

PulseWorx Gateway HTTP Interface

The PulseWorx Gateway firmware starting with version 2.4 contains a processor for commands received as HTTP. This feature is not enabled by default and must be configured first in UPStart version 8.3.25 or later.

Note that all commands and parameters are case sensitive. For example, "Goto" works and "goto" doesn't.

All these commands can be sent to the Gateway as a HTTP GET.

Version Command

/api/v1/GetVersion

Returns the firmware version of the Gateway. The response is JSON format. For example:

{"make": "PulseWorx Gateway", "firmwareVersion": "2.4"}

Action commands

/api/v1/ActivateLink
/api/v1/DeactivateLink
/api/v1/Goto

Supplied with these commands are parameters. For example, /api/v1/ActivateLink?id=20&level=50

id=x

Device or scene id

level=x

Level for command (0-100). Required for Goto command

rate=x

Ramp rate. If omitted, the rate byte in the UPB command is 0xff

channel=x

Channel for action command. If omitted, the channel byte in the UPB command is 0xff







sid=x

0-255: Source id. if omitted, 0xff is used which is the same source id that UPStart uses for commands it sends

nid=x

0-255: Network id. If omitted, use the network id saved by UPStart in the devtype.dat file

xmt=x

0-3: Transmit count. If omitted, use transmit count saved by UPStart as part of the schedule.dat file

Note: The Gateway firmware doesn't do any range checking of parameter values.

After receiving the command, the Gateway responds with a result in JSON format. If the command was accepted, empty JSON is returned: {}

If a bad command is given a result is returned showing the error.

{"error":{"code":400,"message":"bad request"}}

Status Commands

The Gateway keeps track of the state of each device and scene. Using information saved in the Gateway when UPStart exports to it, the Gateway "knows" the effects of each scene command. These commands allow access to the state for each device and scene as the Gateway knows it. These commands <u>do not</u> communicate with the device, just return the state as recorded by the Gateway.

/api/v1/GetDeviceState?id=x
Where x is a unit id number from 1 to 250

/api/v1/GetLinkState?id=x
Where x is a scene id number from 1 to 250

Gateway file access

Two additional commands are available to retrieve files stored in the Gateway. Note that the returned data is not in JSON format. It is just text as such these commands should not be used for binary files.

/api/v1/GetFileStart?name=filename Return the first chunk of the file

/api/v1/GetFileNext





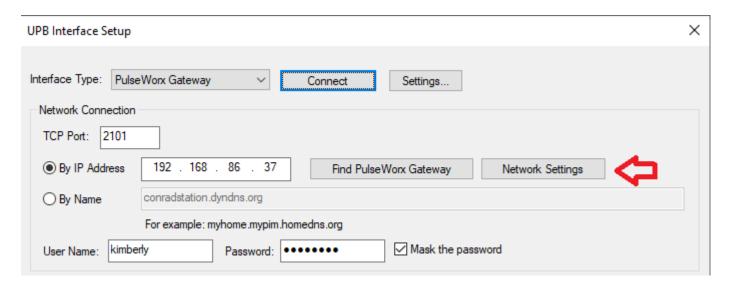


Return the next part of the file. To get the complete file keep using until an empty result is returned.

Using this HTTP command, a Gateway stored file can be retrieved in chunks. The "name" parameter provides the Gateway file name (8.3 format). This command should not be used for binary files.

Network file changes

The network file stored in the Gateway has been changed to contain an additional 8 bytes. The UPB configuration program UPStart has a user interface to view and change these settings. This is in the Interface selection dialog after using the "Network Settings" button and then "Advanced Settings".

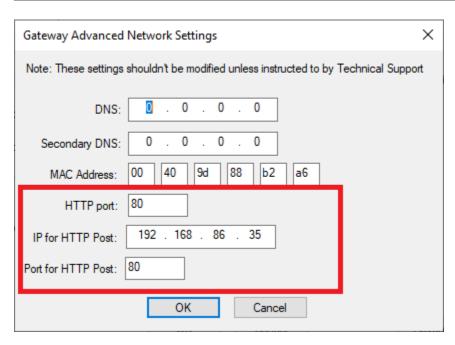








Gateway Network Settings	×	
The Gateway is assigned an address by a DHCP server - usually your router		
The Gateway is asigned the address you enter here. The values enetred depend upon how your network is configured		
Static Address: 0 . 0 . 0 . 0 For ex	ample: 192.168.0.200	
Subnet Mask: 0 . 0 . 0 . For ex	ample: 255.255.255.0	
Network Gateway (Router): 0 . 0 . 0 . 0 For ex	ample: 192.168.0.1	
The default network port is 2101 but you can change it to different port number Network Port: 2101		
OK Ca	ncel Advanced Settings	









Network file changes

Previously the network file was 29 bytes long. The new data is:

Offset 29	IP Port the Gateway listens on to act like a webserver for these commands. Normally port 80
	is used but could use any port
Offset 31	IP address of where a POST should be sent to on a state update
Offset 35	Port number to use for that POST

If the network file doesn't contain the IP Port (bytes 29-30) or those two bytes are zero, then the Gateway doesn't listen for HTTP messages. If the IP address or port is changed using UPStart, the Gateway must be power cycled for this to take effect.

Status Updates via POST

The Gateway has the capability to send a HTTP POST message to an IP address when any device state or scene state changes. This is configured in the network file. If the network file doesn't contain the POST information or the IP address or port is 0, then after a state update no POST is made.

The POST message is either "UpdateDevice" or "UpdateScene".

The POST data for UpdateDevice is <device UPB id>,<channel #>,<percent>

Example: 100,0,50

(Device id 100, channel 0 which is the main load, has gone to 50%

The POST data for UpdateScene is: <scene id>,0,<percent 0 or 100>

Example: 14,0,100

(Scene id 14 has been activated)

Note: No spaces before or after the commas. No leading or trailing spaces.

##end##



