Managing an SiteSage® - Z-Wave Plus® Network

1. Introduction

The SiteSage® can now be integrated with thermostats, smart outlets, switches, sensors, and a range of other devices that are Z-Wave® certified.

In order to set up and use the SiteSage with a Z-Wave network you need to have a Z-Wave radio module for the Gateway. The Powerhouse Dynamics Z-Wave radio module simply snaps into the underside of the Gateway, which has been designed to support the USNAP® standard.

Once the radio has been installed the Gateway functions as a Z-Wave Controller. As will be described later it can also be configured to relinquish the Controller function to another Controller on a network.

All interaction with the Z-Wave network can be accomplished with the Embedded Web Server on the Gateway.

2. The Embedded Web Server

The SiteSage Embedded Web Server serves several functions. It is used to get a Gateway up on a local network. It reports energy usage for circuits being monitored in real-time. And, it can be used to manage a network of devices on the SiteSage network.

For the purposes of this document we are going to focus on using the Embedded Web Server to manage a Z-Wave network of devices. We will assume that the Gateway has already been added to the local network and that the SiteSage has already been registered at this location.

To access the Embedded Web Server you will need to know its IP address. There are several ways to accomplish this:

1. The easiest is to go to *sitesage.net/connect* and enter in the middle 4 digits of the Gateway's serial number. It will then return the IP address.

2. If a static IP address has been set-up for the Gateway, just enter that static IP address.

3. If the Gateway is being assigned a dynamic IP address, you can also log into the SiteSage Portal view for this facility and go to *Settings/Channels*. You will see a link called *Gateway Assignment*. Follow that link and you will see the current IP address of the Gateway.

All functions for managing the Z-Wave network can be found under the Z-Wave Tab.
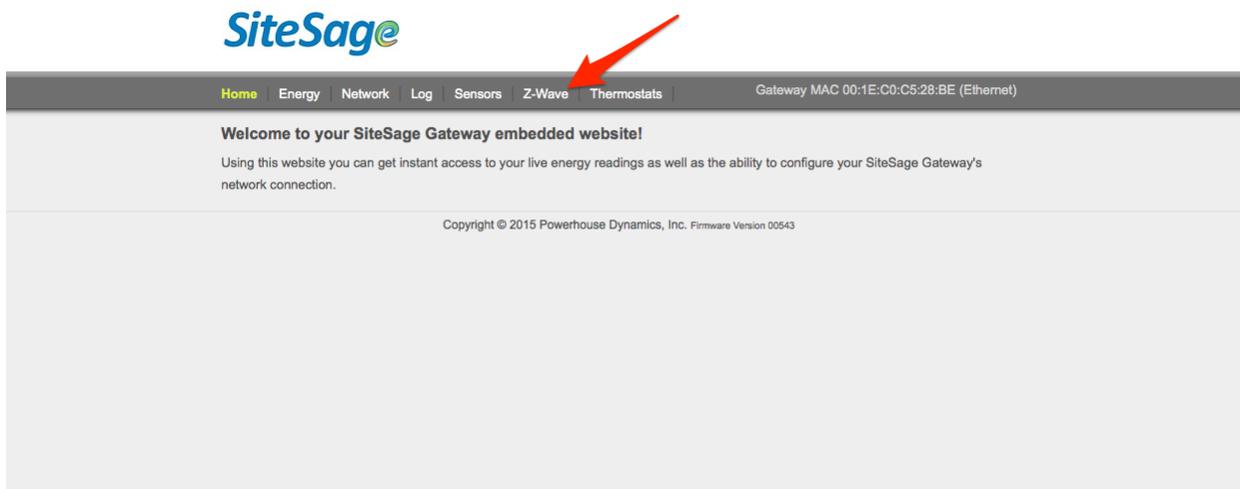
3. Adding Devices to and Deleting Them From the Network

To add a Z-Wave device to the network, you must first put the Gateway into **Inclusion** mode.

Go to the Z-Wave tab and click on CONFIGURE. The next page will give you the option to ADD; click that to put the Gateway in **Inclusion** mode for the period of time you select.
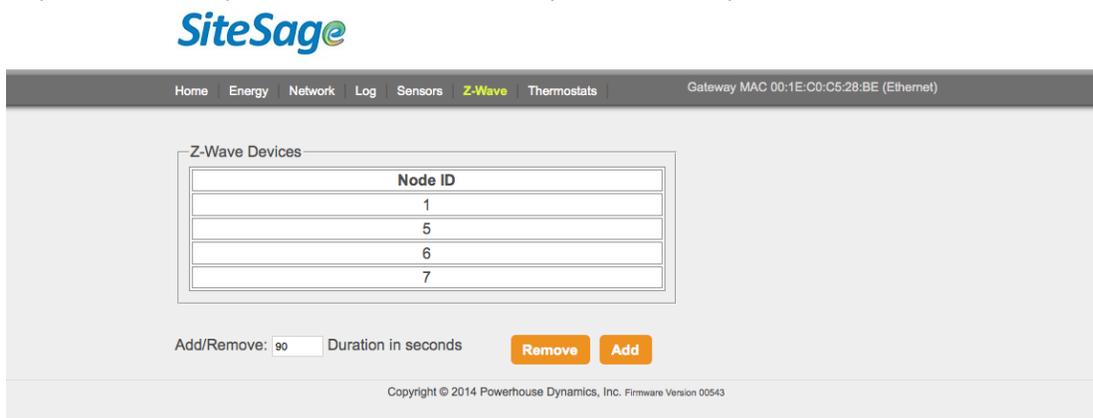
Then, go to your Z-Wave device and follow the instructions for adding the device to a network.

Once a device has been added to the network, the REMOVE button will be activated. This puts the Gateway into **Exclusion** mode. If you need to remove a device from the network, come back to this page, set the time you want the Gateway to remain in **Exclusion** mode, and press REMOVE. Then, go to the Z-Wave device and follow the instructions for deleting that device from a network.

If you need to move a device from one Gateway to another because of a range issue, or are replacing a Gateway with a new one, you will first need to remove the device from the current network.

To remove a failed node that is no longer on the Z-Wave network but has not been excluded by the Gateway:

- Go to the Z-Wave tab
- Press MANAGE. You will see the page below.
- Enter the Node ID in the Input box
- Press REMOVE FAILED NODE

To replace a failed node that is no longer on the Z-Wave network but has not been excluded by the Gateway:

- Go to the Z-Wave tab
- Press MANAGE. You will see the page below.
- Enter the Node ID in the Input box
- Press REPLACE FAILED NODE

4. Turning Devices on and off Remotely

You can turn a Z-Wave device that is on the network On or Off remotely through the Embedded Web Server.

- Go to the Z-Wave tab
- Press MANAGE
- Enter the Node ID in the Input box
- Press the TURN NODE ON or TURN NODE OFF button

5. Including the Gateway on a Different Z-Wave Network

The Gateway can be integrated with a different Z-Wave network. There are several options, all available from the Z-Wave Manage page shown above:

- JOIN NETWORK

This function enables the Gateway to join another network. The Gateway will go into **Learn** mode for 60 seconds and wait for another Controller's **Inclusion** broadcast.

- LEAVE NETWORK

This function enables the Gateway to leave a network that it previously joined. The Gateway will go into **Learn** mode for 60 seconds and wait for another Controller's Exclusion broadcast.

- INITIATE SHIFT

This function allows the Gateway to *shift* primary Controller functionality *to* another Controller. The Controller Shift will be only available for 25 seconds after initiating. You will need to put the Controller receiving the shift into **Learn** mode within that time

- RECEIVE SHIFT

This function allows the Gateway to *receive* primary Controller functionality *from* another controller. The Gateway will go into **Learn** mode for 60 seconds and wait for a **Shift** broadcast from another controller.

- RESET TO DEFAULTS

This resets the Z-wave module on the Gateway to factory defaults (putting it back in Controller mode). The Gateway will then be rebooted.

- BROADCAST NIF

This causes Gateway to broadcast its Node Information

6. Changing Z-Wave Security Mode

The Gateway supports the following Z-Wave Plus encryption modes:

- Non-Secure
- Non-Secure Multichannel
- Secure
- Secure Multichannel
- CRC-16
- CRC-16 Multichannel

To change this:

- Go to the Z-Wave tab
- Press MANAGE
- Select your preferred Mode from the "Mode" drop-down menu