

Setting a Meter to a Static IP Address

Dated: August 18, 2014

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General:

Meter sent by Energy Tracking by default are configured for DHCP which allows them to get an IP address from the router automatically thus enabling plug-n-play operation. However, there may be one or more reasons to set a meter to a static IP address such as port forwarding, increasing the resiliency due to long term router / network outages.

Steps:

1. Connect your laptop to the same network that the meter is connected on.
2. Log-in to the router and identify the settings for the DHCP Server:

DHCP Server:	<input checked="" type="radio"/> Enabled <input type="radio"/> Disabled	<input type="text" value="DHCP Reservation"/>
Start IP Address:	192 . 168 . 4 .	<input type="text" value="1"/>
Maximum Number of Users:	<input type="text" value="50"/>	
IP Address Range:	192 . 168 . 4 . 1 to 50	
Client Lease Time:	<input type="text" value="5"/>	minutes (0 means one day)

Figure 1:

3. In the example above, you will note that the router is set to lease up to 50 IP addresses. This means that any IP address range from 192.168.4.51 to 192.168.4.254 can be selected to be used for a static IP address. We recommend using one (last octet) that is between 200 ~ 254 such as 192.168.4.250 but before that we must confirm that the selected IP address is not currently in use.
4. Launch a DOS "Command Prompt" as shown below. We will try to "ping" the IP address by typing **ping** 192.168.4.254 and then press Enter"

```
Command Prompt
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Valued Customer>ping 192.168.4.254

Pinging 192.168.4.254 with 32 bytes of data:
Reply from 192.168.4.254: bytes=32 time=1ms TTL=64
Reply from 192.168.4.254: bytes=32 time<1ms TTL=64
Reply from 192.168.4.254: bytes=32 time=1ms TTL=64
Reply from 192.168.4.254: bytes=32 time=1ms TTL=64

Ping statistics for 192.168.4.254:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\Users\Valued Customer>
```

Figure #2:

If we get a reply back as shown above, we cannot use this address so we try another IP address as shown below.

```
Command Prompt
C:\Users\Valued Customer>ping 192.168.4.254

Pinging 192.168.4.254 with 32 bytes of data:
Reply from 192.168.4.254: bytes=32 time=1ms TTL=64
Reply from 192.168.4.254: bytes=32 time<1ms TTL=64
Reply from 192.168.4.254: bytes=32 time=1ms TTL=64
Reply from 192.168.4.254: bytes=32 time=1ms TTL=64

Ping statistics for 192.168.4.254:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\Users\Valued Customer>ping 192.168.4.253

Pinging 192.168.4.253 with 32 bytes of data:
Reply from 192.168.4.31: Destination host unreachable.

Ping statistics for 192.168.4.253:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

C:\Users\Valued Customer>
```

Figure #3:

OK, we can use the IP address 192.168.4.253.

- Next we need to know the Subnet and Gateway details. At the prompt, type in *ipconfig* as shown below.

```

C:\Users\Valued Customer>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : 
    Link-local IPv6 Address . . . . . : fe80::c154:b4f2:1cc3:db84%10
    IPv4 Address. . . . . : 192.168.4.31
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.4.80
  
```

Figure #4:

6. Finally, we need the DNS IP address that are provided by the router. These can be used but we recommend using the "Google DNS". DNS 1: 8.8.8.8 and DNS 2: 8.8.4.4
7. Log-In to the meter. Menu >> Setup >> Main Configuration and enter the values as shown below. Please **double check** your entered values.

Static Network Setup:	
Disable DHCP	<input checked="" type="checkbox"/> Use Extreme Care!!!
IP Address	<input type="text" value="192.168.4.253"/>
Subnet	<input type="text" value="255.255.255.0"/>
Gateway	<input type="text" value="192.168.4.80"/>
DNS Setup: (Reqd. if using a Static IP Address)	
DNS 1	<input type="text" value="8.8.8.8"/>
DNS 2	<input type="text" value="8.8.4.4"/>

Figure #5:

Scroll to the bottom of the web page and click on the "Submit" button. The meter will reboot in 35~40 seconds.

Please contact support@energytracking.com for any additional questions you may have.