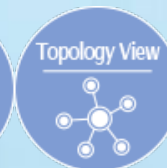
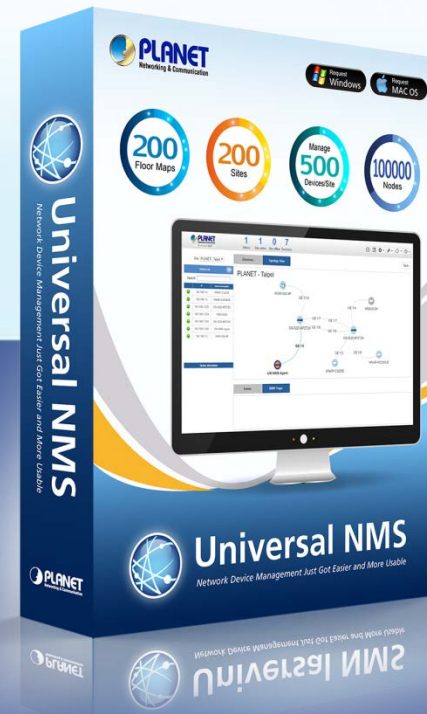


# Software Installation Guide

## *PLANET UNI-NMS*

### *Universal Network Management Software*



# Sections

- ◆ [System Requirements](#)
- ◆ [Installing Software](#)
- ◆ [Importing Open Virtualization Format](#)
- ◆ [How to Set Up](#)
- ◆ [How to Operate](#)

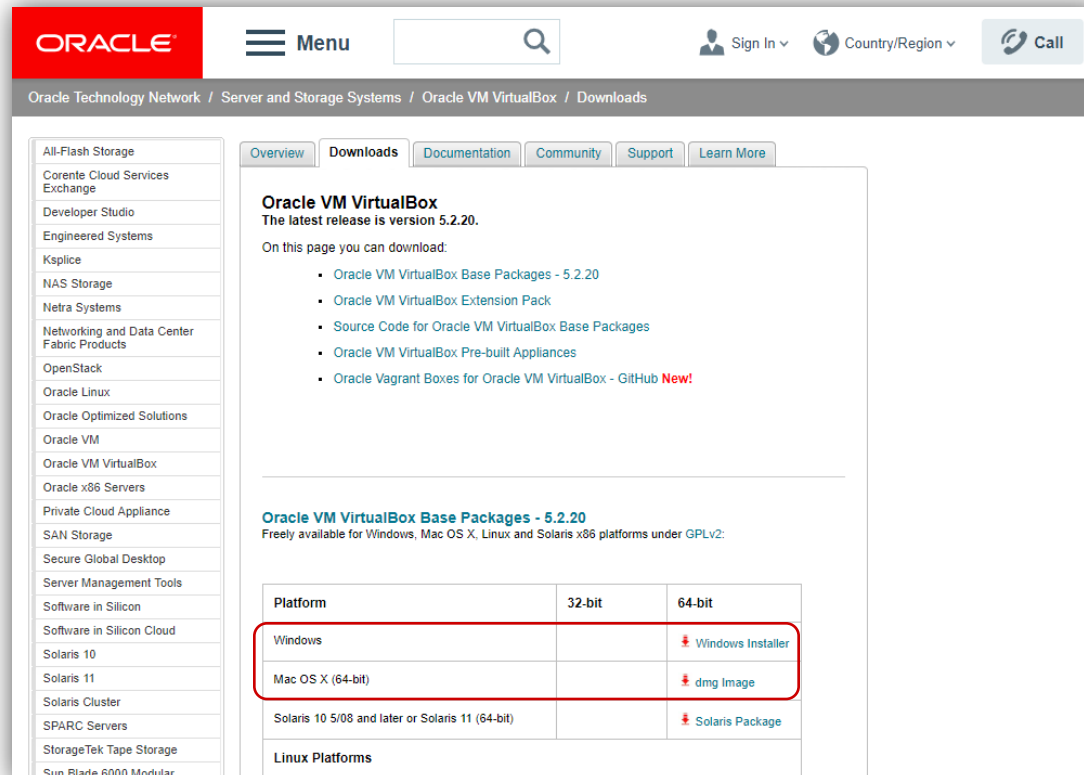
# System Requirements

- ◆CPU: Intel Core i5 3.4 GHz dual-core or above
- ◆RAM: 4 GB minimum or above
- ◆HDD: 200 GB (actual requirement is dependent on log size)
- ◆OS: Microsoft Windows 7/8/8.1/10  
Note: Supported OS is dependent on virtualization product
- ◆Virtualization: Oracle VirtualBox 5.0 or later
- ◆Browser: Chrome 31.0 or better

# Installing Softwave

- ◆ Download to install Oracle VM VirtualBox from Internet

[Download Link](http://www.oracle.com/technetwork/server-storage/virtualbox/downloads/index.html) (<http://www.oracle.com/technetwork/server-storage/virtualbox/downloads/index.html>)



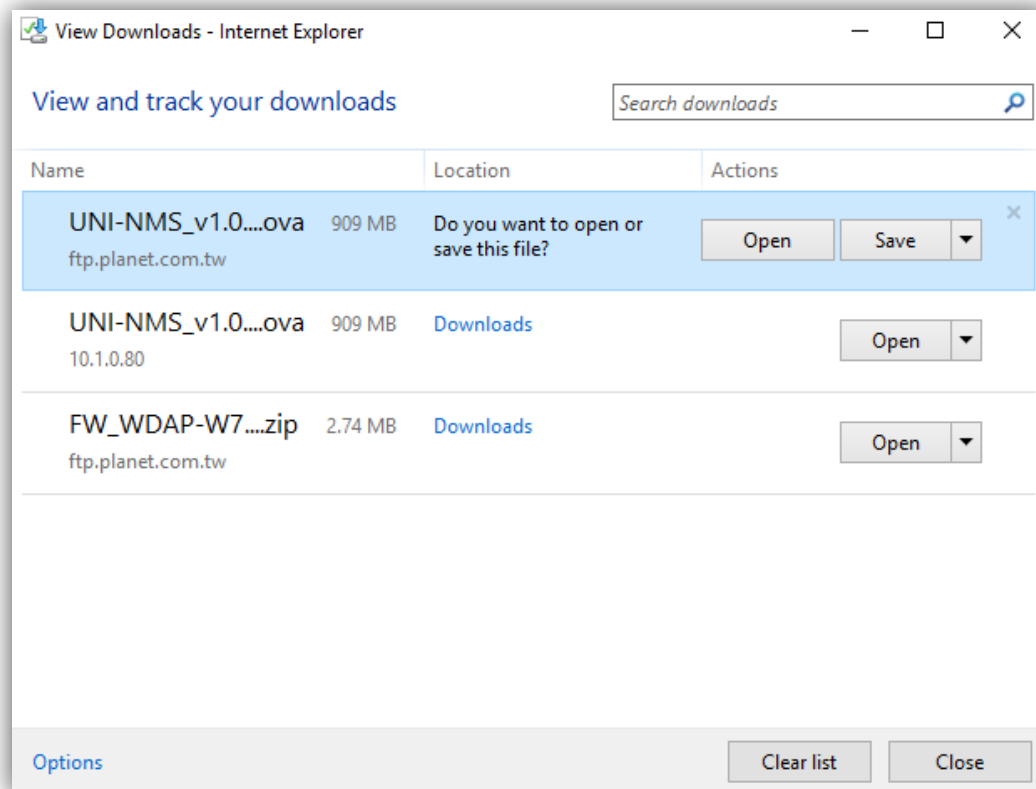
The screenshot shows the Oracle VM VirtualBox Downloads page. The page has a red Oracle logo at the top left, a search bar, and a 'Sign In' button. The breadcrumb trail reads: Oracle Technology Network / Server and Storage Systems / Oracle VM VirtualBox / Downloads. The left sidebar lists various Oracle products, with 'Oracle VM VirtualBox' selected. The main content area has tabs for Overview, Downloads, Documentation, Community, Support, and Learn More. The 'Downloads' tab is active, showing the 'Oracle VM VirtualBox' section with the latest release version 5.2.20. Below this, a list of download options is provided: Oracle VM VirtualBox Base Packages - 5.2.20, Oracle VM VirtualBox Extension Pack, Source Code for Oracle VM VirtualBox Base Packages, Oracle VM VirtualBox Pre-built Appliances, and Oracle Vagrant Boxes for Oracle VM VirtualBox - GitHub New!. A section titled 'Oracle VM VirtualBox Base Packages - 5.2.20' states that the packages are freely available for Windows, Mac OS X, Linux, and Solaris x86 platforms under GPLv2. A table below this section lists the download links for each platform. The 'Windows' and 'Mac OS X (64-bit)' rows are highlighted with a red box.

Platform	32-bit	64-bit
Windows		<a href="#">Windows Installer</a>
Mac OS X (64-bit)		<a href="#">dmg Image</a>
Solaris 10 5/08 and later or Solaris 11 (64-bit)		<a href="#">Solaris Package</a>
Linux Platforms		

# Installing Softwave

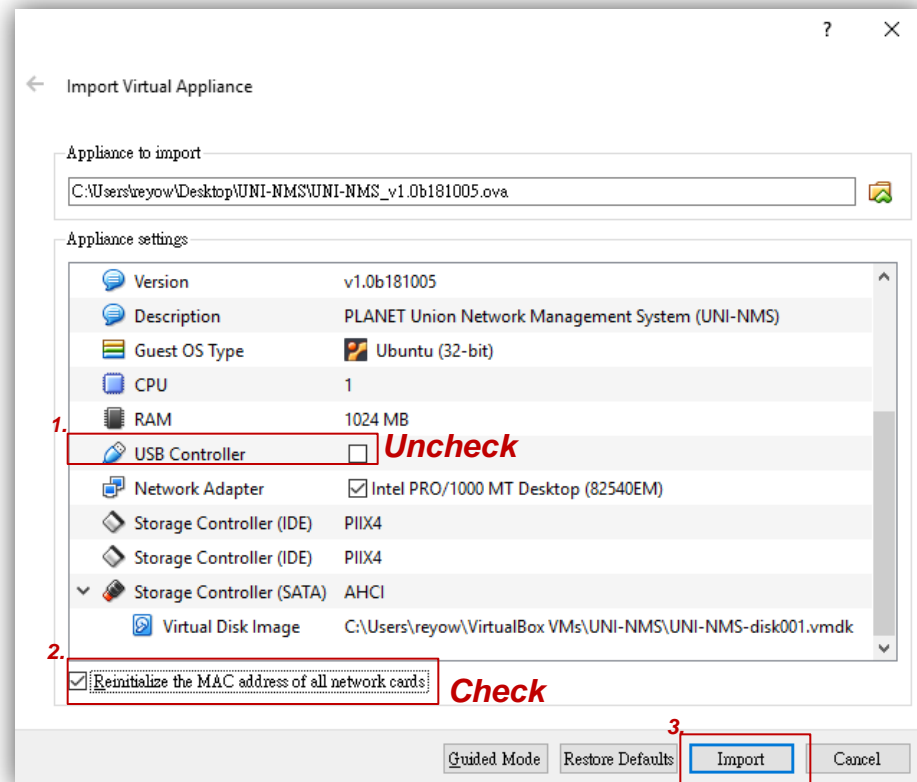
- ◆ Select items from the menus to download UNI-NMS (UNI-NMS\_v1.0b181102.ova.zip)

## Download Link



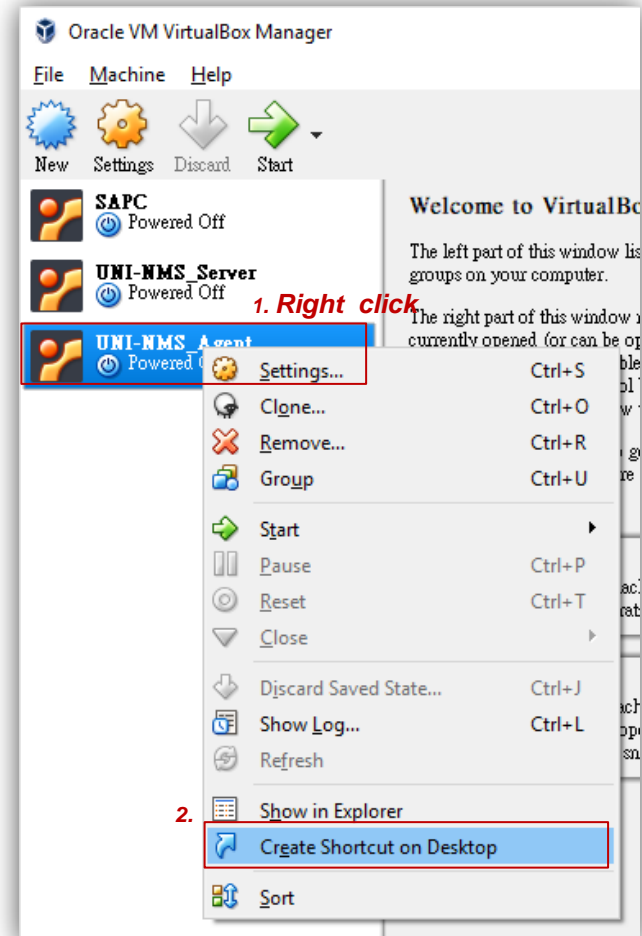
# Importing Open Virtualization Format

- ◆ Double-click “UNI-NMS\_v1.0b181102.ova” to import (or import it through the VM VirtualBox Manager)
- ◆ Uncheck the following items if existed
  - ✓ USB Controller
  - ✓ DVD
  - ✓ Sound Card
- ◆ Select
  - ✓ Reinitialize the MAC ...



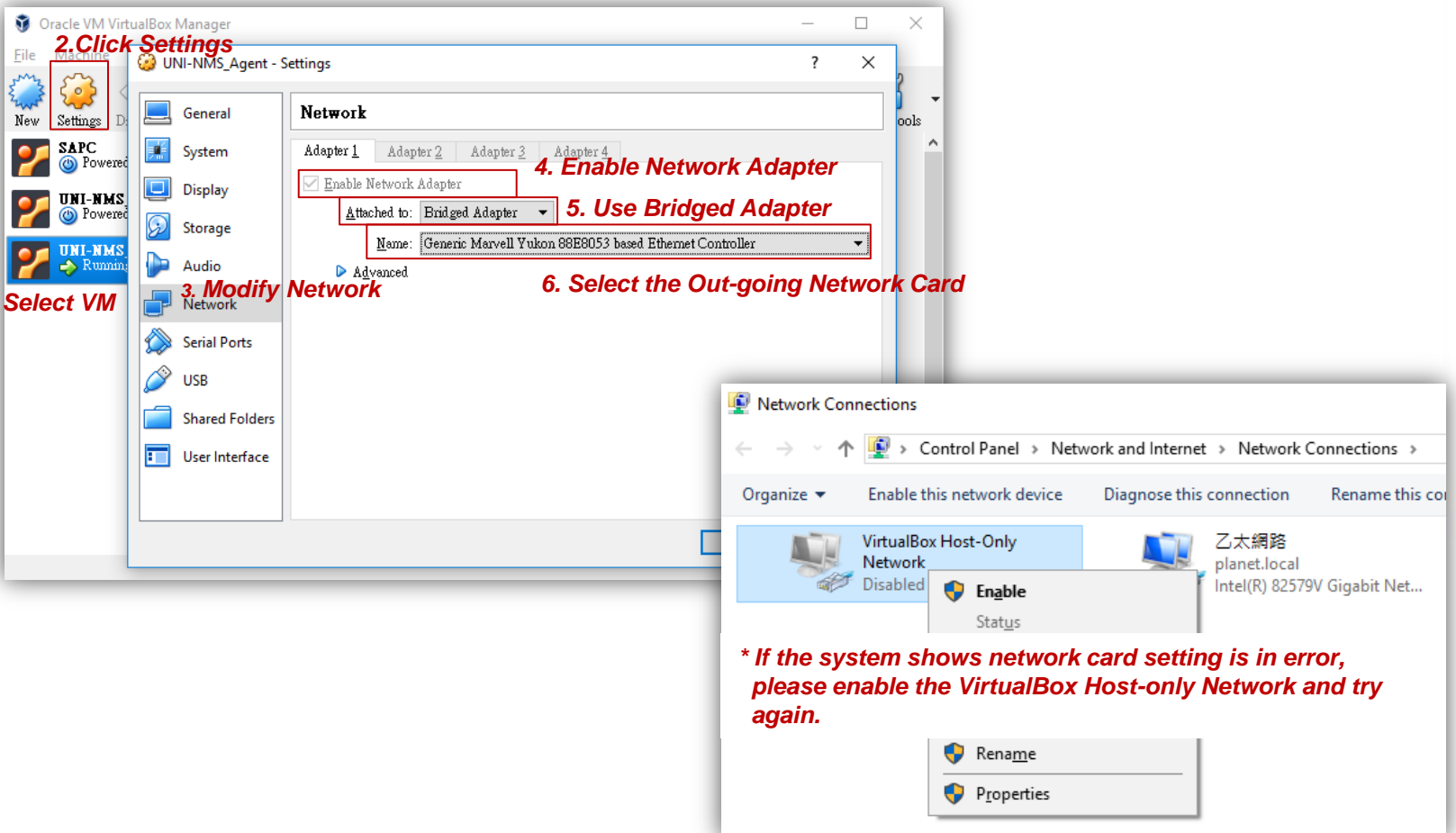
# How to Set Up

- ◆ Right-click “UNI-NMS”.
- ◆ Select “Create Shortcut on Desktop”.



# How to Set Up

- ◆ Please ensure your Network Adapter 1 is connected to the local network (Managed devices included).



**1. Select VM**

**2. Click Settings**

**3. Modify Network**

**4. Enable Network Adapter**

**5. Use Bridged Adapter**

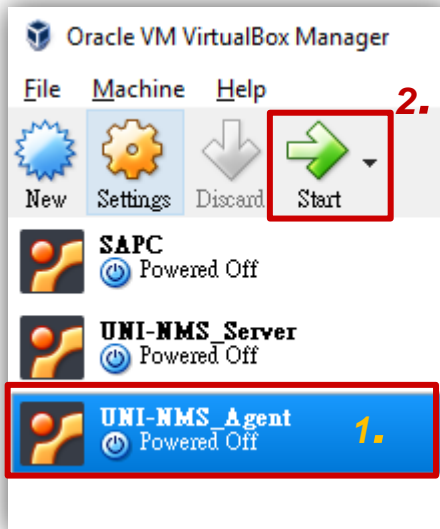
**6. Select the Out-going Network Card**

**\* If the system shows network card setting is in error, please enable the VirtualBox Host-only Network and try again.**

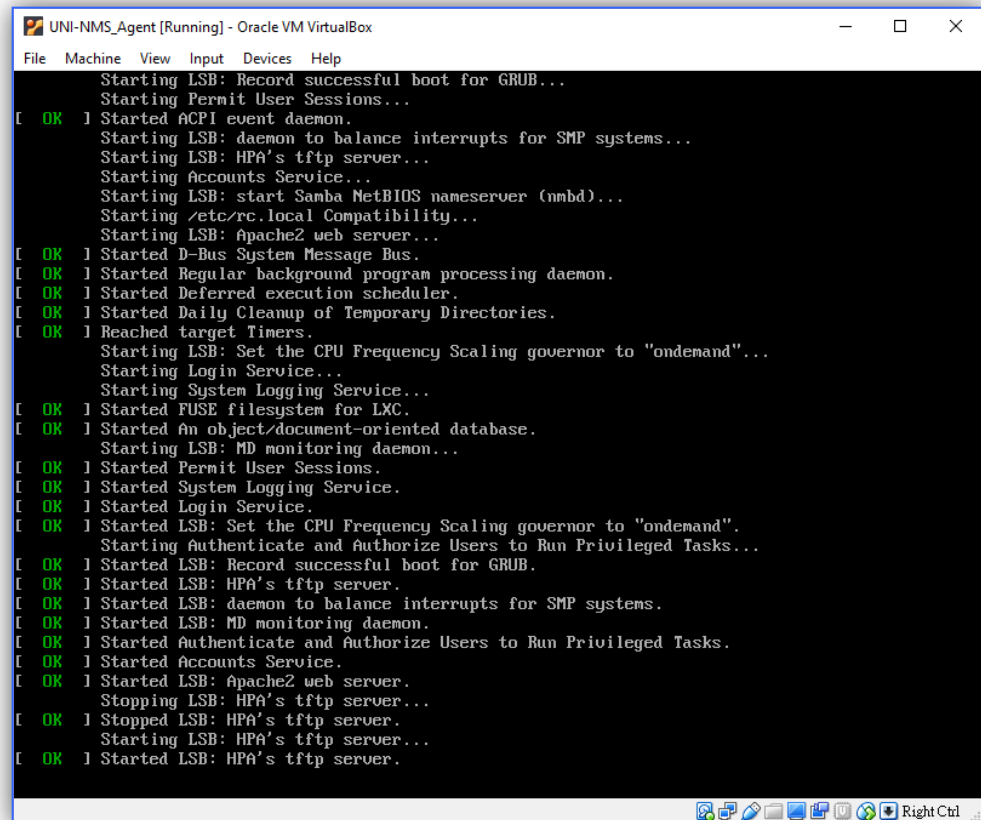


# How to Operate

- ◆ Select the VM.
- ◆ Press "Start" to run the UNI-NMS.

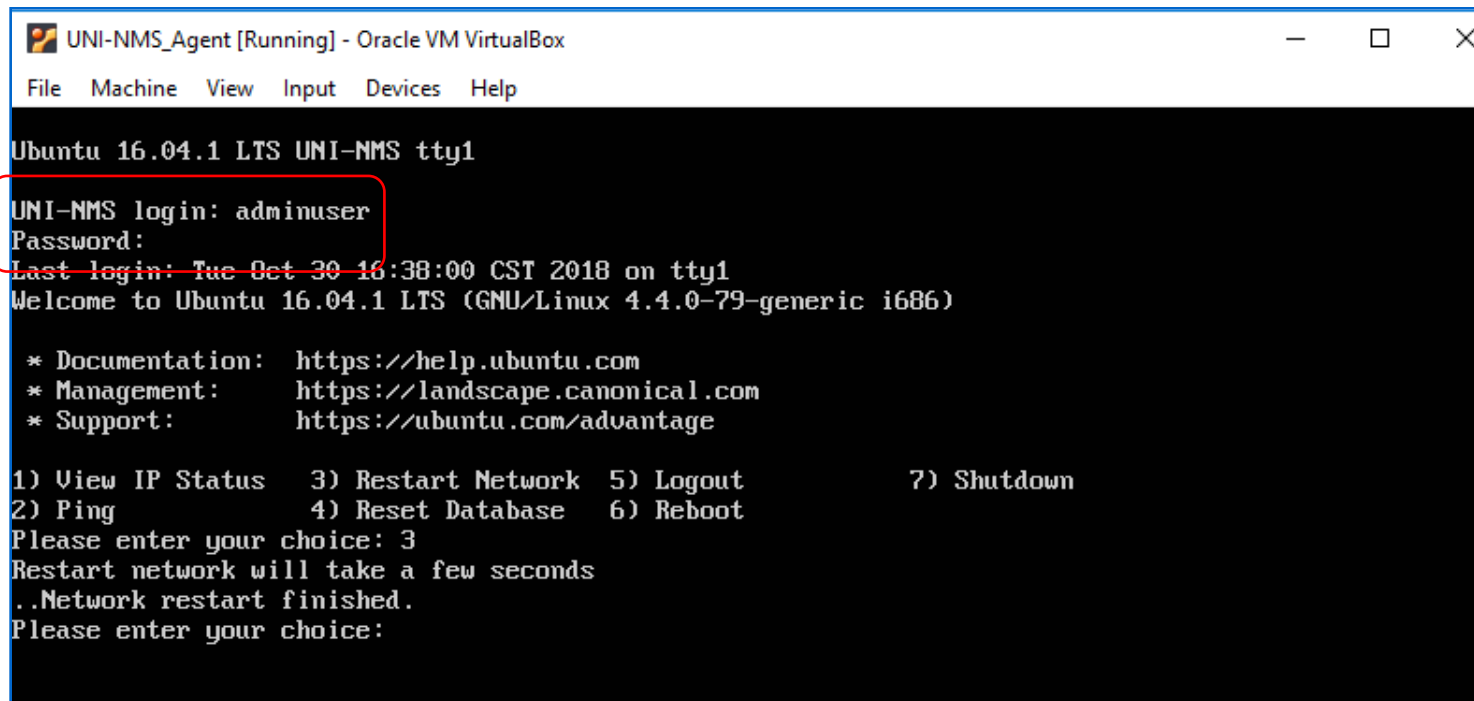


\*Press the setting button to define the General Name of VM.



# How to Operate

- ◆ When the “UNI-NMS login” appears, please enter user login account “adminuser”, and password “adminuser”.



```
UNI-NMS_Agent [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

Ubuntu 16.04.1 LTS UNI-NMS tty1
UNI-NMS login: adminuser
Password:
Last login: Tue Oct 30 16:38:00 CST 2018 on tty1
Welcome to Ubuntu 16.04.1 LTS (GNU/Linux 4.4.0-79-generic i686)

* Documentation:  https://help.ubuntu.com
* Management:    https://landscape.canonical.com
* Support:        https://ubuntu.com/advantage

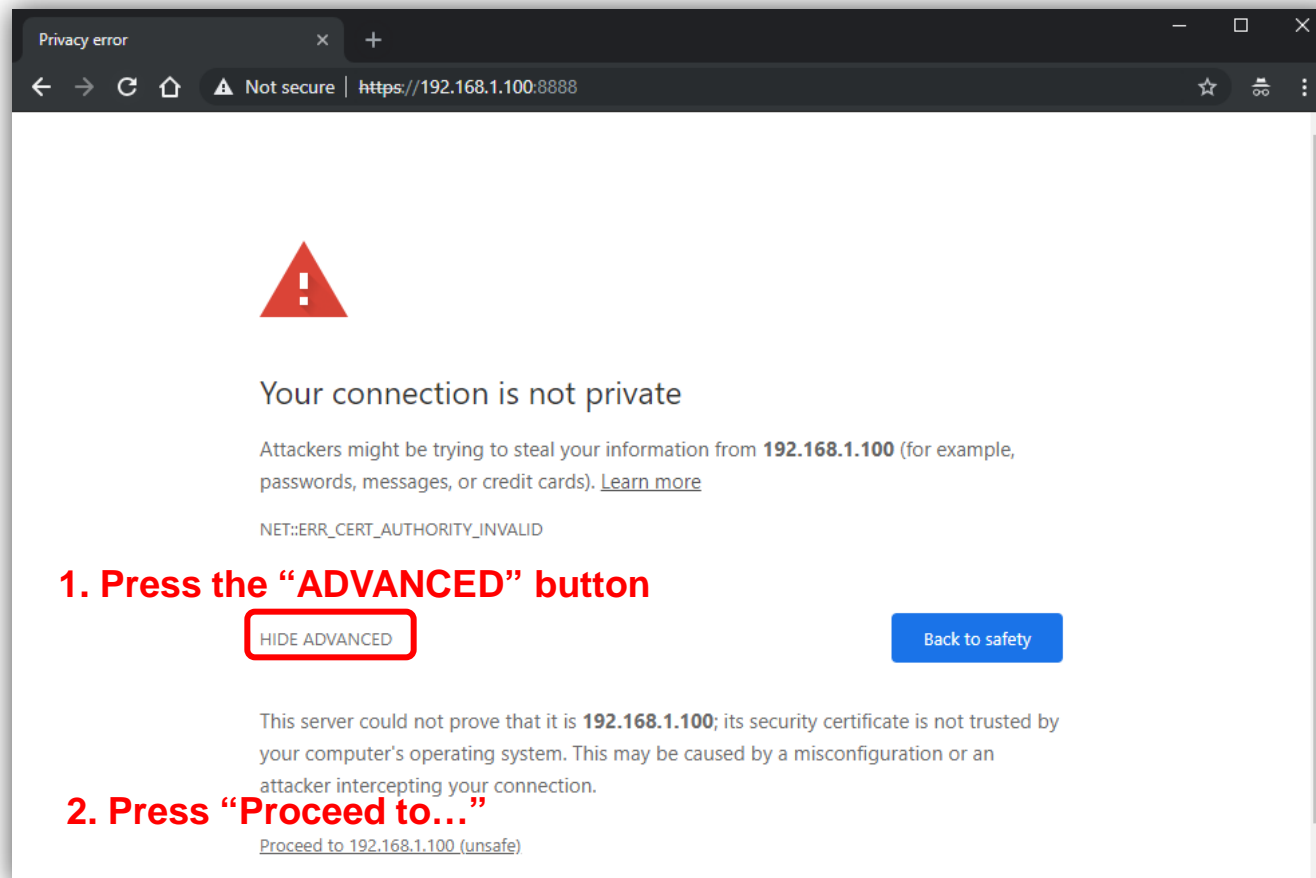
1) View IP Status   3) Restart Network   5) Logout           7) Shutdown
2) Ping             4) Reset Database   6) Reboot

Please enter your choice: 3
Restart network will take a few seconds
..Network restart finished.
Please enter your choice:
```

- ◆ When the “preferred command” appears, please enter command “3” to restart network command. (It will not be necessary if you cannot be connected to UNI-NMS Web UI.)

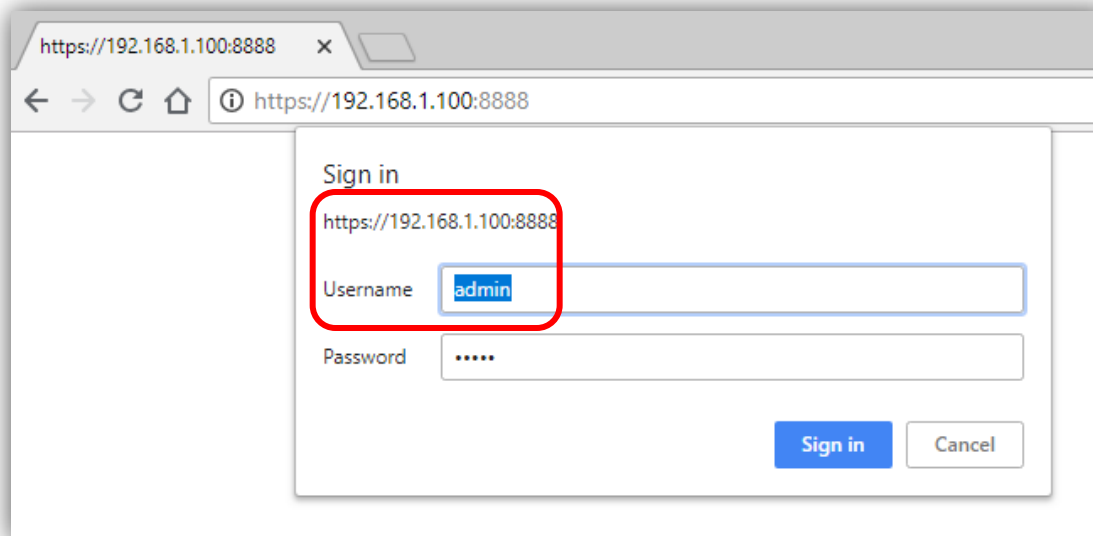
# How to Operate

- ◆ Open Chrome to log in the UNI -NMS.
- ◆ Please use Chrome to get fully supported.



# How to Operate

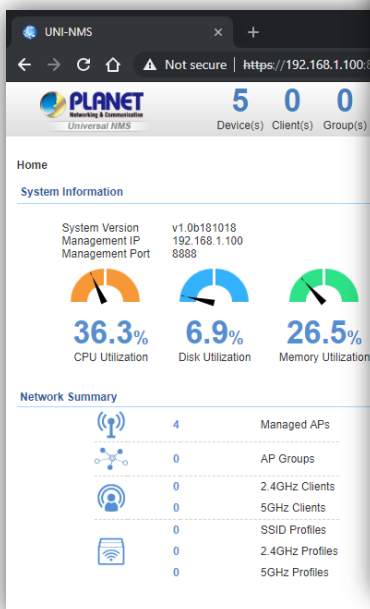
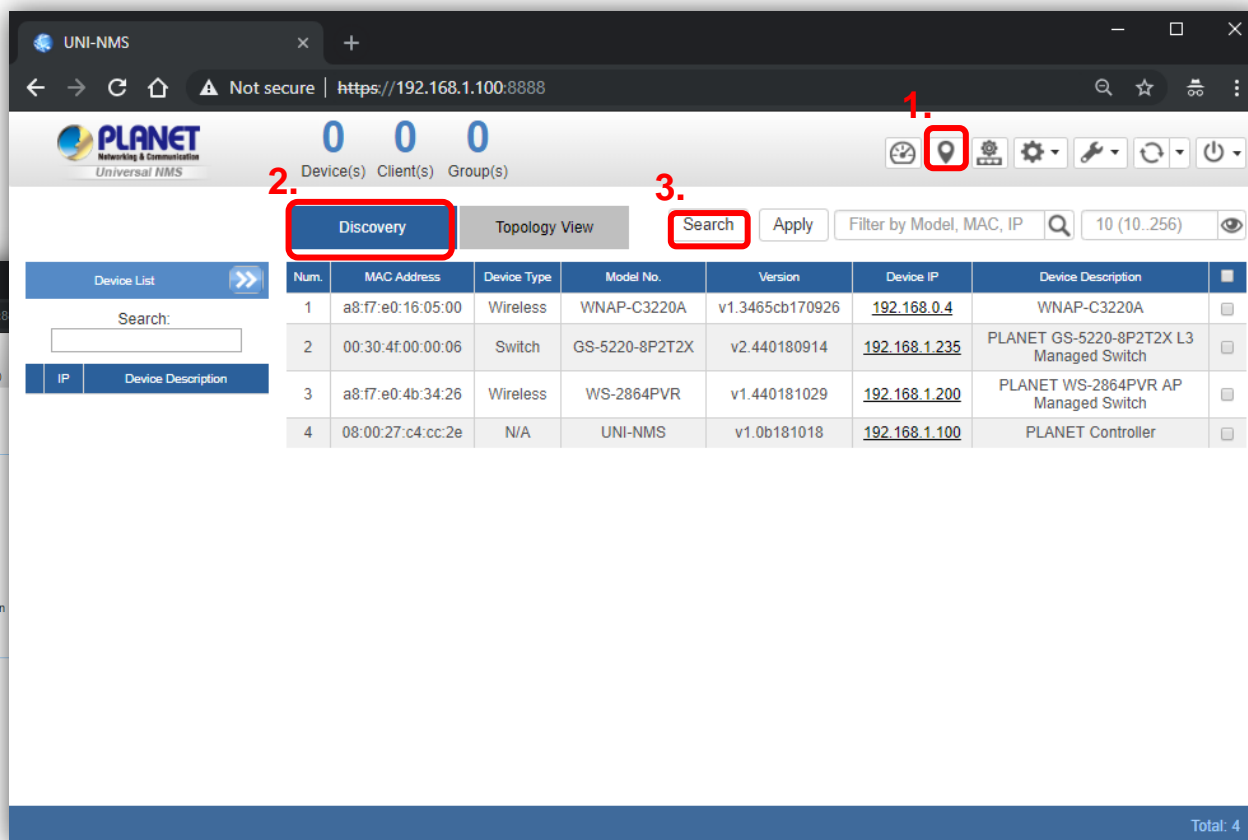
- ◆ The UNI-MMS web GUI login screen.
- ◆ Username: **admin**
- ◆ Password: **admin**



# How to Operate

- On the dashboard, press the “Domain” icon shown below as No. 1, “Discovery” shown as No. 2 and then “Search” shown as No.3 to find the managed APs and continue other settings.

## Dashboard Web UI

1. Domain icon (Location pin)

2. Discovery button

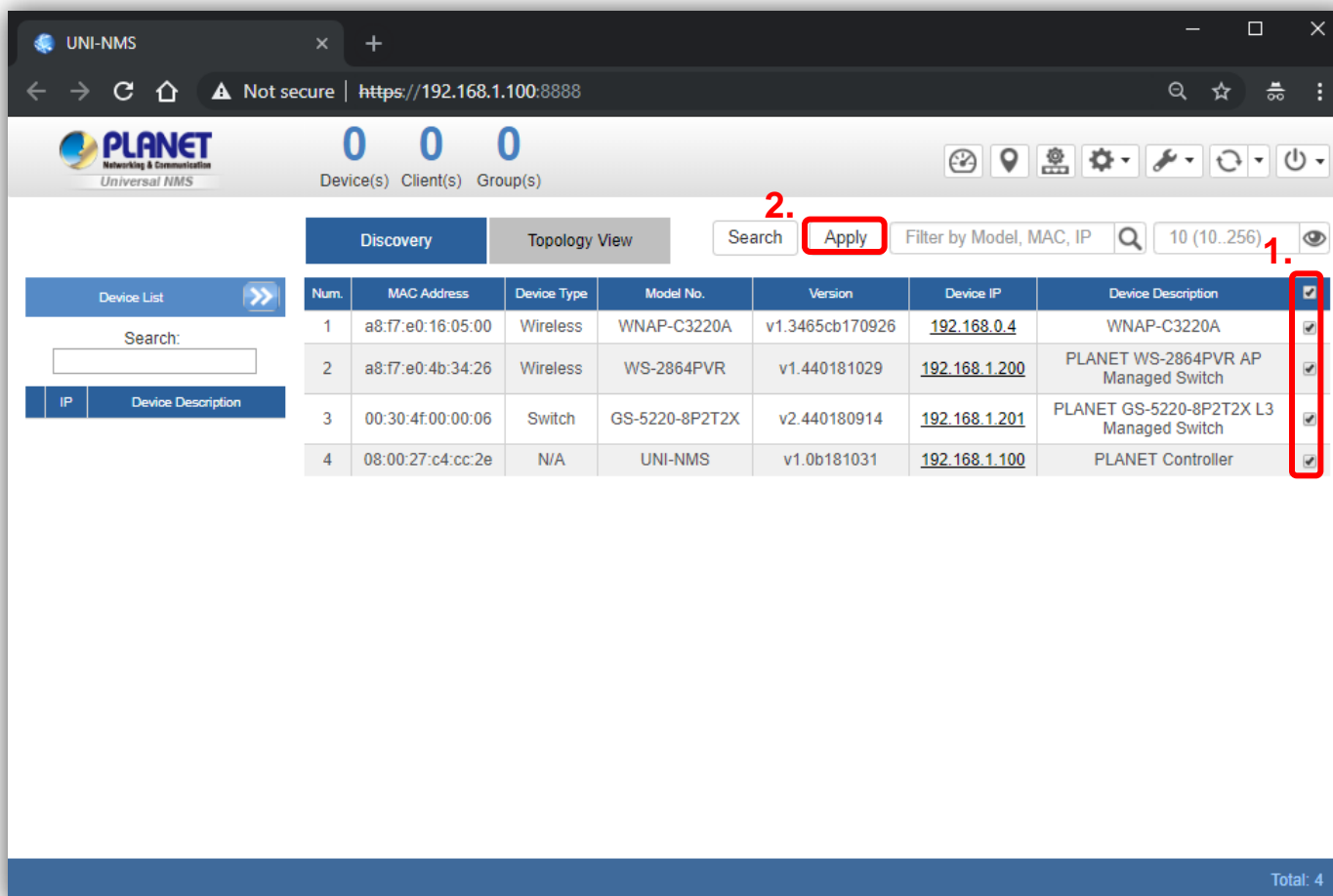
3. Search button

Num.	MAC Address	Device Type	Model No.	Version	Device IP	Device Description
1	a8:f7:e0:16:05:00	Wireless	WNAP-C3220A	v1.3465cb170926	192.168.0.4	WNAP-C3220A
2	00:30:4f:00:00:06	Switch	GS-5220-8P2T2X	v2.440180914	192.168.1.235	PLANET GS-5220-8P2T2X L3 Managed Switch
3	a8:f7:e0:4b:34:26	Wireless	WS-2864PVR	v1.440181029	192.168.1.200	PLANET WS-2864PVR AP
4	08:00:27:c4:cc:2e	N/A	UNI-NMS	v1.0b181018	192.168.1.100	PLANET Controller

Total: 4

# How to Operate

- ◆ Select devices shown below as No. 1 by checking the boxes, and then press the “Apply” icon to add devices to management list.



UNI-NMS

Not secure | https://192.168.1.100:8888

0 0 0  
Device(s) Client(s) Group(s)

Discovery Topology View

Search Apply Filter by Model, MAC, IP 10 (10..256)

Device List

Search:

IP Device Description

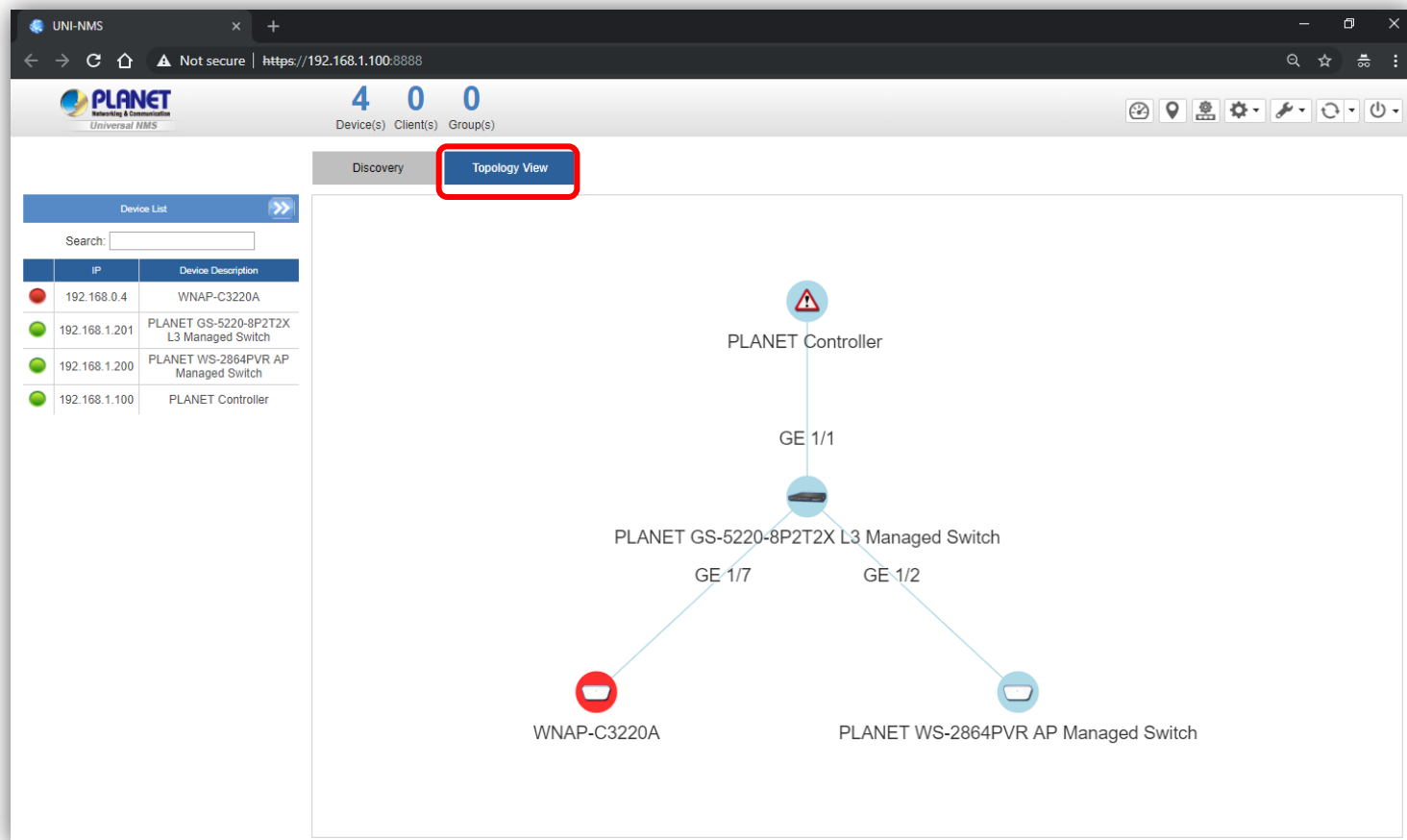
Num.	MAC Address	Device Type	Model No.	Version	Device IP	Device Description	
1	a8:f7:e0:16:05:00	Wireless	WNAP-C3220A	v1.3465cb170926	192.168.0.4	WNAP-C3220A	<input checked="" type="checkbox"/>
2	a8:f7:e0:4b:34:26	Wireless	WS-2864PVR	v1.440181029	192.168.1.200	PLANET WS-2864PVR AP Managed Switch	<input checked="" type="checkbox"/>
3	00:30:4f:00:00:06	Switch	GS-5220-8P2T2X	v2.440180914	192.168.1.201	PLANET GS-5220-8P2T2X L3 Managed Switch	<input checked="" type="checkbox"/>
4	08:00:27:c4:cc:2e	N/A	UNI-NMS	v1.0b181031	192.168.1.100	PLANET Controller	<input checked="" type="checkbox"/>

Total: 4

# How to Operate

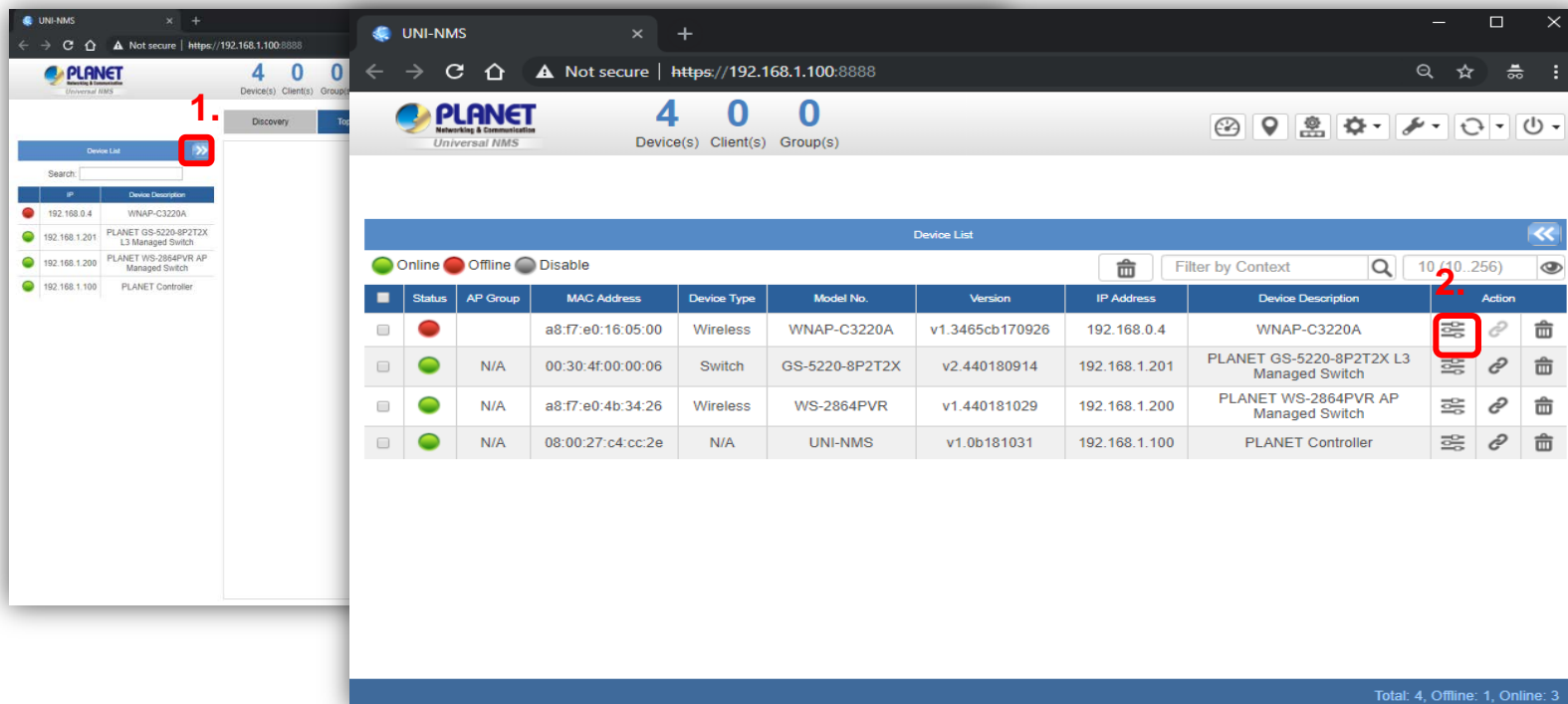
- ◆ Press **“Topology View”** to see the domain network topology after one minute.

※If you do not see the topology, please check devices, like switches, routers, etc. to enable **SNMP** and **LLDP** functions.



# How to Operate

- ◆ Press the “**Double Arrow**” icon shown below as No. 1 to see the fully managed devices information.
- ◆ Press the “**Identification**” icon shown as No. 2 to modify the device description, type, and web protocol information.



The left screenshot shows the 'Device List' sidebar with a red box and '1.' highlighting the 'Double Arrow' icon. The right screenshot shows the main 'Device List' table with a red box and '2.' highlighting the 'Identification' icon in the 'Action' column.

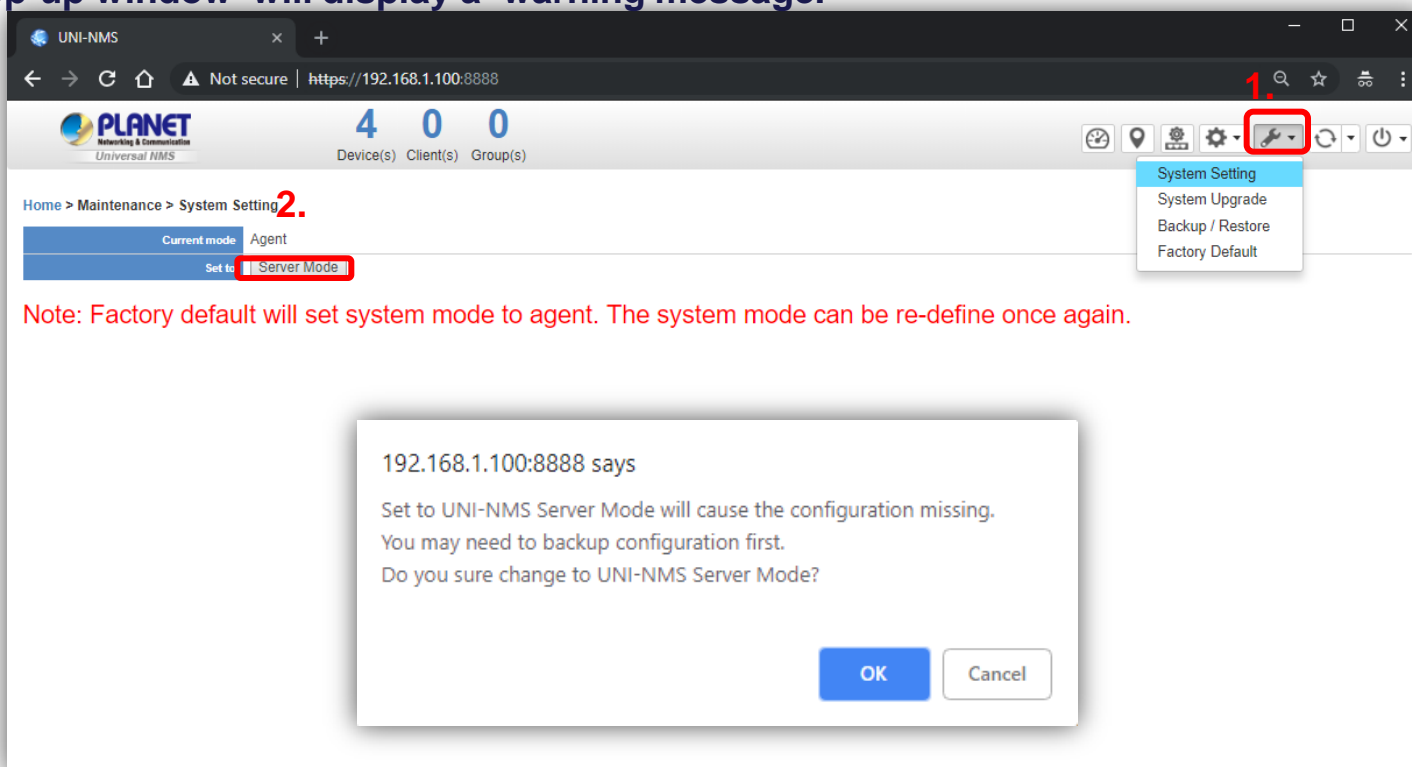
Status	AP Group	MAC Address	Device Type	Model No.	Version	IP Address	Device Description	Action
Offline		a8:f7:e0:16:05:00	Wireless	WNAP-C3220A	v1.3465cb170926	192.168.0.4	WNAP-C3220A	[Double Arrow] [Link] [Trash]
Online	N/A	00:30:4f:00:00:06	Switch	GS-5220-8P2T2X	v2.440180914	192.168.1.201	PLANET GS-5220-8P2T2X L3 Managed Switch	[Double Arrow] [Link] [Trash]
Online	N/A	a8:f7:e0:4b:34:26	Wireless	WS-2864PVR	v1.440181029	192.168.1.200	PLANET WS-2864PVR AP Managed Switch	[Double Arrow] [Link] [Trash]
Online	N/A	08:00:27:c4:cc:2e	N/A	UNI-NMS	v1.0b181031	192.168.1.100	PLANET Controller	[Double Arrow] [Link] [Trash]

Total: 4, Offline: 1, Online: 3



# How to Operate

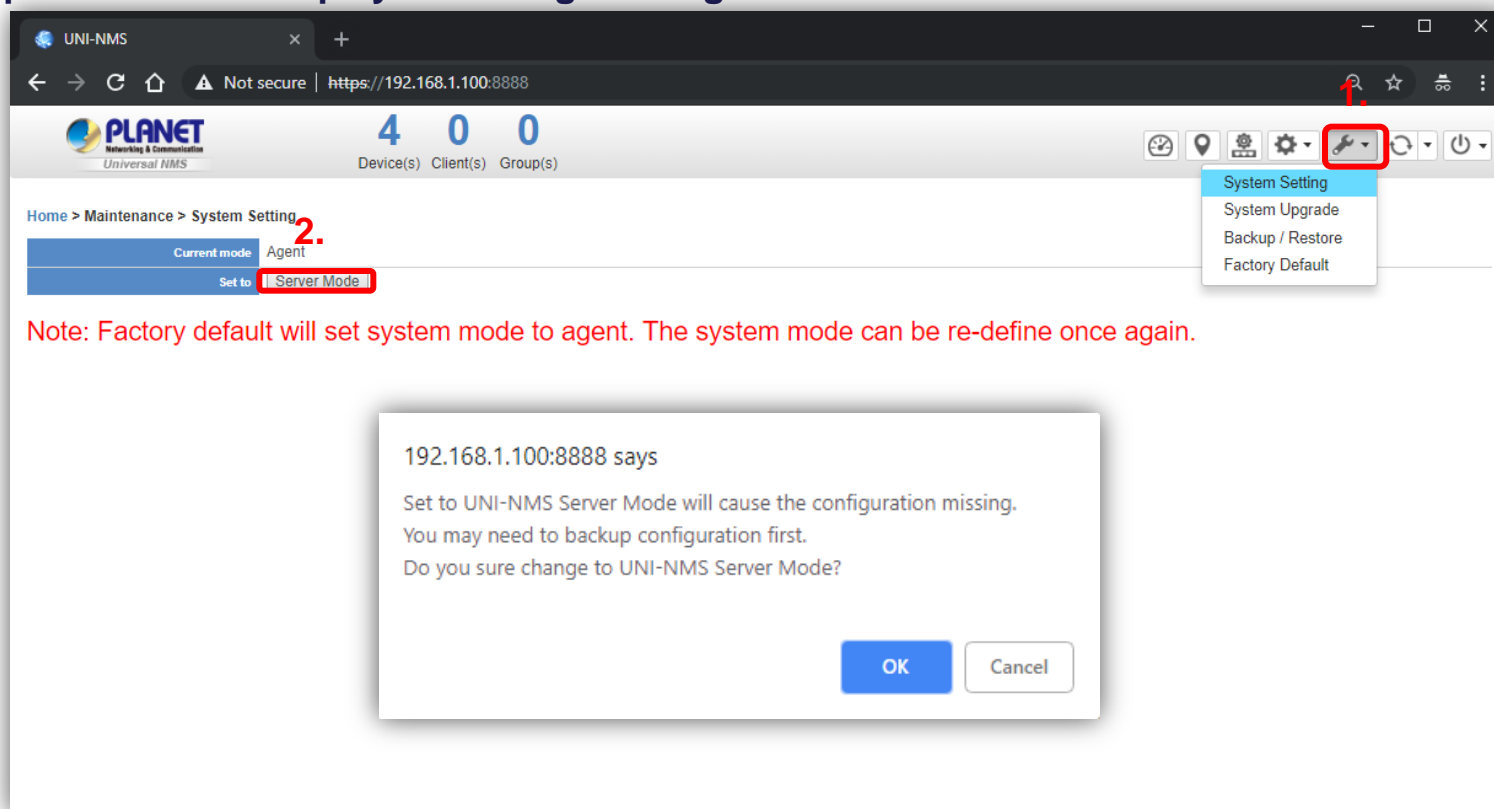
- ◆ Press the “**Maintenance**” icon shown below as No. 1 to make the system become to Server Mode.
- ◆ Press the “**Server Mode**” icon shown as No. 2 to start setting to the Server mode and a pop-up window will display a warning message.



Note: Factory default will set system mode to agent. The system mode can be re-define once again.

# How to Operate

- ◆ Press the “**Maintenance**” icon shown below as No. 1 to make the system become Server Mode.
- ◆ Press the “**Server Mode**” icon shown as No. 2 to start setting to Server mode, and a pop-up window will display a warning message.



UNI-NMS

Not secure | https://192.168.1.100:8888

PLANET Universal NMS

4 0 0  
Device(s) Client(s) Group(s)

Home > Maintenance > System Setting

Current mode Agent

Set to **Server Mode**

System Setting  
System Upgrade  
Backup / Restore  
Factory Default

Note: Factory default will set system mode to agent. The system mode can be re-define once again.

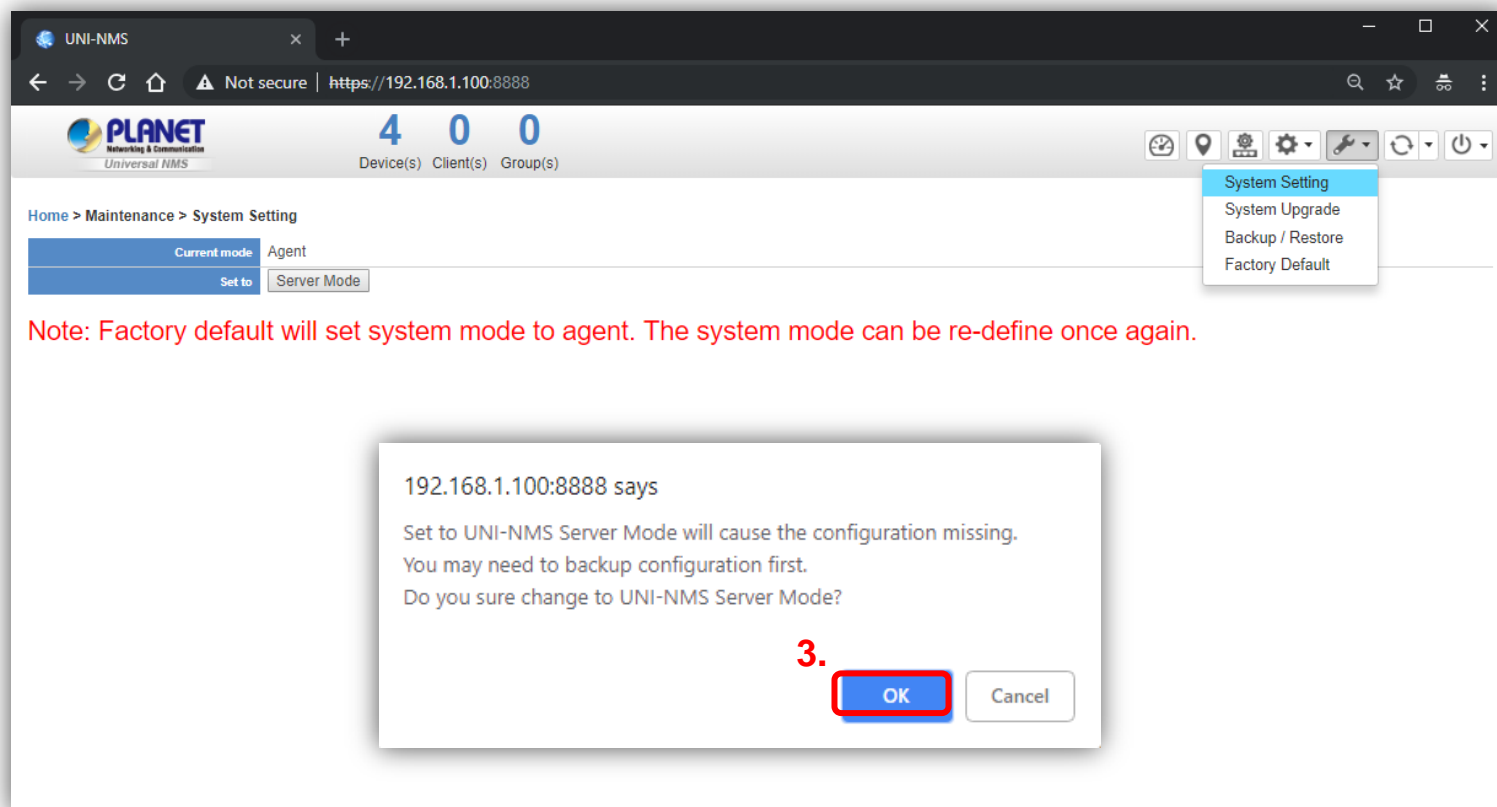
192.168.1.100:8888 says

Set to UNI-NMS Server Mode will cause the configuration missing.  
You may need to backup configuration first.  
Do you sure change to UNI-NMS Server Mode?

OK Cancel

# How to Operate

- ◆ Press the “OK” icon shown below as No. 3 to start changing system to Server Mode.



UNI-NMS

Not secure | https://192.168.1.100:8888

PLANET  
Universal NMS

4 0 0  
Device(s) Client(s) Group(s)

Home > Maintenance > System Setting

Current mode: Agent

Set to: Server Mode

System Setting  
System Upgrade  
Backup / Restore  
Factory Default

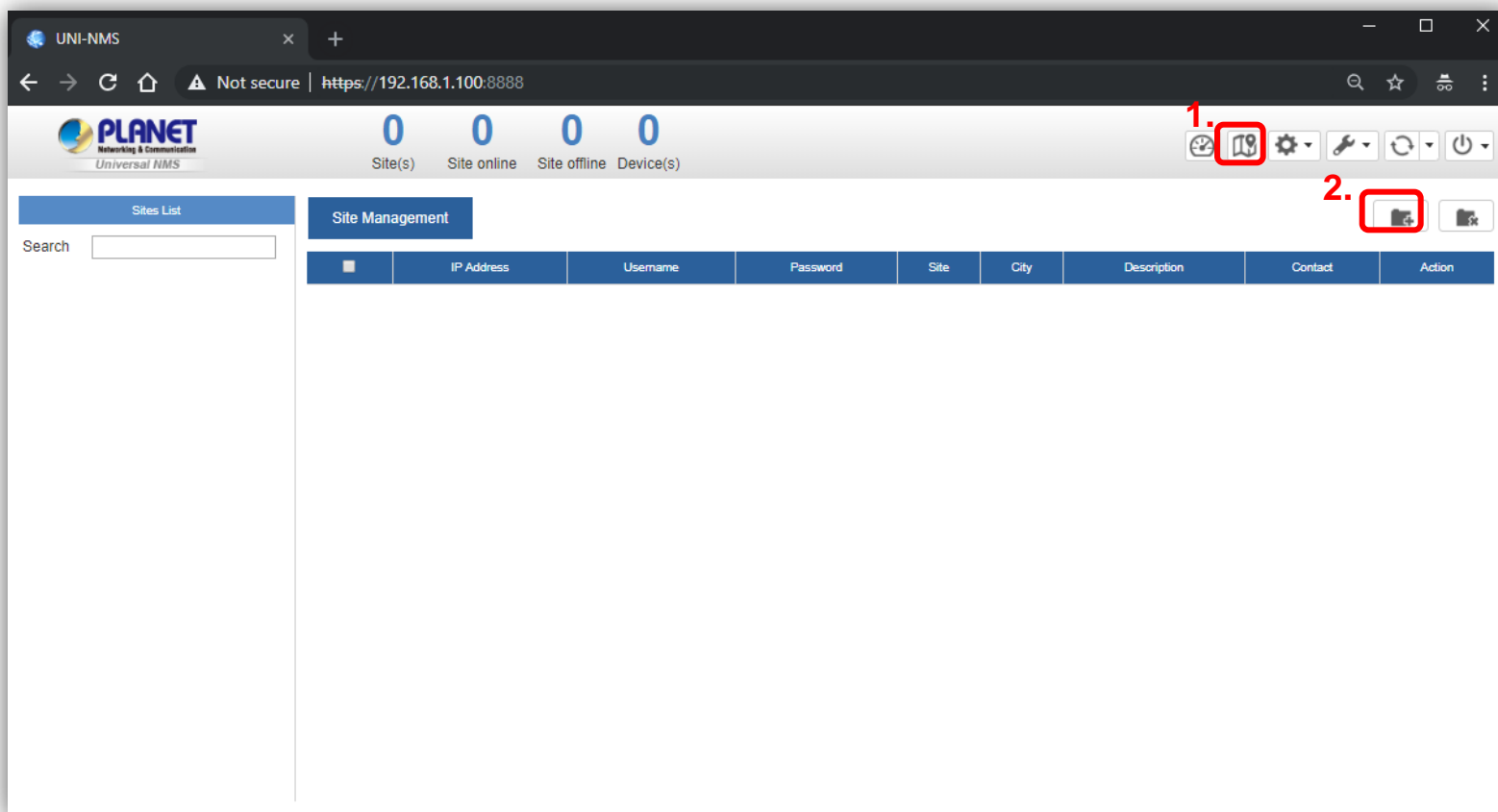
192.168.1.100:8888 says

Set to UNI-NMS Server Mode will cause the configuration missing.  
You may need to backup configuration first.  
Do you sure change to UNI-NMS Server Mode?

3. OK Cancel

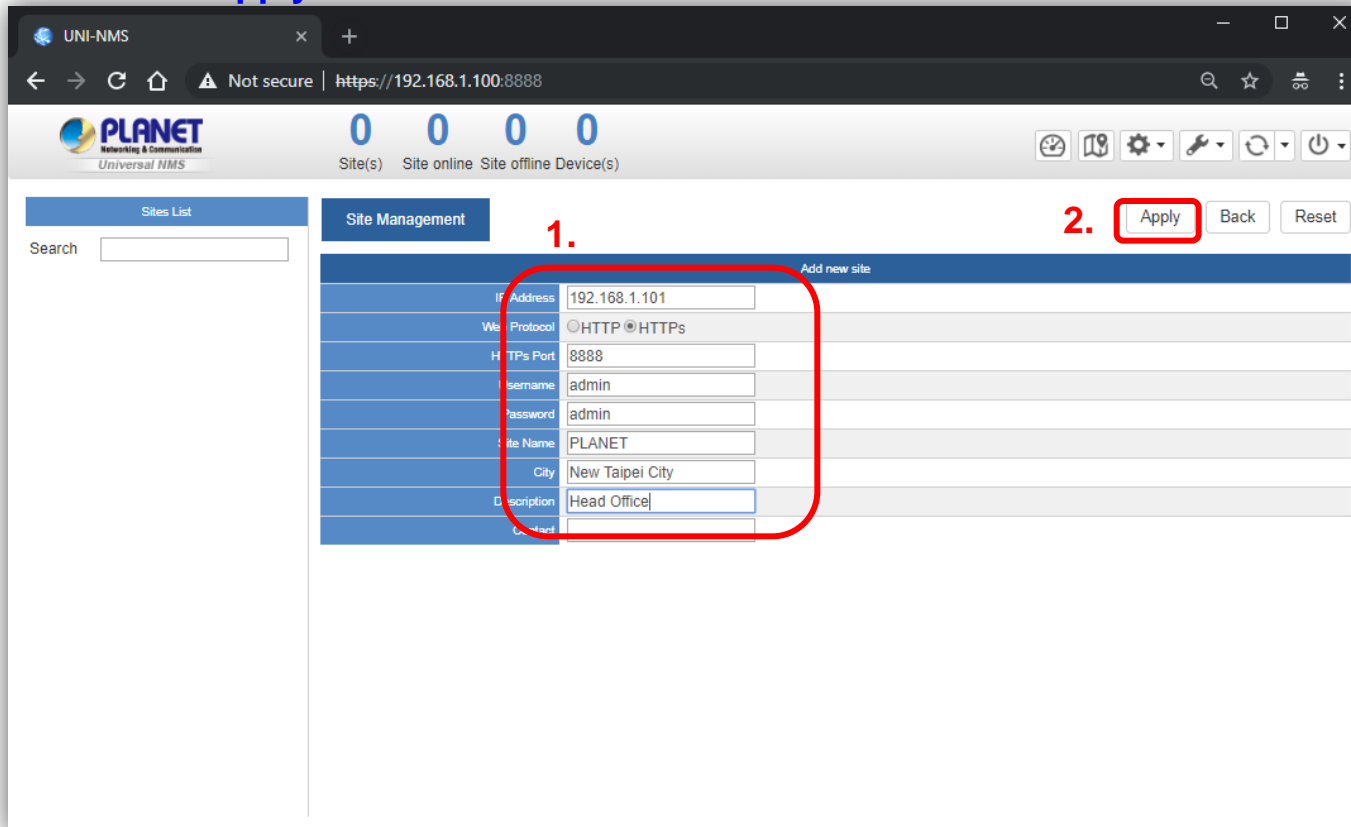
# How to Operate

- ◆ Press the “**Site**” icon shown below as No. 1 to make the system become Server Mode.
- ◆ Press the “**Add-New-Site**” icon shown as No. 2 to add a different site to your network.



# How to Operate

- ◆ Fill out the fields to build a new site (shown below as No. 1)
- ◆ Press the “**Apply**” icon shown as No. 2 to add a new site.



The screenshot displays the UNI-NMS web interface for Site Management. The top navigation bar includes the PLANET logo, status indicators (0 Site(s), 0 Site online, 0 Site offline, 0 Device(s)), and various system icons. The main content area is divided into a 'Sites List' sidebar and a 'Site Management' main panel. The 'Add new site' form is visible, with fields for IP Address, Web Protocol, HTTPs Port, Username, Password, Site Name, City, and Description. A red box labeled '1.' highlights the form fields, and another red box labeled '2.' highlights the 'Apply' button.

Field	Value
IP Address	192.168.1.101
Web Protocol	<input type="radio"/> HTTP <input checked="" type="radio"/> HTTPs
HTTPs Port	8888
Username	admin
Password	admin
Site Name	PLANET
City	New Taipei City
Description	Head Office

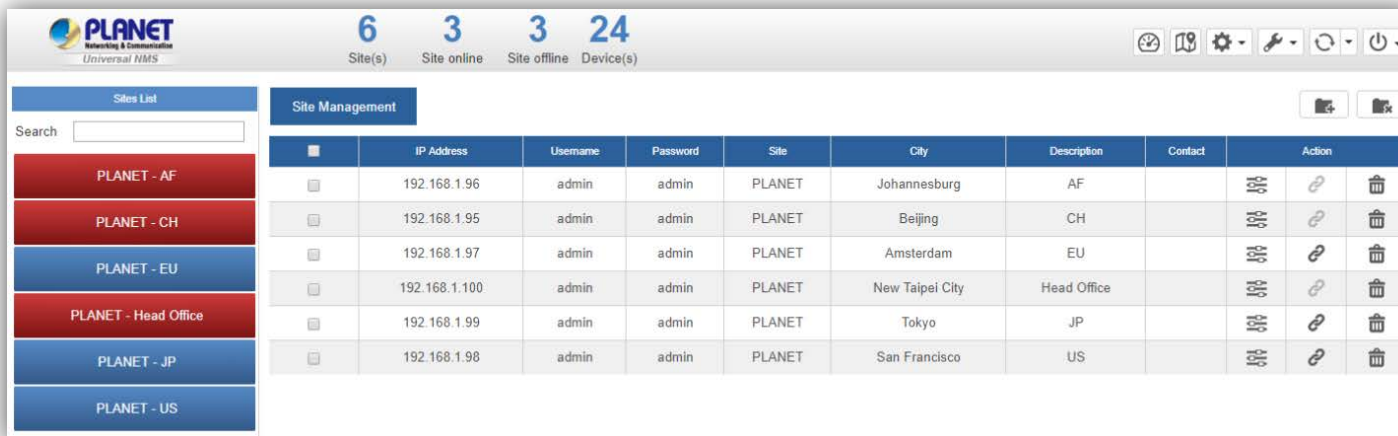
# How to Operate

- ◆ After adding a new site, please wait for the system to be connected.
- ◆ The colored buttons show different statuses like:

**Blue:** connected

**Red:** disconnected

**Gray:** connecting



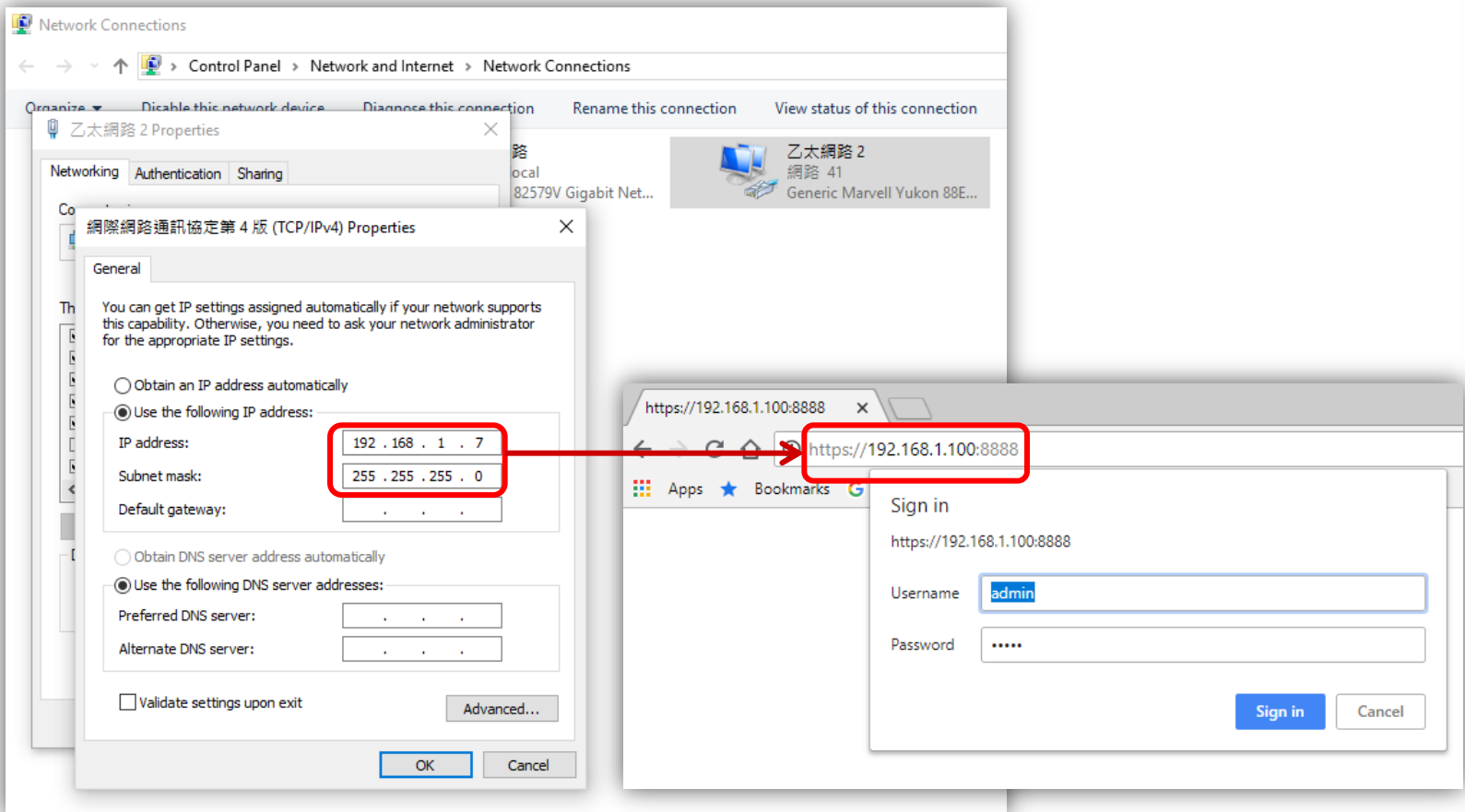
The screenshot shows the PLANET Universal NMS interface. At the top, there are status indicators: 6 Site(s), 3 Site online, 3 Site offline, and 24 Device(s). Below this, there is a 'Sites List' sidebar with buttons for PLANET - AF (red), PLANET - CH (red), PLANET - EU (blue), PLANET - Head Office (red), PLANET - JP (blue), and PLANET - US (blue). The main area is titled 'Site Management' and contains a table with the following data:

	IP Address	Username	Password	Site	City	Description	Contact	Action
	192.168.1.96	admin	admin	PLANET	Johannesburg	AF		
	192.168.1.95	admin	admin	PLANET	Beijing	CH		
	192.168.1.97	admin	admin	PLANET	Amsterdam	EU		
	192.168.1.100	admin	admin	PLANET	New Taipei City	Head Office		
	192.168.1.99	admin	admin	PLANET	Tokyo	JP		
	192.168.1.98	admin	admin	PLANET	San Francisco	US		

- ◆ Press the colored button to see the detailed information.

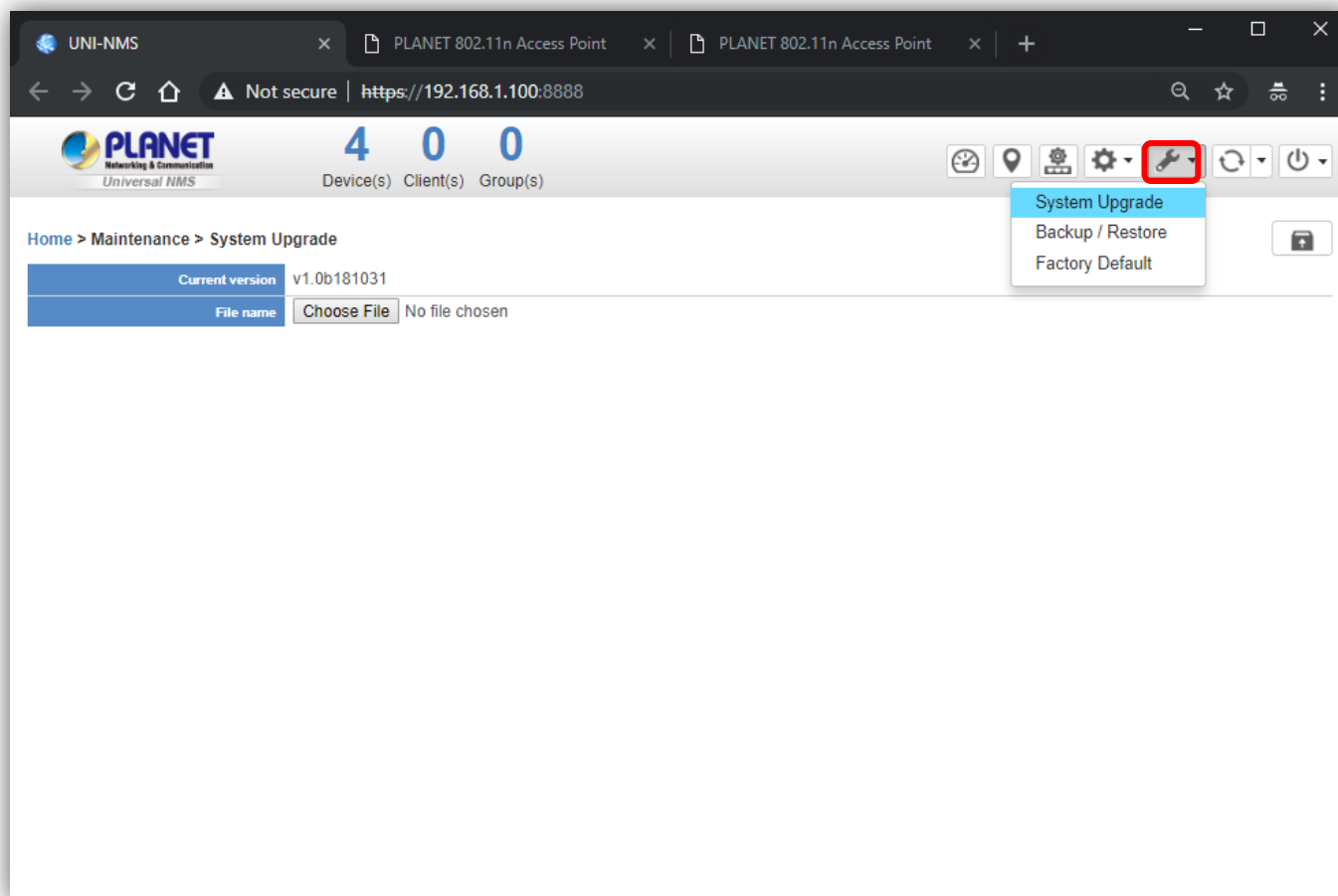
# How to Operate

- ◆ **UNI-NMS is set to the static IP: 192.168.1.100, so configure the network card to log in in the same network segment.**



# How to Operate

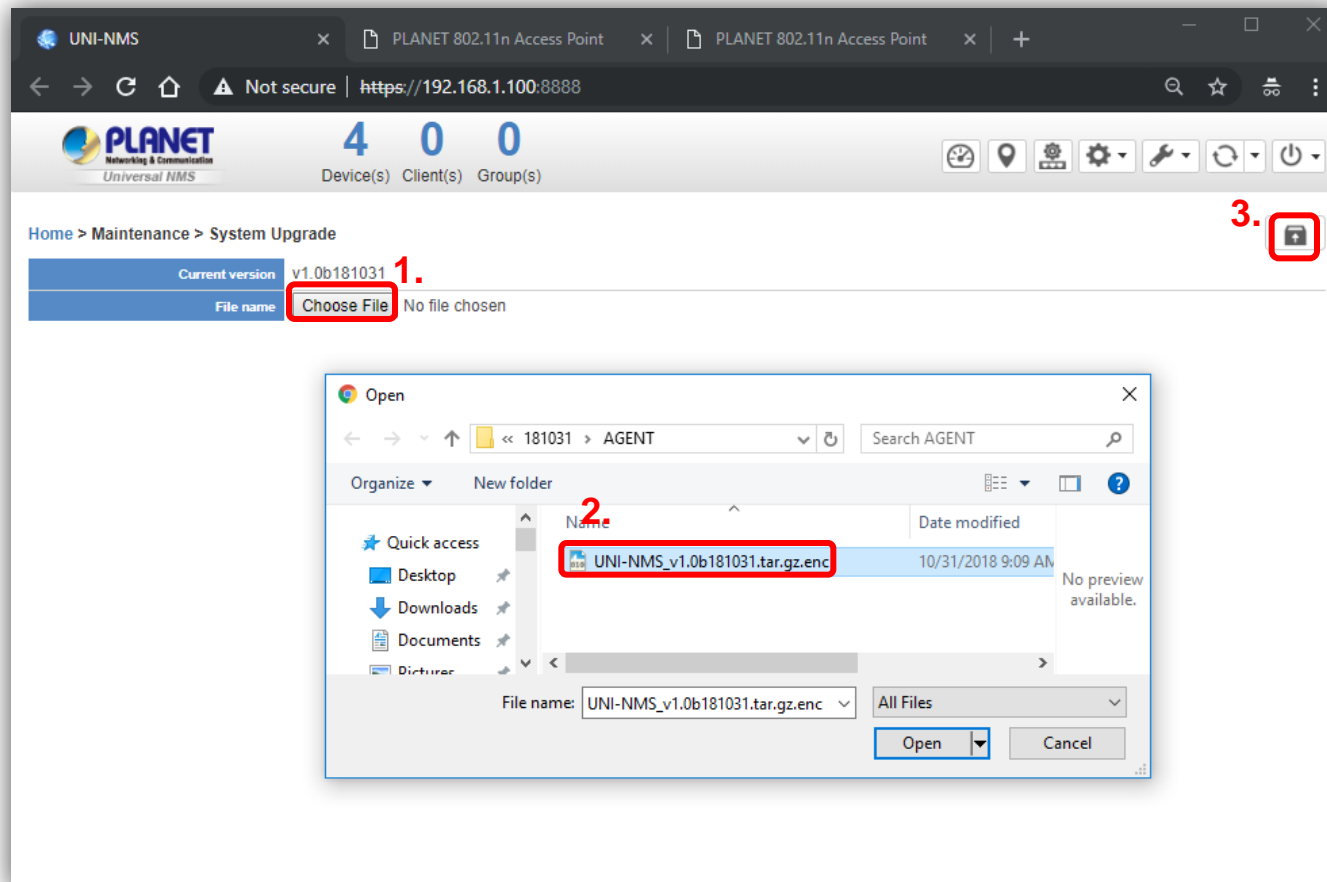
- ◆ Press the “Maintenance” icon to select “System Upgrade” to load patch file so as to upgrade UNI-NMS system.





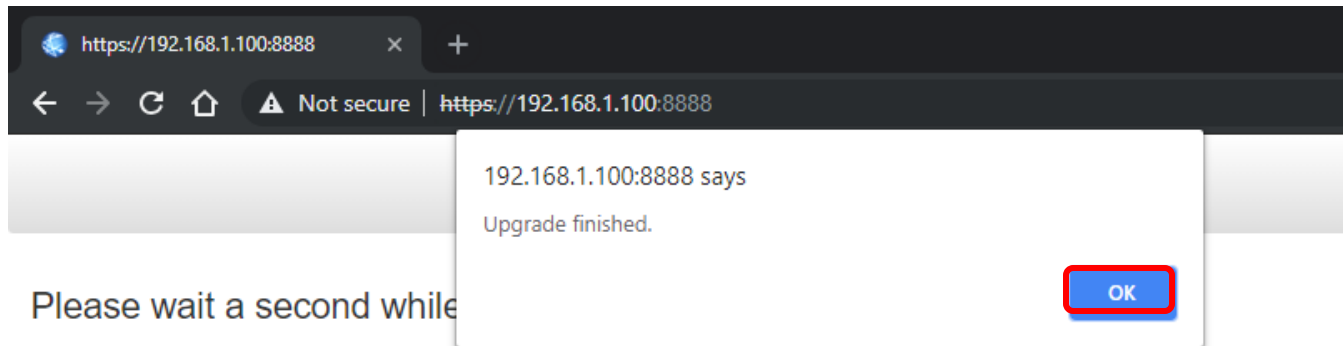
# How to Operate

- ◆ On System Upgrade screen, select “UNI-NMS\_xxx.enc” patch file and then click the “System Upgrade” icon to start system upgrade.



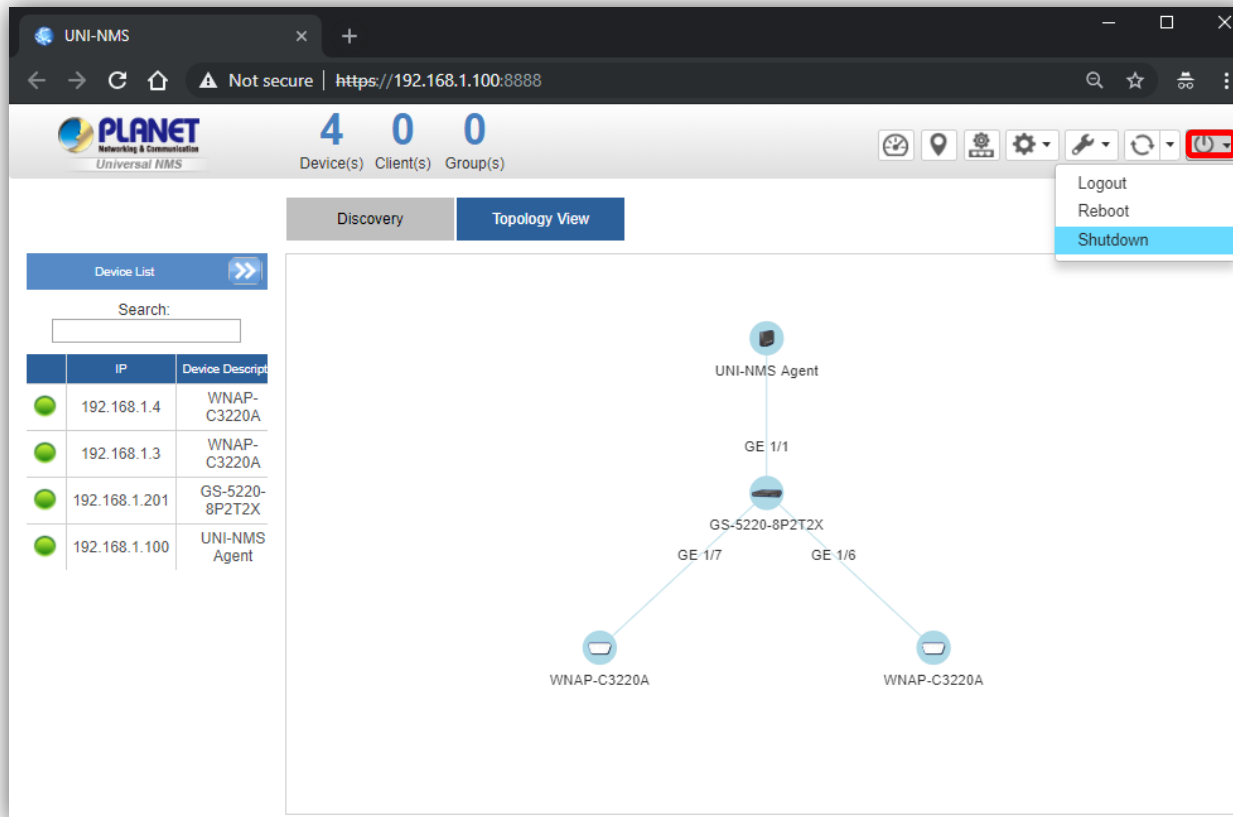
# How to Operate

- ◆ If System Upgrade is successful, Web UI will show “Upgrade finished.”  
Press the OK button to go to the Dashboard page.







# How to Operate

- ◆ Press the **"Exit"** icon and select **"Shutdown"** to shut down the UNI-NMS system and VM; otherwise, it may cause the system to be abnormal at the next restart.



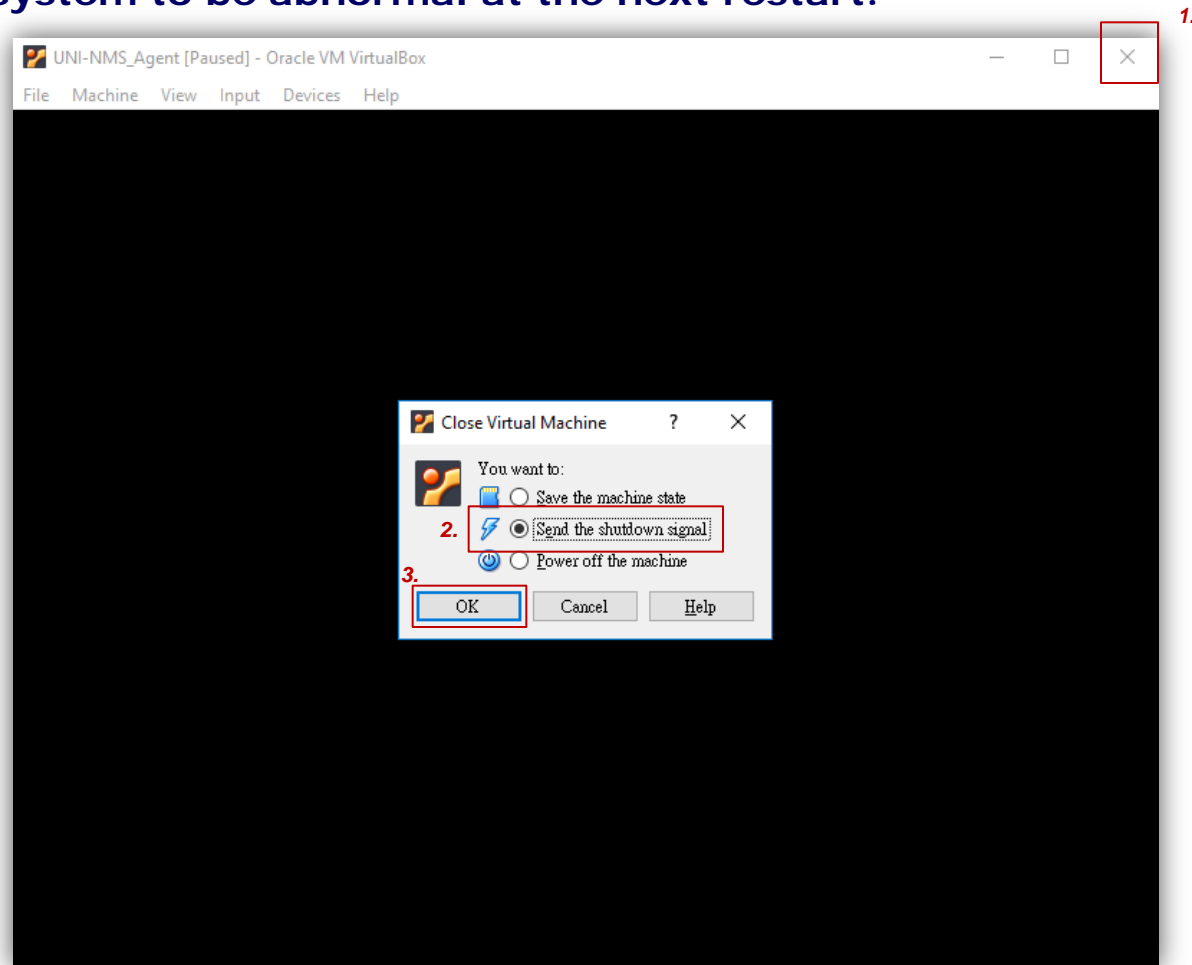
The screenshot displays the UNI-NMS web interface in a browser window. The address bar shows the URL <https://192.168.1.100:8888>. The interface includes a header with the PLANET logo, statistics (4 Device(s), 0 Client(s), 0 Group(s)), and a navigation bar with tabs for Discovery and Topology View. On the left, there is a 'Device List' section with a search bar and a table of devices.

	IP	Device Description
	192.168.1.4	WNAP-C3220A
	192.168.1.3	WNAP-C3220A
	192.168.1.201	GS-5220-8P2T2X
	192.168.1.100	UNI-NMS Agent

The main area shows a network topology diagram. At the top is the 'UNI-NMS Agent' connected to a switch 'GS-5220-8P2T2X' via 'GE 1/1'. The switch is then connected to two 'WNAP-C3220A' devices via 'GE 1/7' and 'GE 1/6' respectively. A dropdown menu is open in the top right corner, showing options: Logout, Reboot, and Shutdown (highlighted in blue).

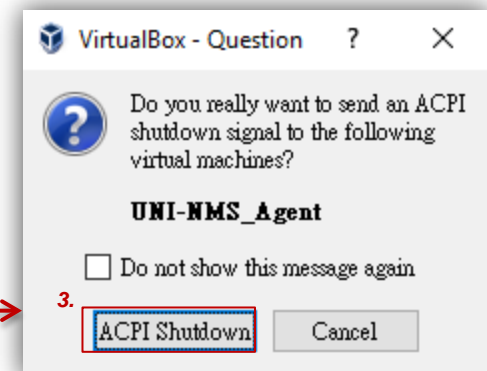
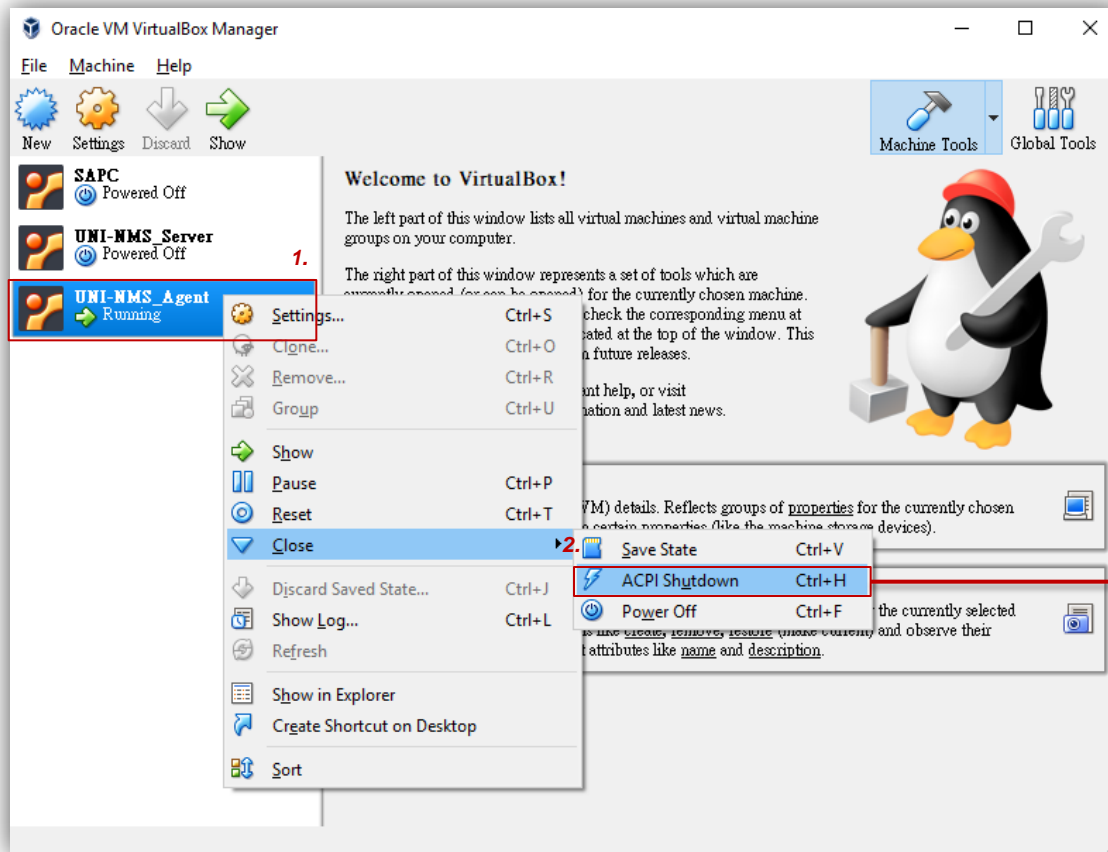
# How to Operate

- ◆ Do Not select “**Power Off**” to shut down the VM; otherwise, it may cause the system to be abnormal at the next restart.

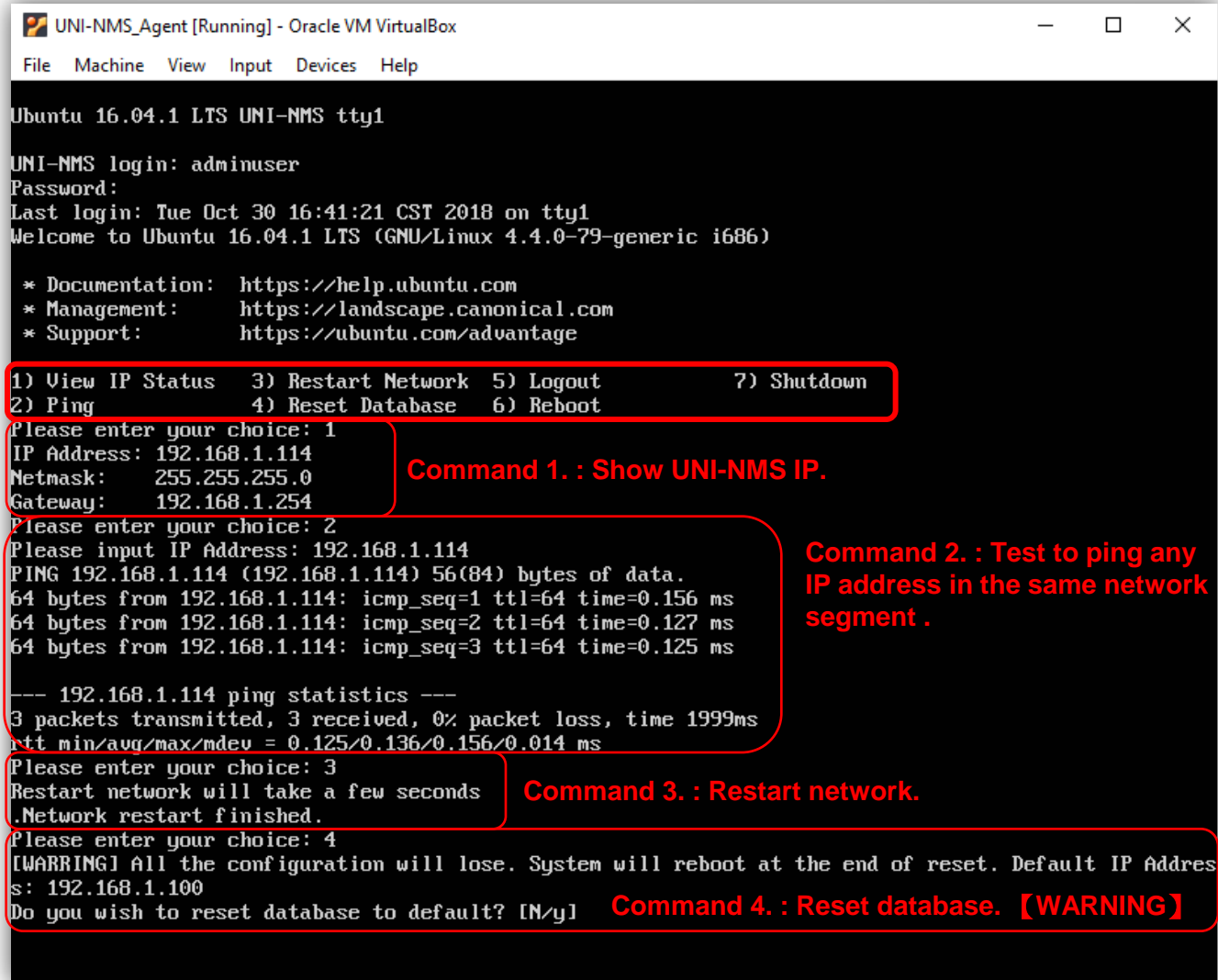


# How to Operate

- ◆ Do Not select “Power Off” to shut down the VM; otherwise, it may cause the system to be abnormal at the next restart.



# How to Operate



```
UNI-NMS_Agent [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

Ubuntu 16.04.1 LTS UNI-NMS tty1

UNI-NMS login: adminuser
Password:
Last login: Tue Oct 30 16:41:21 CST 2018 on tty1
Welcome to Ubuntu 16.04.1 LTS (GNU/Linux 4.4.0-79-generic i686)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

1) View IP Status   3) Restart Network  5) Logout           7) Shutdown
2) Ping            4) Reset Database  6) Reboot

Please enter your choice: 1
IP Address: 192.168.1.114
Netmask:    255.255.255.0
Gateway:    192.168.1.254

Please enter your choice: 2
Please input IP Address: 192.168.1.114
PING 192.168.1.114 (192.168.1.114) 56(84) bytes of data:
64 bytes from 192.168.1.114: icmp_seq=1 ttl=64 time=0.156 ms
64 bytes from 192.168.1.114: icmp_seq=2 ttl=64 time=0.127 ms
64 bytes from 192.168.1.114: icmp_seq=3 ttl=64 time=0.125 ms

--- 192.168.1.114 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 1999ms
rtt min/avg/max/mdev = 0.125/0.136/0.156/0.014 ms

Please enter your choice: 3
Restart network will take a few seconds
Network restart finished.

Please enter your choice: 4
[WARNING] All the configuration will lose. System will reboot at the end of reset. Default IP Address: 192.168.1.100
Do you wish to reset database to default? [N/y]
```



# ACTIVATING IP POWER