TP-Link TECHNOLOGIES CO., LTD.

Agile Config Function

Name:	Agile Config Function
Version:	V1.1
Date:	13 Jun17
Author:	Wang Yang
Audit:	
Approve:	
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Versions

Version/Status	Author	Date	Remark
V1.1	Wang Yang	3Jun17~13Jun17	Modify config tools.
V1.0/Draft	Wang Yang	28Dec16~29Dec16	Create this document.

C a t a l o g

1. Briefing

Since more and more ISPs expect to customize the configurations for their customers, so we develop the Agile Config function to support ISPs to customize their default configuration.

This instruction will tell us how to set up environment to finish default configuration when you get all the tools and the firmware from us.

2. Hardware Environment

1. One PC with Windows OS
2. One Switch with eight or more ports

3. Generate Default Configuration

There are two default configurations: Globle Config & MAC Config

1.Global Config

General configuration can be used for all devices with the same batch. Name the file as “ModelName + Version .bin”, for example “TL-WR850NV116122858485n.bin”, the Model Name is TL-WR850NV1, and the Version is 16122858485n.

How to get the Globle Config file:

Connect the device to one PC, login the Web Page with browser, then set the customized configurations through the GUI according to your demand. Then you can save the Globle Config file in Backup Page by clicking backup. After that, please rename the file according to the rule above.

PS: If SSID of each unit need to be unique based on MAC address, please set SSID as below method when you setting the config through the GUI:

WISP_XXXX_2G, XXXX will be replaced as last N bits of MAC address(N is the number of X). For example, when MAC address is 8D6C7298D0A and you set the SSID as WISP_XXXX_2G, then the SSID will be replaced as WISP_8D0A_2G. If the SSID is WISP_XXXXXX, it will be WISP_298D0A.

When the wireless password is set as ?undefined? in the GUI, it will be the same as PIN of each device.

The Guest Network SSID will follow the main SSID, that is to say the Guest Network SSID will add a suffix “_guest” to the main SSID.

2.MAC Config

The Config file just for the device with specific MAC address, please name the file as “MAC address.bin”.

How to get MAC Config file: Edit by yourselves.

MAC.bin is an explicit file which is created by yourselves. It can just config some parameters of a router in this file. Each line of the file represents one of configuration info. The file only supports ASCII. The editable config are shown below:

1. SSID_band_n: Wireless SSID;
2. Username: login username;

3. password：login password;
4. wirelesskey: wireless password of WPA/WPA2 - Personal(Recommended).
5. PPPOE4_username: username of PPPoE with IPv4
6. PPPOE4_password: password of PPPoE with IPv4
7. Static_IP4: IP address under Static IP with IPv4
8. static_Mask4:Subnet mask with IPv4
9. static_GW4:Default Gateway with IPv4
10. static_DNS4: Default DNS address with IPv4

Each line of codes represent one of configuration info. The format is Key:Value.

Key	Value	Remark
SSID_band_n	SSID name, only characters in ASCII can be displayed (including spaces) and no more than 32 characters.	band：represent 2G or 5G n：represents 0-7, when are multiple SSIDs of APs, 0 is for master AP, 1 is for guest AP For example: SSID_2G_0:TP-LINK_0506, it means that SSID of 2.4G master AP is TP-LINK_0506 (Note: The SSID here should be set to be one certain value. What the value is, then the device SSID will be set to be what)
username	Length cannot be more than 15, and the character set consists of the displayable characters in the ASCII code	
password	Length cannot be more than 15, and the character set consists of the displayable characters in the ASCII code	
wirelesskey	Length should be 8-64, and the character set consists of the displayable characters in the ASCII code (including space)	
PPPOE4_username	Length should not be 0	It means the username of PPPoE with IPv4
PPPOE4_password		It means the password of PPPoE with IPv4
static_IP4		IP address under Static IP with IPv4（Other

		configures such as subnet mask can be edited in global.bin）
static_Mask4		IP address under Static IP with IPv4, this is the subnet mask
static_GW4		IP address under Static IP with IPv4, this is the default Gateway
static_DNS4		IP address under Static IP with IPv4, this is the Default DNS address

Some notices for mac.bin configure:

1. If SSID is illegal, it will not take effect with corresponding band & n; it will use the rule of global.bin to generate, and will not affect other SSIDs. Under the same band, name cannot be duplicated.

2. In file of mac.bin key:value should not contain space in middle; there should not be blank line between items.

3. You can choose above parameters to config according to your demand, but username and password should exist or not exist at the same time

4. If one of values is illegal or key is written incorrectly, it will not take effect. And it will config as global.bin

5. Type of WAN can only be set as one kind. For example, Only PPPoE or Static IP can be set in mac.bin. PPPOE4_username and PPPOE4_username should be set at the same time;
Static_IP4, static_Mask4, static_GW4, static_DNS4 should be set at the same time.

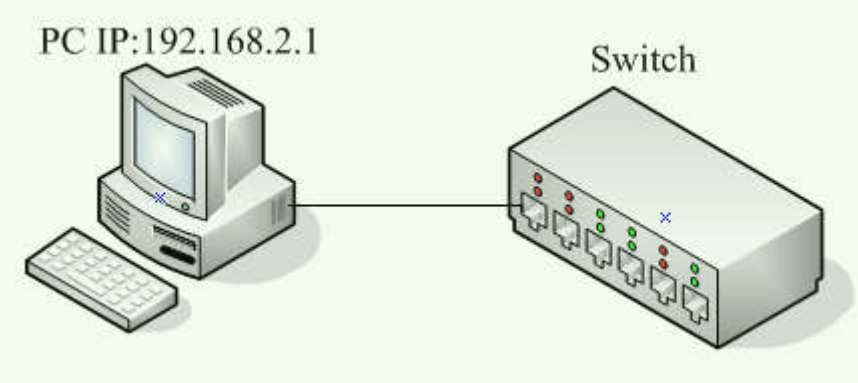
6. Mac.bin should use capital characters, etc. 00AFD5040502.bin

7. An example to create the MAC config file:

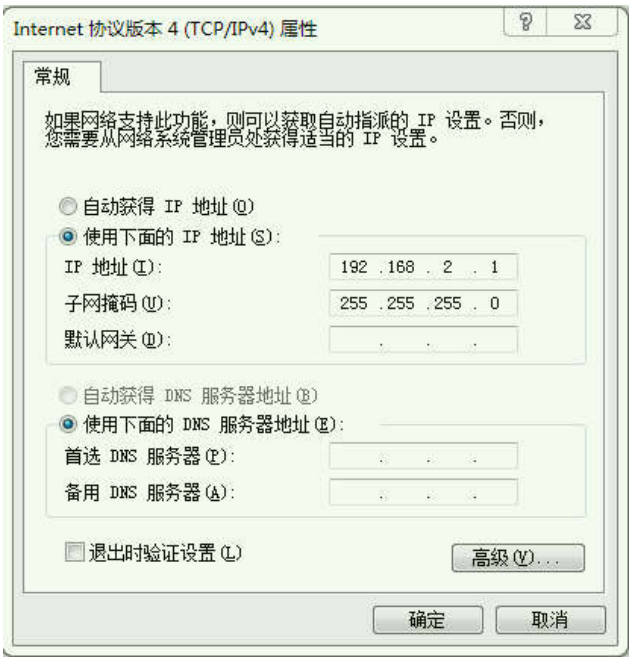
1) Create one txt file;
2) Edit the content according to the above rules;
3) Name the file with capital MAC address, and change ".txt" to be ".bin", for example "00AFD5040502.bin":

00AFD5040502.bin

4. Environment Setup



Connect PC network adapter to one port of switch



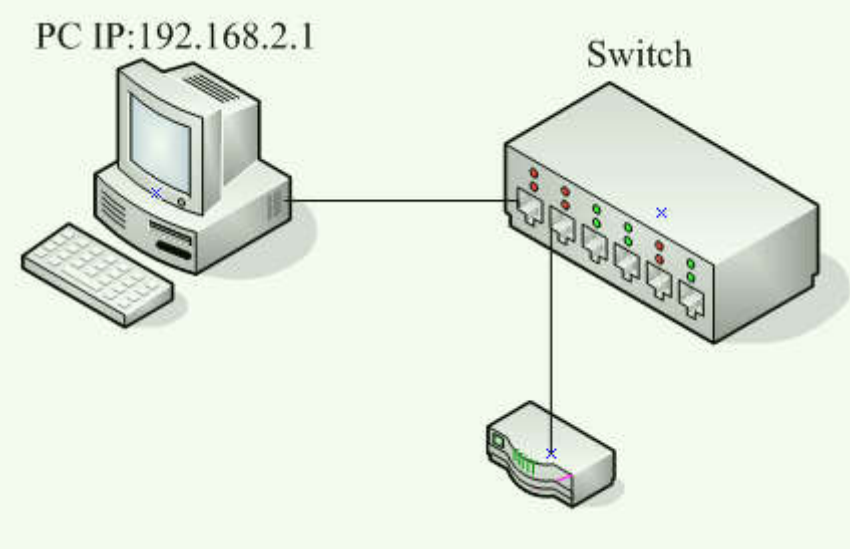
1. Set IP of network adapter as 192.168.2.1, subnet mask as 255.255.255.0, and disable other network adapters;
2. Uncompress TpUpgrade v1.1.rar, find TpUpgrade directory;
3. Put Globle Config and MAC Config mentioned in last chapter into TpUpgrade directory;
4. Run RunStandAlone.bat, RunStandAloneMT.bat in TpUpgrade directory.

5. Import Default Configuration

Connect WAN port of these devices (the devices should be with factory default) which need to configure to Switch. All LEDs will light up when power up. When unit finishes booting up, it will get configuration automatically. When all LEDs light up for second time, it means that upgrade is done. It will take around one minute.

It is suggested that upgrade is processed by two persons. One is in charge of unpacking, powering up and

connecting device to switch. The other one disconnect, power off and pack. It will improve efficiency.



6. Notice

1. How to factory reset through the reset button:
   When the device is power on, and the reset button have been pressed more than 5s, all the leds will turn up, and then you should release the press of the reset button