

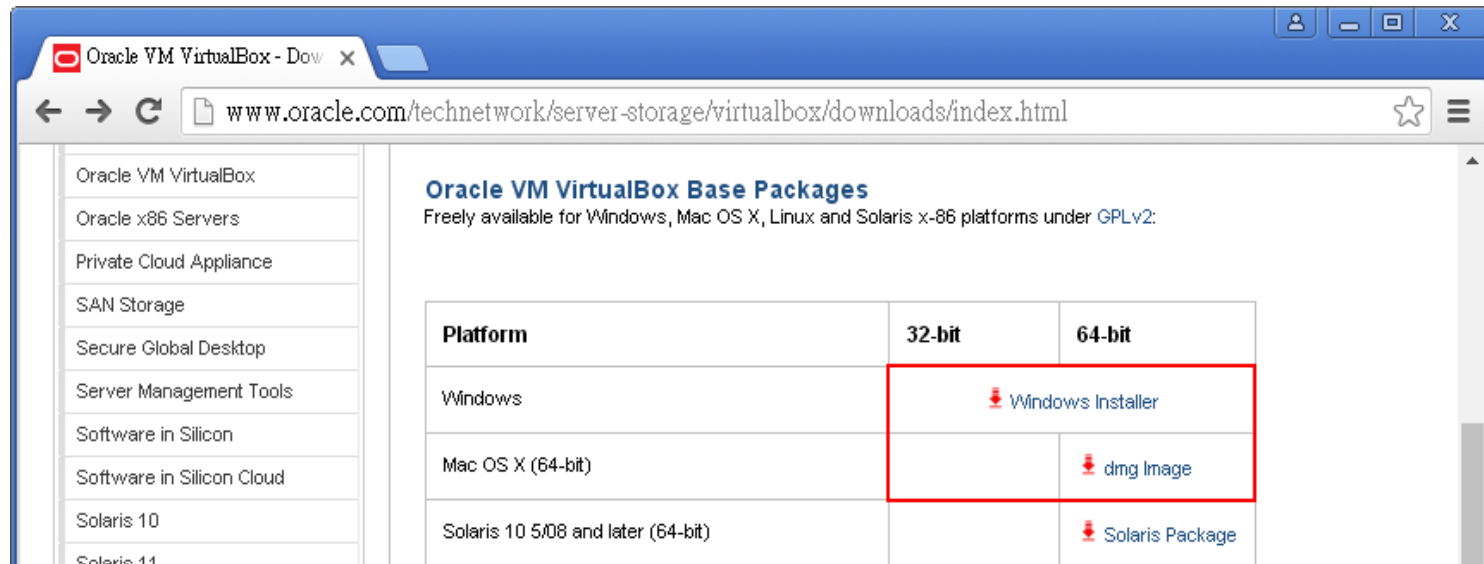
Software Installation Guide

Smart AP Control (SAPC)






Environment Settings - VM

- ◆ Download and 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 a web browser window displaying the Oracle VM VirtualBox Base Packages page. The browser's address bar shows the URL: www.oracle.com/technetwork/server-storage/virtualbox/downloads/index.html. The page content includes a sidebar with navigation links and a main section titled "Oracle VM VirtualBox Base Packages" with a sub-heading "Freely available for Windows, Mac OS X, Linux and Solaris x-86 platforms under GPLv2:". Below this is a table listing download links for different platforms and architectures.

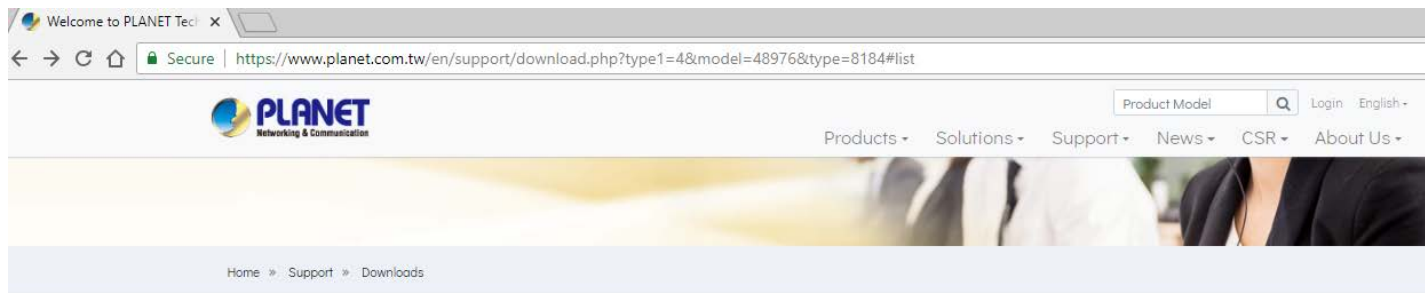
Platform	32-bit	64-bit
Windows	 Windows Installer	
Mac OS X (64-bit)		 dmg Image
Solaris 10 5/08 and later (64-bit)		 Solaris Package

Environment Settings - SAPC

- ◆ Download Planet Smart AP Control Application (SAPC_v1.1b180604.ova)

[Download Link](#)

(<http://www.planet.com.tw/en/support/download.php?type1=4&model=48976&type=8184#list>)

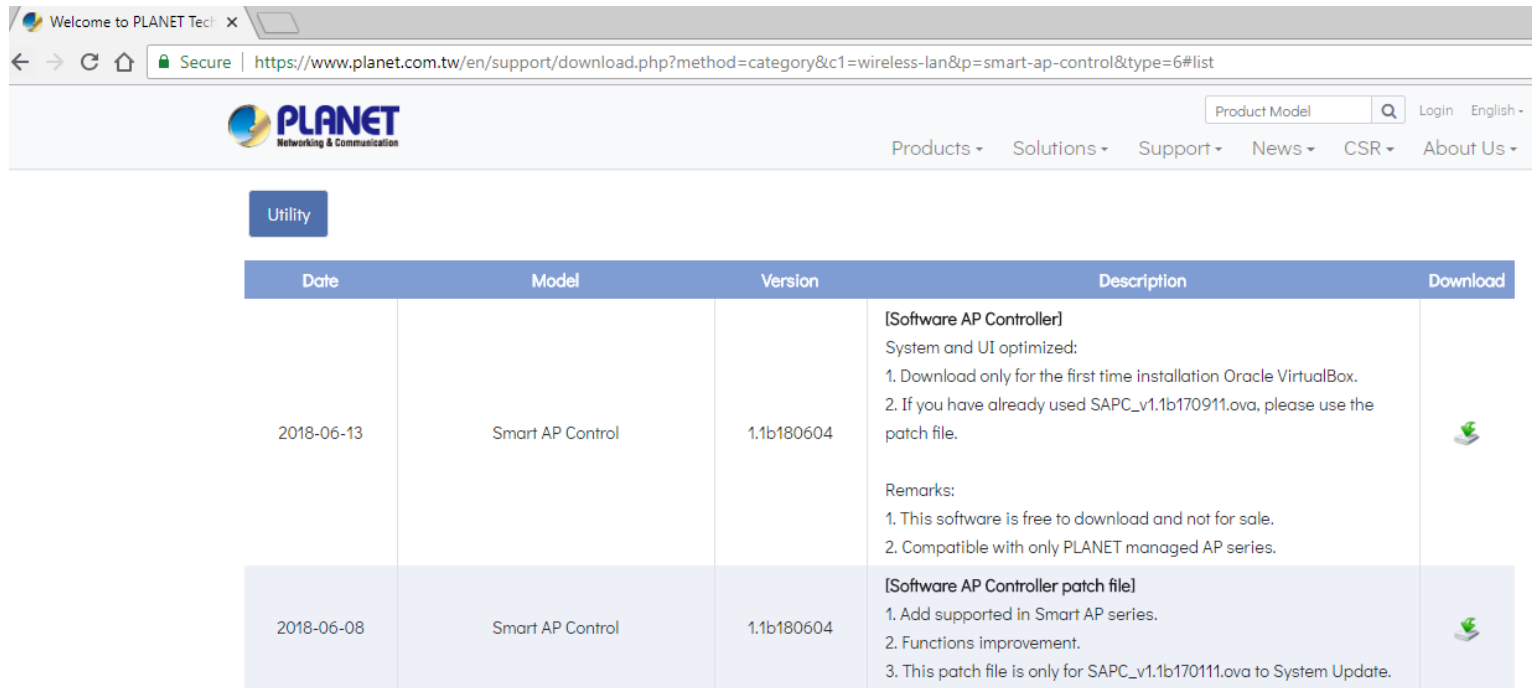


Downloads



<p>Product Category</p> <p>Wireless LAN</p>	<p>Keyword</p> <p>Models , Specifications , Features</p>
<p>Product Model</p> <p>Smart AP Control</p>	<p>Go</p>
<p>Type of File</p> <p>Utility</p>	<p>Go</p>

Environment Settings - SAPC

- ◆ Please also download and update the last patch file after logging in SAPC.

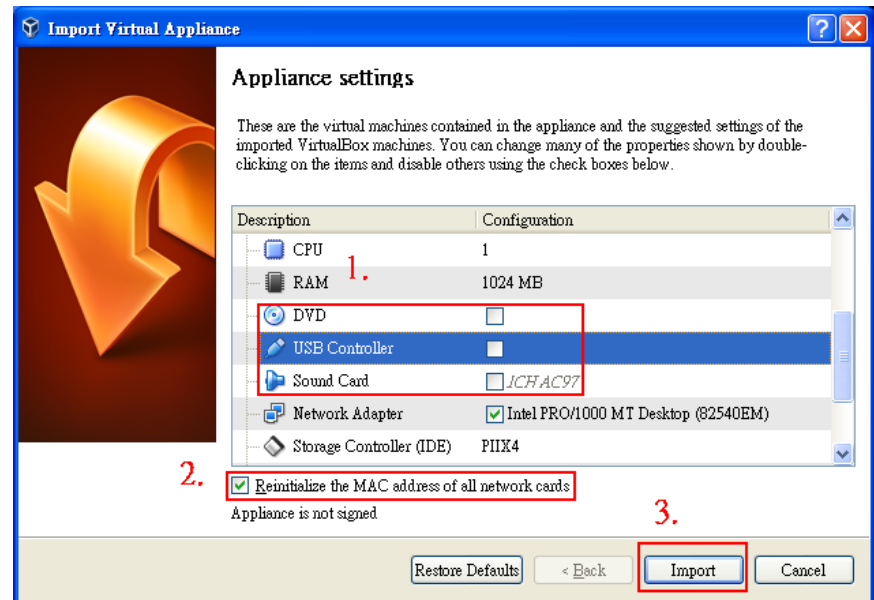


Utility

Date	Model	Version	Description	Download
2018-06-13	Smart AP Control	1.1b180604	<p>[Software AP Controller] System and UI optimized: 1. Download only for the first time installation Oracle VirtualBox. 2. If you have already used SAPC_v1.1b170911.ova, please use the patch file.</p> <p>Remarks: 1. This software is free to download and not for sale. 2. Compatible with only PLANET managed AP series.</p>	
2018-06-08	Smart AP Control	1.1b180604	<p>[Software AP Controller patch file] 1. Add supported in Smart AP series. 2. Functions improvement. 3. This patch file is only for SAPC_v1.1b170111.ova to System Update.</p>	

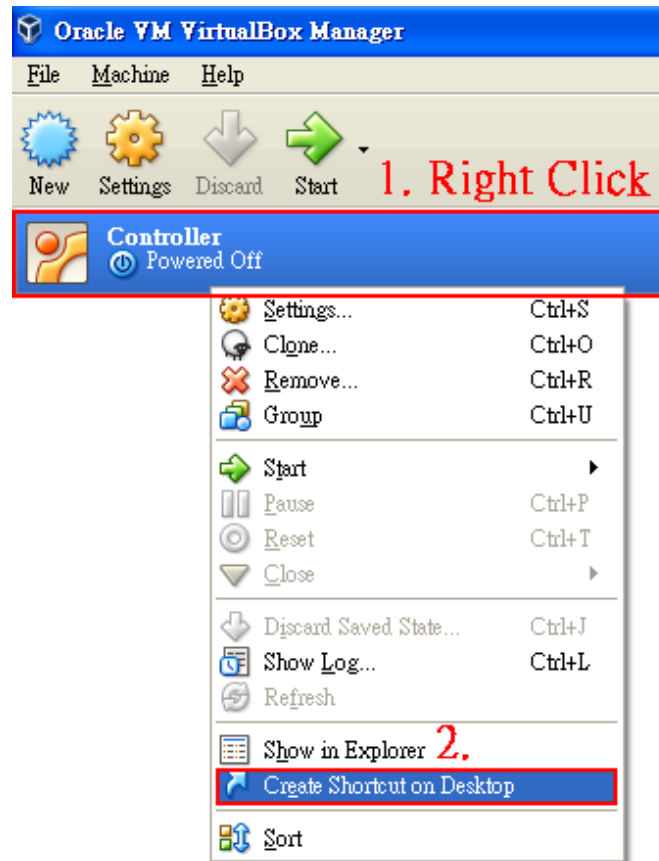
Importing Smart AP Control

- ◆ Double-click **SAPC_v1.1b180604** (or import it through the VM VirtualBox Manager)
- ◆ Uncheck the following items if they exist
 - ✓ DVD
 - ✓ USB Controller
 - ✓ Sound Card
- ◆ Select
 - ✓ Reinitialize the MAC ...



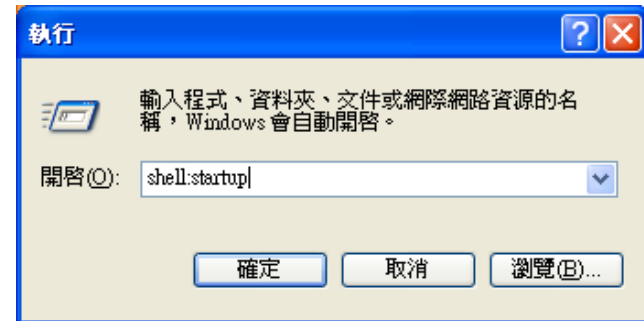
Setting Up Auto Start-up

- ◆ Create shortcut on Desktop



Creating Shortcut

- ◆ Copy the shortcut to Start-up Folder
 - ✓ Copy the shortcut on Desktop
 - ✓ Start → Run
 - ✓ Input “**shell:startup**” , then press OK
 - ✓ Paste the copied shortcut here



Setting Up VM Network Adapter

- ◆ Please ensure your network adapter 1 is connected to a DHCP enabled network (Managed APs included).

1. Select VM

2. Click Setting

3. Modify Network

4. Enable Network Adapter

5. Use Bridge Adapter

6. Select the out-going network card

7. OK

Network Connections

Control Panel > Network and Internet > Network Connections >

Organize Enable this network device Diagnose this connection Rename this co

VirtualBox Host-Only Network Disabled Enable Status

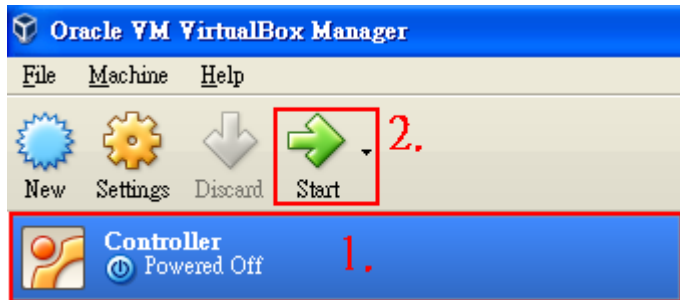
乙太網路 planet.local Intel(R) 82579V Gigabit Net...

* If the system show network card setting is error, please enable the VirtualBox Host-Only Network and try again.

Rename Properties

Run Smart AP Control Application

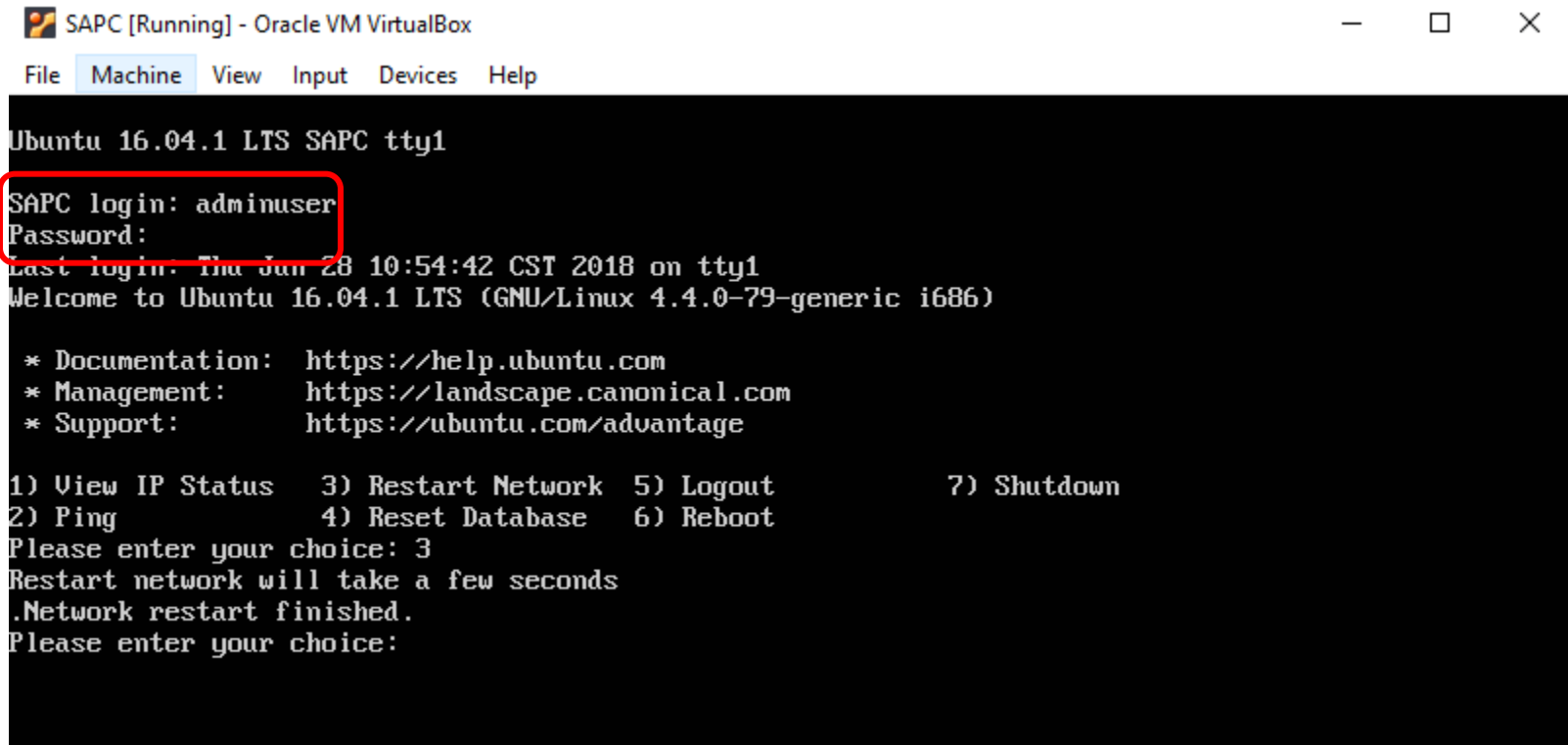
- ◆ Select the VM
- ◆ Press "Start" to allow the system to go into SAPC running.



```
SAPC [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Stopping Login to default iSCSI targets...
[ OK ] Deactivated swap /dev/disk/by-path/pci-0000:00:0d.0-ata-1-part5.
[ OK ] Deactivated swap /dev/disk/by-id/ata-VBOX_HARDDISK_UB65b389a7-cd960976-part5.
[ OK ] Deactivated swap /dev/sda5.
[ OK ] Stopped Network Time Synchronization.
[ OK ] Stopped Load/Save Random Seed.
[ OK ] Deactivated swap /dev/disk/by-uuid/a605331e-8bcb-46eb-ab6a-285cce7576dc.
[ OK ] Stopped Create Volatile Files and Directories.
[ OK ] Stopped Login to default iSCSI targets.
Stopping iSCSI initiator daemon (iscsid)...
[ OK ] Stopped iSCSI initiator daemon (iscsid).
[ OK ] Stopped target Network is Online.
[ OK ] Stopped target Network.
Stopping Raise network interfaces...
[ OK ] Stopped Raise network interfaces.
[ OK ] Stopped Apply Kernel Variables.
[ OK ] Stopped Load Kernel Modules.
[ OK ] Stopped target Local File Systems.
Unmounting /run/xcfs/controllers/freezer...
Unmounting /run/xcfs/controllers/net_cls,net_prio...
Unmounting /run/xcfs/controllers/memory...
Unmounting /run/xcfs/controllers/cpuset...
Unmounting /run/xcfs/controllers/perf_event...
Unmounting /run/xcfs/controllers/devices...
Unmounting /run/xcfs/controllers/blkio...
Unmounting /run/xcfs/controllers/hugetlb...
Unmounting /run/xcfs/controllers/pids...
Unmounting /run/user/1001...
Unmounting /run/xcfs/controllers/name=systemd...
Unmounting /run/xcfs/controllers/cpu,cpuacct...
[ OK ] Unmounted /run/xcfs/controllers/freezer.
[ OK ] Unmounted /run/xcfs/controllers/net_cls,net_prio.
[ OK ] Unmounted /run/xcfs/controllers/perf_event.
[ OK ] Unmounted /run/xcfs/controllers/devices.
[ OK ] Unmounted /run/xcfs/controllers/hugetlb.
[ OK ] Unmounted /run/xcfs/controllers/cpuset.
```

Run Smart AP Control Application

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



```
SAPC [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Ubuntu 16.04.1 LTS SAPC tty1
SAPC login: adminuser
Password:
Last login: Thu Jun 28 10:54:42 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

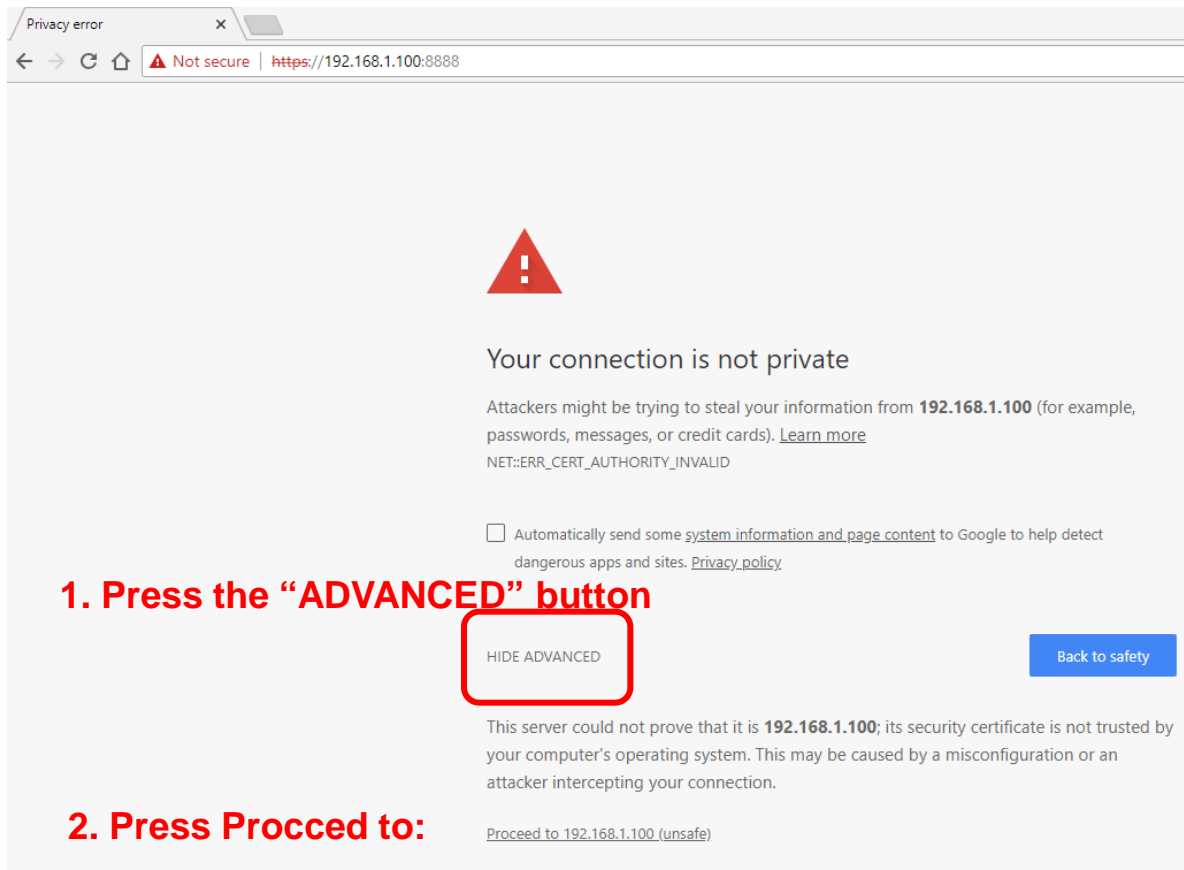
1) View IP Status   3) Restart Network  5) Logout           7) Shutdown
2) Ping            4) Reset Database  6) Reboot

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

- ◆ When the “choice command” appears, please enter “3” to do Restart Network command. (It won’t be necessary if you cannot connect to SAPC Web UI.)


Log in Smart AP Control

- ◆ Open Chrome to log in the Smart AP Control.
- ◆ Please use Chrome to get fully supported.



Privacy error x

← → ↻ 🏠 ⚠ Not secure | <https://192.168.1.100:8888>



Your connection is not private

Attackers might be trying to steal your information from **192.168.1.100** (for example, passwords, messages, or credit cards). [Learn more](#)

NET::ERR_CERT_AUTHORITY_INVALID

Automatically send some [system information and page content](#) to Google to help detect dangerous apps and sites. [Privacy policy](#)

1. Press the “ADVANCED” button

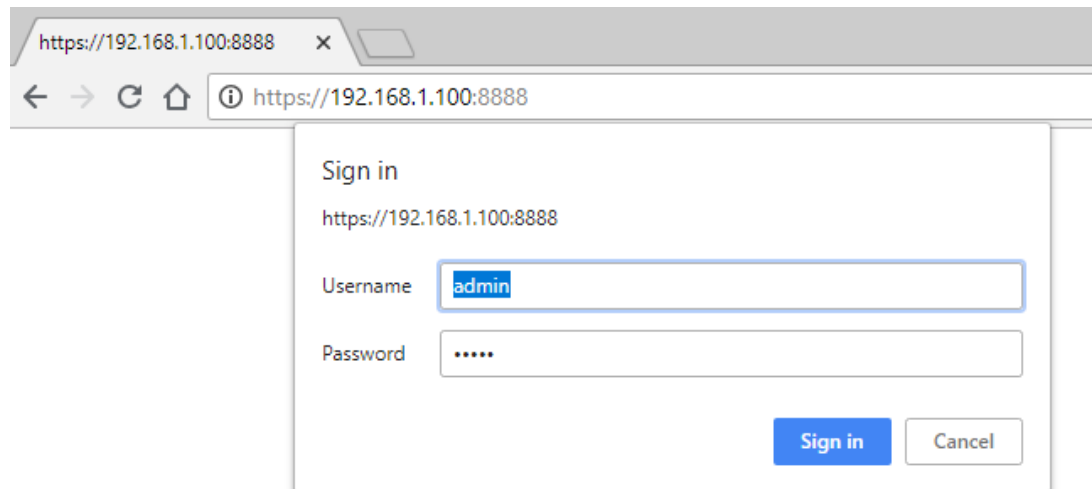
HIDE ADVANCED Back to safety

This server could not prove that it is **192.168.1.100**; its security certificate is not trusted by your computer's operating system. This may be caused by a misconfiguration or an attacker intercepting your connection.

2. Press Proceed to: [Proceed to 192.168.1.100 \(unsafe\)](https://192.168.1.100)

Log in Smart AP Control

- ◆ **Username: admin**
- ◆ **Password: admin**



https://192.168.1.100:8888 x

← → ↻ 🏠 ⓘ https://192.168.1.100:8888

Sign in

https://192.168.1.100:8888

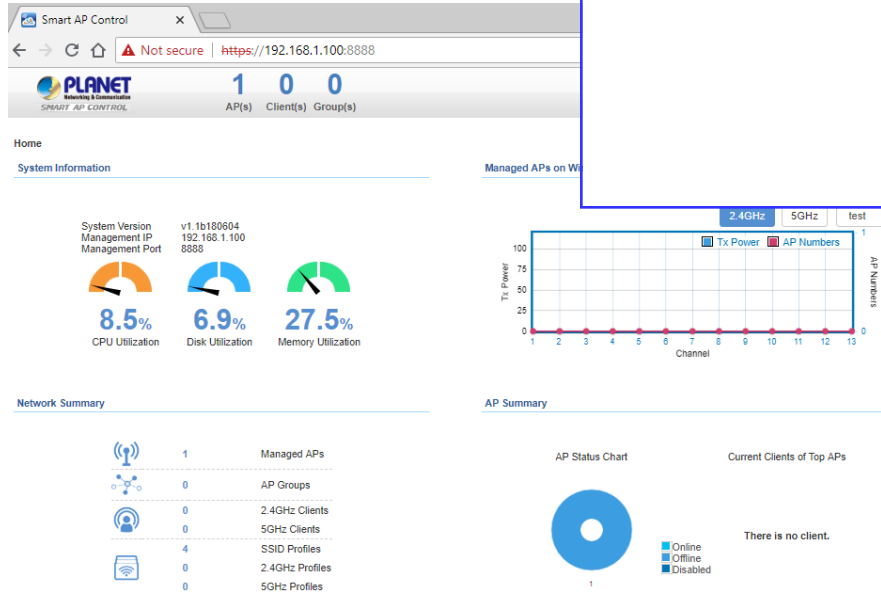
Username

Password

Log in Smart AP Control – Successful login

- ◆ When the Default Dashboard is displayed, press the “AP control” icon (1), then press the two “Search” icons (2 and 3) to find the managed APs and continue other settings.

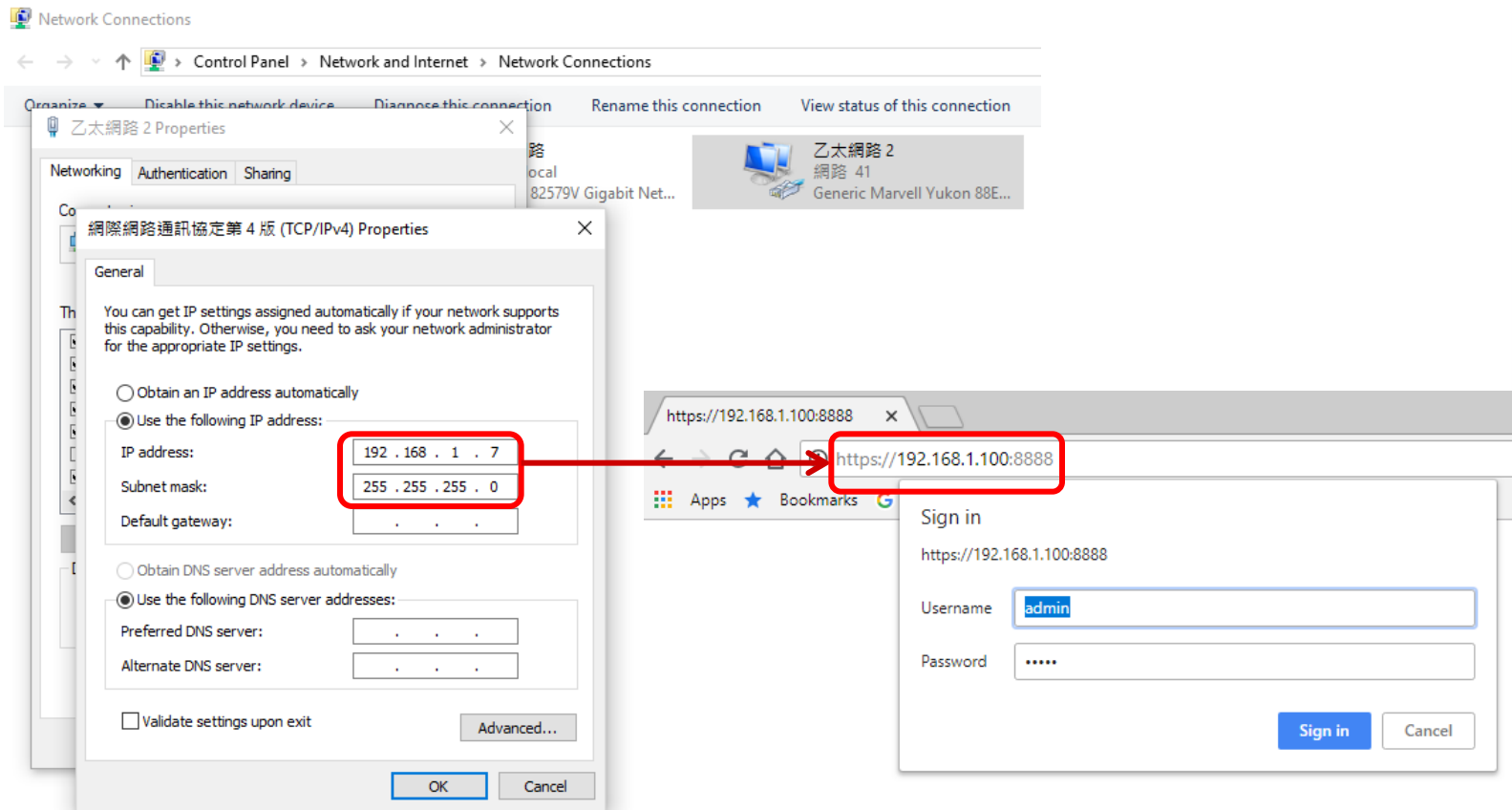
SAPC Dashboard Web UI



Appendix-1: Check Network Status

- ◆ SAPC is set at static IP: 192.168.1.100

Please configure network card to log in to the same network segment.



The screenshot displays the Windows Network Connections control panel. The 'Ethernet 2 Properties' window is open, showing the 'Networking' tab. Under 'Internet Protocol Version 4 (TCP/IPv4) Properties', the 'General' tab is selected. The 'Use the following IP address' option is chosen, with the IP address field set to 192.168.1.7 and the Subnet mask field set to 255.255.255.0. A red box highlights these fields, and a red arrow points from the IP address field to a browser window. The browser window shows a sign-in page for https://192.168.1.100:8888. The sign-in page has a 'Username' field containing 'admin' and a 'Password' field with masked characters. The 'Sign in' button is visible.

Appendix-2: Upgrade System with Patch File

- ◆ Press the **“Maintenance”** icon and select **“System Upgrade”** item to load patch file (*.enc) so as to upgrade the SAPC system.

The screenshot displays the Smart AP Control web interface. At the top, the browser address bar shows <https://192.168.1.100:8888>. The interface header includes the PLANET logo and system statistics: 1 AP(s), 0 Client(s), and 0 Group(s). A navigation menu in the top right corner has the 'Maintenance' icon (a wrench) highlighted with a red box, with a dropdown menu showing 'System Upgrade' and 'Backup/Restore' options.

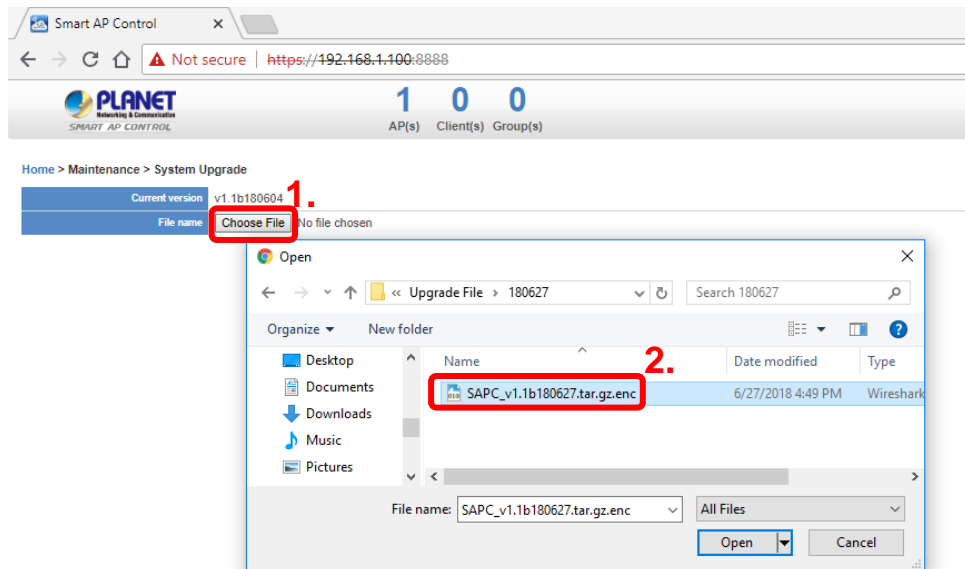
The main content area is divided into several sections:

- System Information:** Displays system version (v1.1b180604), management IP (192.168.1.100), and management port (8888). It also shows resource utilization: CPU Utilization (7.4%), Disk Utilization (6.9%), and Memory Utilization (27.7%).
- Managed APs on Wireless Channels:** A line chart showing Tx Power and AP Numbers across channels 1-13. The chart is currently set to 2.4GHz.
- Network Summary:** A table listing system components and their counts:

Managed APs	1
AP Groups	0
2.4GHz Clients	0
5GHz Clients	0
SSID Profiles	4
2.4GHz Profiles	0
5GHz Profiles	0
- AP Summary:** An AP Status Chart showing 1 AP. A legend indicates Online (blue), Offline (light blue), and Disabled (dark blue) states. Below it, the 'Current Clients of Top APs' section shows 'There is no client.'

Appendix-2: Upgrade System with Patch File

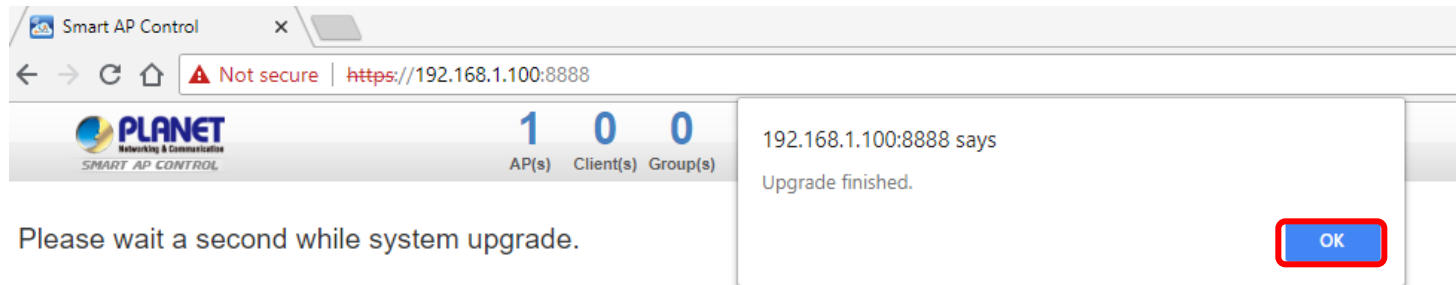
- ◆ On the System Upgrade screen, select the “SAPC_xxx.enc” patch file and then click the “System Upgrade” icon to start system upgrade.



Appendix-2: Upgrade System with Patch File

- ◆ If System Upgrade is successfully done, Web UI will show “Upgrade finished.”

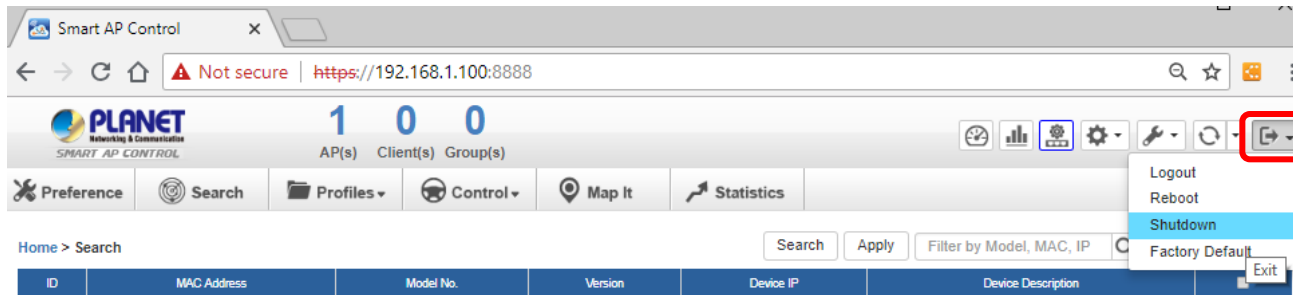
Press the OK button to go to the Dashboard page.



The screenshot shows a web browser window with the title "Smart AP Control". The address bar displays "https://192.168.1.100:8888" with a "Not secure" warning. The main content area features the PLANET SMART AP CONTROL logo on the left, and a status summary in the center: "1 AP(s)", "0 Client(s)", and "0 Group(s)". A notification box on the right contains the text "192.168.1.100:8888 says Upgrade finished." and a blue "OK" button with a red border. Below the notification, the text "Please wait a second while system upgrade." is visible. A "LOADING" indicator with a circular progress bar is located at the bottom right of the interface.

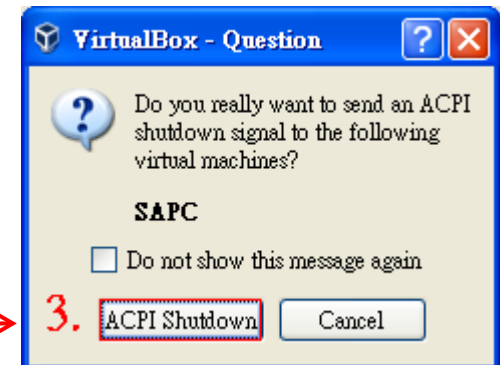
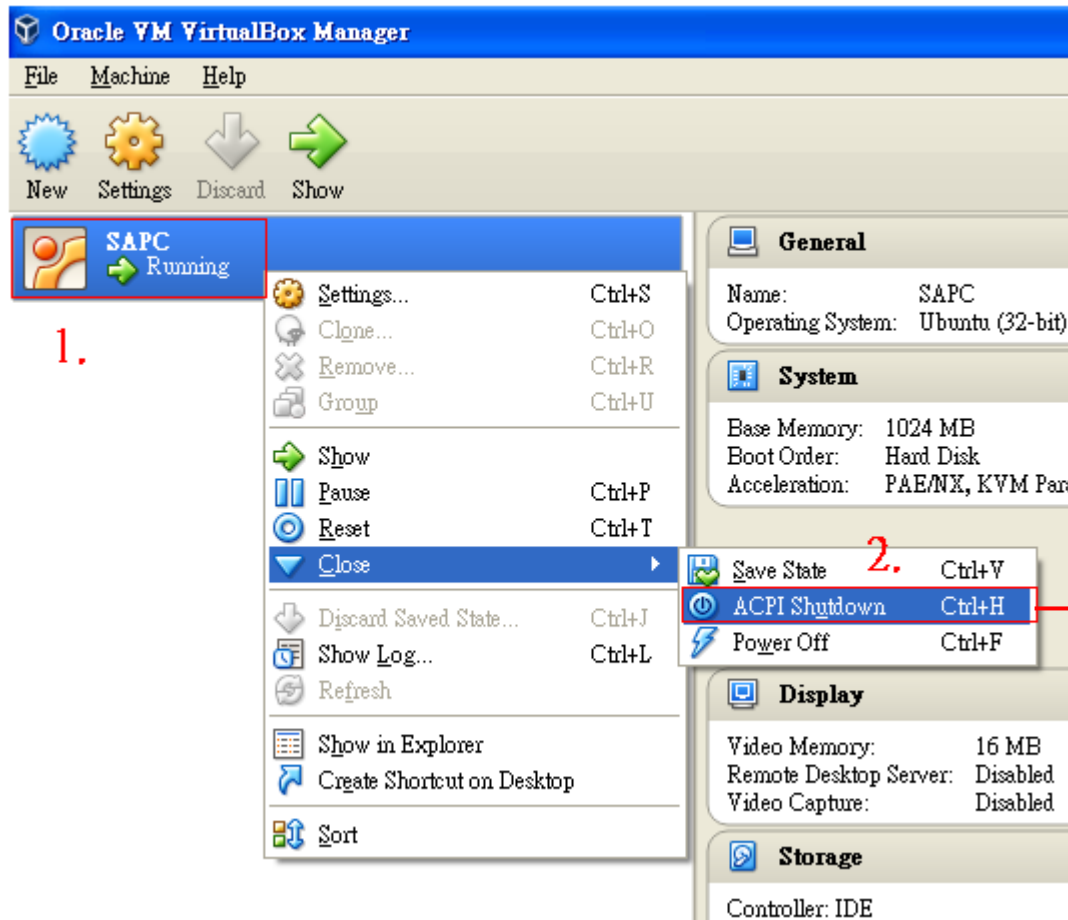
Appendix-2: How to Shut Down the VM

- ◆ Press the “Exit” icon and select “Shutdown” item to shut down the SABC system and VM; otherwise, it may cause the system to be abnormal at the next restart.



Appendix-3: Use VM to Shut Down the System

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



Appendix-4: VM Main Command Introduction

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

Ubuntu 16.04.1 LTS SAPC tty1

SAPC login: adminuser
Password:
Last login: Thu Jun 28 13:42:09 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: 192.168.1.100
Netmask:    255.255.255.0
Gateway:    192.168.1.254

Please enter your choice: 2
Please input IP Address: 192.168.1.100
PING 192.168.1.100 (192.168.1.100) 56(84) bytes of data.
64 bytes from 192.168.1.100: icmp_seq=1 ttl=64 time=0.127 ms
64 bytes from 192.168.1.100: icmp_seq=2 ttl=64 time=0.238 ms
64 bytes from 192.168.1.100: icmp_seq=3 ttl=64 time=0.117 ms

--- 192.168.1.100 ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2000ms
rtt min/avg/max/mdev = 0.117/0.160/0.238/0.056 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]M
```

Command 1. : Show SAPC IP.

Command 2. : Test to ping any IP address in the same network segment .

Command 3. : Restart network.

Command 4. : Reset database. [WARNING]



ACTIVATING IP POWER