



BACnet P2 – Quick Start

Configuration of the BACnetP2 gateway is done via the BACnet interface.

1. Connect to the BACnetP2 using the BACnet who-is command.
The root device object instance is 2,700,000

2. Explore the device object.
The initial device objects should be as shown.

CSV1	Driver version	Purpleswift apogee P2 Library version 2.0.0.001	Driver Version
CSV2	Last Result	Please set Driver Link Protocol. (MSV1)	Result of last User command
MV1	Driver link Protocol	None	P2 over RS485 or Ethernet options

3. Set the required link protocol using MSV1.
For Ethernet operation set MSV1 value to 3

CSV1	Driver version	Purpleswift apogee P2 Library version 2.0.0.001	Driver Version
CSV2	Last Result	Please set Driver Link Protocol. (MSV1) Please reload device objects.	Result of last User command
MV1	Driver link Protocol	P2 over Ethernet	P2 over RS485 or Ethernet options

*Note that CSV2 is used to provide useful hints.

4. Reload the device objects.
Several device objects should now be accessible as show.

AI12	P2 New cmds found	0	P2 New cmds found
AV1	Join BLN count	1	Number of BLN connections required
BV1	Driver Enable	Disabled	Enable P2 communications
BV2	Logout	Logged In	Disable configuration editing
CSV1	Driver version	Purpleswift apogee P2 library version 2.0.0.005	Driver version
CSV2	Last Result	Driver Link Protocol saved. (MSV1) Please reload device objects.	Result of last user command
CSV3	P2 Driver Status	System OFF.	P2 Driver Status
CSV4	P2 Network uptime		P2 Network uptime
CSV5	System Resources	Free=1.426 Gb, Used=2.428 Gb, CPU=0.0 %, Disk=17.748 Gb	System Resources
CSV6	Driver buffers	P2 System settings saved. MaxArray(0%) MaxBuffer(0%)	Driver buffers
CSV7	Driver ID	{38305-27150-15670-00E2-E5D5}	Driver ID used to generate licence key
CSV8	Licence Key		Licence key in use
CSV9	Licence Status	No valid licence found. Demo mode active. Driver disable in 258760 seconds.	Licence validation
CSV10	Login	<ALREADY LOGGED IN>	Enter password to enable configuration editing
CSV11	This Node Name	<***REQUIRED***>	A unique name for this device on the P2 BLN.
CSV12	This Site	<USE DEFAULT>	A Site name for this device on the P2 BLN
CSV13	Join BLN[0] target BLN	<***REQUIRED***>	Join this P2 BLN
CSV14	Join BLN[0] target Node Name	<***REQUIRED***>	Connect to this device on the P2 BLN
CSV15	Join BLN[0] target IP address	<***REQUIRED***>	Connect to this device on the P2 BLN
MV1	Driver Link Protocol	P2 over Ethernet	P2 over RS485 or Ethernet option

5. Set the number of BLN's using AV1.
The minimum is 1.

AI12	P2 New cmds found	0	P2 New cmds found
AV1	Join BLN count	2	Number of BLN connections required
BV1	Driver Enable	Disabled	Enable P2 communications

6. Reload the device objects.
The extra Join BLN setting will appear as shown.

CSV11	This Node Name	<***REQUIRED***>	A unique name for this device on the P2 BLN.
CSV12	This Site	<USE DEFAULT>	A Site name for this device on the P2 BLN
CSV13	Join BLN[0] target BLN	<***REQUIRED***>	Join this P2 BLN
CSV14	Join BLN[0] target Node Name	<***REQUIRED***>	Connect to this device on the P2 BLN
CSV15	Join BLN[0] target IP address	<***REQUIRED***>	Connect to this device on the P2 BLN
CSV16	Join BLN[1] target BLN	<***REQUIRED***>	Join this P2 BLN
CSV17	Join BLN[1] target Node Name	<***REQUIRED***>	Connect to this device on the P2 BLN
CSV18	Join BLN[1] target IP address	<***REQUIRED***>	Connect to this device on the P2 BLN
CSV2	Last Result	Join BLN count saved. (AV1) Please reload device objects.	Result of last user command

7. Enter Node names, BLN and IP for each

AV1	Join BLN count	2	Number of BLN connections required
BV1	Driver Enable	Disabled	Enable P2 communications
CSV2	Last Result	Ready to Set Driver Enable. (BV1)	Result of last user command
CSV11	This Node Name	MyNodeName	A unique name for this device on the P2 BLN.
CSV12	This Site	<USE DEFAULT>	A Site name for this device on the P2 BLN
CSV13	Join BLN[0] target BLN	BLN	Join this P2 BLN
CSV14	Join BLN[0] target Node Name	CAB2	Connect to this device on the P2 BLN
CSV15	Join BLN[0] target IP address	192.168.1.99	Connect to this device on the P2 BLN
CSV16	Join BLN[1] target BLN	BLN2	Join this P2 BLN
CSV17	Join BLN[1] target Node Name	CAB3	Connect to this device on the P2 BLN
CSV18	Join BLN[1] target IP address	192.168.1.100	Connect to this device on the P2 BLN
DEV2700000	BACnetP2 00	Operational	Gateway Device and Router
MV1	Driver Link Protocol	P2 over Ethernet	P2 over RS485 or Ethernet option

8. Start the driver by setting the Driver Enable using BV1

AV2	P2 BAUD	57600	Use 0 to select auto BAUD rate.
BV1	Driver Enabled	Enabled	Enabled P2 communications
BV2	Logout	Logged In	Disable Configuration editing
CSV1	Driver Version	Purpleswift apogee P2 library version 2.0.0.001	Driver version
CSV2	Last Result	Driver Enabled saved. (BV1)	Result of Last user command
CSV3	P2 Driver Status	System busy... auto BAUD, trying BAUD=57600	P2 Driver Status

*Note that CSV3 provides info on what the driver is doing.

9. Wait while the P2 driver auto maps the apogee system. This may take several minutes. When CSV3 displays “System ready” then the mapping is complete.

AI1	Panels found	5	Panels found
AI2	Panels online	2	Panels found
AI3	Points found	151	Points found
AI4	TECs found	3	TECs found
AI5	TECs online	3	TECs online
CSV3	P2 Driver Status	System ready.	P2 Driver Status

*Note that during the mapping process several device objects will be created. One for each apogee panel and one for each TEC device found on the P2 network.

BACnetP2 00 (2700000)
Panel 17 (2717001)
TEC dc4 (2717105)
TEC tec40 (2717240)
TEC tec3 (2717303)
Panel 65 (2765001)
Panel 99 (2799001)

10. You may now explore each of the new device objects.

AI100001	tec3:ROOM TEMP	23.4489 °C
AI100004	tec3:RM STPT DIAL	23.4489 °C
AI100007	Tec3:AUX TEMP	3.33556 °C
BI300001	Tec3:DI OVRD SW	OFF
BI300004	Tec3:DI 2	OFF
BI300007	Tec3:DI 3	OFF

*Note that each P2 point is mapped to 4 BACnet objects.

AI100001	tec3:ROOM TEMP	23.4489 °C	
AV100002	tec3:ROOM TEMP_\$COV	0	COVs per minute < 20
MV100002	tec3:ROOM TEMP_\$PRIORITY	NONE	
MV100003	tec3:ROOM TEMP_\$STATUS	FAILED	

11. Info required for software licence.

- 1) Number of Panels (AI1)
- 2) Number of TECs (AI4)
- 3) Driver ID (CSV7)
- 4) Configuration password required (not changeable once licence is issued)

AI1	Panels found	5	Panels found
AI4	TECs found	3	TECs found
CSV7	Driver ID	{12345-12345-12345-1234-1234-1234}	Driver ID used to generate licence key
CSV8	Licence Key		Licence key in use
CSV9	Licence Status	No valid licence found. Demo mode active. Driver disable in 3 seconds.	Licence validation

Please email the above info to bacnetp2@purpleswift.com

12. Activate the licence using CSV8.

CSV7	Driver ID	{12345-12345-12345-1234-1234-1234}	Driver ID used to generate licence key
CSV8	Licence Key	{P2 INSTANCE(01) PANELS(005) TEC(3) 12345-12345-12345-1234}	Licence key in use
CSV9	Licence Status	Licence OK.	Licence validation

*Note that once the licence has been activated the driver configuration will become password protected using the password supplied in 10.4 above.

13. Login / Logout. Use CSV10 to Login and use BV2 to logout.

BV2	Logout	Logged In	Disable configuration editing
CSV10	Login	<ALREADY LOGGED IN>	Enter password to Enable configuration editing