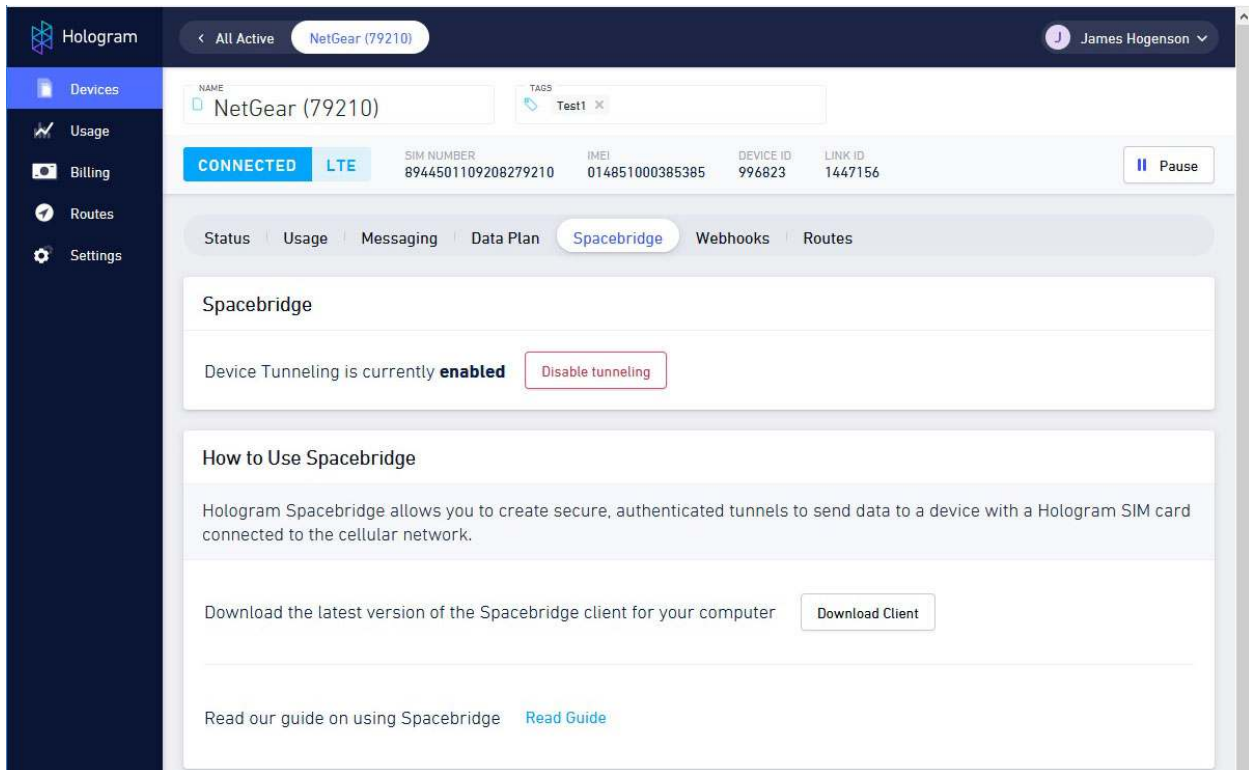


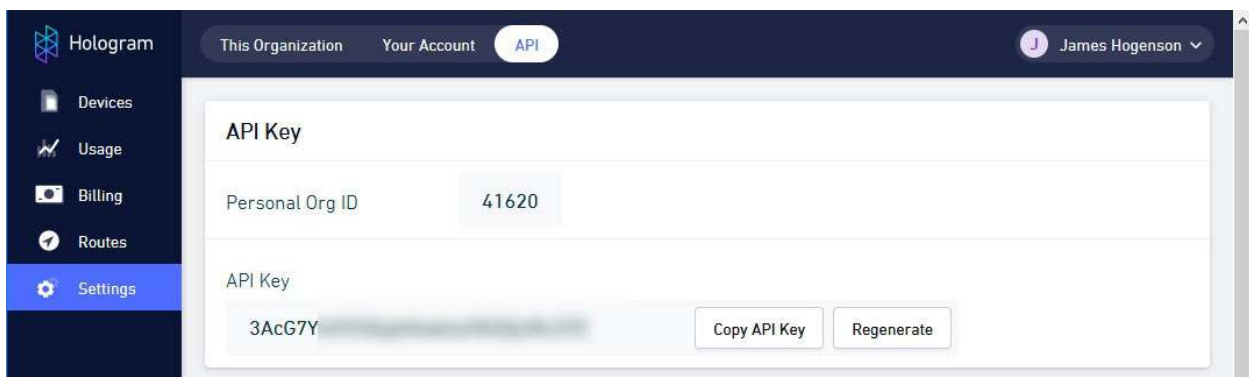
Accessing Remote Device via Cellular Router

You can access a remote device's web UI via a cellular router as if connected locally using tunneling. This technique requires that the router is using a SIM card from Hologram.io. Once you have activated the Hologram SIM, go to the Spacebridge page under Devices (after selecting device). Download the client from the link given and unzip into a directory you will be able to find later via a command line. Click on Enable Tunneling for the device you wish to tunnel to.



The screenshot shows the Hologram web interface. The top navigation bar includes the Hologram logo, a breadcrumb trail for 'All Active' > 'NetGear (79210)', and a user profile for 'James Hogenson'. The left sidebar contains navigation options: Devices, Usage, Billing, Routes, and Settings. The main content area is for the 'NetGear (79210)' device, showing it is 'CONNECTED' via 'LTE'. Below this, there are tabs for 'Status', 'Usage', 'Messaging', 'Data Plan', 'Spacebridge', 'Webhooks', and 'Routes'. The 'Spacebridge' tab is active, displaying 'Device Tunneling is currently enabled' with a 'Disable tunneling' button. A section titled 'How to Use Spacebridge' explains that Hologram Spacebridge allows creating secure tunnels to devices with Hologram SIM cards. It includes a 'Download Client' button and a 'Read Guide' link.

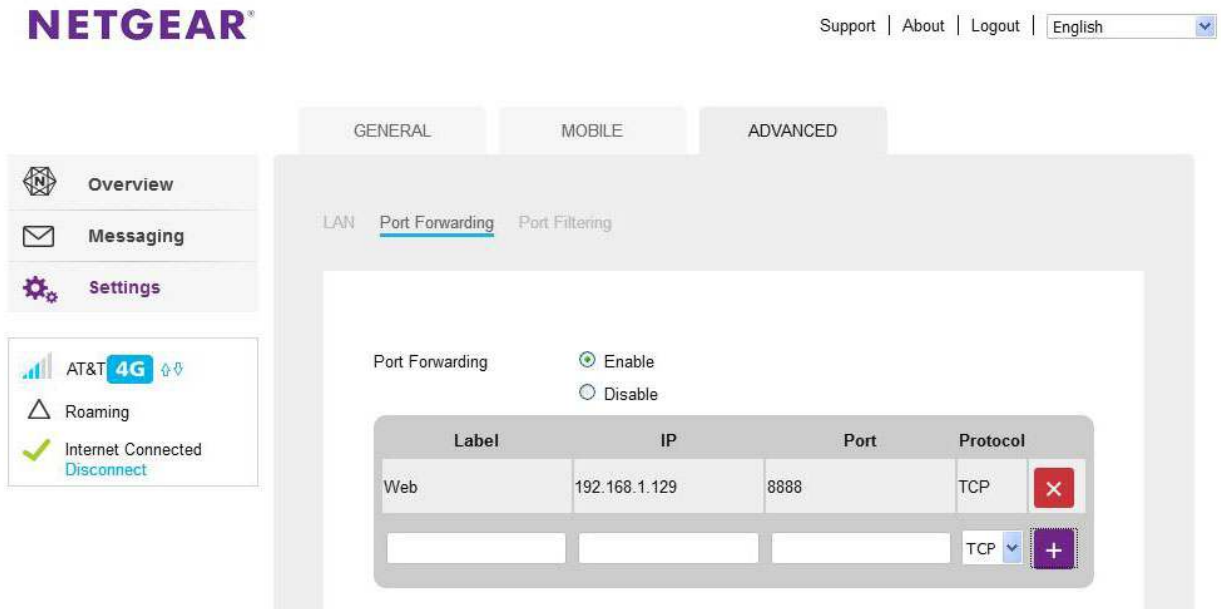
Under Settings, copy your API key and keep it handy.



The screenshot shows the Hologram web interface with the 'API' tab selected in the top navigation. The left sidebar is the same as in the previous screenshot. The main content area is titled 'API Key' and shows the 'Personal Org ID' as '41620'. Below this, the 'API Key' is displayed as '3AcG7Y' followed by a blurred portion. There are 'Copy API Key' and 'Regenerate' buttons next to the key.

In order to access the web UI, you need to do a couple of things on the device end. In the cellular modem (router), enable port forwarding to the IP address of the Control Solutions device.

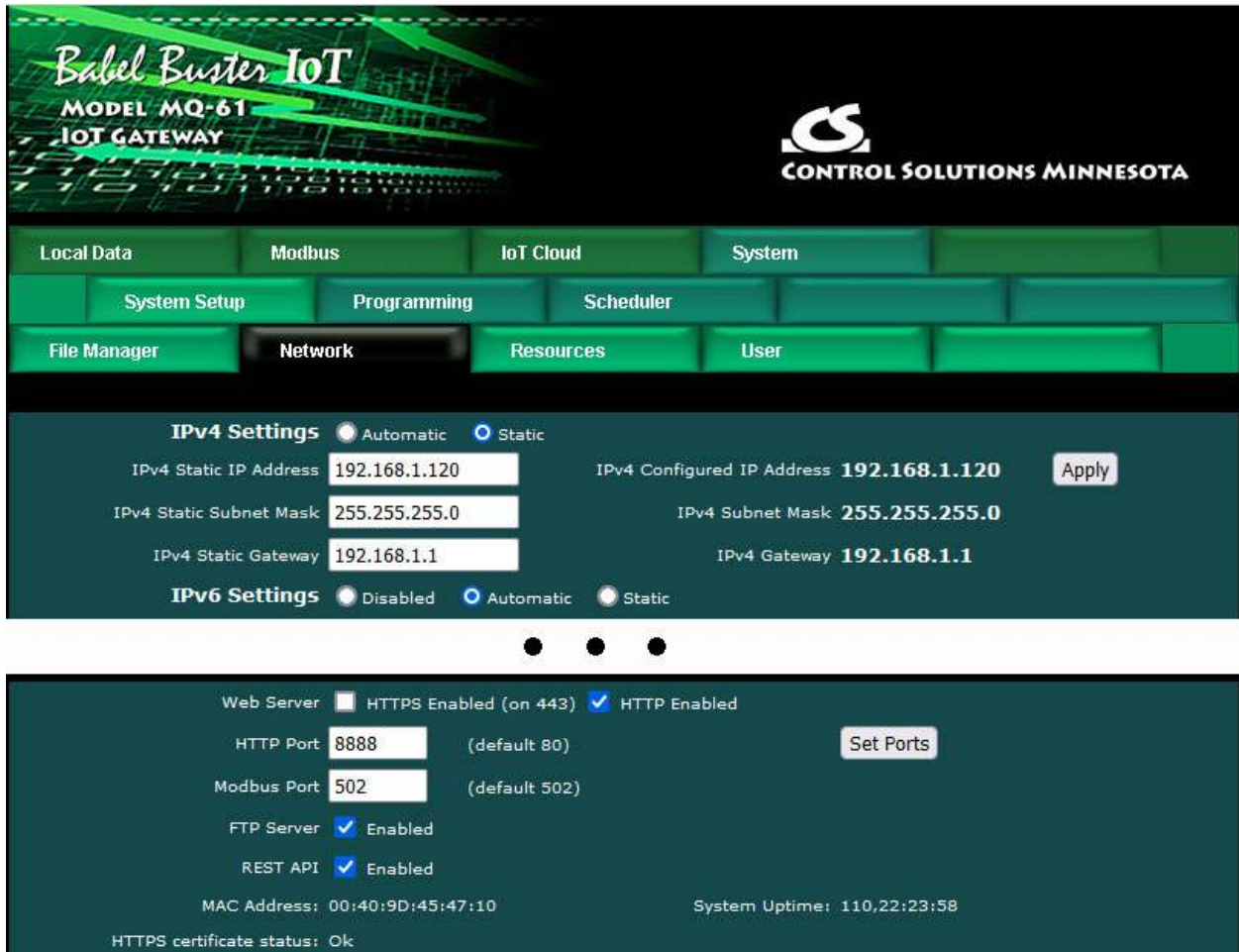
You will also need to change the HTTP port for the Control Solutions device since the standard port 80 is also used by the modem's own web UI. In our example, we have moved the device's web UI to port 8888, and then forwarded that port to the device's IP address.



The abbreviated view of the Network setup page in a BB2-6010X-Web device is illustrated below. Note that the HTTP port has been changed to 8888 (you can use 8080 or any other port you like).



The abbreviated view of the Network setup page in an MQ-61 is illustrated below, and again the port has been changed to 8888 in this example.



You are now ready to start up the Spacebridge client (VPN tunneling client). Open the Windows PowerShell and go to the directory where you had saved the spacebridge client.

Execute the spacebridge client with `./spacebridge --text-mode` to force the command prompt operation. Enter your API key when asked. Then select the link ID for the device you are going to tunnel to, and finally provide the remote device port (8888 in our example) and the local port that should be tunneled to that remote port.

```
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\Jim Hogenson> cd documents
PS C:\Users\Jim Hogenson\documents> cd hologram
PS C:\Users\Jim Hogenson\documents\hologram> dir *.exe

    Directory: C:\Users\Jim Hogenson\documents\hologram

Mode                LastWriteTime         Length Name
----                -
-a----            12/20/2017  10:24 AM      11774880 spacebridge.exe

PS C:\Users\Jim Hogenson\documents\hologram> ./spacebridge --text-mode
Please enter your Hologram API key: 3AcG7YnHYOAYpHeakzu9k50jcRL07E
We're going to generate a set of secure keys to protect your connection to your device. These keys will be generated by
the Hologram API. The Hologram servers will only store the public key and the private key will be saved to your computer
.
If you have a key already that you want to use or want to generate one on your own exit this program (CTRL-C) and run wi
th the --upload-publickey and --privatekey arguments.
Press enter to continue...
Links with tunneling enabled:
  ID#1447156 - NetGear (79210) (Device ID#996823)
Enter link ID to forward: 1447156
Enter device port: 8888
Enter local port: 5000
Tunnel is running

Now forwarding 127.0.0.1:5000 to link1447156:8888 ...

Hit enter to close tunnel and exit...
```

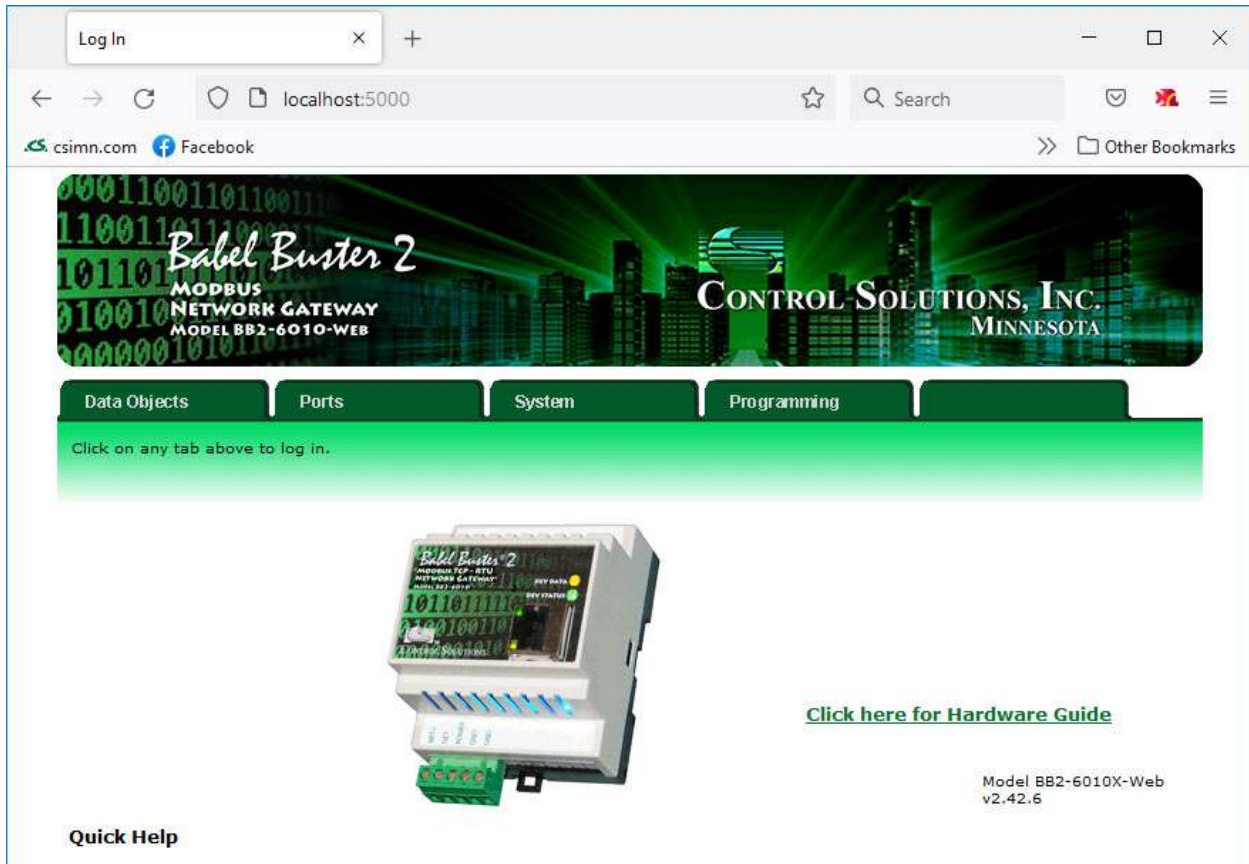
The first time you run it, you will see a message about creating secure keys. After that, it will continue to reuse the same keys.

```
PS C:\Users\Jim Hogenson\documents\hologram> ./spacebridge --text-mode
Please enter your Hologram API key: 3AcG7YnHYOAYpHeakzu9k50jcRL07E
Links with tunneling enabled:
  ID#1447156 - NetGear (79210) (Device ID#996823)
Enter link ID to forward: 1447156
Enter device port: 8888
Enter local port: 5000
Tunnel is running

Now forwarding 127.0.0.1:5000 to link1447156:8888 ...

Hit enter to close tunnel and exit...
```

You can now open your browser on your local PC and browse to localhost:5000 and you should end up connected as if you were local. The Control Solutions web UI will behave as if you are connected locally.



The above screen shot is what you would expect to see logging into a BB2-6010X-Web, The screen shot below shows remotely logging into an MQ-61.

The alternate form of "localhost" is "127.0.0.1".

Also note that once logged in, the home page for a BB2 device (or AMJR or other older Control Solutions device) is "localhost:5000/index.html" while the home page for a BB3, MQ, or other newer Control Solutions device will be "localhost:5000/html/index.html". Note the difference is the /html/ directory explicitly required in the newer devices.

Log In


localhost:5000

csimn.com Facebook


Other Bookmarks

Babel Buster IoT

MODEL MQ-61
IoT GATEWAY



Local Data Modbus IoT Cloud System



Model MQ-61
v3.16.2
MAC 00:40:9D:45:47:10

Quick Help