PLANET Networking & Communication

Pioneer of IP Innovation

Configuration Guide

Smart AP Control (SAPC)

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Overview

Main Features:

- *AP auto discovery (subnet-based discovery)*
- *AP auto IP assignment*
- *AP group management (bulk provision, upgrade, reboot, LED control)*
- *AP provisioning*
- *AP SSID, radio configuration*
- *AP LED control*
- *AP bulk firmware upgrade*
- *Remote AP power reboot*
- *Floor map view*
- *Floor map import, custom map export**
- *Real-time AP signal coverage display*
- *Real-time AP and wireless client status monitoring*
- *Real-time graphical statistics view*
- *Real-time wireless channel distribution*
- *Rogue AP detection**
- *Wireless MAC black list**
- *Ban clients per AP**
- *Dashboard view*
- *Remark: * means new features will be added through system updates.*

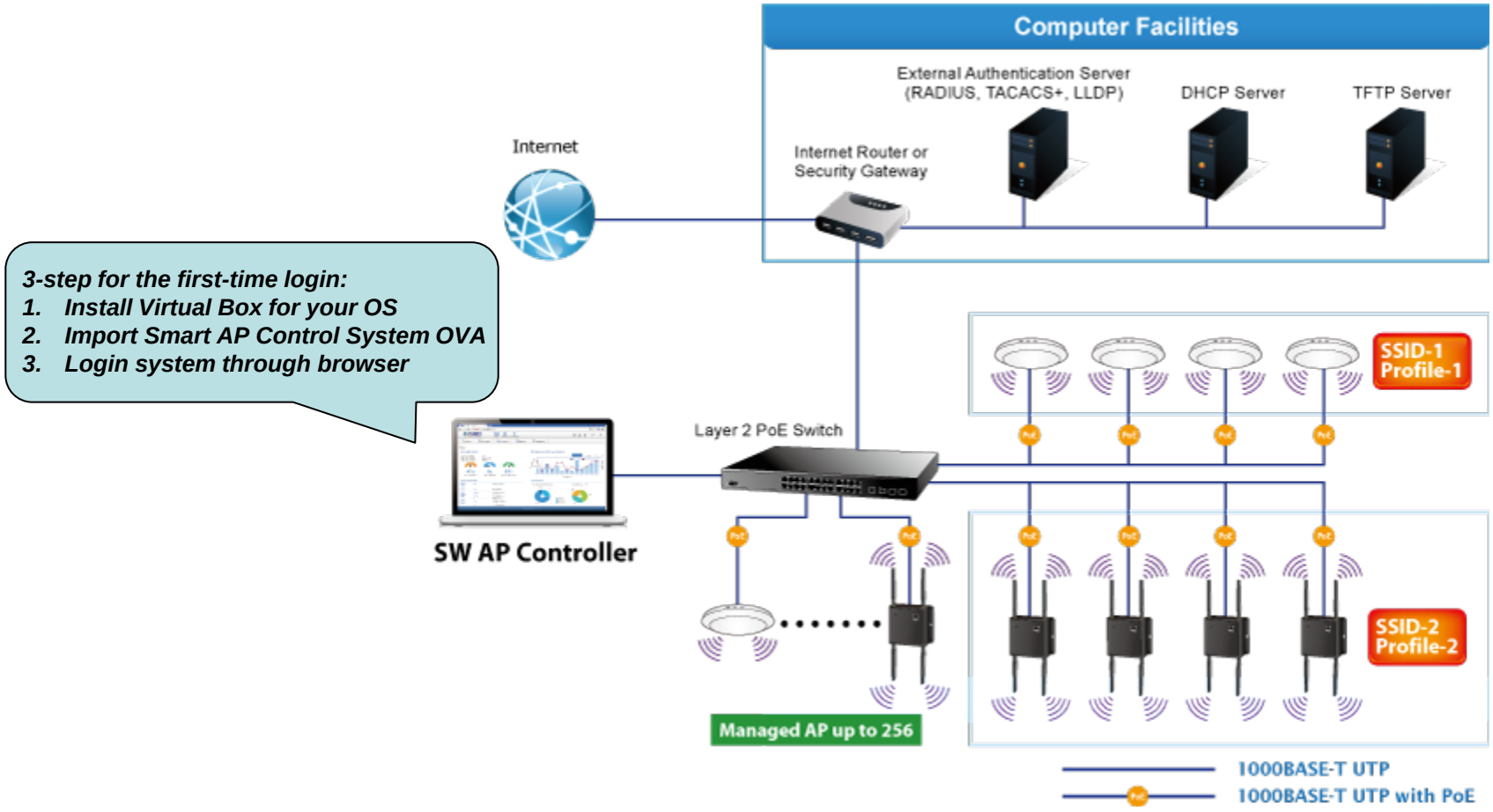
System Requirement:

- *CPU: Intel Core i3 3.4 GHz dual-core or above*
- *RAM: 4 GB minimum*
- *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*

Compatible Managed APs:

- *WDAP-W7200AC*
- *WDAP-C7200AC*
- *WNAP-C3220A*
- *WNAP-W2201A*

Application



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Main UI Layout

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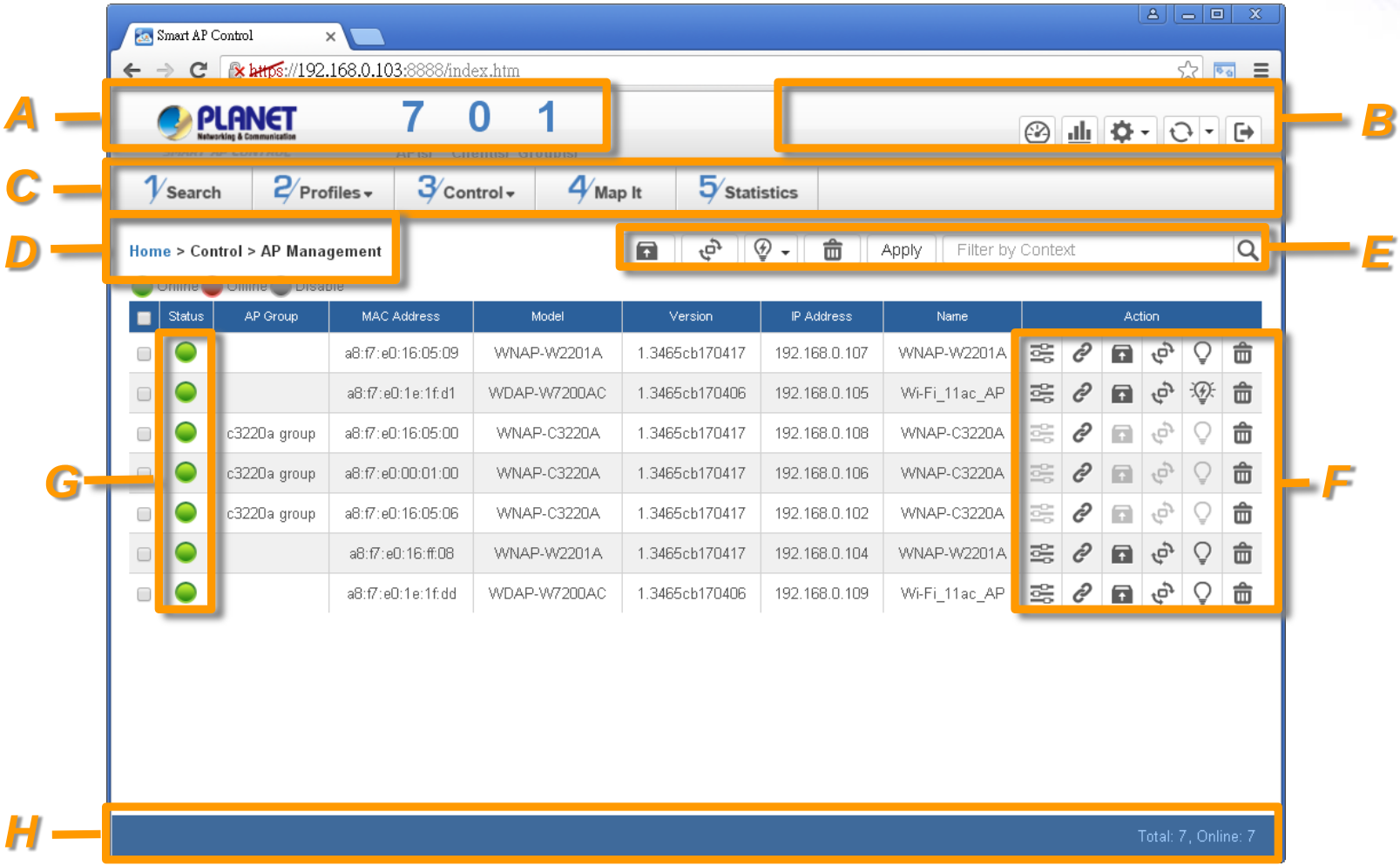
Main UI Layout - Structure



Main UI Layout - Description

Item	Description	Remark
A	AP Status Summary	Shows the roughly system status: Current APs online (total online), AP Groups (total groups), Clients (total active clients)
B	System Menu	From Left to right: 1. Dashboard (Home): provides the whole system view and wireless network status 2. Graphical Statistics: provides the AP and active clients status in charts 3. System Configuration: includes user configuration, system upgrade 4. Refresh: auto refresh or manually refresh the page content 5. Logout: click to logout the system
C	Main Menu	1. Search, 2. Profiles, 3. Control, 4. Map It, 5. Statistics
D	Function Path	Shows the path of current page
E	Action Group	The function group allows to perform the same configuration on selected multiple APs
F	Action	The function provides for single AP includes: Edit, Delete, Link, Upgrade, LED Control, Reboot
G	AP Status	The AP status includes: 1. Online, 2. Offline, 3. Wi-Fi disabled, 4. In progress, 5, Finished upgrade, 6. Failed to upgrade
H	Footer	Shows the counting data of current page

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System Menu

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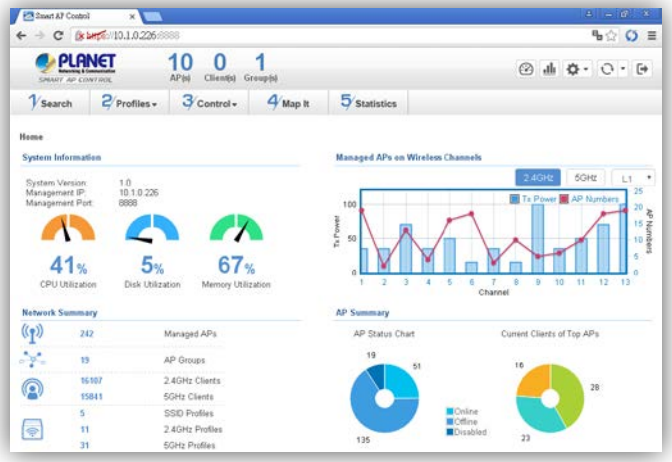
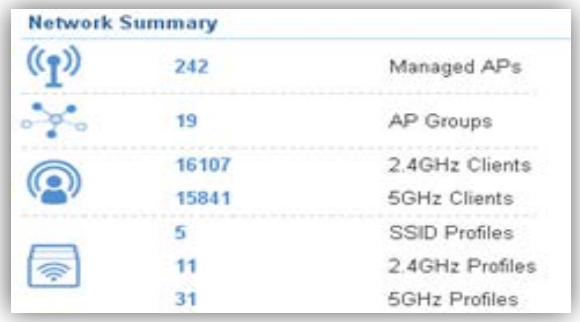
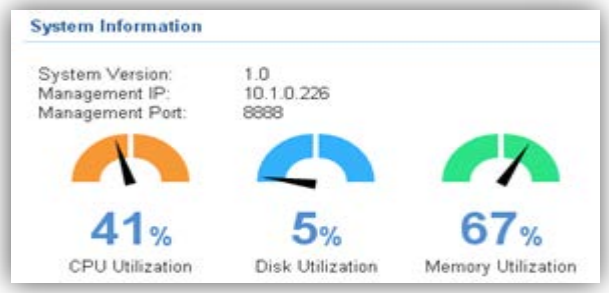
System Menu - Dashboard (Home)



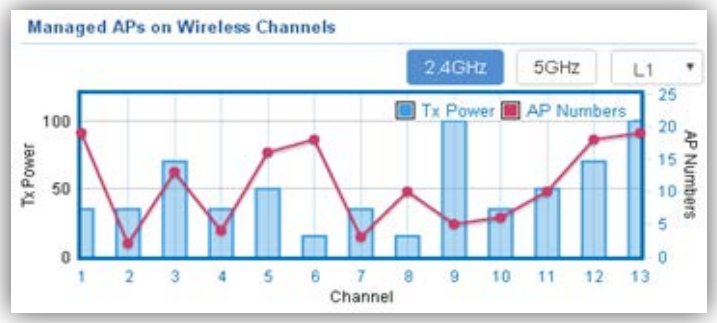
[System Menu – Dashboard]



- **Network Summary**: in this area, you can view the network status includes total managed APs, AP groups, 2.4GHz/5GHz clients, SSID/2.4GHz/5GHz profiles.

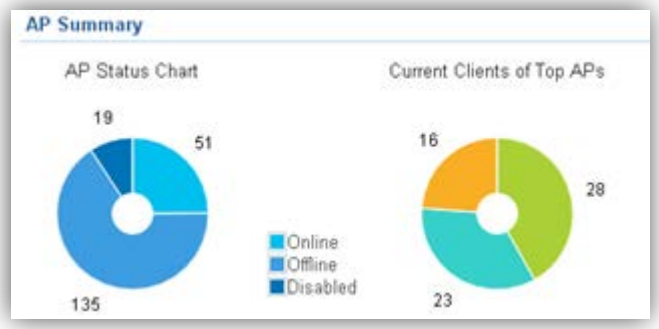


- **System Information**: in this area, you can view the basic system information includes system version, management IP, management port, CPU Utilization, Disk Utilization, Memory Utilization.



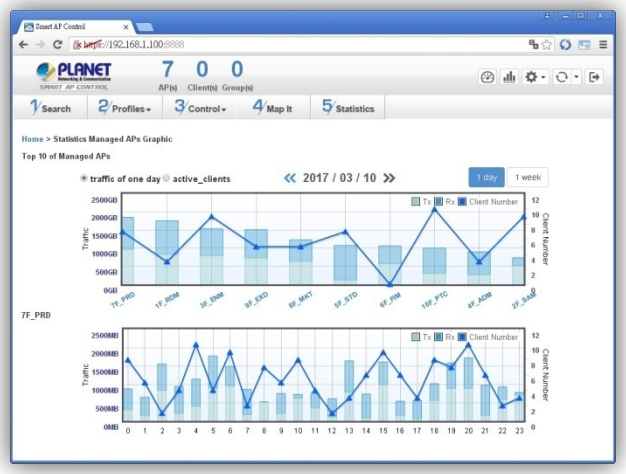
- **Managed APs on Wireless Channels:** the chart shows the current quantity of managed AP with max. Tx power at each channel.
- Click 2.4GHz or 5GHz to switch to different frequency band. Select the drop-down list to switch between different floor maps if available.

System Menu - Dashboard (Home)



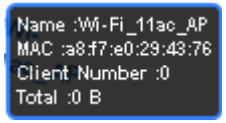
- **AP Summary**: in this area, you can view the pie charts includes AP Status, Current Clients of Top APs.
- **The AP Status chart** shows the AP quantity of online, offline, wi-fi disabled.
- **The Current Clients of Top APs chart** shows the real-time top 3 APs which have max. active clients.

System Menu – Graphical Statistics

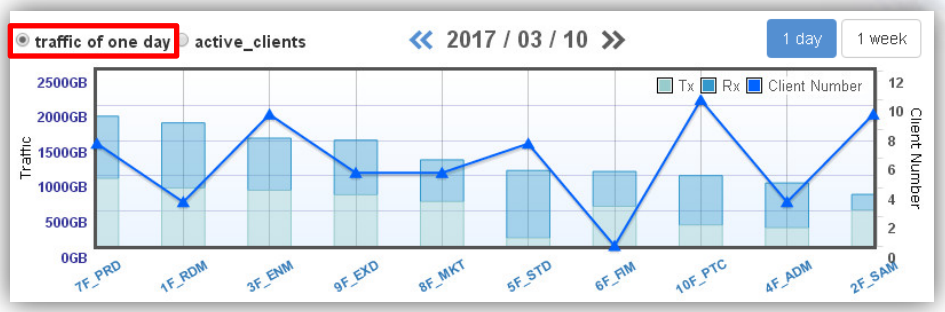


[System Menu – Graphical Statistics]

- **Graphical Statistics**: in this page, you can view the charts includes real-time traffic statistics of Top 10 managed AP and active clients.

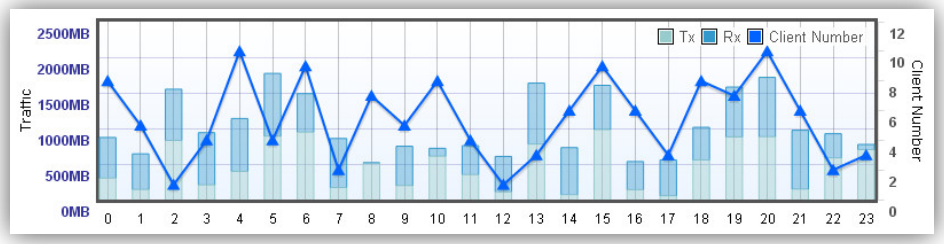


- Move the cursor on any arrow point to view the hint of the AP status.



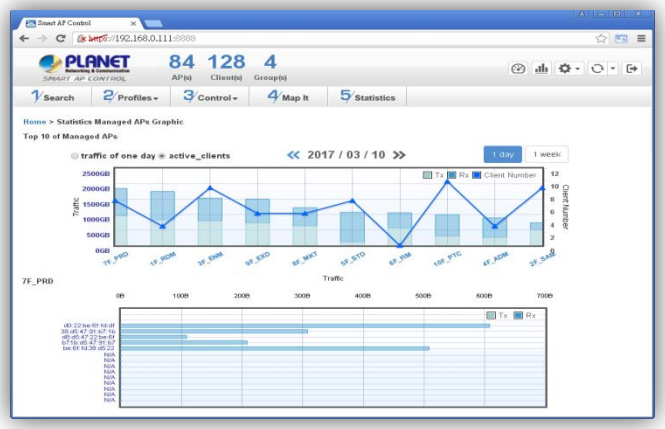
[Top Chart]

- **The Top 10 Managed AP chart** shows the real-time traffic statistics of Top 10.
- Switch between 1 day or 1 week to view the statistic of a day in 24 hrs, or cumulative traffic includes 7 days of a week.
- Click the **AP name** at the x-axis of the top chart to show the statistics of designated AP into the bottom chart.



[Bottom Chart]

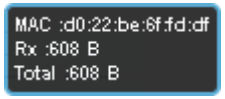
System Menu – Graphical Statistics



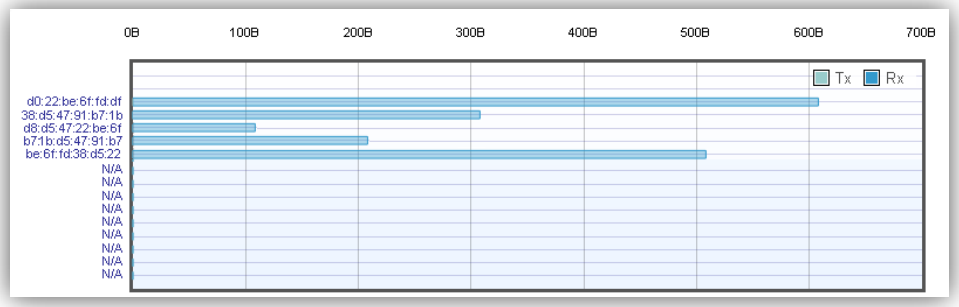
[System Menu – Graphical Statistics]

[Top Chart]

- Set the radio option to "**active_clients**" and then click the **AP name** at the x-axis of the top chart to show the active clients' statistics of designated AP into the bottom chart.



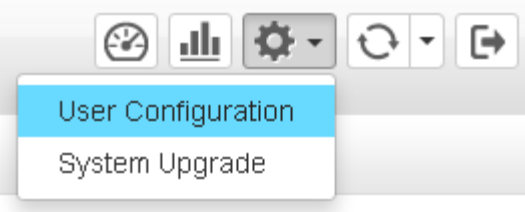
- Move the cursor on bar to view the hint of the client.



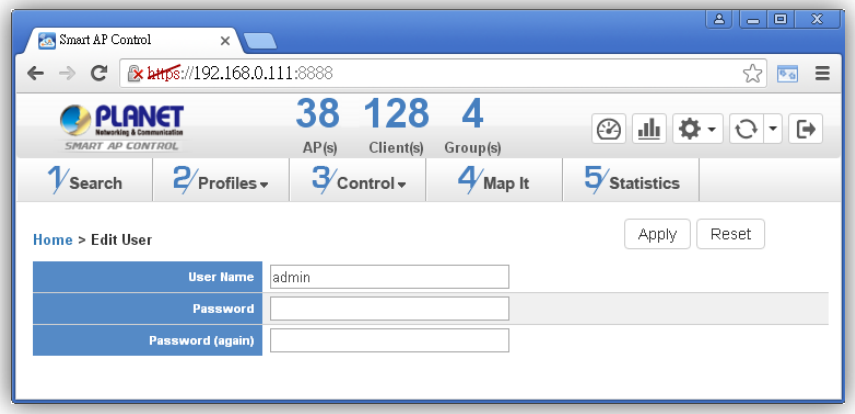
[Bottom Chart]

- **The Active Clients chart** shows the real-time traffic statistics of active clients. Switch between 1 day or 1 week to view the statistic per day or per week.

System Menu – User Configuration



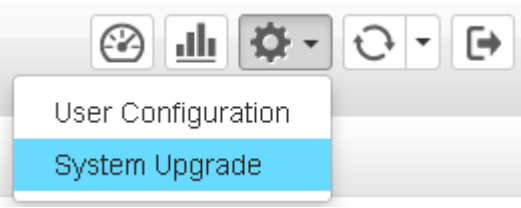
[System Menu – User Configuration]



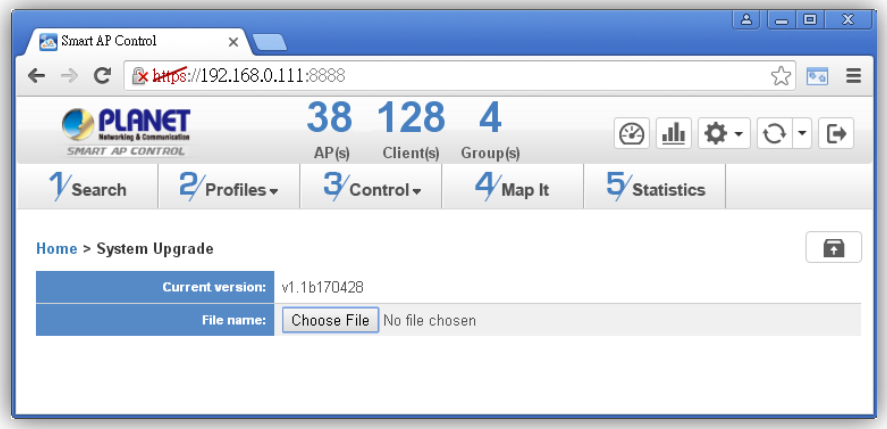
[User Configuration]

- **User Configuration**: in this page, you can modify the login user name and password.
- Enter the new user name and new password directly in the corresponding fields, then click "**Apply**" to apply the setting. The login window will prompted to ask you to enter the new account to re-login the system.
- **Username:**
  - Length = 5~32 characters
  - Format = A ~ Z, a ~ z, 0 ~ 9
- **Password:**
  - Length = 5~32 characters
  - Format = A ~ Z, a ~ z, 0 ~ 9

System Menu – User Configuration



[System Menu – System Upgrade]



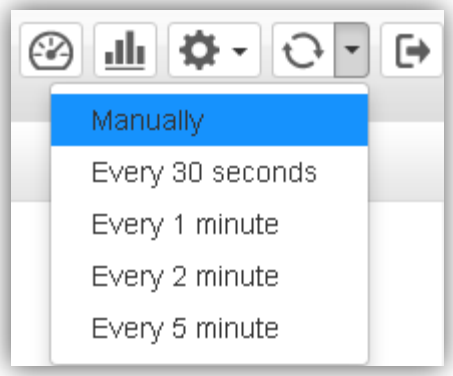
[System Upgrade]

- **System Upgrade**: in this page, you can upgrade the system to the latest version with new patch.
- Click "**Choose File**" to designate the system patch file for upgrade. Then, click the upgrade icon at the upper-right corner to start the system upgrade.
- Please regularly check PLANET official website for the system upgrade file

- **Smart AP Control download path:**

http://www.planet.com.tw/en/product/product.php?id=48976#dl

System Menu – Refresh

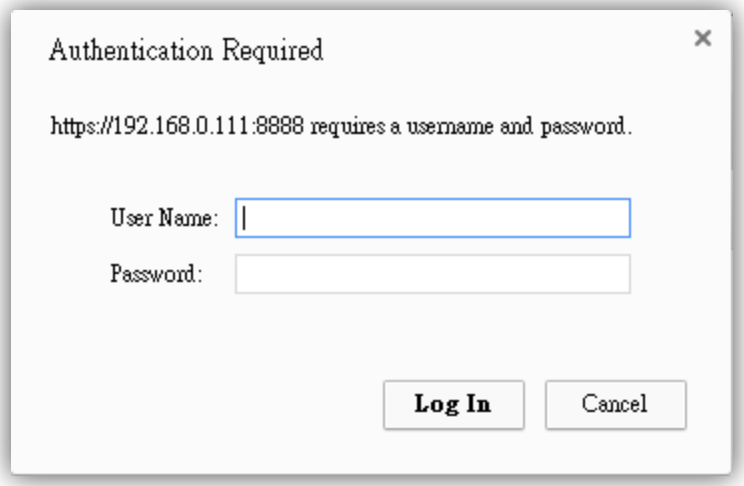


[System Menu – Refresh]

- **Refresh**: the page content will updated every 1 minute automatically by default. You can modify the system update frequency to every 30 seconds, every 2 minutes or every 5 minutes.
- If you required the system to update immediately, you may click "**Manually**" to refresh the page content.

System Menu – Logout

[System Menu – Logout]



[Login Window]

- **Logout**: click "**Logout**" to logout the system.
- Once clicked, the login window will prompted to ask user to re-login the system.

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Main Menu

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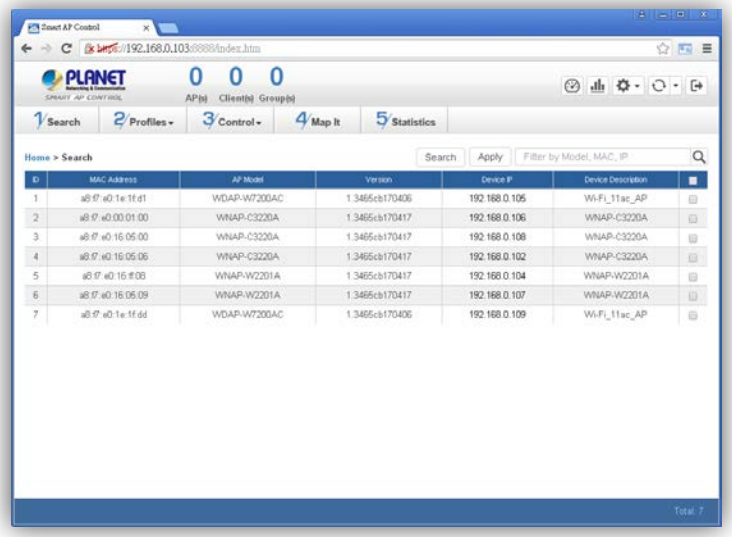
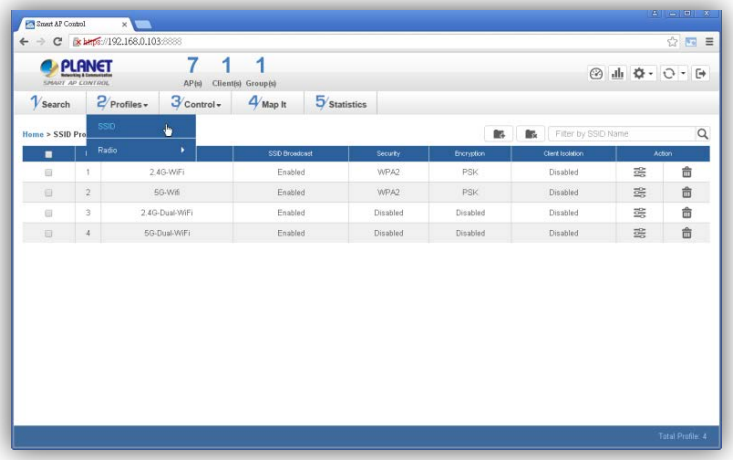
Main Menu – 1/Search



[1/Search]

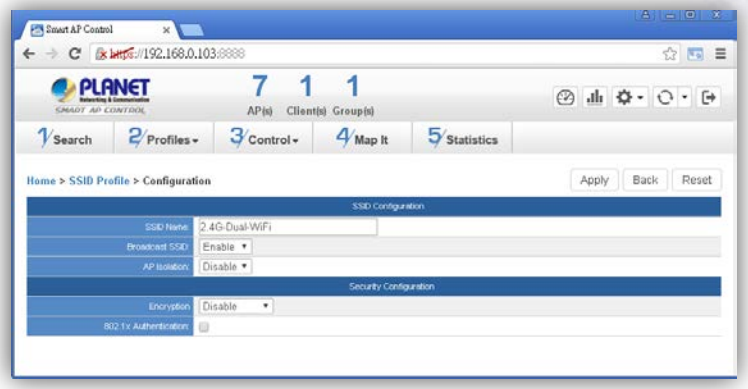
- **Search:** in this page, you can discover the managed APs on the network.
- Click the main menu "**1/Search**" or "**Search**" button to update the current list.
- Select the specific AP or select all AP by checking the check box to add to the control list for further configuration. After selected, please click "**Apply**" button to take effect.
- **Filter:** you can filter the search result by entering the keywords in the field next to the magnifier icon. The keywords includes: Model, MAC Address and IP Address .

Main Menu – 2 / Profiles



[2 / Profiles]

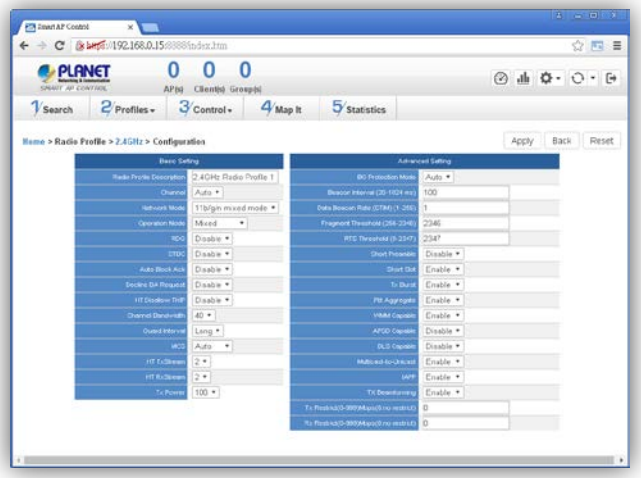
- **Profiles:** in this page, you can create the SSID and 2.4GHz/5GHz profiles for further AP provisioning.
- **SSID Profiles:** click "**Add new profile**" button to add a new SSID profile.
- **Radio Profiles:** click "**Add new profile**" button to add a new 2.4GHz radio profile or 5GHz radio profile.
- You can create up to 32 profiles respectively for each type of profiles (SSID, 2.4G radio, 5G radio).



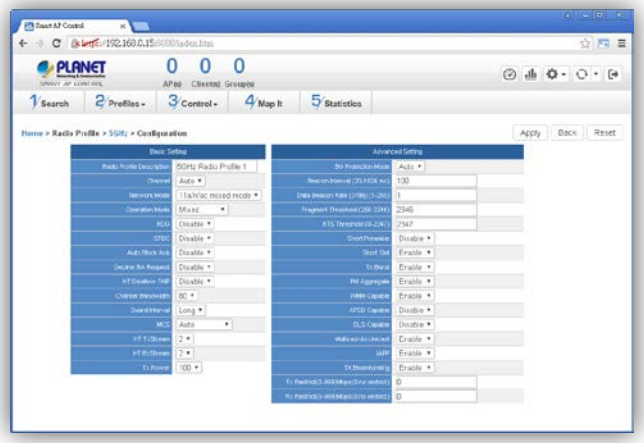
[SSID Profile Configuration]

- In the **SSID profile configuration** page, enter the value that you preferred and then click "**Apply**" to save the profile.
- **Add new profile:** click it to add a new profile.
- **Delete selected item:** click it to delete the selected profile.
- **Edit:** click it to edit the profile.
- **Delete:** click it to delete the single profile.
- **Filter:** you can filter the search result by entering the keywords in the field next to the magnifier icon. The keywords includes: SSID Name

Main Menu – 2 / Profiles



[2.4GHz Radio Profile Configuration]

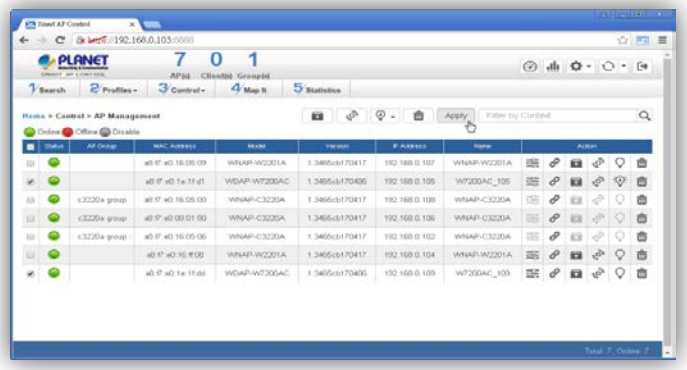


[5GHz Radio Profile Configuration]

- In the Radio profile configuration page, enter the value that you preferred and then click "**Apply**" to save the profile.
- **Apply:** click this button to save the settings.
- **Back:** click this button to return to the previous page.
- **Reset:** click this button to reset all fields to default value.
- **Remark:**

1. Strongly suggested keep the values as default except the fields includes Channel, Network Mode, Channel Bandwidth, Tx Power, IAPP, Tx/Rx Restrict to prevent any unexpected error or impact the performance.
2. WMM Capable is not allowed to be disabled.

Main Menu – 3 / Control



[3 / Control - AP Management]

- **Control:** in this page, the system allow you to control the AP or AP group with specific actions.
- **AP Management:** go to this page to control single AP or multiple APs respectively.
- **AP Group Management**: go to this page to create multiple APs as a group or control AP group.
- **Filter:** you can filter the AP list by entering the keyword in the field next to the magnifier icon. The keyword should be any context belongs to the fields includes: AP Group, MAC Address, Model, Version, IP Address, Name.
- **Apply:** click this button to apply the setting. The profile setting will not take effect until you click "**Apply**" button in the Control's main page.

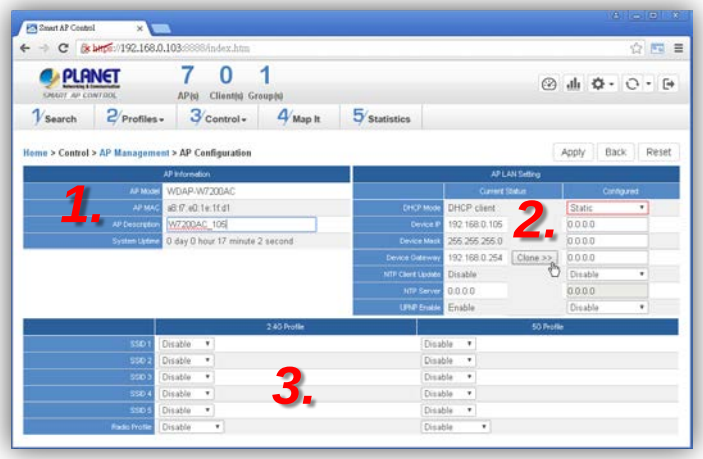
- **Status:**
  - **Connection status:** online, offline, wi-fi disabled
  - **In progress:** action in progress
  - **Finished / Success:** action finished and success.
  - **Failed:** action failed.
- **Action:**
  - **Setting:** edit setting and allocate profile to AP
  - **Link:** link to the AP's web page
  - **Firmware Update :** upgrade AP's firmware
  - **Reboot:** reboot the AP
  - **Delete:** delete the AP from the control list
  - **LED Control:** control the AP's LED.

    Mouse-click in a sequential order:

    LED blink-> LED off-> LED on
- **Remark:**

  To configure multiple APs at one time, select multiple APs, then choose one of the action icons on the top of the page. The "**Link**" action is not allowed for multiple APs.

Main Menu – 3 / Control



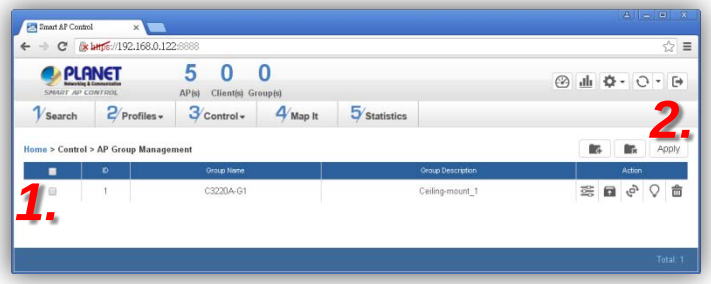
[AP Configuration]

- In the **AP Group Configuration** page, you can create an AP group with the same model of AP.
- **Apply:** click this button to save the group/setting.
- **Back:** click this button to return to the previous page.
- **Reset:** click this button to reset all fields to default value.
- **Remark:** the system allow to create up to 32 AP groups.

- **Procedure of configure AP's setting:**

1. Edit the basic AP Information.
2. Click "**Clone >>**" button if you want to use the same IP configuration as the previous LAN settings. Otherwise, please enter the preferred LAN setting.
3. If there is already profiles created, you can designate the SSID profile and Radio profile to this AP. You can do this step later once finished AP's basic setting.

Main Menu – 3/Control

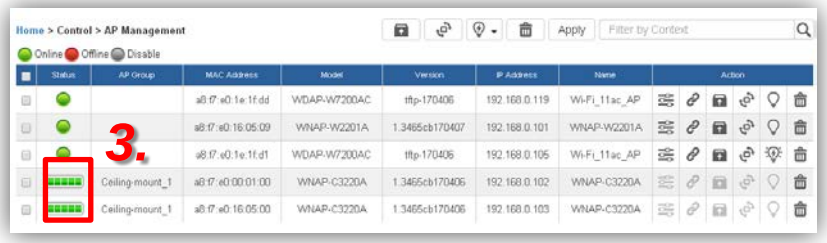


[3/Control - AP Group Management]

- In the **AP Group Management** page, you can create AP group and control one or more AP groups.
- **Add new group:** click it to add an AP group.
- **Delete selected item:** click it to delete the selected AP group.
- **Apply:** click this button to apply the setting. The profile setting will not take effect to a group until you click "**Apply**" button.
- **Remark:**

  To do profile provisioning to multiple AP groups at one time, select multiple AP groups, then click "**Apply**" button. The "**Link**" action is not allowed for multiple APs or AP group.

- **Procedure of profile provisioning to AP groups:**
  1. Select the AP group.
  2. Click the "**Apply**" button.
  3. Go to "**3/Control-> AP Management**" to check the status is becoming "**In progress**". Wait until the status became "**Online**".

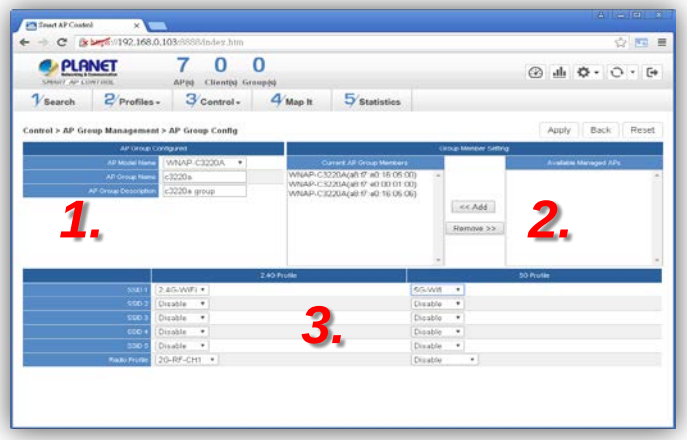


- **Action:**
  - **Setting:** edit setting and allocate profile to group
  - **Firmware Update :** upgrade AP group's firmware
  - **Reboot:** reboot the AP group
  - **Delete:** delete the AP group from the control list
  - **LED Control:** control the AP group's LED.

    Mouse-click in a sequential order:

    LED blink-> LED off-> LED on

Main Menu – 3 / Control



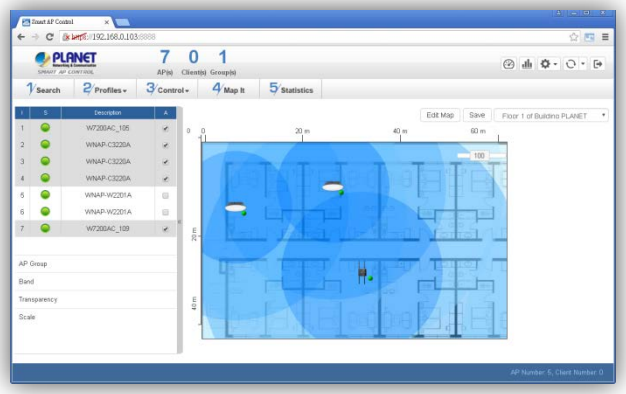
[AP Group Configuration]

- In the **AP Group Configuration** page, you can create an AP group with the same model of AP.
- **Apply:** click this button to save the group/setting.
- **Back:** click this button to return to the previous page.
- **Reset:** click this button to reset all fields to default value.
- **Remark:** the system allow to create up to 32 AP groups.

- **Procedure of create an AP group:**

1. Choose the AP model from the drop-down list and enter the AP group name and description.
2. Select the AP and click "**<< Add**" to the "**Current AP Group Members**" list.
3. If there is already profiles created, you can designate the SSID profile and Radio profile to this group. You can do this step later once finished creating group.

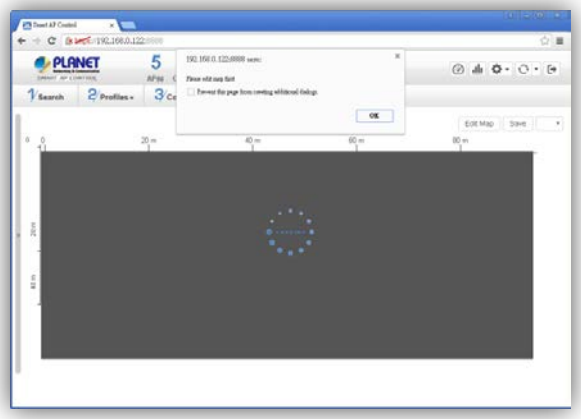
Main Menu – 4/Map It



[4/Map It]

- **Map It:** in this page, the system allow you to upload your floor map to the system and you can add managed APs to the actual position against the floor map. This is convenient to user to view and adjust the actual deployment by reference to its real transmit power, channel allocation.
- The system allows user to upload up to 10 floor maps.

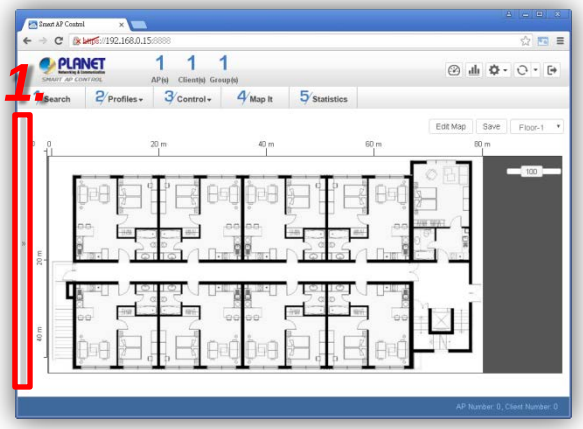
- A system message will prompt to remind you to edit map first if there is no any map available in the system. Click "**OK**" to continue.



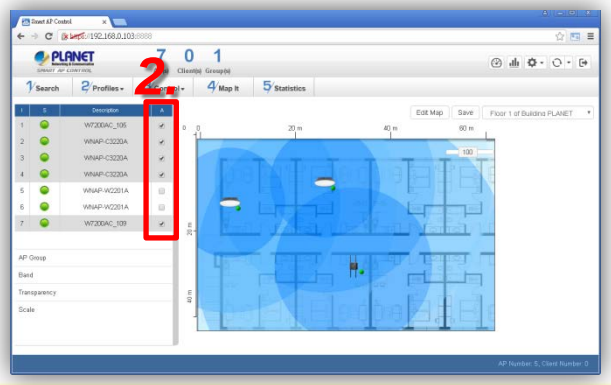
- In **Edit Map** page, click "**Choose File**" and enter the map's description. Then click "**Apply**" to upload the map.

Main Menu – 4/Map It

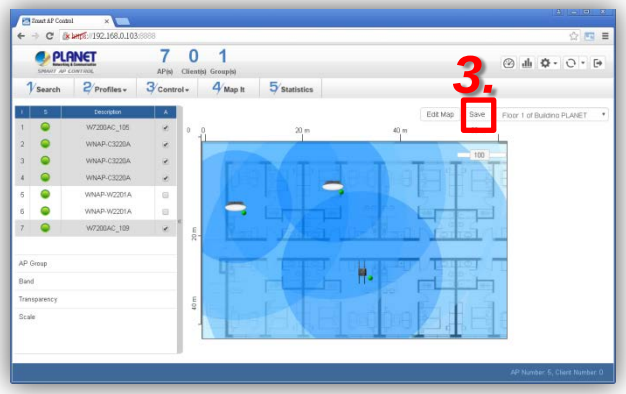
- After finished map upload, you can click the sidebar at the left-side of the window to expand the AP list.



- Drag and drop the AP onto the map or select multiple APs by clicking the checkbox.



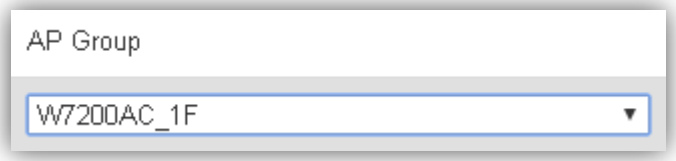
- Once finished allocation, click "**Save**" to save the setting.



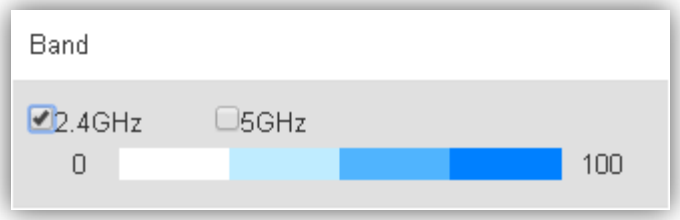
- To upload more maps or edit current map, click "**Edit Map**" button to re-enter the **Edit Map** page.

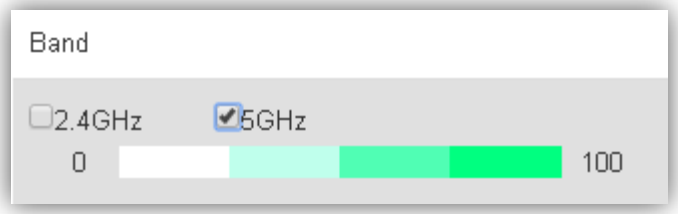
Main Menu – 4/Map It

- The lower-left side area provides map control options.
- **AP Group:** to filter the managed APs shown on the map, and only display the selected AP group.



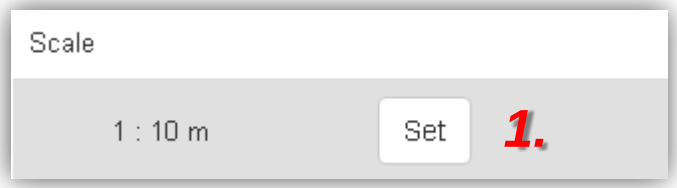
- **Band:** select "**2.4GHz**" to show APs with 2.4GHz frequency or select "**5GHz**" to show APs with 5GHz frequency.

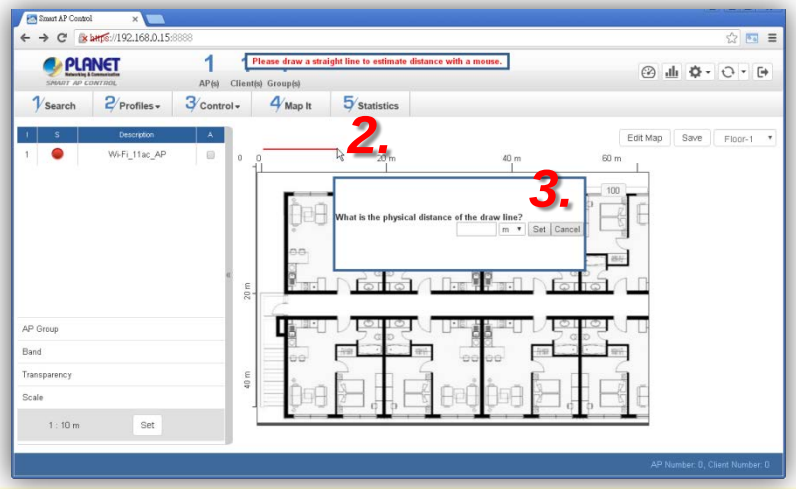




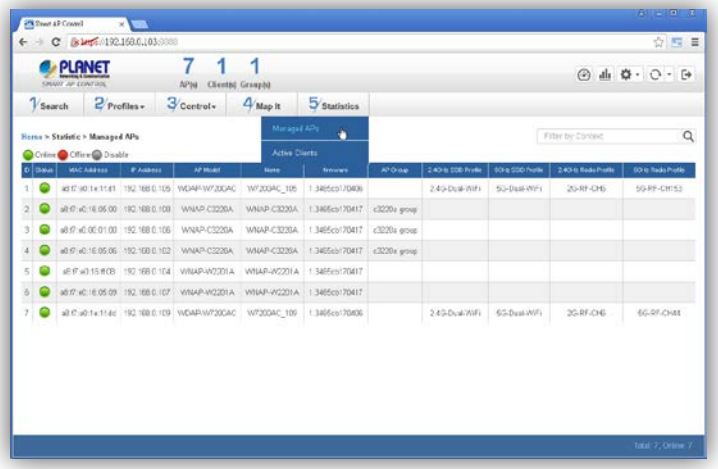
- **Transparency:** slide the bar to adjust the transparency of the map.

- **Scale:** click "**Set**" to reset the map scale.



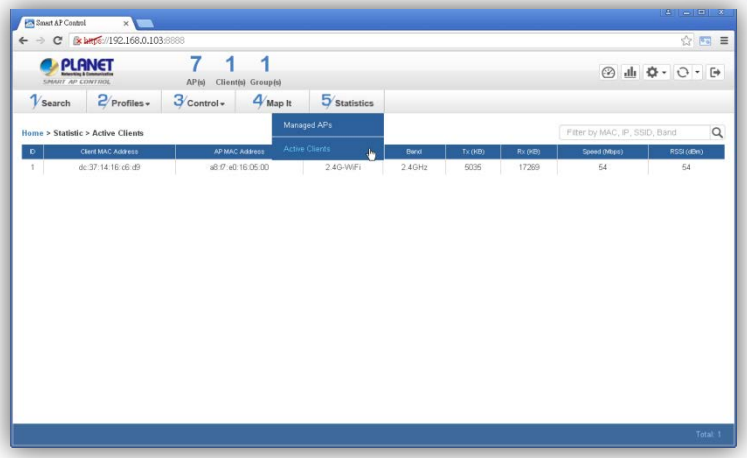


Main Menu – 5 / Statistics



[5 / Statistics – Managed APs]

- **Managed APs:** in this page, you can observe the current configuration of all managed APs.
- **Filter:** you can filter the AP list by entering the keyword in the field next to the magnifier icon. The keyword should be any context belongs to the fields of this page.



[5 / Statistics – Active Clients]

- **Active Clients:** in this page, you can observe the status of all associated clients includes traffic statistics, transmit speed and RSSI signal strength.
- **Filter:** you can filter the search result by entering the keywords in the field next to the magnifier icon. The keywords includes: MAC Address, IP Address, SSID and Band.

Activating IP Power