

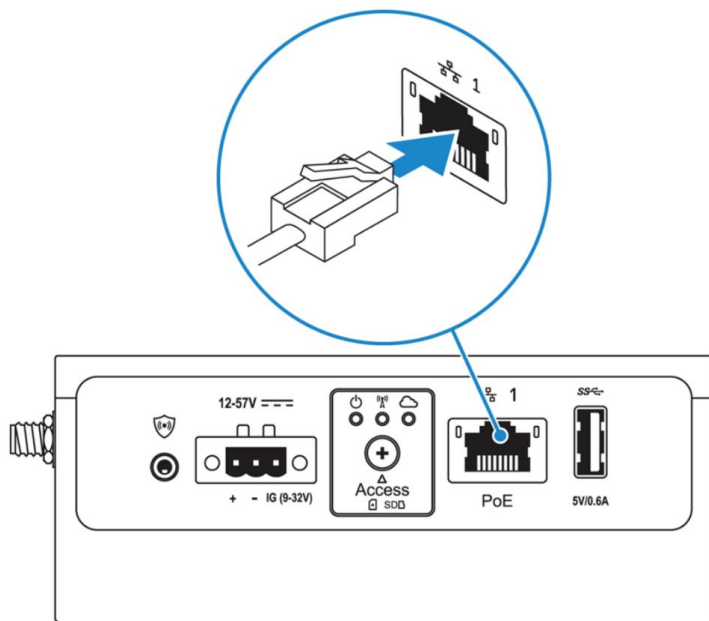
Introduction

This application note describes how to enable Wi-Fi in Access Point mode on the EpiSensor NGR-30-5 Gateway, which will allow clients (laptops, mobile phones, etc.) to connect to the Gateway and access the EpiSensor web interface. An SSH client and basic knowledge of the VI command line text editor is needed.

To connect the Gateway to an existing Wi-Fi access point as a client, see page 55 of the user manual for the Dell Edge Gateway 3002 [here](#).

Power on the Gateway

Take the included Power over Ethernet adapter out of the box and connect it to the Gateway as per the following photo:



If the version of the Gateway that you have ordered doesn't include a power supply, you'll need to connect it to a 12 or 24V supply. For more information, see Dell's user guide for the Edge Gateway 3002 [here](#).

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Connect to the Gateway with Ethernet

Connect a laptop to the Ethernet port of the PoE Adapter included with your Gateway, making sure it's configured with a static IP address of 172.31.255.123 and netmask 255.255.255.0

Using an SSH client on port 22 (Terminal on OSX or Ubuntu, PuTTY on Windows) connect to the Gateway with the following user account:

Username: admin

Password: ITEpi*&1

Example command to connect with SSH on Mac OSX Terminal:

```
ssh admin@172.31.255.1
```

Configure Wi-Fi Access Point Mode

Note the last 4 digits of the Gateway's serial number if you would like to use this as an identifier for the Wi-Fi Access Point. The

```
# open the config file below for editing with VI
```

```
# this procedure describes how to change the operating mode from "13" to "14"
```

```
sudo vi /etc/modprobe.d/rs9113.conf
```

```
# scroll to the "3" in 13 and "change word" with the following VI commands:
```

```
cw
```

```
4
```

```
# press the esc key and enter the following to write to file
```

```
:wq!
```

```
# press enter
```

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```
# restart the Gateway for the change to take effect:

sudo shutdown -r now

# confirm the Wi-Fi access point snap is installed:

snap install wifi-ap

# run the setup wizard for the Wi-Fi access point:

sudo wifi-ap.setup-wizard

# configure the SSID as: episensor-ADB2
# with the last 4 digits set to the Gateway's serial number

Which SSID you want to use for the access point: episensor-4143

Do you want to protect your network with a WPA2 password instead of staying
open for everyone? (y/n) n

Insert the Access Point IP address: 10.0.0.1

How many host do you want your DHCP pool to hold to? (1-253) 4

Do you want to enable connection sharing? (y/n) n

Do you want to enable the AP now? (y/n) y

# set the netmask manually:

sudo wifi-ap.config set wifi.netmask=255.255.255.0
```

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Example output:

```
admin@DTXPB02:~$ sudo wifi-ap.setup-wizard
Automatically selected only available wireless network interface wlan0
[Which SSID you want to use for the access point: episensor-4143
[Do you want to protect your network with a WPA2 password instead of staying open for everyone? (y/n) n
[Insert the Access Point IP address: 10.0.0.1
[How many host do you want your DHCP pool to hold to? (1-253) 4
[Do you want to enable connection sharing? (y/n) n
[Do you want to enable the AP now? (y/n) y
In order to get the AP correctly enabled you have to restart the backend service:
$ systemctl restart snap.wifi-ap.backend
2017/08/25 14:24:07 wifi.address=10.0.0.1
2017/08/25 14:24:07 wifi.netmask=ff000000
2017/08/25 14:24:07 dhcp.range-start=10.0.0.2
2017/08/25 14:24:07 dhcp.range-stop=10.0.0.5
2017/08/25 14:24:07 share.disabled=true
2017/08/25 14:24:07 disabled=false
2017/08/25 14:24:07 wifi.ssid=episensor-4143
2017/08/25 14:24:07 wifi.security=open
Configuration applied succesfully
admin@DTXPB02:~$
```