

FLEXPOWER® APPLICATION NOTE AN-24 SETTING UP NETLINK® REPORTS

OVERVIEW

LifeSafety Power's NetLink modules provide network monitoring and control of a power system in access control or other related systems.

As part of the monitoring provided, periodic reports may either be exported or emailed from the NetLink with a history of data points taken to aid in diagnosing problems or monitoring the overall health of the power system.

This application note will help you make the most of these reports, using an NL4 with a connected FP075 an M8 board, and an additional B100 set for 5V in the examples.



CONFIGURING THE REPORTS

The NetLink provides a comprehensive list of items to include or exclude from the event log. To select and configure the reported items for the NetLink, navigate to the "Reporting" page of the network interface. This is also where the number of history events to include in the emailed report may be set. In addition, high and low limits, service dates, and other parameters may be configured on the "Configure" page of the Netlink. If an M8 board is present, the M8 parameters are programmable in the M8's configure page.

In order for emailed reports to be sent, the email section on the Configure page needs to be properly set up. The email setup section is where the frequency of periodic status report emails can be set.

Refer to the NetLink manual for detailed information on configuring all of the above settings.



BREAKING DOWN THE REPORTS

Once a report is received, either via email or manual creation, it may be opened in Microsoft Excel or other spreadsheet software that accepts CSV files. When opened, the report will appear as shown below:

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1	Site ID	FPO/5/150	J-D8M8NL	4E2																		-11
4	Report triv	Beyond th	Room Ter	Room Ter	mperature	upper lim	it is 100.00	Deg.F														- 1
4	Report an	beyond	Noom ren	incom re.	inperator 2	upper min	113 200.02	Deg.														
5																						
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7	Service du	no																				/
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9	Device na	Device pa	Fri Mar 11	Fri Mar 11	Fri Mar 11	Fri Mar 11	Fri Mar 11	Fri Mar 11	Fri Mar 11	Fri Mar 11	Fri Mar 11	Fri Mar 11	. 2016 13:41:	:01								- 1
10	Notlink	Statue	Revord ti	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal	Normal										- 1
12	Netlink	Enclosure	112.67	112.67	112.67	111.79	111.79	111.79	110.91	110.91	110.91	110.04										
13	Netlink	Room Ter	100.36	99.48	95.08	94.2	91.56	87.16	83.64	81	79.24	79.24										
14	Netlink	12V Batte	-0.15	-0.15	-0.15	-0.15	-0.2	-0.15	-0.15	-0.15	-0.15	-0.2										
15	Netlink	Total 12V	-0.1	-0.1	-0.05	-0.1	-0.1	-0.1	-0.1	-0.05	-0.05	-0.05										
16	Netlink	B100 Outp	9.06	9.03	9.03	9.03	9.03	9.03	9.03	9.03	9.03	9.03										
17	Netlink	Tamper S	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive										
18																						_
19	FP1	Model nu	FPO150-1	FPO150-1	FPO150-1	FPO150-1	FPO150-1	FPO150-1	FPO150-1	FPO150-1	FPO150-1	FPO150-1	00									
20	FP1	System ra	No	No	No	No	No	No	No	No	No	No										_
21	FP1	AC rauns	N0 Inactive	N0 Inactive	Inactive	Inactive	Inactive	Inactive	No Inactive	No	No	No										-
23	FP1	Output la	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive										
24	FP1	Output vo	12.61	12.61	12.61	12.61	12.61	12.61	12.61	12.61	12.61	12.61										
25	FP1	Battery vo	13.84	13.81	13.81	13.81	13.84	13.84	13.81	13.81	13.81	13.84										
26	FP1	Battery cł	0	0	0	0	0	0	0	-0.01	-0.01	0										
27	FP1	Total pow	6219	6219	6219	6219	6219	6219	6219	6219	6219	6219										
28	FP1	Battery in	172	172	172	172	172	172	172	172	172	172										_
29	FP1	# of AC fa	124	124	124	124	124	124	124	124	124	124										
30	FP1	# of syste	100	100	100	100	100	100	100	100	100	100										-
32	FPI	Battery St	100	100	100	100	100	100	100	100	100	100										
33	FP2	Model nu	FPO75	FPO75	FPO75	FPO75	FPO75	FPO75	FPO75	FPO75	FPO75	FPO75										-
34	FP2	System fa	No	No	No	No	No	No	No	No	No	No										
35	FP2	AC fault s	No	No	No	No	No	No	No	No	No	No										
36	FP2	FAI status	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive										
37	FP2	Output la	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive										_
38	FP2	Output vo	25.31	25.28	25.31	25.31	25.31	25.31	25.31	25.28	25.28	25.31										_
39	FP2	Battery vo	0.32	0.32	0.32	0.32	0.32	0.32	0.29	0.32	0.29	0.32										_
40	FP2	Battery or	1//98	1//98	14498	1//97	1//97	1//97	1//197	1//197	14497	14497										-
41	←→ Fle	xPowerRer	port2 /	14450	14430	14457	14437	14437	14457	14497	14497	14457					ш				•	
Rez	Ready Ready Ready																	₩0₩	100% 😑			Ð.,

With some quick reformatting, we can make the report more readable.

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Site ID	FP075/150-D8M8NL4E2												
eport trigger: Netlink nd	the Room Temperature upper	oom Temperature is 100.36 Deg.	Temperature up	per limit is 100	00 Deg.F								
Service due	no												
Davisa anma	Device encometer	Evi May 11 2016 14:21/26	Exi Max 11	016 14:01:01	E el I	Apr 11 2016 1	1.16:00	Ext N	av 11 2016 1	411-01	Eci May 11 201	6 14:06:00	Exi Max 11.2
Device frame	Device parameter	FIT Midt 11 2010 14.21.20	FIT WIGH 11	2010 14.21.01		vidi 11 2010 1-	+.10.00	PH IN	81 11 2010 1	4.11.01	FIT Mat 11 2010	0 14.00.00	FIT Midt 11 20
Netlink	Status	nd the Room Temperature upper	No	rmal		Normal			Normal		Norma	al	Nor
Netlink E	nclosure temperature (Deg.F)	112.67	11	2.67		112.67			111.79		111.79	9	111
Netlink	12V Patton Current (Amor)	100.36	99	15		95.08			94.2		91.56		87.
Netlink	Total 12V Current (Amps)	-0.13		11		-0.15			-0.15		-0.2		-0.
Netlink	B100 Output (9V) (Volts)	9.06	9	03		9.03			9.03		9.03		91
Netlink	Tamper Switch	Inactive	Ina	ctive		Inactive			Inactive		Inactiv	/e	Inac
601	Model number	EP0150-100	5901	50,100		EP0150-100			EP0150-10	0	EPO150	100	5001
FP1	System fault status	No	1101	100		No			No	•	No	100	
FP1	AC fault status	Ne		No		No			No		No		N
FP1	FAI status	Inactive	Ina	ctive		Inactive			Inactive		Inactiv	/e	Ina
FP1	Output latching on FAI	Inactive	Ina	ctive		Inactive			Inactive		Inactiv	/e	Ina
FP1	Output voltage (Volts)	12.61	12	.61		12.61			12.61		12.61		12
FP1	Battery voltage (Volts)	13.84	18	.81		13.81			13.81		13.84		13
FP1 B	attery charger current (Amps)	0		0		0			0		0		(
FP1	Total power-up time (Hours)	6219	6	219		6219			6219		6219		62
FP1 8	Sattery installed time (Hours)	172	1	72		172			172		172		1
EP1	# of sustem faults detected	100	1	24		124			124		124		11
FP1	Battery State of charge	100	1	00		100			100		100		10
	buttery state or enarge	100				100			100		200		
FP2	Model number	FPO75	FF	075		FPO75			FPO75		FPO75	5	FP
FP2	System fault status	No		No		No			No		No		P
FP2	AC fault status	No		No		No			No		No		
FP2	FAI status	Inactive	Ina	ctive		Inactive			Inactive		Inactiv	/e	Ina
FP2	Output latching on FAI	Inactive	Ina	ctive		Inactive			Inactive		Inactiv	/e	Ina
FP2	Output voltage (Volts)	25.31	25	.28		25.31			25.31		25.31		25
FP2	Battery voltage (Volts)	0.32	0	.32		0.32			0.32		0.32		0.
EP2 D	Total power-up time (Hours)	14498	14	409		14498			14497		14497		14
FP2 P	atten installed time (Hours)	2049	14	490		2049			2049		2049		20
FP2 U	# of AC faults detected	2045		10		70			70		2045		
FP2	# of system faults detected	89		9		89			89		89		
FP2	Battery State of charge	0		0		0			0		0		
M8-1	ZoneDescription												
MR-1	Voltage(V)	0		n		0			0		0		
M8-1	Current(A)	0		0		0			0		0		
M8-1	Power	ő		0		ő			0		0		
M8-1	PowerReady	Yes)	es		Yes			Yes		Yes		Ye
							5 x 1						

BREAKING DOWN THE REPORTS

Site ID

The Top of the report shows the Site ID of the NetLink board, which is FP075/150-D8M8NL4E2 in this example. This ID is set by the user in the NetLink's Configure page.

Trigger Information

If the report was sent due to a trigger condition (fault, service due, time period, etc) there will be some information regarding the condition to cause the report to be sent. These conditions are selected in the Reporting page of the NetLink. If the report was manually created and exported from the NetLink's interface, this section will not be present.

	А	В	С	D	
1	Site ID	FPO75/150-D8M8NL4E2			
2					
3	Report trigger: Netlink	Beyond the Room Temperature upper limit	Room Temperature is 100.36 Deg.F	Room Temperature upper limit is 100.00 Deg.F	
4					
5					
6					
7	Service due	no			
8					

In this example, the report was sent because the NetLink detected that the Room Temperature (using the external temperature sensor of the NL4) was above the upper limit setting of 100 degrees F. This could indicate that the air conditioning in the room has failed, a thermostat has malfunctioned, or some other problem.

This information will vary, depending on the cause for the report being sent. For example "Report Period" would appear when the periodic report is sent - this period is set in the Email Settings section of the Configure page of the NetLink.

You can also see in this example that the Service Due date has not been passed.

History Data

Below the Site ID and Trigger Information sections is the data captured by the NetLink during the periodic snapshots and any trigger conditions which occur.

0								
9	Device name	Device parameter	Fri Mar 11 2016 14:21:26	Fri Mar 11 2016 14:21:01	Fri Mar 11 2016 14:16:00	Fri Mar 11 2016 14:11:01	Fri Mar 11 2016 14:06:00	Fri Mar 11 2016 14:0:
10								
11	Netlink	Status	nd the Room Temperature upper	Normal	Normal	Normal	Normal	Normal
12	Netlink	Enclosure temperature (Deg.F)	112.67	112.67	112.67	111.79	111.79	111.79
13	Netlink	Room Temperature (Deg.F)	100.36	99.48	95.08	94.2	91.56	87.16
14	Netlink	12V Battery Current (Amps)	-0.15	-0.15	-0.15	-0.15	-0.2	-0.15
15	Netlink	Total 12V Current (Amps)	-0.1	-0.1	-0.05	-0.1	-0.1	-0.1
16	Netlink	B100 Output (9V) (Volts)	9.06	9.03	9.03	9.03	9.03	9.03
17	Netlink	Tamper Switch	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
18								
19	FP1	Model number	FPO150-100	FPO150-100	FPO150-100	FPO150-100	FPO150-100	FPO150-100
20	FP1	System fault status	No	No	No	No	No	No
21	FP1	AC fault status	No	No	No	No	No	No
22	FP1	FAI status	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
23	FP1	Output latching on FAI	Inactive	Inactive	Inactive	Inactive	Inactive	Inactive
24	FP1	Output voltage (Volts)	12.61	12.61	12.61	12.61	12.61	12.61
25	FP1	Battery voltage (Volts)	13.84	13.81	13.81	13.81	13.84	13.84
26	FP1	Battery charger current (Amps)	0	0	0	0	0	0
27	FP1	Total power-up time (Hours)	6219	6219	6219	6219	6219	6219
28	FP1	Battery installed time (Hours)	172	172	172	172	172	172
29	FP1	# of AC faults detected	124	124	124	124	124	124
30	FP1	# of system faults detected	100	100	100	100	100	100
31	FP1	Battery State of charge	100	100	100	100	100	100
32								
33	FP2	Model number	FPO75	FPO75	FPO75	FPO75	FPO75	FPO75
34	FP2	System fault status	No	No	No	No	No	No
35	FP2	AC fault status	No	No	No	No	No	No

The heading for this section consists of the following:

- Device Name This is the device that each parameter belongs to. Data under this heading can be Netlink, FP1, FP2, M8-1, M8-2, etc. Only the devices present and enabled in the Reporting page of the NetLink will be present here.
- Device Parameter These are the parameters for the associated device. In the above example, the NetLink is showing five monitored parameters - Status, Enclosure Temperature, Room Temperature, 12V Battery Current, Total 12V current, B100 Output, and Tamper Switch.
- Date and Time These are the dates and times of the snapshots taken by the NetLink. The information under these dates and times are the parameters measured by the NetLink. Look at the Device Name and Device Parameter columns to match the data with the parameter.

HOW TO USE THE DATA

Once the report is in Excel or other spreadsheet software, data can be formatted, graphed, etc. to gain the most information. For example, by applying conditional formatting to the NetLink Status row, the fields could be color coded to turn Yellow or Green based on the status. Voltage, current, temperature, etc can be plotted on a graph to more easily spot problems or trends. Once formatted, the sheet can be saved as a template and used again by pasting in new data when the next report is received. However, in order for this to work properly, the report will need to contain the same information every time it is run. If the reported items are changed on the NetLink's Reporting page, the template would need to be adjusted.

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