

# P3Scan Quick Guide For Evaluation

#### 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. Access type: Internet
  - d) Click Details.
- Connections: 📱 Ethernet 3
- 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 <sup>3</sup>. 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.
- 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.

🔬 PFP Gatev	way		-		×		
License To: d	emo						
Gateway Nam	ie: demo						
License File: ers\PFP\Desktop\PFP\licensekey\license_demo.key File							
	Start	Stop					

#### 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

- Click Devices from left bar, find the device you have, then click B 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.

Click **Configure PMon** tab, change IP address to the one obtained in Step 1, then click **Update**.

Place PMon On Map		Configure PM	Ion
pMon Settings			
Name *	Cisco_Demo_021	919	
Device Type * pMon 751			×
Connected Gateway *	beta		~
Data Size *	4096		
P IP Address *	192.168.1.105		
Reporting Mode *	Report Always		~
TCP Port *	7001		

## 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

Delete Project	Create Project	Office v		Ρ	roje	<b>SCI</b>	tC	Philip, Hue	FPGA	NetGear
Philip_H	D tapdate Projecti	ADC	ADC1		Trace Length			RF Gain	0	V.
ue≝		Channel	DC1	v.	Num States	2		Trigger Mode	0	
Philips_Hue		Sample Rate	0.9765625		Num Traces	100		Trigger Hys	0.025	
A Consect the pt	elased .	Trigger Source	DC Rising		Pre Trigger	0%		Trigger Percentage	0	
Name Philips_Hue		Trigger Level	0.1		DC Gain	30				
IP Address 192.168.1.110										
Gateway demo										

## 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 ( Reset the pMon! ) 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.



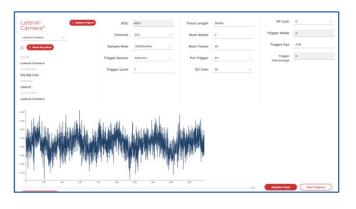
- 6. Click the icon and click **Show Results** from alert table for your project training result.
- 7. Select the model from the list and click **Show Results** to view the quality of training results.
  - Usually ≥85% of diagonal elements on the confusion matrix indicates it's a good result.

## Step 8: Runtime Monitoring

- 1. On training results page, select model and click
- Proceed to Runtime. 2. Select Device.

ROC

- 3. Click Start.
- FFT8192MA10TS1024OLR0
- 4. If device is in a trained or known state, **Runtime** will display colored dots with matching score between 0 and 1.
- If device is in an unknown state, **Runtime** will display red dots with score ≥ 1.
- 6. Click **Stop** to stop runtime monitoring.



- 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

Training							
Antinan E							
False Fusike Rule							
	State 2						
	Confusion Matrix						
	1771K38444017520000L80						
200 Paulo Disgongoliding	5 was ex						
	an a						
	1 2 Terpet Gaus						

