

# **H3 Platform Falcon 4016 Quick Installation Guide**

- **Hardware Introduction and Device Installation**
- **Host Adapter Card Installation**
- **Quick GUI Setting**

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(\*Please visit our website [www.h3platform.com](http://www.h3platform.com) to access the User Manual for more details)

# Chapter 1

## Hardware Introduction

In this chapter, we will introduce the package contents and each part of Falcon 4016.

### 1.1 Package Contents

1. General parts
  - a. 1 x Falcon 4016 barebone chassis
  - b. 2 x device drawers (inside the barebone chassis)



(\*GPU not included)

- c. 3 x 3000 watt power supplies (inside the barebone chassis)



- d. 4 x dual-rotor fan modules (inside the barebone chassis)



e. 16 x GPU rear brackets



f. 16 x GPU power cords

- 8pin to 8pin: Nvidia Tesla® P100, V100, Nvidia Quadro® RTX8000/6000 Passive
- 8pin to 8+8pin (Note: This power cord needs to be purchased additionally. Please contact us for details): AMD Radeon Instinct™ MI50, MI60

**Caution: Please use the correct power cord for your GPU model. Using the wrong power cord will damage the GPU.**



g. 16 x full-height brackets (inside the barebone chassis)

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Caution: Please install the bracket when PCIe slot is not populated with any device for good airflow.

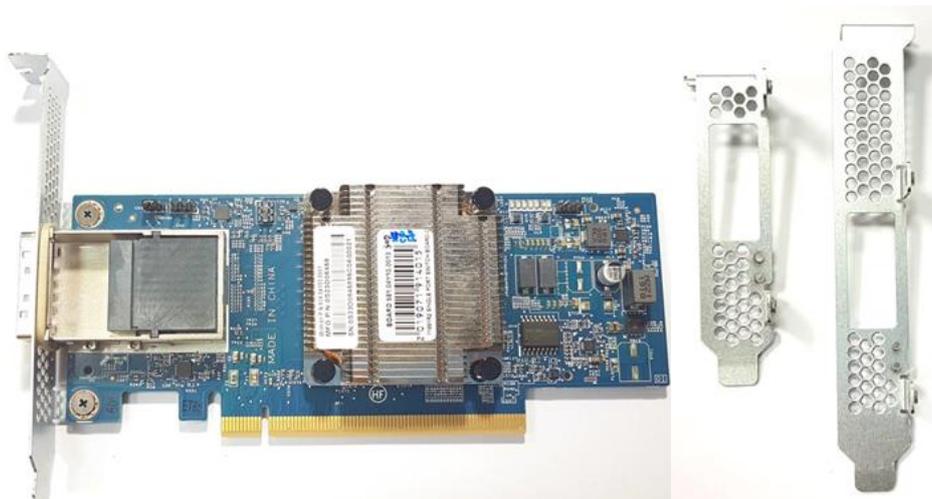


- h. 3 x power cords (220V, Type B to IEC320 C19)



- 2. Host link - host adapter card

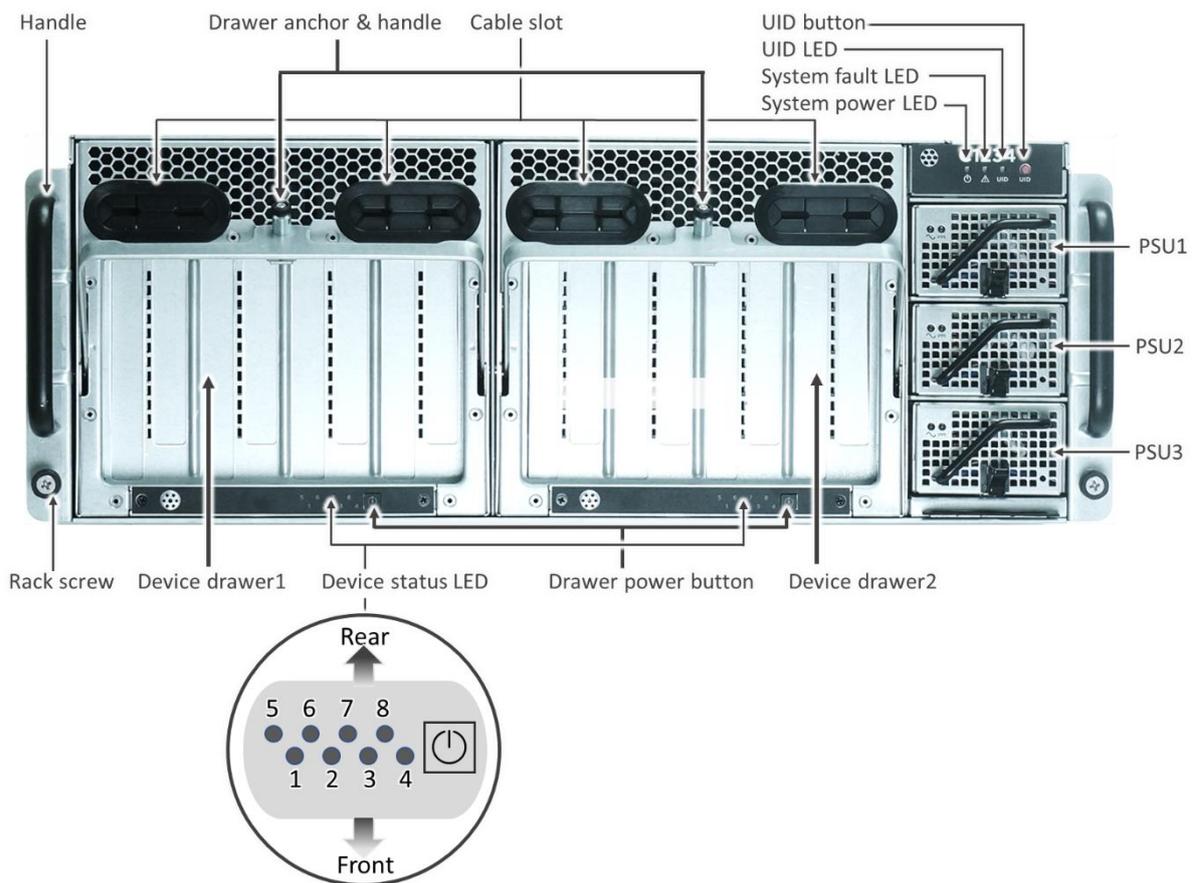
- a. 4 or 2 x host adapter cards (based on the ordered barebone chassis P/N) with half-height/full-height brackets (screws located in the drawer)



- b. 4 or 2 x 1.5m CDFP cables (based on the ordered barebone chassis P/N)



## 1.2 Front View



**Rack screw:** For attaching Falcon 4016 to rack.

**Device drawer:** One drawer can accommodate 8 GPUs [Left, Right: Drawer1, Drawer2].

**Drawer power button:** For controlling single drawer power.

Button functionality:

Pressing for 1-10 seconds (blinking green) will switch on/off the drawer.

During the power on/off process, the system fault LED will blink amber. When the drawer power is completely on, the button will glow green.

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Pressing for >10 seconds (amber) will reset GUI IP/password.

**Device status LED:** A Total of 8 LEDs show the GPU status for each drawer. When a GPU is installed correctly, the LED will glow green.

**Handle:** For transporting Falcon 4016.

**System power LED:** For showing Falcon 4016 power status. When the system power is completely on, the LED will glow green. During the power on/off process, the system power LED will first blink green, then the system fault LED will blink amber and go off.

**Drawer anchor & handle:** For removing drawer from Falcon 4016.

**Cable slot:** For allowing cable access to GPUs at the back portion of the drawer.

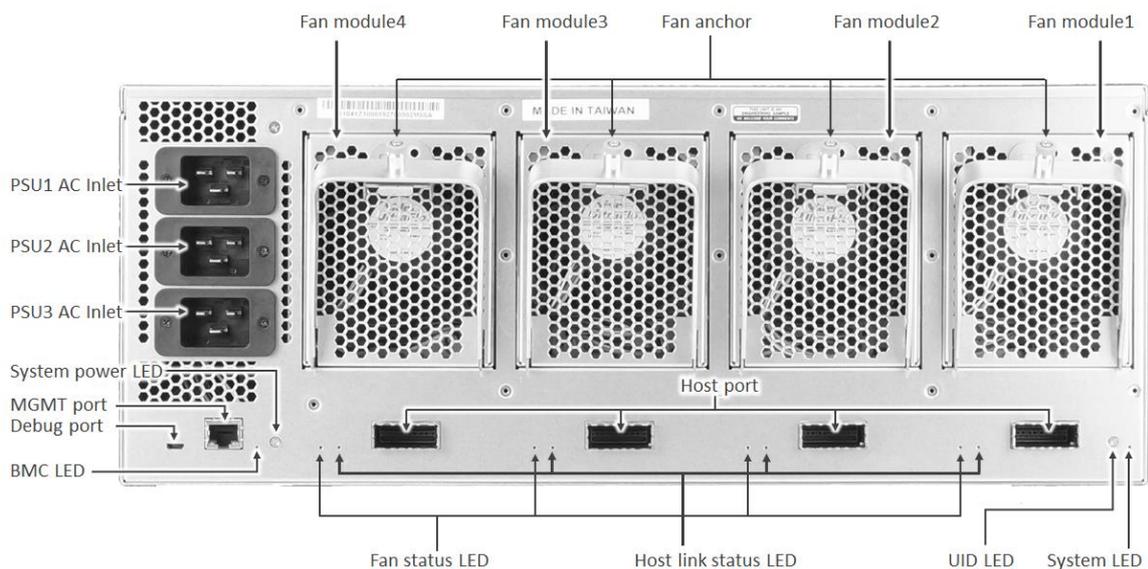
**UID button:** For controlling UID LED on/off.

**UID LED:** For identifying Falcon 4016 location and the LED will glow blue.

**System fault LED:** The LED will glow amber when Falcon 4016 suffers a critical error.

**Power supply:** A total of 3 PSUs supply the power allowing 1 PSU to be shut down.

## 1.3 Rear View



**Fan status LED:** For showing fan status. Green light indicates fan is operating normally [1, 2, 3, 4].

**Host link status LED:** For showing host link status. Green light indicates host is linked [1, 2, 3, 4].

**UID LED:** For identifying Falcon 4016 location and the LED will glow blue.

**Host port:** For connection to host by CDFP cable [2:H2, 2:H1, 1:H2, 1:H1].

**Fan module:** A total of 4 dual-rotor fan modules deliver the best cooling performance allowing 1 rotor of each fan module to be shut down [1, 2, 3, 4].

**Fan anchor:** For attaching fan module. Pull up to remove fan module.

**AC inlet:** Sockets for AC power cords [1, 2, 3].

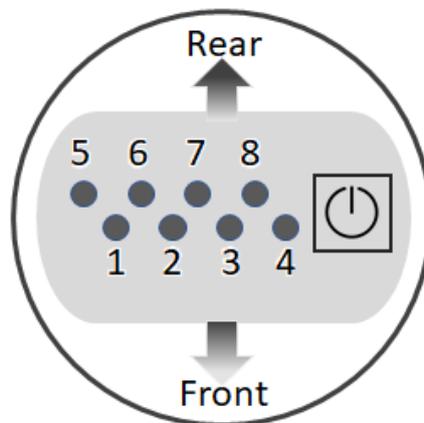
**System power LED:** For showing Falcon 4016 power status. When the system power is completely on, the LED will glow green. During the power on/off process, the system power LED will first blink green, then the system fault LED will blink amber and go off.

**MGMT port:** RJ45 management port.

**Debug port:** Micro USB for critical fault debugging.

**BMC LED:** For showing BMC status.

## 1.4 Drawers



**PCIe slot:** For device installation [Drawer number, 1-8].

# Chapter 2

## Hardware Installation

### 2.1 GPU Installation

Please follow the following steps to install/remove your GPUs.

**Caution:** Please ensure each step is carefully followed. Failure to follow the procedure below could result in damage to Falcon 4016. Special attention should be paid to cable/power cord connections and screws being fully and correctly engaged.

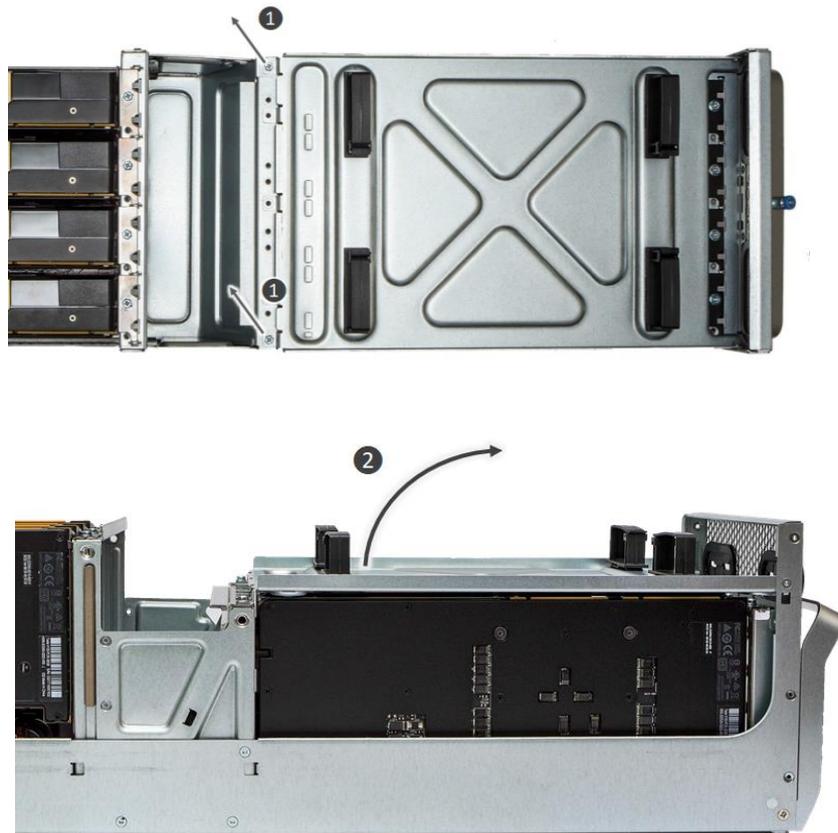
1. To pull out the device drawer: Pull up the drawer anchor, pull down the drawer handle, then pull out the drawer.



To fully remove the drawer from Falcon 4016, please push the safety latch on the bottom right hand side of the drawer. This latch becomes visible once the drawer has been withdrawn to the halfway point, see the image below.

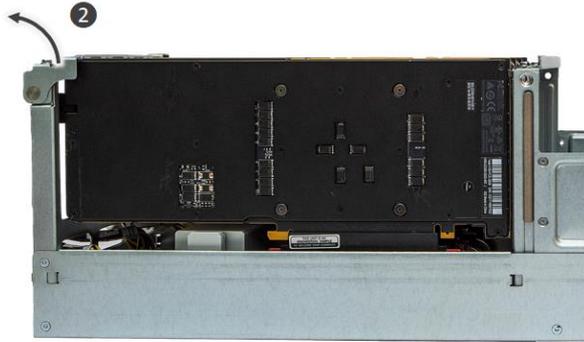


2. To install or remove the GPUs located in the **front** portion of the drawer, the top cover should be removed. Release 2 screws, then remove cover.

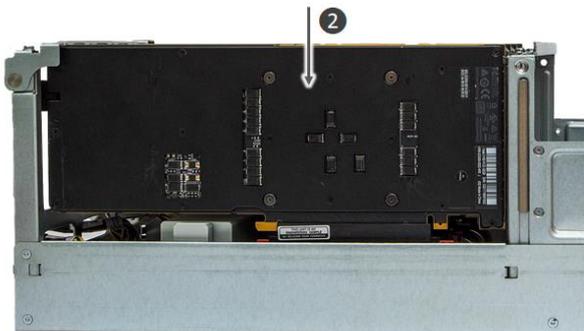


To install or remove the GPUs located in the **rear** portion of the drawer, the rear GPU holder must be opened. Release 2 screws, then open holder.

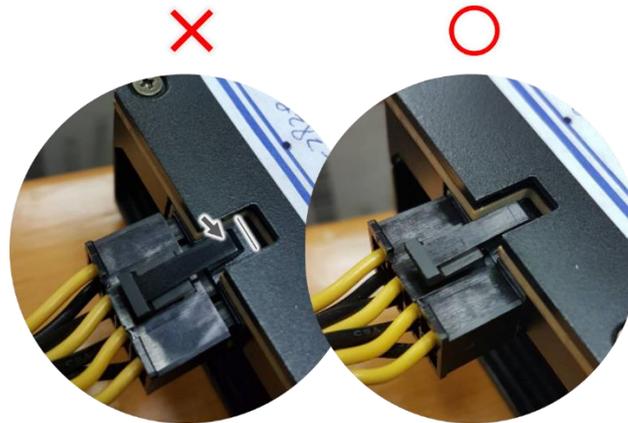
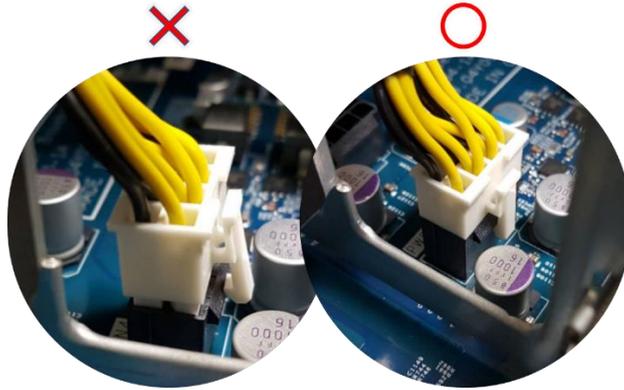




3. To install a GPU: Release bracket screw, install GPU, plug in power cord, then lock bracket screw.



**Caution: Ensure correct installation as shown below.**



\* Baseboard side

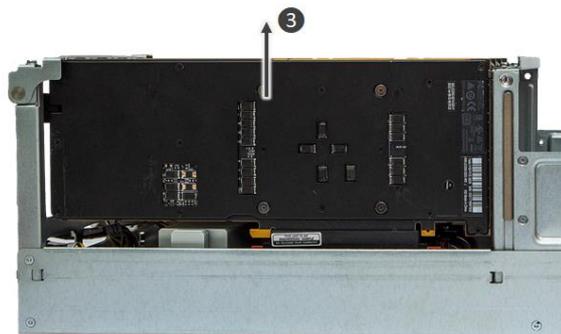
\* GPU side



**Caution:** Please ensure screws are correctly aligned and fully engaged. Failure to follow the procedure below could result in damage to Falcon 4016.

4. To remove a GPU: Release bracket screw, unplug power cord, remove GPU, then install bracket and lock screw.





5. To push the drawer back into Falcon 4016

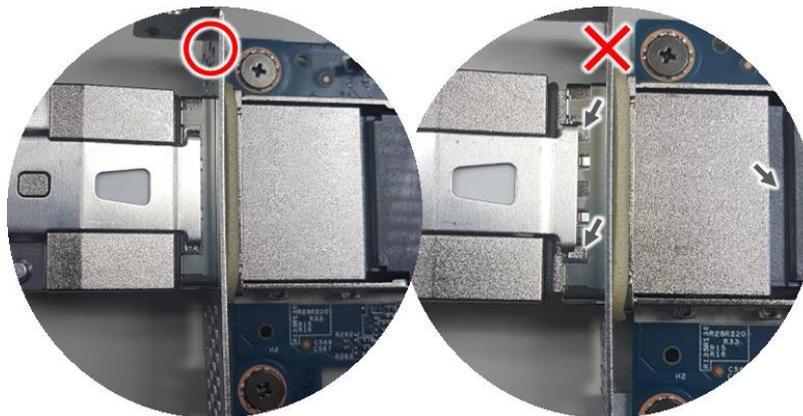
**Caution:** Take care not to trap items or fingers in the drawer during reinsertion.

## 2.2 Host Adapter Card Installation

Please ensure your host meets the following criteria prior to installation.

**OS:** CentOS 7.5 and 7.6; RedHat 7.5 and 7.6; Ubuntu 16.04 and 18.04;  
Windows 10 pro (build 1903)

**Installation space:** PCIe x16 socket, 166.7mm length and 65mm height



Caution: Please ensure CDFP cable is correctly connected, see the image above. Failure to follow the procedure below could result in damage to Falcon 4016.

## Chapter 3

# Boot Process

## 3.1 Boot Process

Please follow step 1 to 6 outlined below to boot up your Falcon 4016.

1. Install your GPU in Falcon 4016.
2. Connect the MGMT port to the network.



3. Connect to at least 2 A/C PSUs to power on.  
Falcon 4016 will take ~2 minutes completing the boot-up process.



4. After the system power-up, the system power LED will glow green.  
Now use the management UI to insert the following information:
  - Default IP is "169.254.100.100"
  - Account/Password is admin/admin
5. Plug in the CDFP cable and link to the host and then boot up the host.
6. Modify your time/network/account setting using the management UI. Please refer to Chapter 4 for details.

# Chapter 4

## Quick GUI Setting

In this chapter, we will show you how to quickly set up your GUI time/network/account when you use Falcon 4016 for the first time.

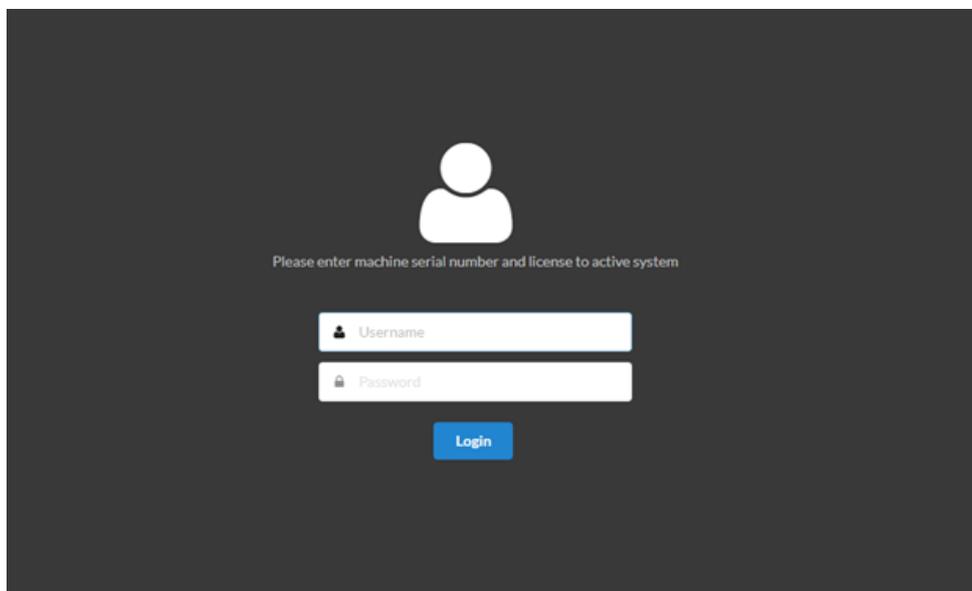
### 4.1 Access to GUI

The UI of your device is accessed using a web browser. Currently Firefox 3.5 or newer, Internet Explorer 7 or newer and Chrome version 12 or higher are all supported.

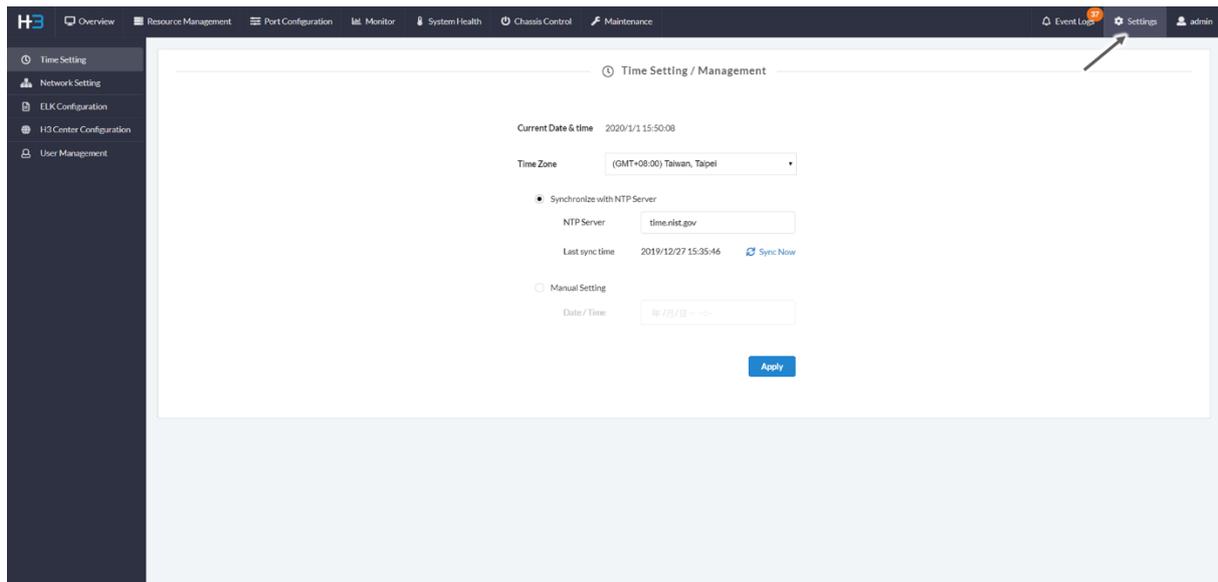
To access the web UI, enter the following URL and login details into your browser:

IP address	169.254.100.100
Login name	admin
Login password	admin

Please note that above login details should be changed from the above defaults in order to maintain the secure operation.

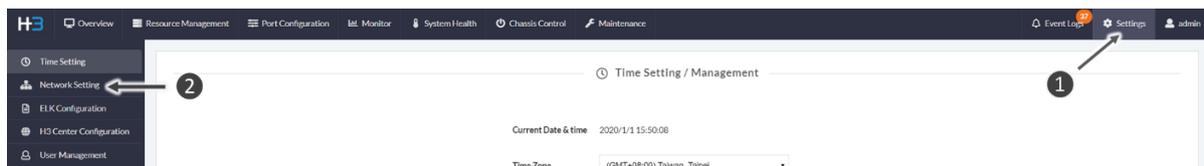


Next, account/networking/time can be set up on the Settings page.



## 4.2 Network Setting

Users can modify their Falcon 4016 network settings here.



a. Settings> Network Setting

**TCP / IP Setting**

Obtain IP address setting automatically via DHCP  
 Use static IP address

IP Address

Subnet Mask

Default Gateway

**DNS Setting**

Obtain DNS server address automatically  
 Use the following DNS server address

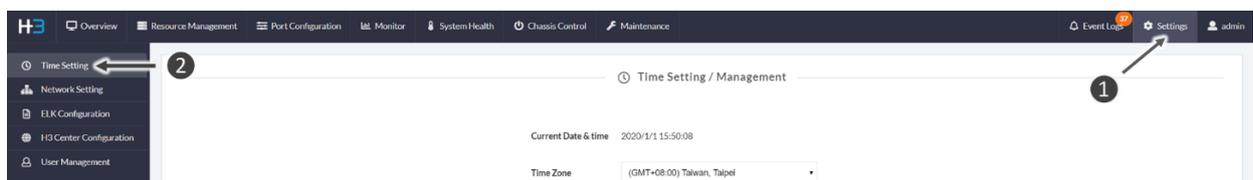
DNS

**Apply**

- b. Select your new IP address via, [DHCP, Static]
- c. Fill in your new IP address, [xxx.xxx.xxx.xxx]
- d. Fill in your new Subnet Mask information, [xxx.xxx.xxx.xxx]
- e. Fill in your new Gateway information, [xxx.xxx.xxx.xxx]
- f. Fill in your new DNS server address, [xxx.xxx.xxx.xxx]
- g. Click the “Apply” button to finish actions.

## 4.3 Time Setting

Please follow the following steps to update the system time.



- a. Settings> Time Setting

## Time Setting / Management

Current Date & time 2020/1/1 15:50:08

Time Zone **b)** (GMT+08:00) Taiwan, Taipei

Synchronize with NTP Server **d)**

NTP Server time.nist.gov

Last sync time 2019/12/27 15:35:46 [Sync Now](#)

Manual Setting **e)**

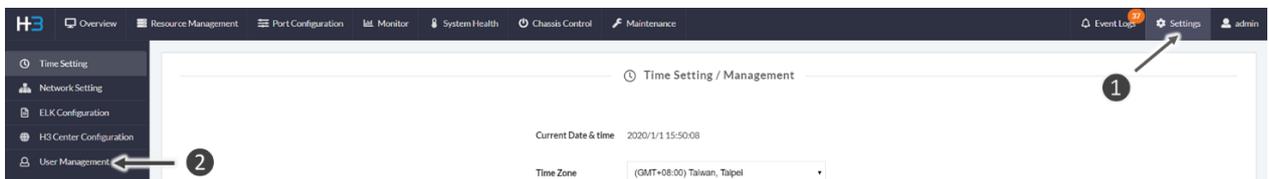
Date / Time 年 / 月 / 日 --:--

**f)** [Apply](#)

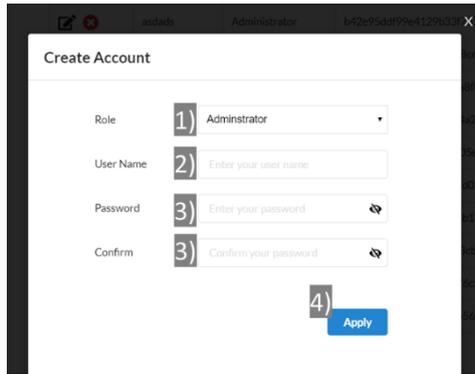
- b. Select the time zone of your location.
- c. Check the method to setup your new time, [Manual Setting Date/Time, Synchronize with NTP server]
- d. For Synchronizing to the NTP server, fill in the NTP server address that you want to synchronize with.
- e. Manual Setting Date/Time, select using the calendar app.
- f. Click the “Apply” button to save the new settings.

## 4.4 Account Setting

Please follow the steps outlined below to create/delete/manage your Falcon 4016 account.



- a. Settings> User Management
- b. Create:



1. Select the account type, [Administrator, Operator, Reservation, or Guest]
2. Fill in Username.
3. Fill in Password and fill in password again to confirm.
4. Click the “Apply” button to save the new settings.

c. Delete: Click  button to delete the account.

Action	Username	Authori:
 	admin	0
 	test	3

d. Edit: Click  button to edit the account, fill in new password and click “Apply” button to save the new settings.

Action	Username	Authori:
 	admin	0
 	test	3