



Ethernet Gateway Configuration Settings

Monnit Corporation

Version 1.1

Configuration Values

Software Configurations

These configurations are held on the iMonnit server and be updated immediately without waiting for communication from the gateway.

- Send notifications for this Network
 - If checked notification from sensors in this network will be delivered.
 - If unchecked notifications from sensors in this network will not be delivered.
 - By default this is unchecked during shipping. Upon first logging in user will be prompted that notifications are disabled for the network. They can either enable notifications from the prompt or continue and change this value from here.

Hardware Configurations

These configurations are held on the gateway updates are not effective until the gateway device communicates with the server.

- Heartbeat
 - The frequency which the gateway communicates with the server under normal operation. (Aware state messages will force immediate communication with the server)
- Use DHCP
 - If Checked IP Address information is negotiated with DHCP server on the local network. This is commonly a router that the device is plugged into.
 - If Unchecked
 - Gateway IP
 - The IP Address that the gateway will use to identify itself on the network. (ie: 192.168.0.25)
 - Gateway Mask
 - The Subnet Mask the gateway will use to identify the network. (ie: 255.255.255.0)
 - Default DNS Server
 - The IP Address the gateway will use to resolve host names.

Modifying Configurations

There is no local interface to set configuration values on the Ethernet gateway. All configuration settings are made on the iMonnit server and pushed to the gateway when the gateway checks in. We don't push any packets from the server we only respond to requests. By using this approach we minimize interference with network firewalls.

Provision with Static IP Address

In order to initially provision an Ethernet gateway it must first connect to the iMonnit server. The steps to provision the gateway with a static IP Address are:

- 1) Login to iMonnit (<https://www.imonnit.com>)
 - a. Open My Network
 - b. Click the edit icon next to the network
 - c. Uncheck "Use DHCP"
 - d. Enter desired Gateway IP (ie: 192.168.0.25)
 - e. Enter Gateway Mask (ie: 255.255.255.0)
 - f. Enter Default DNS Server (ie: 192.168.0.1)
 - g. Click Save
- 2) Connect the gateway to DHCP enabled network that has internet connectivity (TCP access to www.imonnit.com port 3000)
 - a. Connect Ethernet connection
 - b. Connect Power adapter
 - c. Wait while gateway boots up (lights go green)
 - d. Part of the boot-up sequence is to request the sensor list from the server. The server will respond with the Configuration changes made in step 1.
 - e. Gateway will write configuration pages to flash memory
 - f. Gateway will reboot using static ip address rather than request address from DHCP server.
- 3) (Optional) Remove gateway from network and connect it to network where the new static IP Address will be recognized.

Configuration Reset

Manufacturer Defaults

These are the settings the gateway comes with from the manufacturer

- Heartbeat: 5
- Use DHCP: Checked

Reset to Manufacturer Defaults

There are two ways to automatically reset the gateway to the manufacturer defaults.

- Software Reset
 - This reset will only work if the gateway is still in communication with the server.
 - Login to iMonnit, on the network edit screen, click the “Reset” link near the bottom of the page.
- Hardware Reset
 - This will force the gateway back to default settings but not update the settings on the server.
 - Hold the reset button (located on the back of the gateway) for approx 5 seconds until the lights turn off.

Trouble Shooting

Understanding the Lights

Your gateway has three dual state LED's that will show the status of your gateway.

- 1) The LED on the left indicates access to the Local Area Network (LAN). On boot up it will show red as it loads its IP Address and checks communication to the nearest router. If successful it will turn to green and the boot process will continue.
- 2) The LED in the middle indicates Wide Area Network (WAN) and communication with iMonnit server. On boot up it will show red as it attempts communication with the server. If the communication is successful it will turn green and the boot process will continue.
- 3) The LED on the right indicates the state of the Monnit sensor network. Green indicates active, red indicates a problem turning the receiver on.

Local Area Network

If the LED on the left is green that signifies the LAN is working.

If this LED is red

- Check the connection of the Ethernet cable at both the Ethernet Gateway and the router it is plugged into.
- Make sure the router is running a DHCP Server or that you have assigned a static IP address to the gateway.
To assign a static IP on the gateway, it must first be brought online in a DHCP environment and the setting changed on the iMonnit server. After that setting has been saved to the online database it will be pushed to the gateway at its next check in or heartbeat (default 5 min). You can see when it takes the settings by watching the LEDs. The check in can be forced by a short press of the button in the back of the gateway.
- Contact support@monnit.com or call 801-561-5555

Wide Area Network

If the LED in the middle is green that signifies the WAN is available and nothing is blocking the communication with the iMonnit server.

If this LED is red:

- Check that your Internet connection is active by visiting www.iMonnit.com in your web browser
- Check to make sure your Router or Modem has an active connection with your ISP (Internet Service Provider)
- Make sure that port 3000 is not blocked to **outbound** traffic.
Outbound port check can be done by using tools similar to firebind (<http://www.firebind.com/>)
- Contact support@monnit.com or call 801-561-5555

Sensor Network

If the LED on the right is green that signifies the Sensor Network is active and listening for sensors to check in.

If this LED is red:

- Contact support@monnit.com or call 801-561-5555