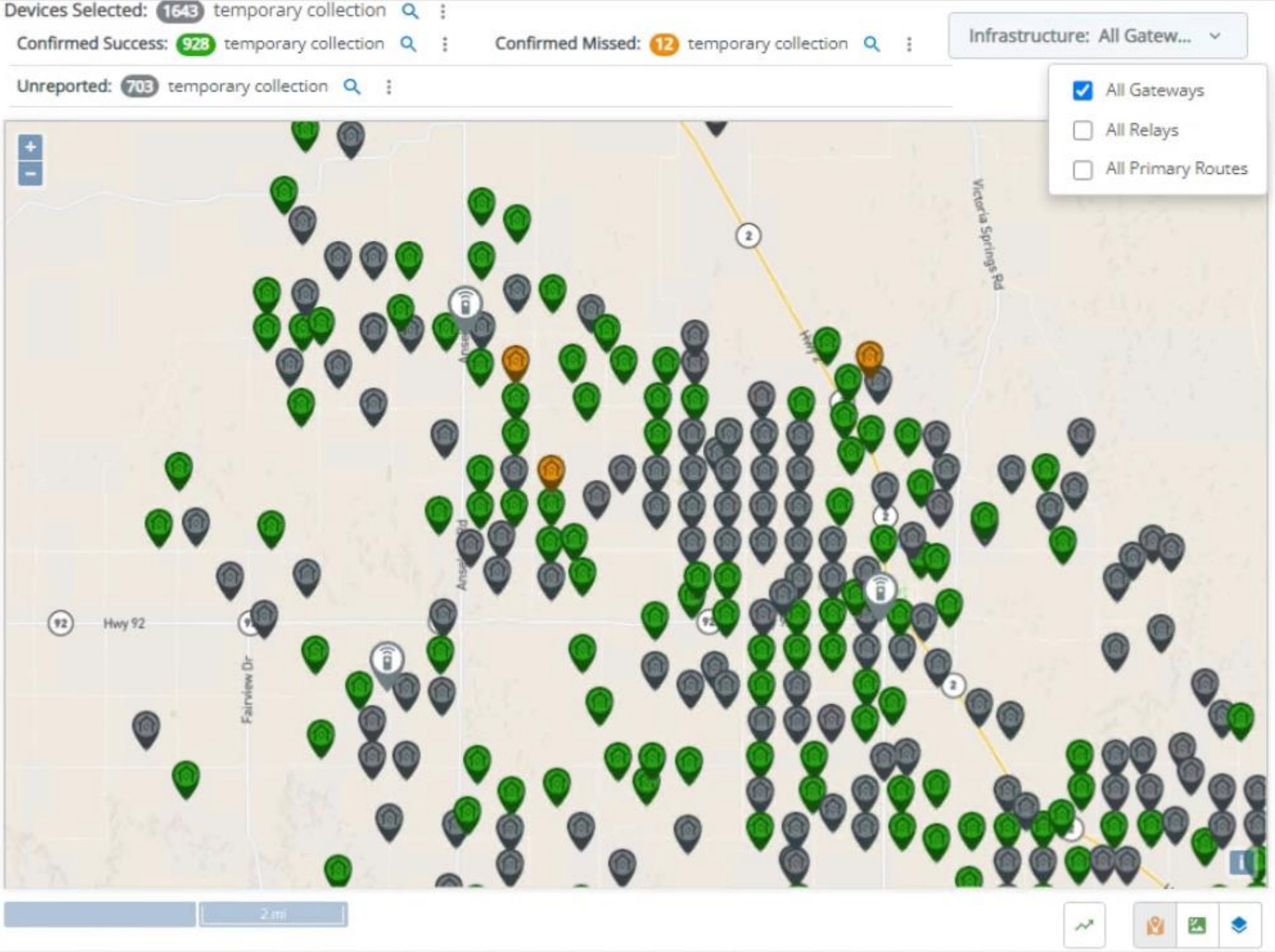


Broadcast Performance Report



Broadcast Performance Report



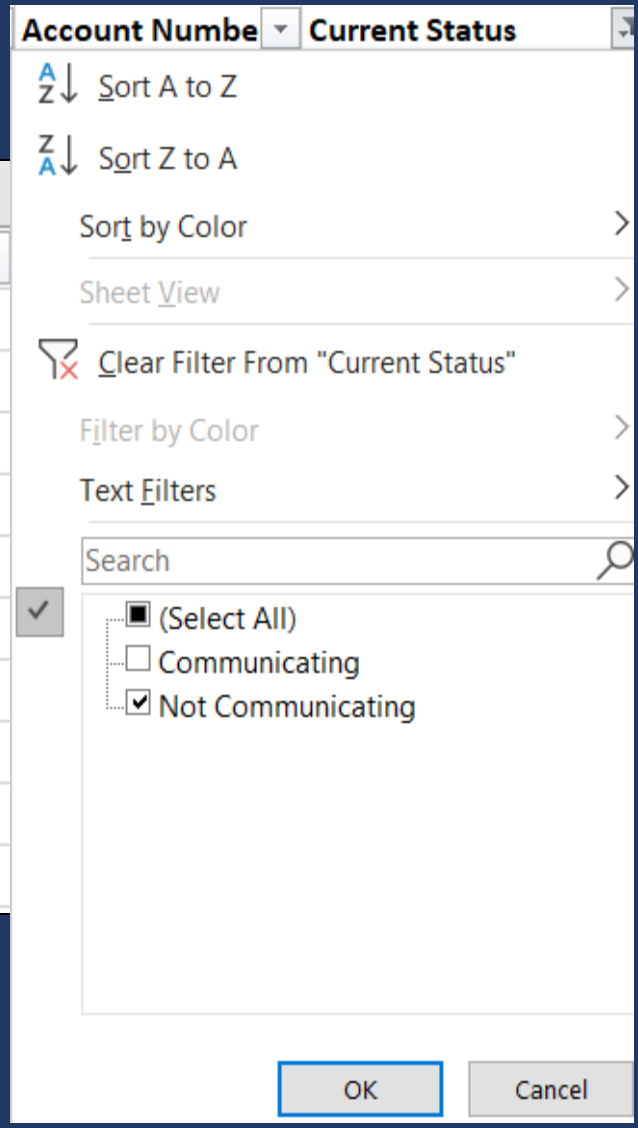

Devices Selected: 1643 temporary collection
Confirmed Success: 928 temporary collection
Confirmed Missed: 12 temporary collection
Unreported: 703 temporary collection
Infrastructure: All Gatew...
All Gateways
All Relays
All Primary Routes
Hwy 92
Victoria Springs Rd
Fairview Dr
2 mi

Broadcast Performance Report – CSV Export

	A	B	C	D	E
1	**Device Name**	**Device Type**	**Account Number**	**Current Status**	**Last Communication**
2	72001	LCR 6600 RFN	Account1	Communicating	04/25/2023 15:49:01 CDT
3	72002	LCR 6600 RFN	Account2	Not Communicating	04/20/2023 02:23:29 CDT
4	72003	LCR 6600 RFN	Account3	Communicating	04/25/2023 10:23:34 CDT
5	72004	LCR 6600 RFN	Account4	Not Communicating	09/28/2022 11:01:22 CDT
6	72005	LCR 6600 RFN	Account5	Not Communicating	11/21/2022 14:33:10 CST
7	72006	LCR 6600 RFN	Account6	Communicating	04/25/2023 01:06:39 CDT
8	72007	LCR 6600 RFN	Account7	Communicating	04/24/2023 22:53:12 CDT
9	72008	LCR 6600 RFN	Account8	Communicating	04/25/2023 02:21:09 CDT
10	72009	LCR 6600 RFN	Account9	Not Communicating	12/28/2022 07:10:11 CST
11	72010	LCR 6600 RFN	Account10	Communicating	04/25/2023 19:25:09 CDT
12	72011	LCR 6600 RFN	Account11	Not Communicating	10/29/2022 02:00:36 CDT
13	72012	LCR 6600 RFN	Account12	Communicating	04/25/2023 07:29:56 CDT
14	72013	LCR 6600 RFN	Account13	Communicating	04/25/2023 08:02:20 CDT
15	72014	LCR 6600 RFN	Account14	Communicating	04/25/2023 17:18:02 CDT
16	72015	LCR 6600 RFN	Account15	Not Communicating	09/15/2022 08:44:09 CDT
17	72016	LCR 6600 RFN	Account16	Communicating	04/25/2023 21:31:21 CDT
18	72017	LCR 6600 RFN	Account17	Communicating	04/25/2023 05:19:30 CDT
19	72018	LCR 6600 RFN	Account18	Communicating	04/25/2023 00:34:51 CDT
20	72019	LCR 6600 RFN	Account19	Communicating	04/25/2023 18:24:57 CDT
21	72020	LCR 6600 RFN	Account20	Not Communicating	11/04/2022 03:08:15 CDT
22	72021	LCR 6600 RFN	Account21	Not Communicating	04/17/2023 22:37:18 CDT
23	72022	LCR 6600 RFN	Account22	Not Communicating	10/03/2022 18:58:55 CDT

Broadcast Performance Report – CSV Export

	A	B	C	D	E
1	Device Name	Device Type	Account Numbe	Current Status	Last Communication
3	72002	LCR 6600 RFN	Account2	Not Communicating	04/20/2023 02:23:29 CDT
5	72004	LCR 6600 RFN	Account4	Not Communicating	09/28/2022 11:01:22 CDT
6	72005	LCR 6600 RFN	Account5	Not Communicating	11/21/2022 14:33:10 CST
10	72009	LCR 6600 RFN	Account9	Not Communicating	12/28/2022 07:10:11 CST
12	72011	LCR 6600 RFN	Account11	Not Communicating	10/29/2022 02:00:36 CDT
16	72015	LCR 6600 RFN	Account15	Not Communicating	09/15/2022 08:44:09 CDT
21	72020	LCR 6600 RFN	Account20	Not Communicating	11/04/2022 03:08:15 CDT
22	72021	LCR 6600 RFN	Account21	Not Communicating	04/17/2023 22:37:18 CDT
23	72022	LCR 6600 RFN	Account22	Not Communicating	10/03/2022 18:58:55 CDT
25	72024	LCR 6600 RFN	Account24	Not Communicating	04/18/2023 02:58:41 CDT



Asset Availability

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Asset Availability

Target Level: Control Area (151 Devices)

55 Active: 36.4%
0 Opted Out: 0%
19 Inactive: 12.6%
77 Unavailable: 51%

Device Groups: *Select Device Group(s)*

Recent Reading: Active | Opted Out | Inactive | Unavailable

Primary Forward: Select Gateways

Filter

Filtered Results: 151 Devices

Serial Number	Device Type	Primary Forward	Last Communication	Last Runtime
72300	LCR 6700 RFN	Unknown	05/03/2023 16:54:53	09/21/2022 04:00:00

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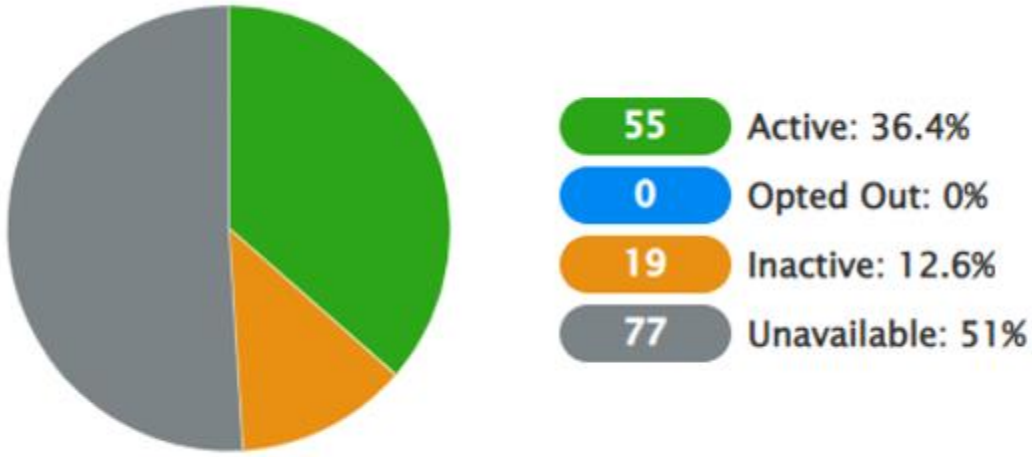
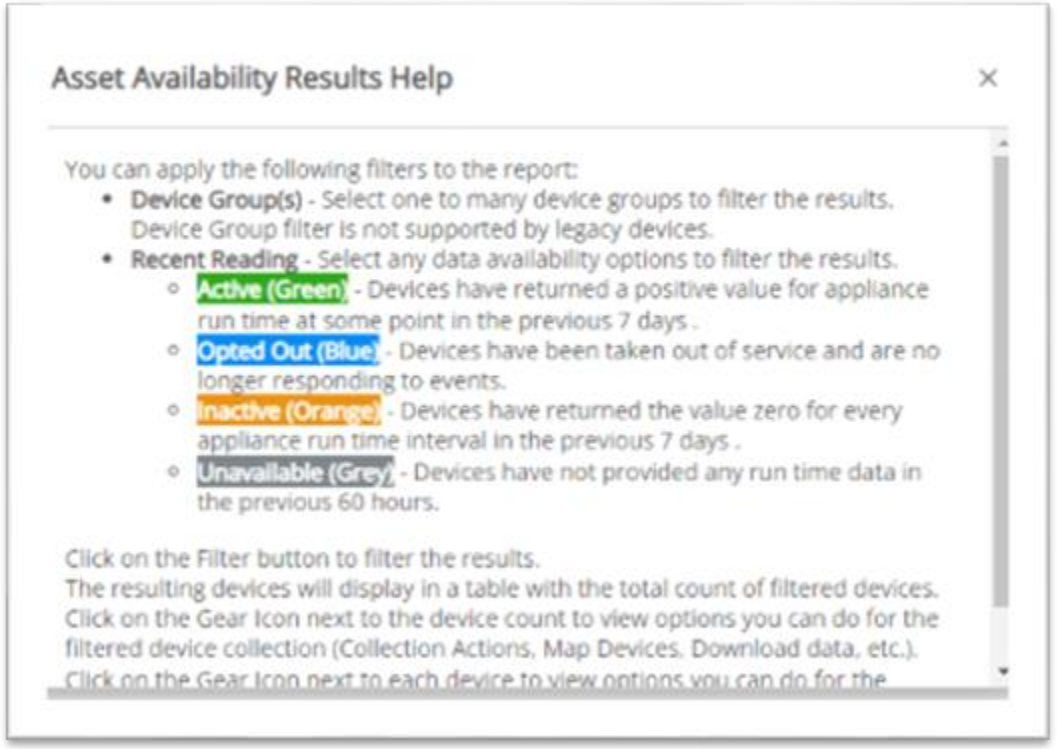
Asset Availability





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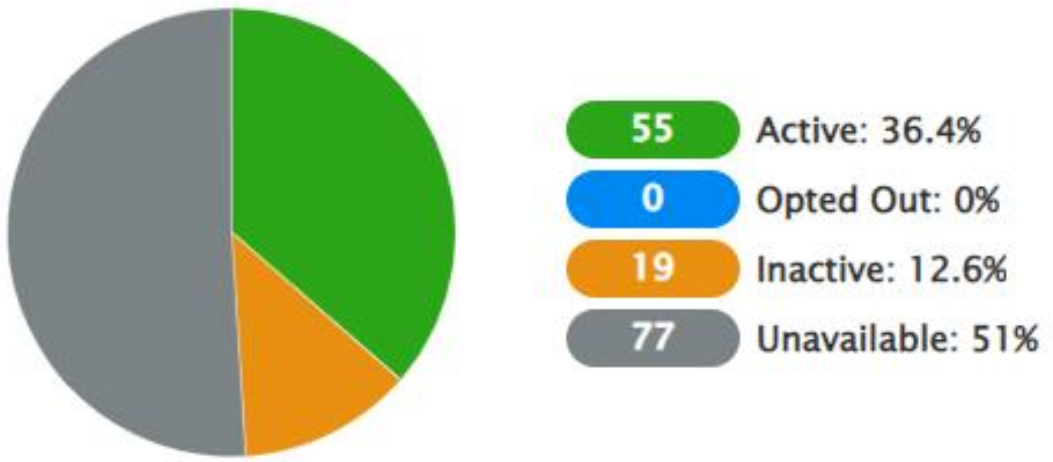
Asset Availability



Filtered Results: 151 Devices

- Collection Actions
- Download
- Inventory Action
- Map Devices

Device Type	Primary Forward
LCR 6700 RFN	Unknown
LCR 6700 RFN	Unknown

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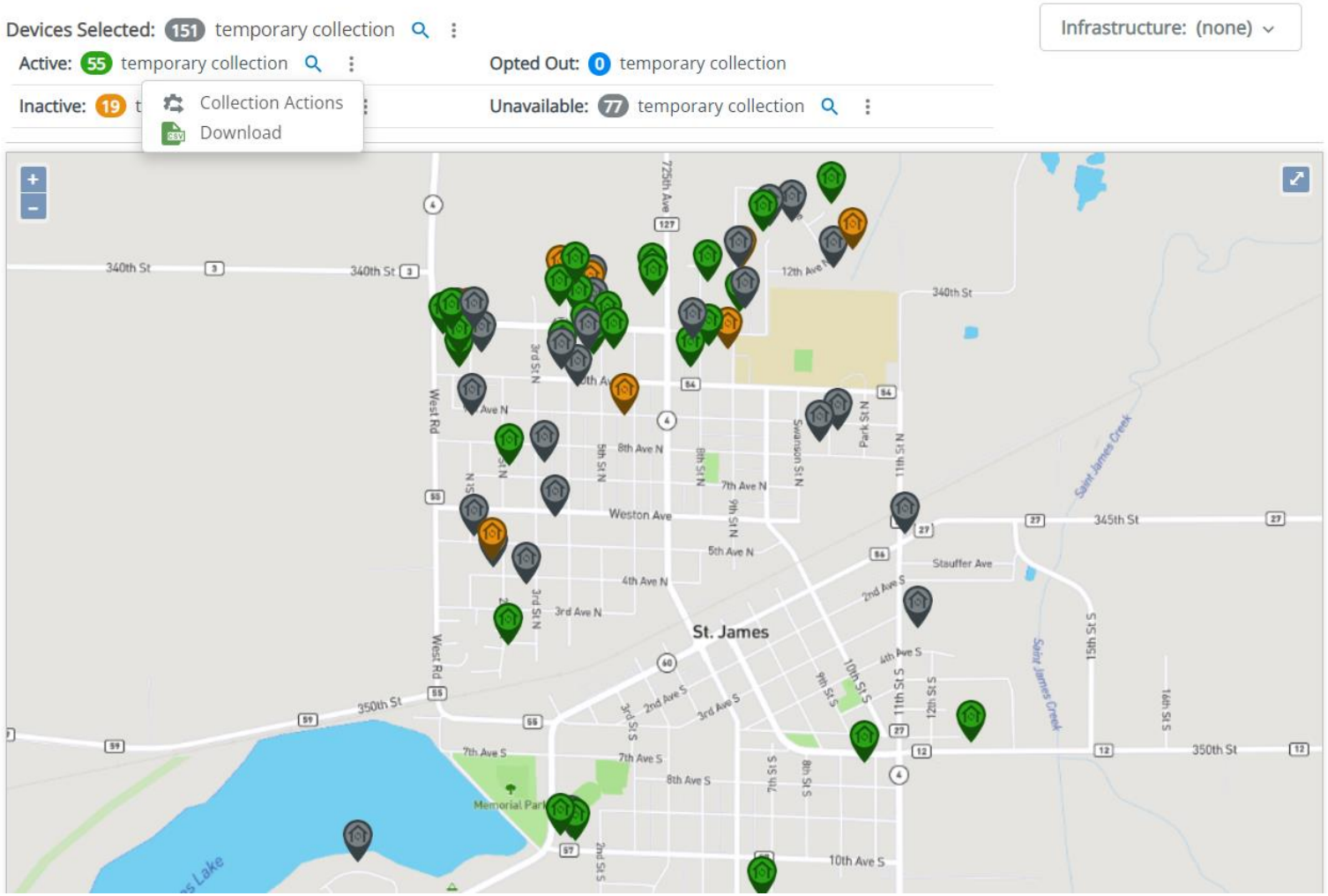
Map Devices



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LCR Two Way Data Logs

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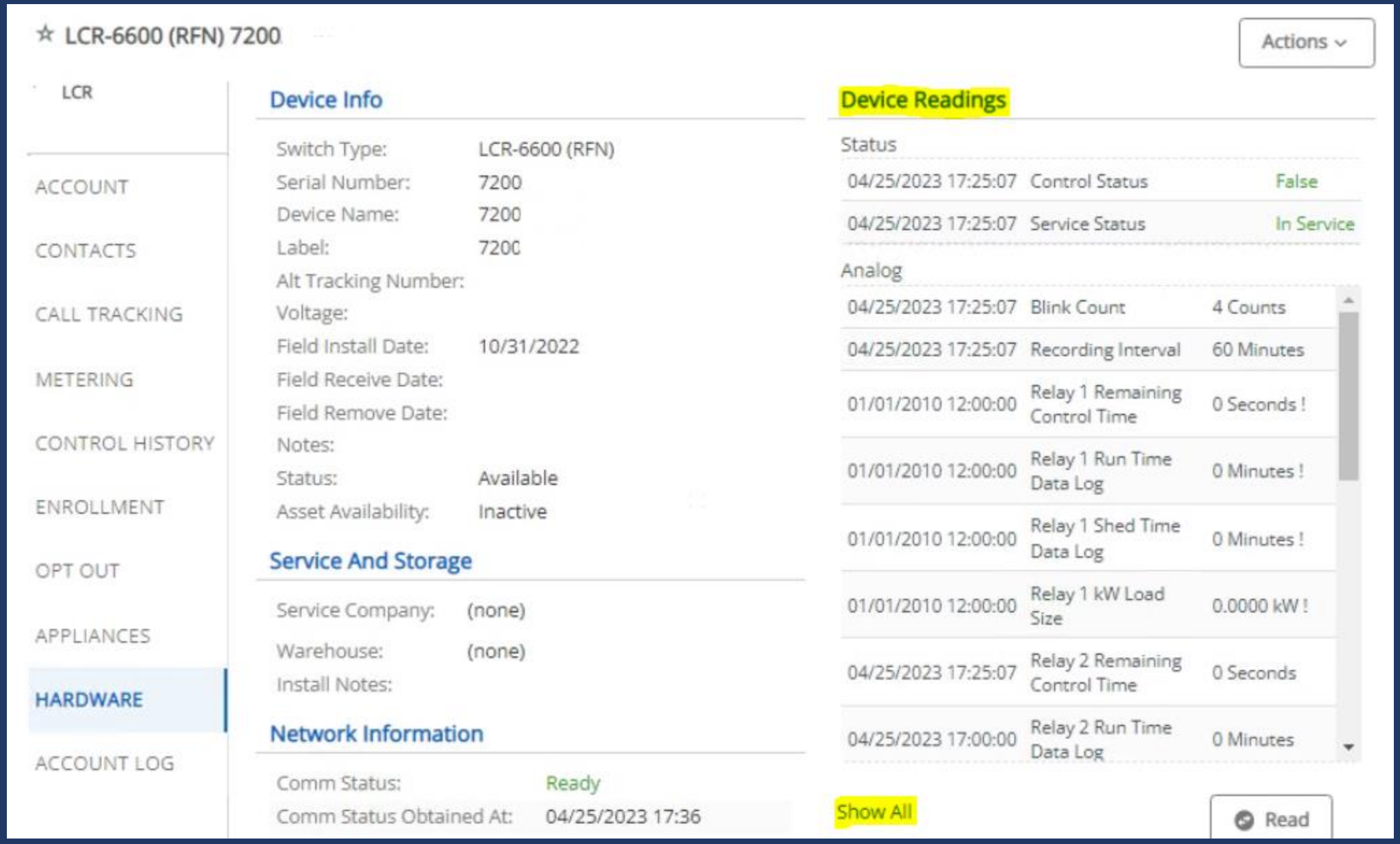
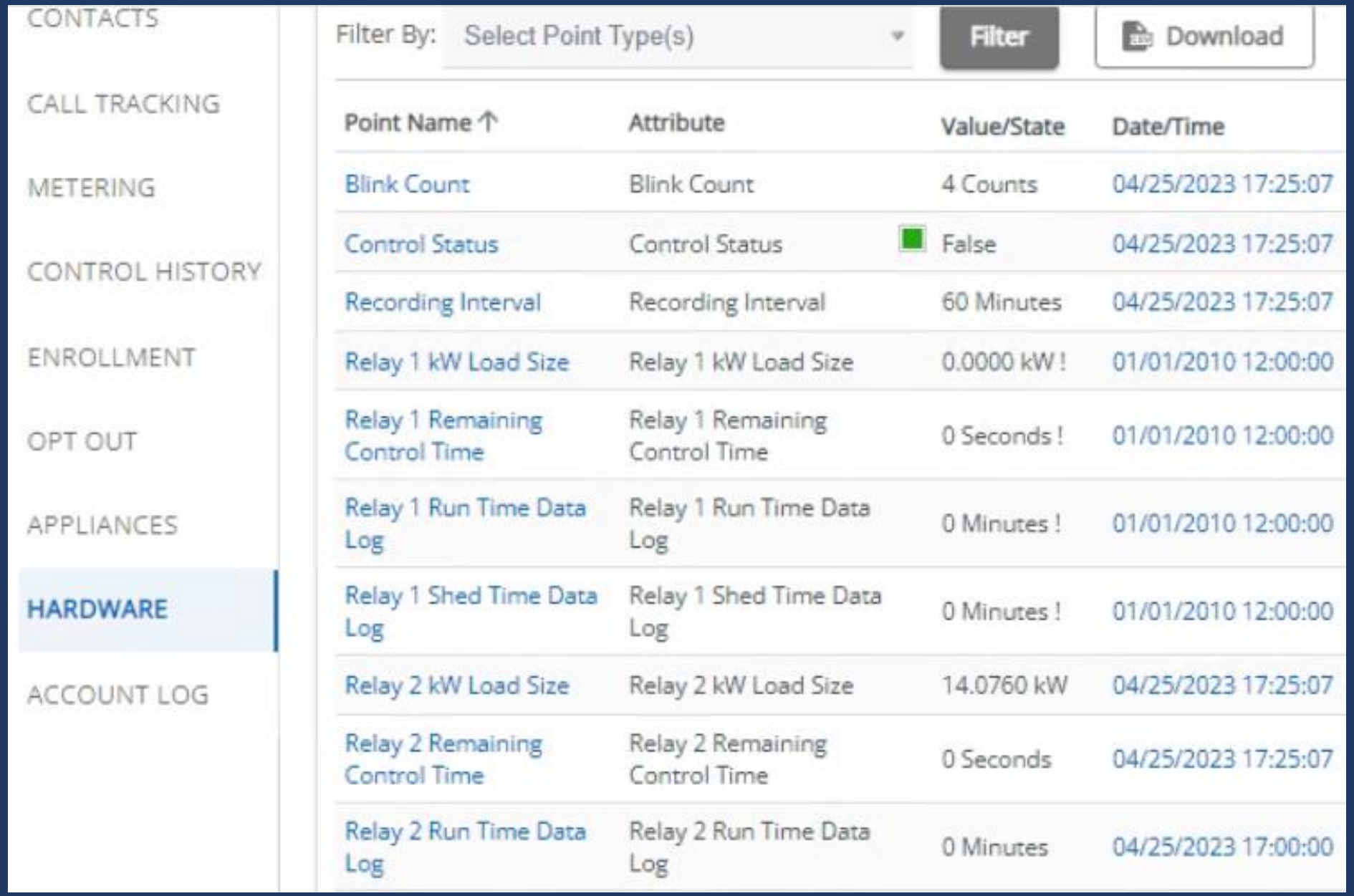
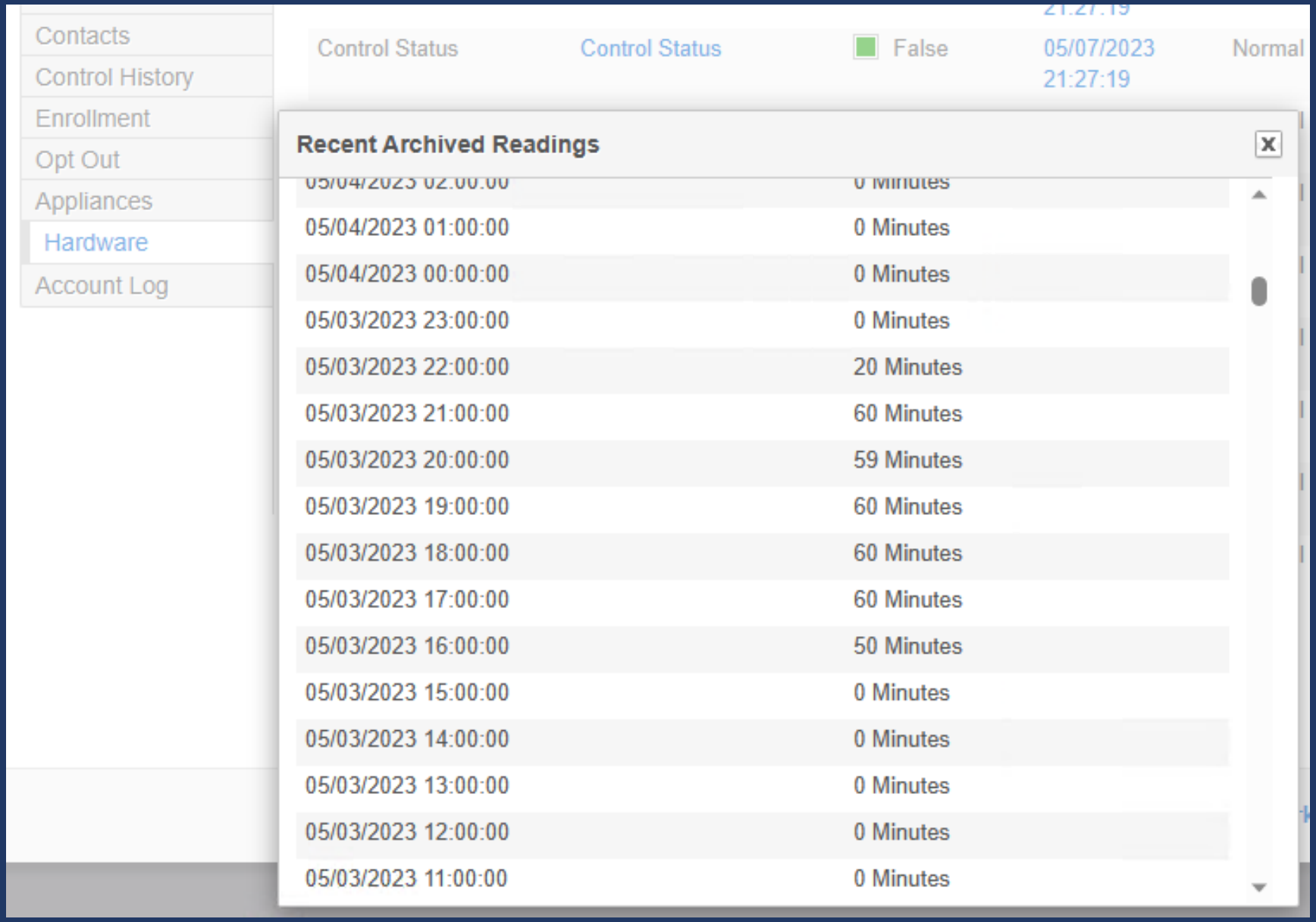
LCR Device Points



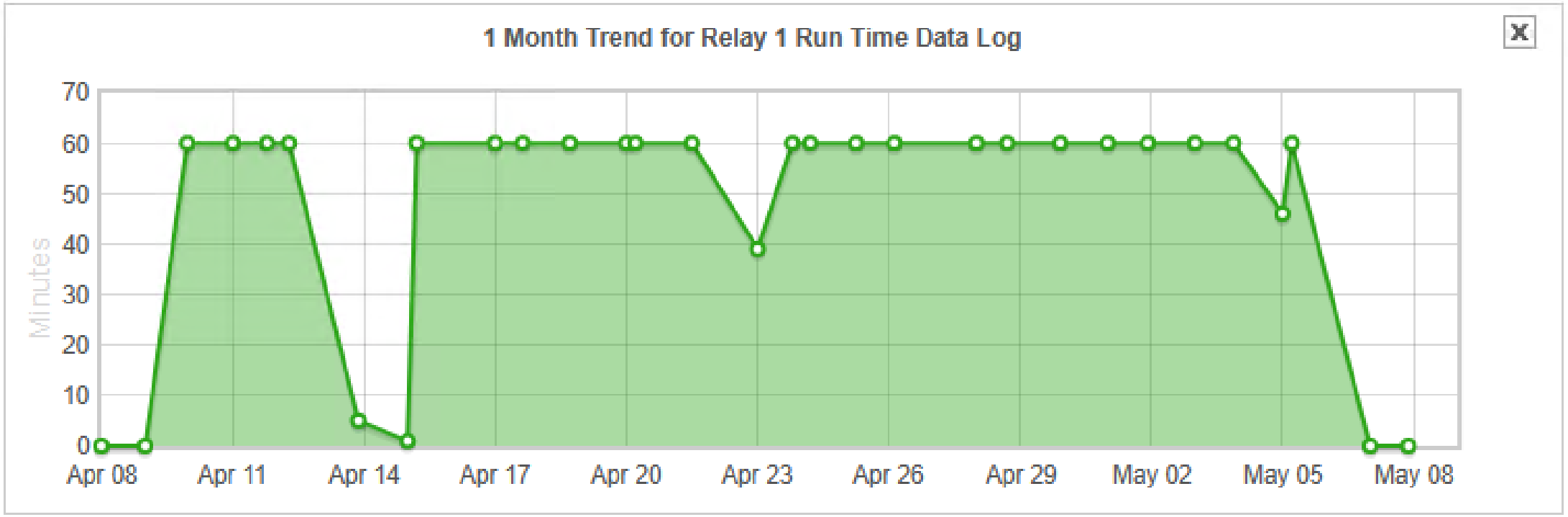
LCR Device Points – View All Point



LCR Device Points – Runtime Data Log



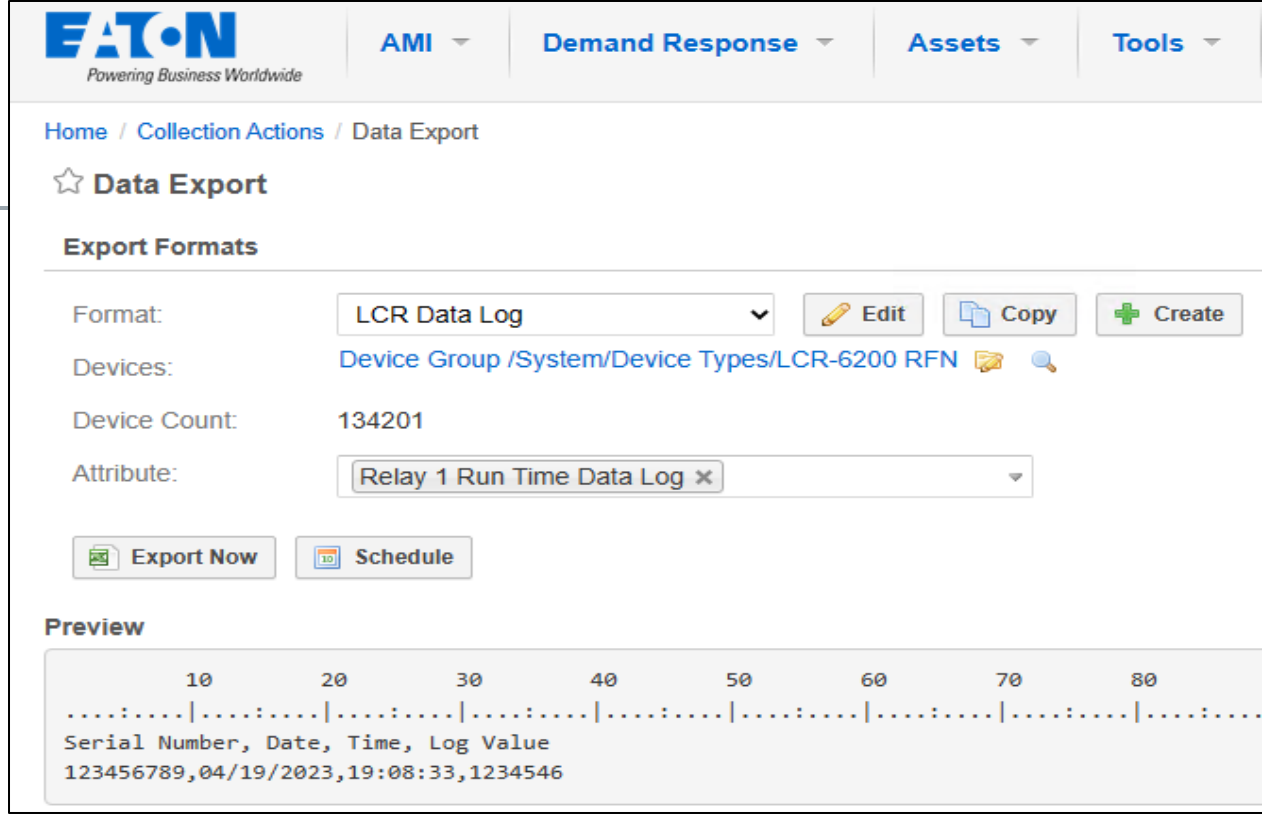
LCR Device Points – Runtime Data Log



Timestamp	Value
05/07/2023 21:00:00	0 Minutes

Runtime Data Log Export

Can we obtain the runtime data for every 6200 on our system for 12:00-14:00?

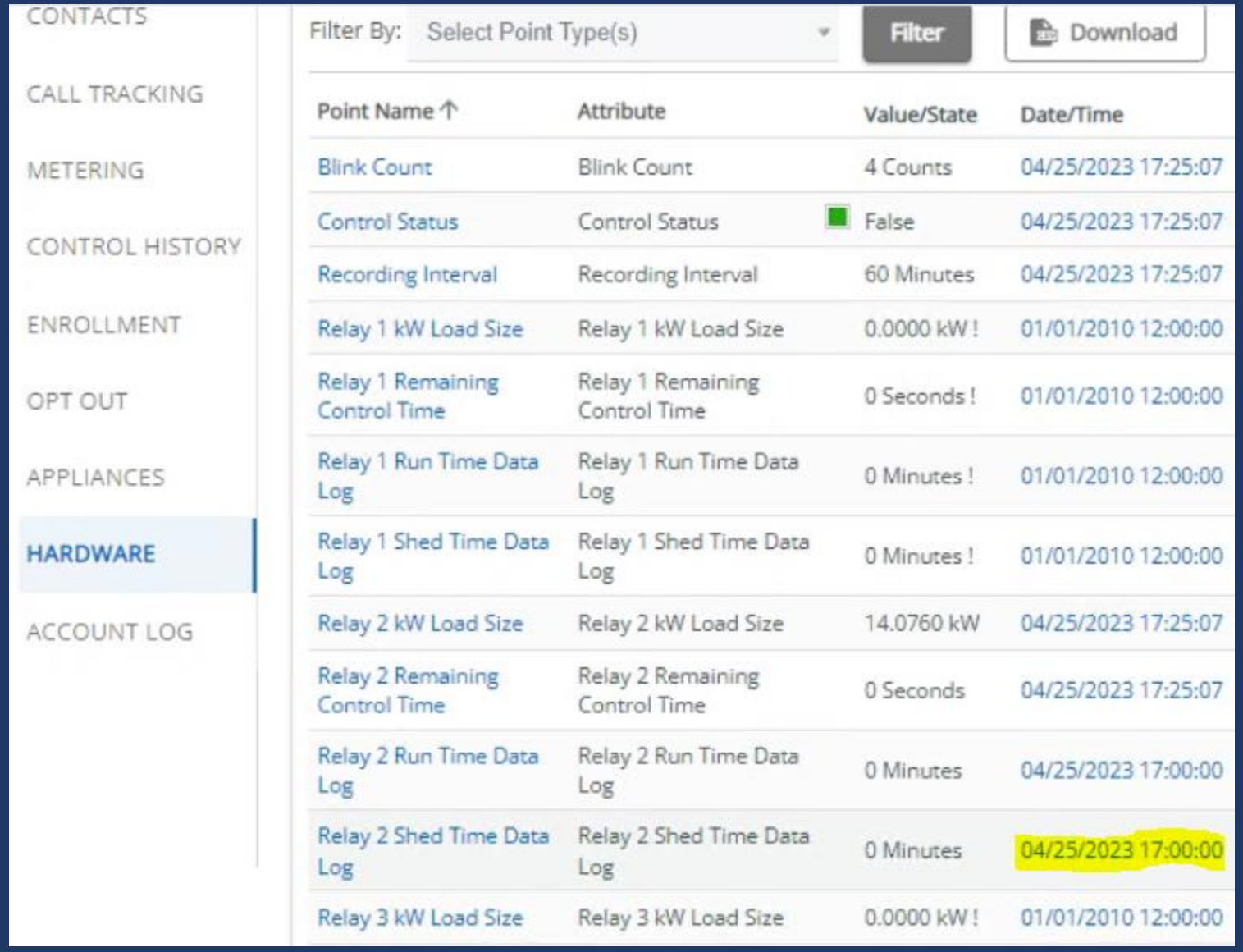


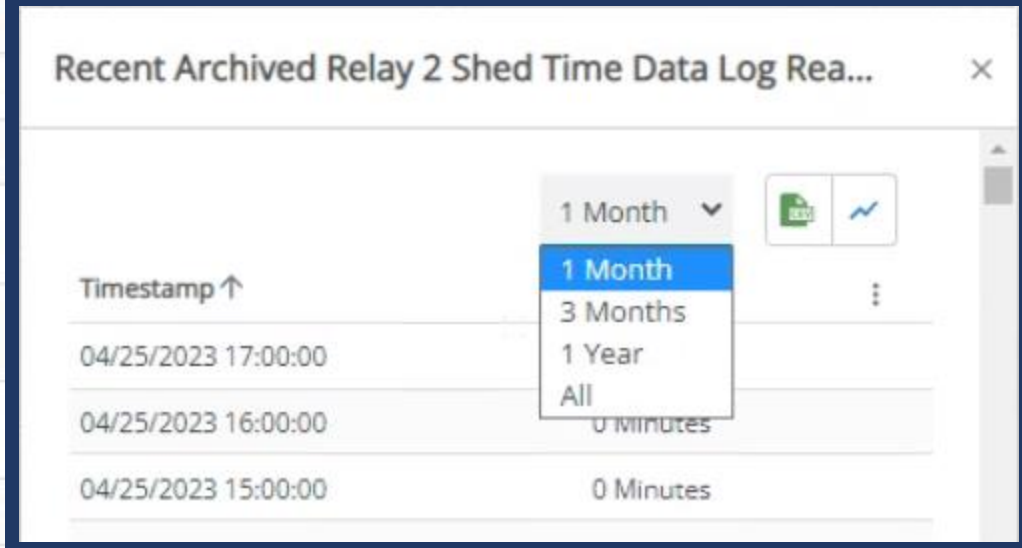
Serial Number	Date	Time	Runtime
71041	9/18/2022	12:00:00	0
71036	9/18/2022	12:00:00	0
71031	9/18/2022	12:00:00	0
71037	9/18/2022	12:00:00	41
71041	9/18/2022	12:00:00	0
71038	9/18/2022	12:00:00	6
71032	9/18/2022	12:00:00	33
71038	9/18/2022	12:00:00	0
71038	9/18/2022	12:00:00	0
71034	9/18/2022	12:00:00	0
71034	9/18/2022	12:00:00	0
71032	9/18/2022	12:00:00	59
71039	9/18/2022	12:00:00	60

Serial Number	Date	Time	Runtime
71041	9/18/2022	13:00:00	0
71036	9/18/2022	13:00:00	0
71031	9/18/2022	13:00:00	25
71037	9/18/2022	13:00:00	28
71041	9/18/2022	13:00:00	0
71038	9/18/2022	13:00:00	0
71032	9/18/2022	13:00:00	16
71038	9/18/2022	13:00:00	0
71038	9/18/2022	13:00:00	0
71034	9/18/2022	13:00:00	0
71034	9/18/2022	13:00:00	0
71032	9/18/2022	13:00:00	50
71039	9/18/2022	13:00:00	40

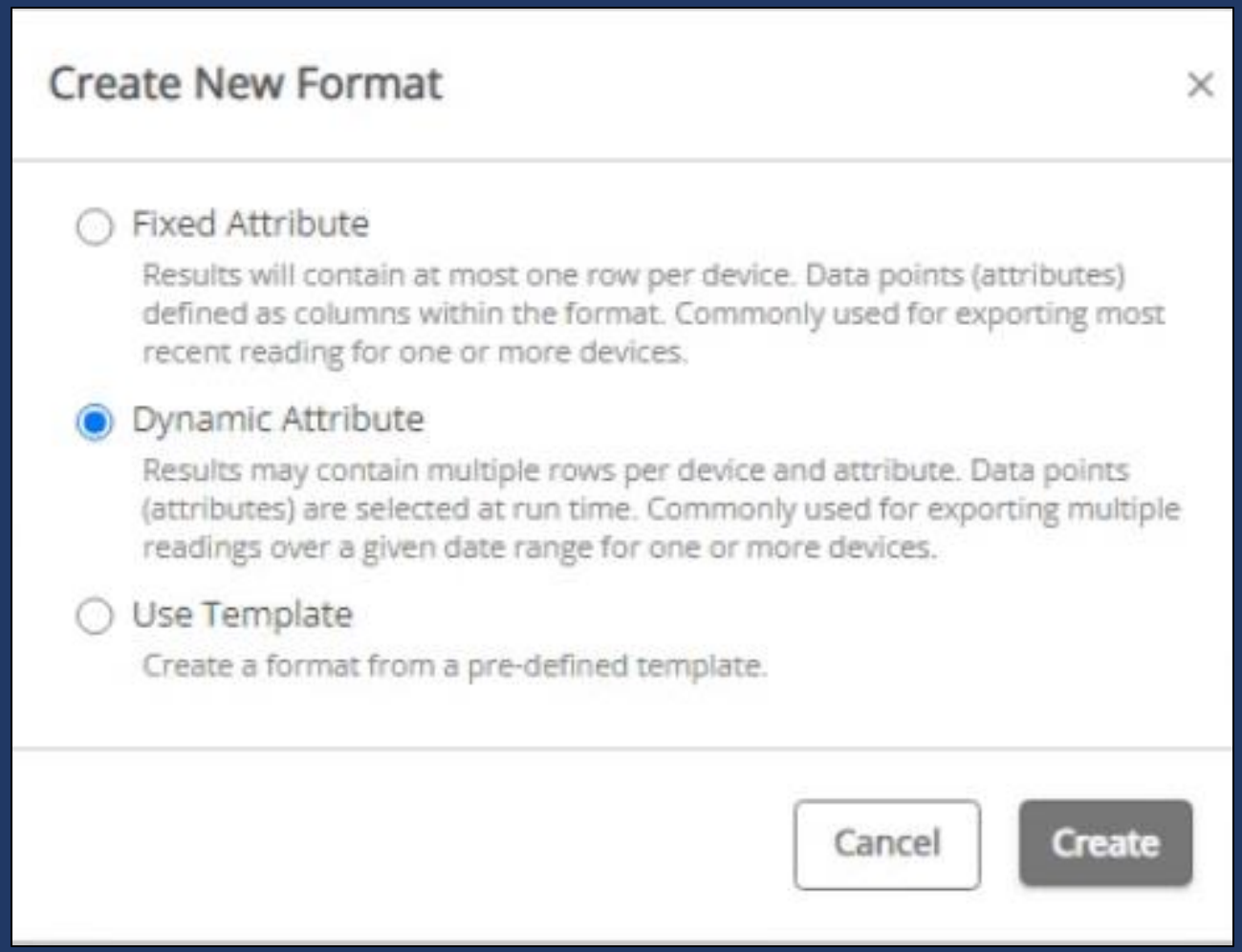
Serial Number	Date	Time	Runtime
71041	9/18/2022	14:00:00	0
71036	9/18/2022	14:00:00	0
71031	9/18/2022	14:00:00	25
71037	9/18/2022	14:00:00	31
71041	9/18/2022	14:00:00	0
71038	9/18/2022	14:00:00	6
71032	9/18/2022	14:00:00	12
71038	9/18/2022	14:00:00	0
71038	9/18/2022	14:00:00	0
71034	9/18/2022	14:00:00	22
71034	9/18/2022	14:00:00	0
71032	9/18/2022	14:00:00	33
71039	9/18/2022	14:00:00	52

LCR Device Points – Shed Time Data Log





LCR Data Logs – Build Data Exports!



Name of Format: Shed Time Reporting

Delimiter: Comma (,)

Header: Device,Timestamp,Value,Name

Footer:

Time Zone Format: Local

☐ Exclude Readings with Abnormal Quality

Field Setup

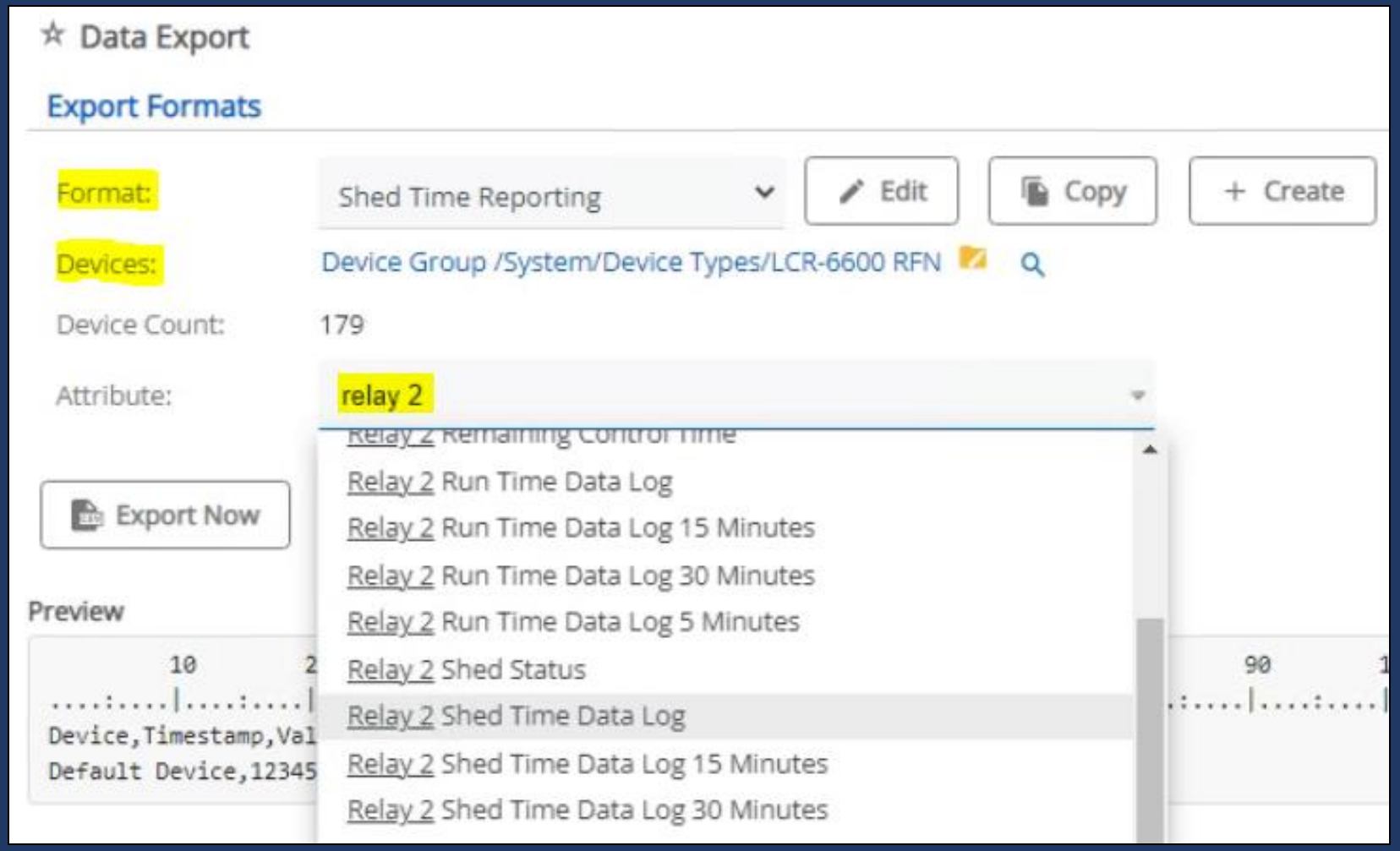
Field	Data Type	Data Selection	Days Previous	Missing Value	Rounding	Pattern	Field Size	Padding
Device Name				Leave Blank			No Max	None
Address/Serial Number				Leave Blank			No Max	None
Timestamp				Leave Blank		MM/dd/yyyy HH:mm	No Max	None
Value				Leave Blank	Half Even	#####	No Max	None
Attribute Name				Leave Blank		DEFAULT	No Max	None

Add

Preview

```
        10        20        30        40        50        60        70        80        90        100       110       120       130
....:....|....:....|....:....|....:....|....:....|....:....|....:....|....:....|....:....|....:....|....:....|....:....|....:
Device,Timestamp,Value,Name
Default Device,123456789,04/25/2023 22:05,1234546,Delivered kWh
```

Shed Time Data Log Export



Shed Time Data Log, Evaluation - Normal

	A	B	C	D	E
1	**SN**	**Device**	**Timestamp**	**Value**	**Point**
2	72004	745	8/11/2021 0:00	0	Relay 2 Shed Time Data Log
3	72004	745	7/29/2021 1:00	0	Relay 2 Shed Time Data Log
4	72004	745	7/29/2021 2:00	0	Relay 2 Shed Time Data Log
5	72004	745	7/29/2021 3:00	0	Relay 2 Shed Time Data Log
6	72004	745	7/29/2021 4:00	0	Relay 2 Shed Time Data Log
7	72004	745	7/29/2021 5:00	0	Relay 2 Shed Time Data Log
8	72004	745	7/29/2021 6:00	0	Relay 2 Shed Time Data Log
9	72004	745	7/29/2021 7:00	0	Relay 2 Shed Time Data Log
10	72004	745	7/29/2021 8:00	0	Relay 2 Shed Time Data Log
11	72004	745	7/29/2021 9:00	0	Relay 2 Shed Time Data Log
12	72004	745	7/29/2021 10:00	0	Relay 2 Shed Time Data Log
13	72004	745	7/29/2021 11:00	0	Relay 2 Shed Time Data Log
14	72004	745	7/29/2021 12:00	0	Relay 2 Shed Time Data Log
15	72004	745	7/29/2021 13:00	3	Relay 2 Shed Time Data Log
16	72004	745	7/29/2021 14:00	60	Relay 2 Shed Time Data Log
17	72004	745	7/29/2021 15:00	60	Relay 2 Shed Time Data Log
18	72004	745	7/29/2021 16:00	60	Relay 2 Shed Time Data Log
19	72004	745	7/29/2021 17:00	60	Relay 2 Shed Time Data Log
20	72004	745	7/29/2021 18:00	60	Relay 2 Shed Time Data Log
21	72004	745	7/29/2021 19:00	60	Relay 2 Shed Time Data Log
22	72004	745	7/29/2021 20:00	32	Relay 2 Shed Time Data Log
23	72004	745	7/29/2021 21:00	0	Relay 2 Shed Time Data Log
24	72004	745	7/29/2021 22:00	0	Relay 2 Shed Time Data Log
25	72004	745	7/29/2021 23:00	0	Relay 2 Shed Time Data Log

Shed Time Data Log, Evaluation - Abnormal

Device	Timestamp	Value	Point
72001	8/9/2021 14:00	0	Relay 2 Shed Time Data Log
72001	8/9/2021 15:00	0	Relay 2 Shed Time Data Log
72001	8/9/2021 16:00	0	Relay 2 Shed Time Data Log
72001	8/9/2021 17:00	0	Relay 2 Shed Time Data Log
72001	8/10/2021 17:00	52	Relay 2 Shed Time Data Log
72001	7/29/2021 1:00	0	Relay 2 Shed Time Data Log
72001	7/29/2021 2:00	0	Relay 2 Shed Time Data Log
72001	7/29/2021 3:00	0	Relay 2 Shed Time Data Log
72001	7/29/2021 4:00	0	Relay 2 Shed Time Data Log

Device	Timestamp	Value	Point
72004	7/29/2021 1:00	0	Relay 2 Shed Time Data Log
72004	7/29/2021 2:00	0	Relay 2 Shed Time Data Log
72004	7/29/2021 3:00	0	Relay 2 Shed Time Data Log
72004	7/29/2021 4:00	0	Relay 2 Shed Time Data Log
72004	7/29/2021 5:00	0	Relay 2 Shed Time Data Log
72004	7/29/2021 6:00	0	Relay 2 Shed Time Data Log
72004	7/29/2021 7:00	0	Relay 2 Shed Time Data Log
72004	7/29/2021 20:00	33	Relay 2 Shed Time Data Log
72004	7/29/2021 21:00	0	Relay 2 Shed Time Data Log
72004	7/29/2021 22:00	0	Relay 2 Shed Time Data Log
72004	7/29/2021 23:00	0	Relay 2 Shed Time Data Log
72004	7/30/2021 0:00	0	Relay 2 Shed Time Data Log

Control Audit Report

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Control Audit Report

Home / Assets / Actions / LM Control Audit

☆ LM Control Audit

Assets Selected: 151 Individually Selected

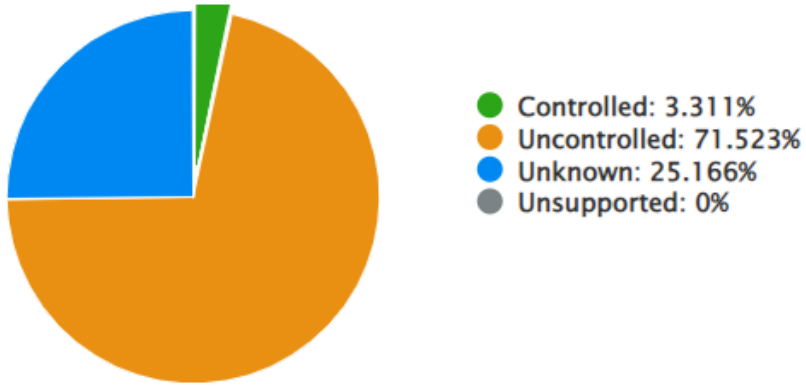
04/28/2023 12:09 CDT

to

05/05/2023 12:09 CDT

Progress: Finished

Run Audit



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Control Audit Report

Controlled Devices

Devices: 5 (3.311%)

New Action | Download

Serial Number	Device Type	Account No	Control Total
72300	LCR 6700 RFN	5-458	2 hours 24 minutes
72300	LCR 6700 RFN	8-202	3 hours
72300	LCR 6700 RFN	7-480	7 hours 35 minutes
72300	LCR 6700 RFN	7-370	5 hours 35 minutes
72300	LCR 6700 RFN	8-646	2 hours 35 minutes

1 - 5 of 5

Uncontrolled Devices

Devices: 108 (71.523%)

New Action | Download

Serial Number	Device Type	Account No
72300	LCR 6700 RFN	6-013
72300	LCR 6700 RFN	5-480
72300	LCR 6700 RFN	5-487
72300	LCR 6700 RFN	6-046
72300	LCR 6700 RFN	5-534
72300	LCR 6700 RFN	6-040
72300	LCR 6700 RFN	6-048
72300	LCR 6700 RFN	8-154
72300	LCR 6700 RFN	8-128
72300	LCR 6700 RFN	8-062

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Commander

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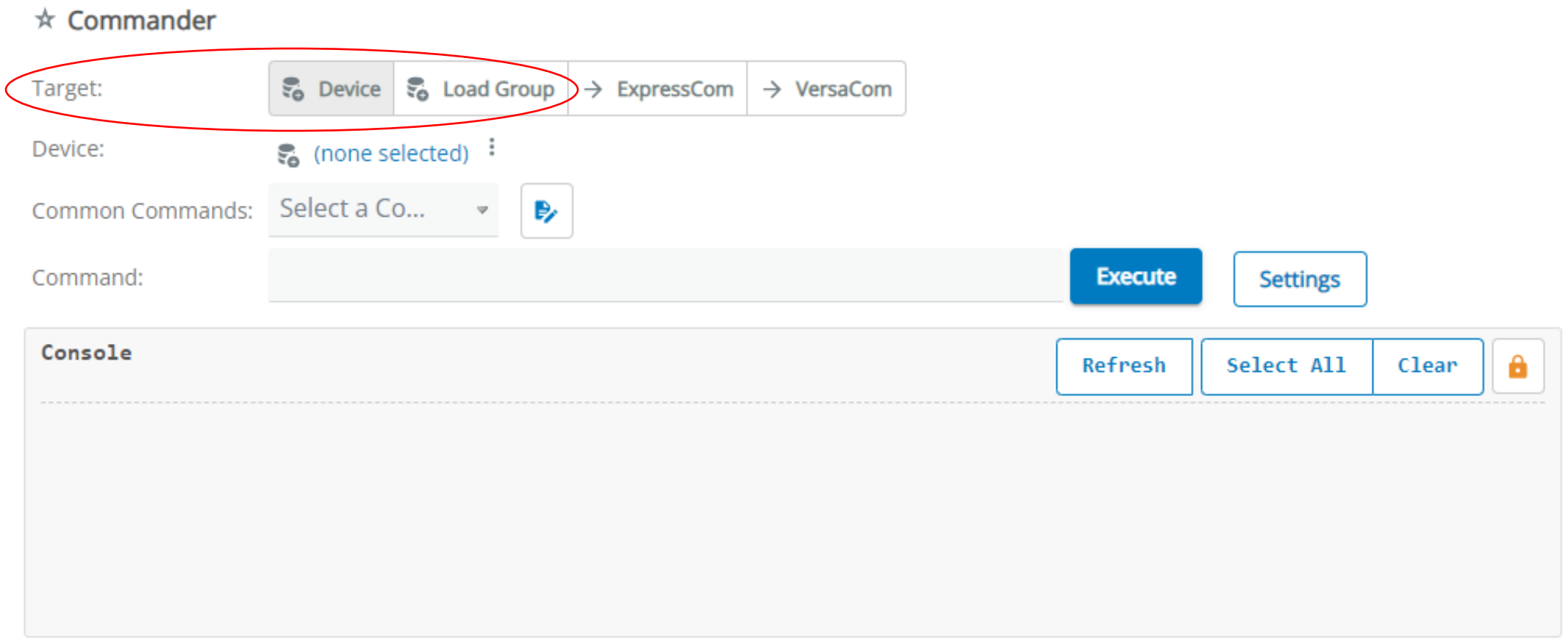
Commander



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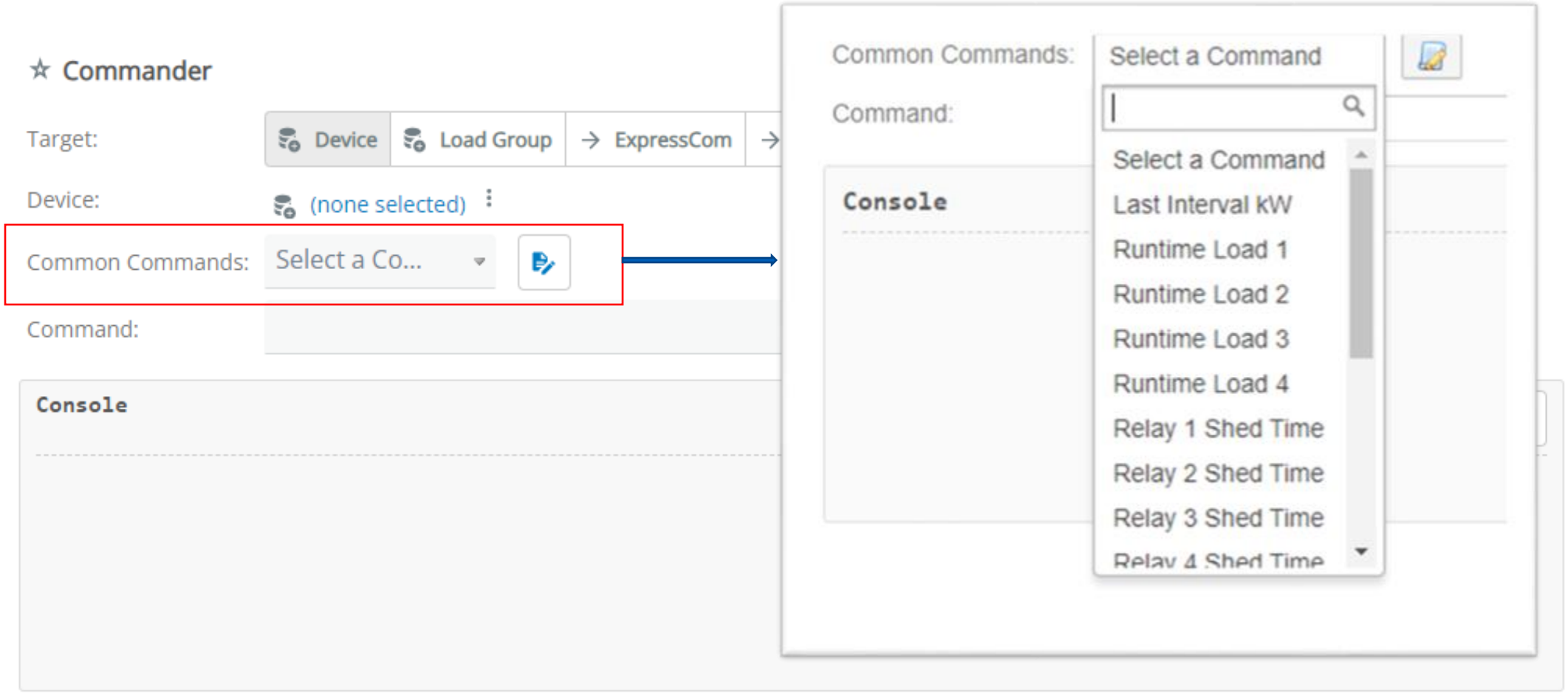
Commander



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Mapping

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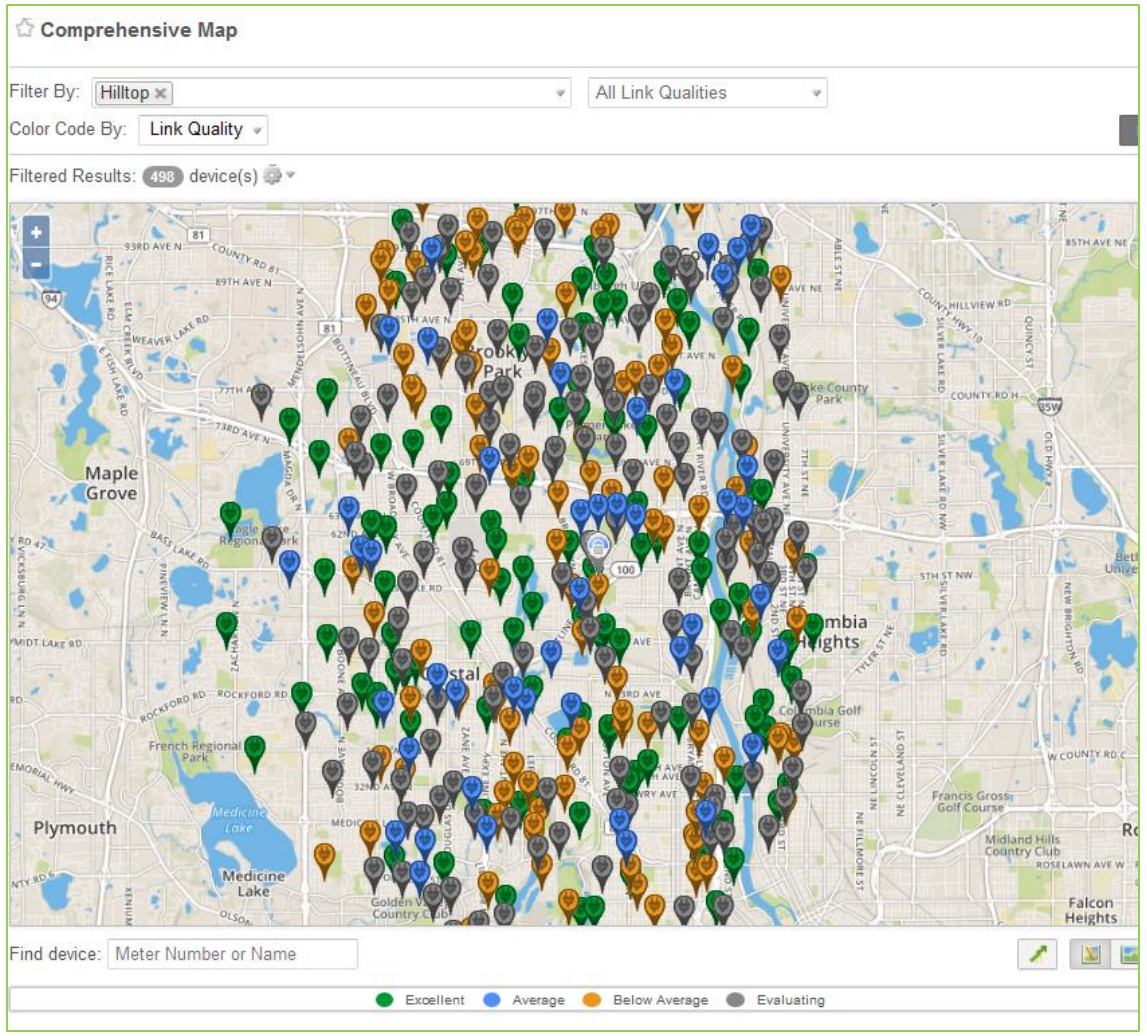
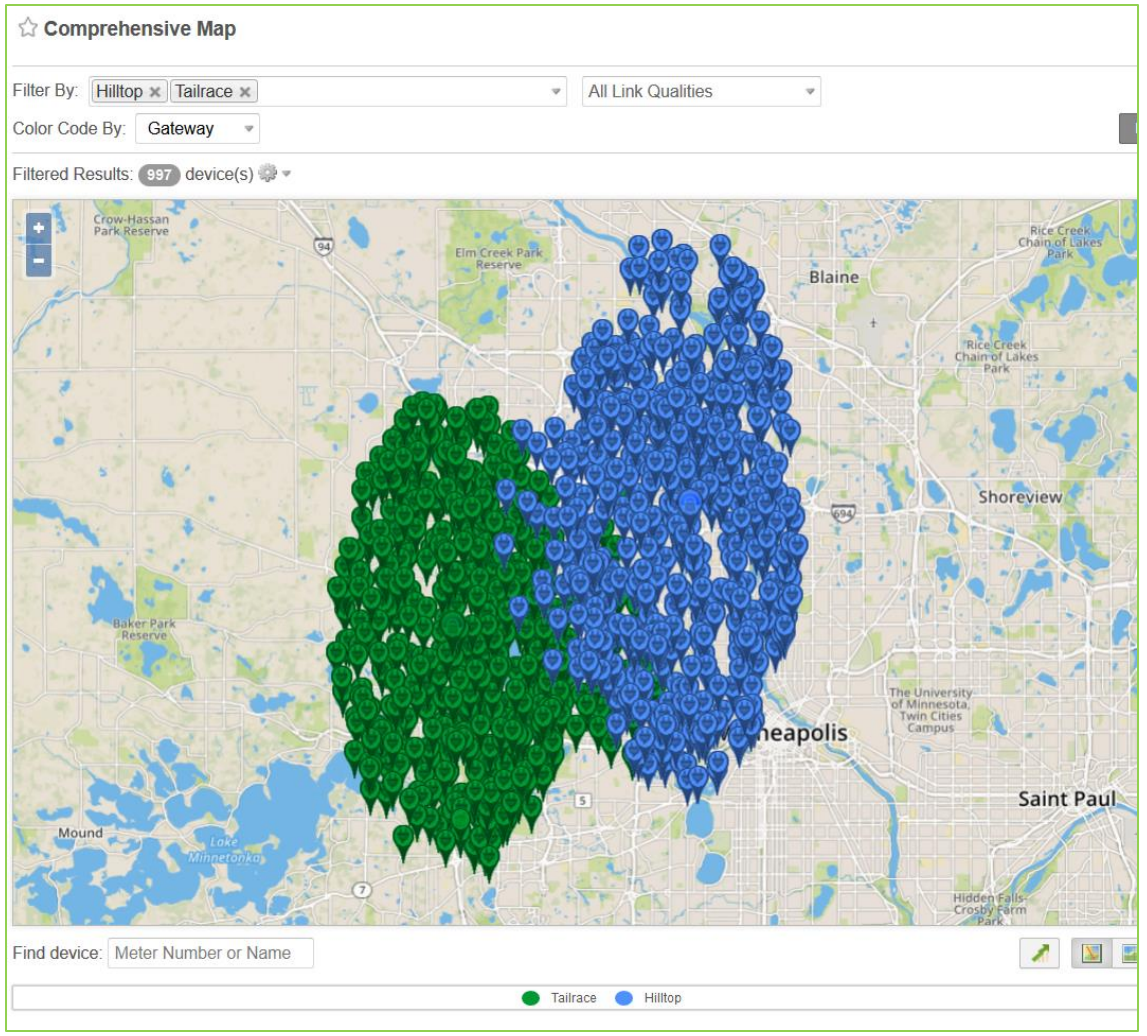
Comprehensive Maps





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Addressing

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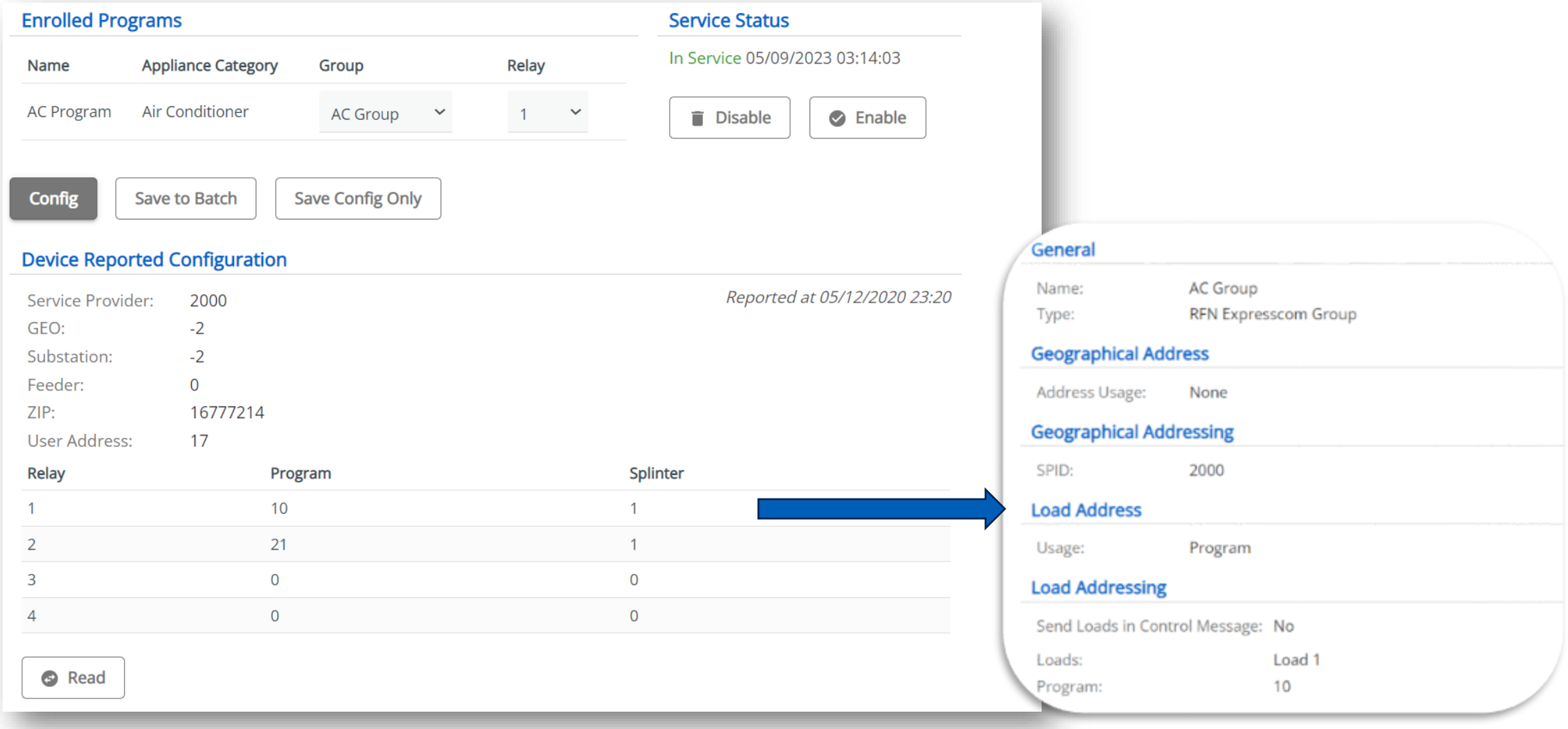
Addressing



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Cellular LCR

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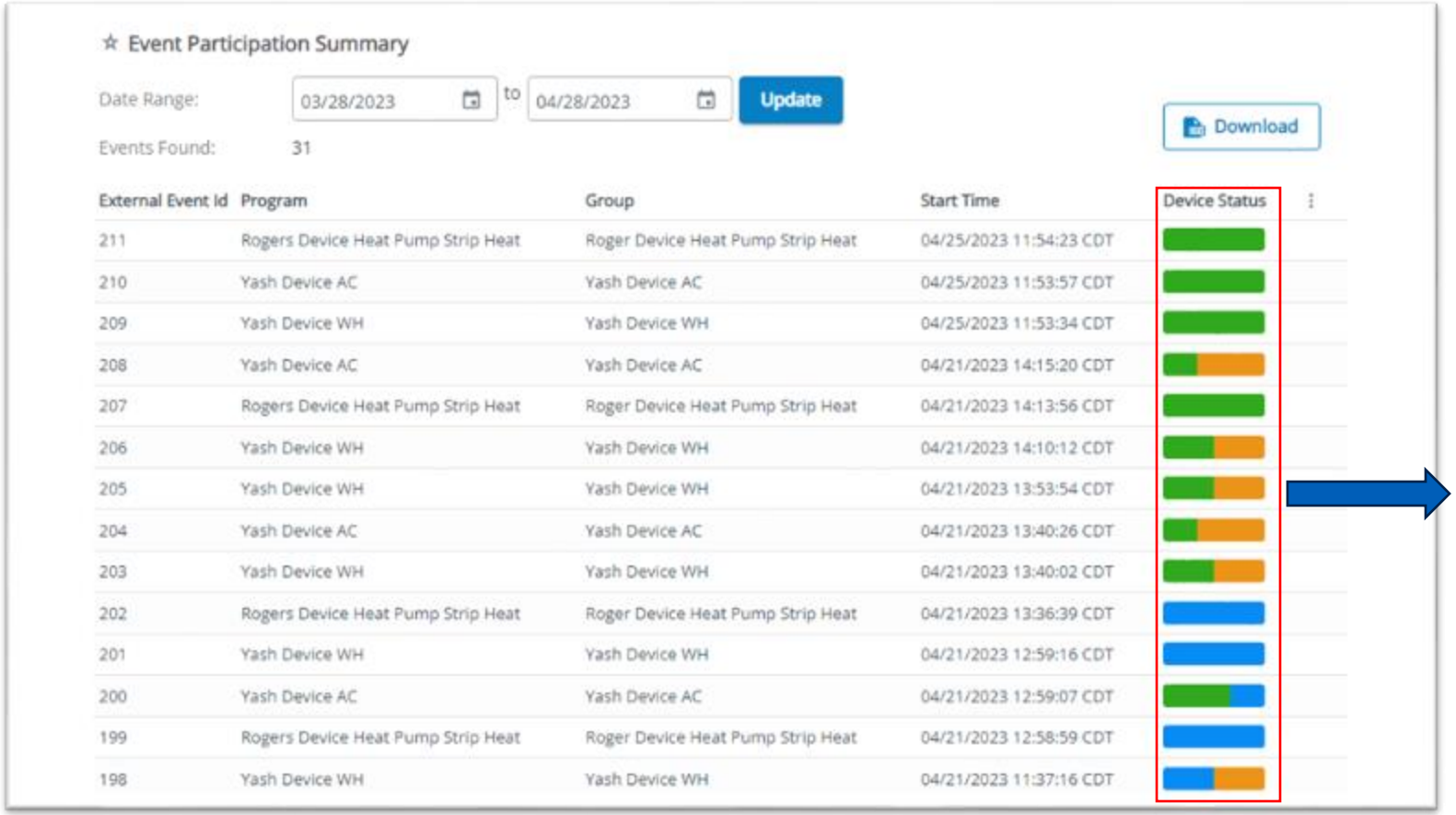
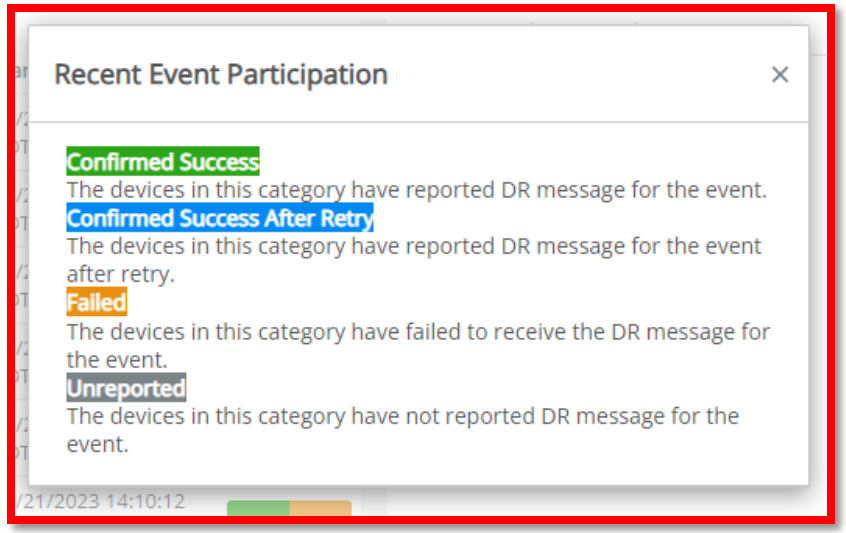
Event Participation Summary



External Event Id	Program	Group	Start Time	Device Status
211	Rogers Device Heat Pump Strip Heat	Roger Device Heat Pump Strip Heat	04/25/2023 11:54:23 CDT	
210	Yash Device AC	Yash Device AC	04/25/2023 11:53:57 CDT	
209	Yash Device WH	Yash Device WH	04/25/2023 11:53:34 CDT	
208	Yash Device AC	Yash Device AC	04/21/2023 14:15:20 CDT	
207	Rogers Device Heat Pump Strip Heat	Roger Device Heat Pump Strip Heat	04/21/2023 14:13:56 CDT	
206	Yash Device WH	Yash Device WH	04/21/2023 14:10:12 CDT	
205	Yash Device WH	Yash Device WH	04/21/2023 13:53:54 CDT	
204	Yash Device AC	Yash Device AC	04/21/2023 13:40:26 CDT	
203	Yash Device WH	Yash Device WH	04/21/2023 13:40:02 CDT	
202	Rogers Device Heat Pump Strip Heat	Roger Device Heat Pump Strip Heat	04/21/2023 13:36:39 CDT	
201	Yash Device WH	Yash Device WH	04/21/2023 12:59:16 CDT	
200	Yash Device AC	Yash Device AC	04/21/2023 12:59:07 CDT	
199	Rogers Device Heat Pump Strip Heat	Roger Device Heat Pump Strip Heat	04/21/2023 12:58:59 CDT	
198	Yash Device WH	Yash Device WH	04/21/2023 11:37:16 CDT	



External Event Id	Program	Group	Start Time	Stop Time	Device Name	Account Number	Event Phase	Participation State	Serial Number	OptOut Status	Fail Reason	Retry Time
189	Yash Device AC	Yash Device AC	4/20/2023 7:52	4/20/2023 8:59	7.8331E+13	Yash's Test Devices	Unknown	Unreported	7.8331E+13	NONE	Unable to send device command., id=5534b7eb-9e7b-4700-b637-d3caa8df7832	
189	Yash Device AC	Yash Device AC	4/20/2023 7:52	4/20/2023 8:59	7.1789E+14	Yash's Test Devices	Completed	Confirmed	7.1789E+14	NONE		

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