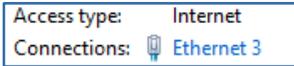


Step 1: Connect pMon

1. Connect your pMon device to your network via ethernet, then power on your pMon device.
2. Use a Windows computer on the same network, obtain your IP address by
 - a) Open Start Menu.
 - b) Search **View Network Status and Task**.
 - c) Click your network name listed under **Connections**.
 - d) Click **Details**.
 - e) Find your listed Ipv4 address, save the address then click **Close**.

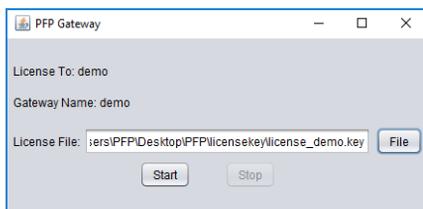


IPv4 Default Gateway	172.16.1.1
IPv4 DHCP Server	172.16.1.1

3. Connect to the PMon via:
 - a) ssh using pMon IP. Ensure that your PC is set to the same IP for the connection.
 - b) Or serial using a USB to Micro usb cable. (PMon baud rate is 115200)
4. Login and modify the pMon IP:
 - a) Type in `vi /etc/network/interfaces/`
 - b) Type in `i` to interact with vi
 - c) Modify the IP as needed
 - d) Quit vi using `Esc` then `:wq`
 - e) Type in `reboot` to restart your device

Step 2: Install Gateway

1. Get gateway installation kit from PFP.
2. Plug in the USB dongle from PFP, copy folder **PFP** from USB to a local drive.
3. Open **PFP** folder and install Gateway by running **pfp_gateway_standalone.exe** which requires java. Or run **PFP_windows-x64_1_1.exe** (for Windows) as an alternative.
4. Search **PFP_Gateway** from start menu, right click the icon to run Gateway as Administrator.
5. Click File, select the customized license key file in the **/PFP/licensekey** folder, click **Open**.
6. Click **Start**, leave the window open to keep the gateway running until the end of evaluation.

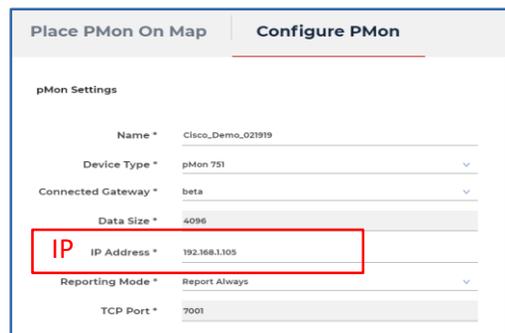


Step 3: Login P3Scan

1. You should have received an invitation email from PFP to create your login, follow the steps if you haven't already.
2. Open a web browser and go to demo.pfpcyber.com
3. Use the credentials you set using the invitation email
4. Click **Sign in**, enter verification code: 1

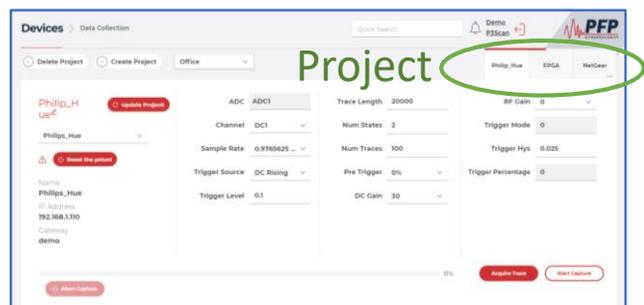
Step 4: Update Device IP

1. Click Devices from left bar, find the device you have, then click **Edit** to edit.
2. Skipped for evaluation, but user can set up a map and place devices on the selected map.:
 - Facility map is created in Companies → Facilities → Add Map.
 - Click **Place PMon on Map** tab, select facility map and click on map to place the device.
3. Click **Configure PMon** tab, change IP address to the one obtained in Step 1, then click **Update**.



Step 5: Choose Project

1. Click on **Devices**, then click **Data Collection**.
2. Click to choose **Project** from existing list.
 - **PFP** provides several demo projects for evaluation



Step 6: Data Collection

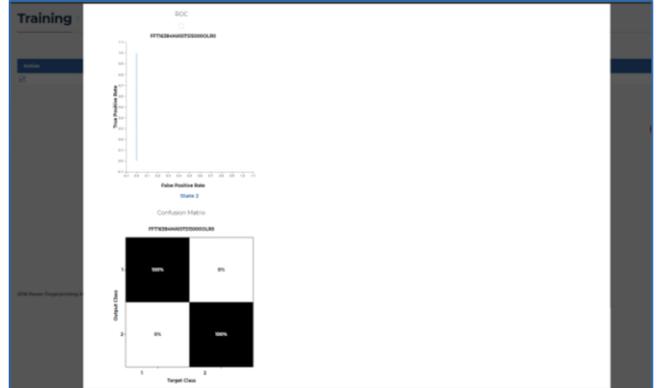
1. Confirm **Project** and **Device** selection.
2. Click **Update Project** to save any changes.
3. Click **Acquire Trace** to confirm the setting.
4. If failed, click . Upon completion, refresh the page and click **Acquire Trace** again.
5. Click **Start Capture** to start data collection:
 - a) A window pops up for data collection of a new state.
 - b) Set up the device for the next physical state.
 - c) Click **Save** to continue or **Cancel** to abort.
 - d) Repeat a) to c) until pop up message says 100% complete.



Step 7: Training

1. Click on **Devices**, then click **Training**.
2. Confirm **Project** selection.
3. Input training parameters:
 - Diff Method, e.g. 2
 - Sub Bands, e.g. 0.1,0.95
 - Subset Offset, e.g. 0
 - Subset Length, e.g. 30000
 - Pfa, e.g. 0.001
 - Levels, e.g. 0.4, 0.75
 - SigMFChan, e.g. 1
 - Get TopN, e.g. 10
4. Click **Start**, then click **OK** on the pop up window.
5. Training will be running in the background. When it completes, it will notify the user with red dot icon in the upper right corner. 
6. Click the icon and click **Show Results** from alert table for your project training result.
7. Select the model from the list and click **Show Results** to view the quality of training results.
 - Usually $\geq 85\%$ of diagonal elements on the confusion matrix indicates it's a good result.

- FFT Size, e.g. 16384
- Time Seg Length, e.g. 15000
- Overlap Ratio, e.g. 0
- MA Length, e.g. 10
- Num Of Ave, e.g. 10
- Training Ratio, e.g. 0.5
- Training Seed, e.g. 200



Step 8: Runtime Monitoring

1. On training results page, select model and click **Proceed to Runtime**. 
2. Select **Device**.
3. Click **Start**.
4. If device is in a trained or known state, **Runtime** will display colored dots with matching score between 0 and 1.
5. If device is in an unknown state, **Runtime** will display red dots with score ≥ 1 .
6. Click **Stop** to stop runtime monitoring.

