



# Configuration Guide

For Access Control In Multiple SSIDs

EAP Controller

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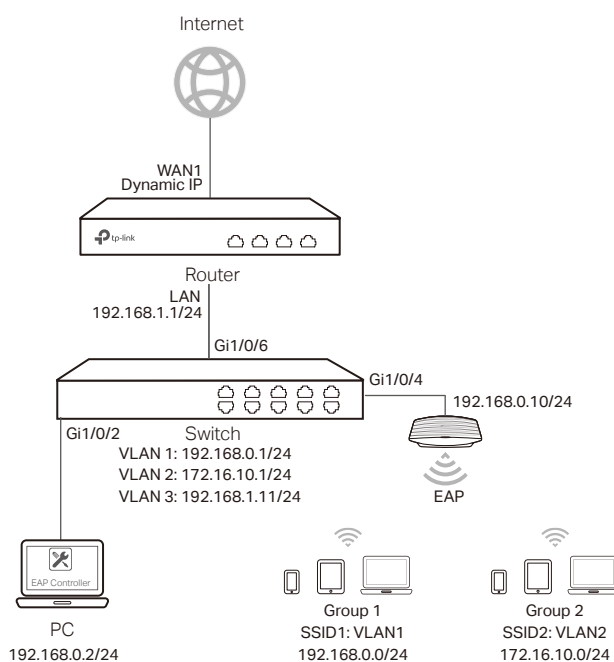
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# 1 Overview

In enterprise wireless networks, users may have a range of different requirements. For security reasons, it's important to limit access to the EAP Controller to only the users who have the given authority. Access Control can provide this. The figure below shows the network topology of such a scenario. The administrator can divide users into two groups; users in Group 1 can access both the internet and the EAP Controller, while users in Group 2 can only access the internet.

Figure 1-1 Network topology for access control in Multiple SSIDs



To achieve this, the administrator can configure two SSIDs in two different subnets and VLANs on the network. Different access control strategies can then be applied to the two SSIDs. The administrator can assign different SSIDs to different groups of users. The configuration follows the methodology below:

- 1) Configure WAN IP, LAN IP, and multi-nets NAT on the router, and static routing on both the router and the switch to ensure the network connectivity.
- 2) Configure two SSIDs in two different VLANs on the EAP Controller. Then assign each SSID to the corresponding user group.
- 3) Configure VLAN, interface IP and DHCP server on the switch. The switch will assign different IP addresses to clients connected to different SSIDs for all subnets.
- 4) Configure the hotspot portal and vouchers on the EAP Controller, so that the authenticated users can access the internet.
- 5) Configure access control strategy on the switch, so that only the users who have the given authority can access the EAP Controller.

# 2 Configuring Access Control in Multiple SSIDs

This chapter explains how to configure access control in multiple SSIDs. The configuration consists of two parts:

- 1) Configuring the basics.
- 2) Configuring ACL.

## 2.1 Configuring the Basics

To complete the basic network configuration, follow these steps:

- 1) Configure the router.
- 2) Configure the switch.
- 3) Configure the EAP Controller.

### 2.1.1 Configuring the Router

Example with TL-ER6120, the configuration steps are as follows:

- 1) Choose the menu **Network > WAN > WAN1** to load the following page. Specify the connection type according to your actual network environment. Here, we select **Dynamic IP** as the connection type. Click **Save** and **Connect**.

Figure 2-1 Configure WAN Port

The screenshot shows the 'Connection Configuration' page for WAN1. The 'Connection Type' dropdown is set to 'Dynamic IP'. Other fields include 'Host Name' (Optional), 'Upstream Bandwidth' (1000000 Kbps), 'Downstream Bandwidth' (1000000 Kbps), 'MTU' (1500, 576-1500), 'Primary DNS' (Optional), 'Secondary DNS' (Optional), and 'Vlan' (10). There is an unchecked checkbox for 'Get IP using Unicast DHCP'. At the bottom, there are three buttons: 'Save', 'Connect', and 'Disconnect'. The 'Save' and 'Connect' buttons are highlighted with a red border.

- 2) Choose the menu **Network > LAN > LAN** to load the following page. Specify the IP address as **192.168.1.1** and the subnet mask as 255.255.255.0. Click **Save**.

Figure 2-2 Configure LAN Port

LAN

IP Address: 192.168.1.1

Subnet Mask: 255.255.255.0

Management Vlan: ---

Save

- 3) Choose the menu **Transmission > NAT > Multi-Nets NAT** and click **Add** to load the following page. Specify the name. Here, we specify the name as **multinet1** for example. Select **WAN1** as the interface. Specify the source IP range as **192.168.0.0/24**. Check **Enable** for status. Click **OK**.

Figure 2-3 Configure Multi-Nets NAT 1

Multi-Nets NAT List

+ Add - Delete

ID	Name	Interface	Source IP Range	Status	Description	Operation
--	--	--	--	--	--	--

Name: multinet1

Interface: WAN1

Source IP Range: 192.168.0.0 / 24

Status:  Enable

Description: (Optional)

OK Cancel

Similarly, add another entry as the following figure shows.

Figure 2-4 Configure Multi-Nets NAT 2

Multi-Nets NAT List

+ Add - Delete

ID	Name	Interface	Source IP Range	Status	Description	Operation
--	--	--	--	--	--	--

Name: multinet2

Interface: WAN1

Source IP Range: 172.16.10.0 / 24

Status:  Enable

Description: (Optional)

OK Cancel

- 4) Choose the menu **Transmission > Routing > Static Route** and click **Add** to load the following page. Specify the name. Here, we specify the name as **route1** for example. Specify the destination IP as **192.168.0.0** and subnet mask as **255.255.255.0**. Specify the next hop as **192.168.1.11**. Select **LAN** as the interface. Check **Enable** for status. Click **OK**.

Figure 2-5 Configure Static Route 1

The screenshot shows the 'Static Route' configuration page. At the top right, there are '+ Add' and '- Delete' buttons. Below is a table with columns: ID, Name, Destination IP, Subnet Mask, Next Hop, Interface, Metric, Status, and Operation. The table is currently empty. Below the table, the configuration form is displayed with the following fields:

- Name: route1
- Destination IP: 192.168.0.0
- Subnet Mask: 255.255.255.0
- Next Hop: 192.168.1.11
- Interface: LAN (dropdown menu)
- Metric: 0 (0-15)
- Description: (Optional)
- Status:  Enable

At the bottom, there are 'OK' and 'Cancel' buttons.

Similarly, add another entry as the following figure shows.

Figure 2-6 Configure Static Route 2

The screenshot shows the 'Static Route' configuration page. At the top right, there are '+ Add' and '- Delete' buttons. Below is a table with columns: ID, Name, Destination IP, Subnet Mask, Next Hop, Interface, Metric, Status, and Operation. The table is currently empty. Below the table, the configuration form is displayed with the following fields:

- Name: route2
- Destination IP: 172.16.10.0
- Subnet Mask: 255.255.255.0
- Next Hop: 192.168.1.11
- Interface: LAN (dropdown menu)
- Metric: 0 (0-15)
- Description: (Optional)
- Status:  Enable

At the bottom, there are 'OK' and 'Cancel' buttons.

## 2.1.2 Configuring the Switch

Exemplified with T2600G-28TS, the configuration steps are as follows:

- 1) Choose the menu **VLAN > 802.1Q VLAN > Port Config** to load the following page. Specify the link type as **ACCESS** and PVID as **1** for port 1/0/2, and click **Apply**. Specify

the link type as **GENERAL** and PVID as **1** for port 1/0/4, and click **Apply**. Specify the link type as **GENERAL** and PVID as **3** for port 1/0/6, and click **Apply**.

Figure 2-7 Configure Link Type and PVID for the Ports

VLAN Port Config

UNIT:  LAGS

Select	Port	Link Type	PVID	LAG	VLAN
<input type="checkbox"/>		<input type="text" value=""/>	<input type="text" value=""/>		
<input type="checkbox"/>	1/0/1	ACCESS	1	---	<a href="#">Detail</a>
<input type="checkbox"/>	1/0/2	ACCESS	1	---	<a href="#">Detail</a>
<input type="checkbox"/>	1/0/3	ACCESS	1	---	<a href="#">Detail</a>
<input type="checkbox"/>	1/0/4	GENERAL	1	---	<a href="#">Detail</a>
<input type="checkbox"/>	1/0/5	ACCESS	1	---	<a href="#">Detail</a>
<input type="checkbox"/>	1/0/6	GENERAL	3	---	<a href="#">Detail</a>
<input type="checkbox"/>	1/0/7	ACCESS	1	---	<a href="#">Detail</a>
<input type="checkbox"/>	1/0/8	ACCESS	1	---	<a href="#">Detail</a>
<input type="checkbox"/>	1/0/9	ACCESS	1	---	<a href="#">Detail</a>
<input type="checkbox"/>	1/0/10	ACCESS	1	---	<a href="#">Detail</a>
<input type="checkbox"/>	1/0/11	ACCESS	1	---	<a href="#">Detail</a>
<input type="checkbox"/>	1/0/12	ACCESS	1	---	<a href="#">Detail</a>
<input type="checkbox"/>	1/0/13	ACCESS	1	---	<a href="#">Detail</a>
<input type="checkbox"/>	1/0/14	ACCESS	1	---	<a href="#">Detail</a>
<input type="checkbox"/>	1/0/15	ACCESS	1	---	<a href="#">Detail</a>

- 2) Choose the menu **VLAN > 802.1Q VLAN > VLAN Config** and click **Create** to load the following page. Specify the VLAN ID as **2**. Specify the name as **vlan2**. Add 1/0/4 to VLAN 2 as tagged port, and click **Apply**.

Figure 2-8 Configure VLAN 2

The screenshot displays the 'VLAN Info' configuration page. At the top, the 'VLAN ID' is set to 2 (range 1-4094) and the 'Name' is 'vlan2' (16 characters maximum). Below this, the 'Untagged port' section shows 'UNIT: 1 LAGS' with a grid of port numbers 1-28. The 'Tagged port' section also shows 'UNIT: 1 LAGS' with a grid of port numbers 1-28. In the 'Tagged port' grid, port 4 is highlighted in blue, indicating it is selected. At the bottom of the 'Tagged port' section, the 'Apply' button is highlighted with a red box. A legend at the bottom identifies the port selection states: Unselected Port(s) (white), Selected Port(s) (blue), and Not Available for Selection (grey).

VLAN Info

VLAN ID:  (1 - 4094)

Name :  (16 characters maximum)

Untagged port

UNIT:  LAGS

2	4	6	8	10	12	14	16	18	20	22	24	26	28
1	3	5	7	9	11	13	15	17	19	21	23	25	27

All Clear

Tagged port

UNIT:  LAGS

2	4	6	8	10	12	14	16	18	20	22	24	26	28
1	3	5	7	9	11	13	15	17	19	21	23	25	27

All Clear Apply Help

Unselected Port(s)  Selected Port(s)  Not Available for Selection



Similarly, configure another two VLANs as the following figures show.

Figure 2-9 Configure VLAN 1

**VLAN Info**

VLAN ID:  (1 - 4094)

Name:  (16 characters maximum)

---

**Untagged port**

UNIT:  LAGS

<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

---

**Tagged port**

UNIT:  LAGS

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Unselected Port(s)   
  Selected Port(s)   
  Not Available for Selection

Figure 2-10 Configure VLAN 3

**VLAN Info**

VLAN ID:  (2 - 4094)

Name:  (16 characters maximum)

---

**Untagged port**

UNIT:  LAGS

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

---

**Tagged port**

UNIT:  LAGS

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Unselected Port(s)   
  Selected Port(s)   
  Not Available for Selection

- 3) Choose the menu **Routing > Interface > Interface Config** to load the following page. Specify the interface ID as **VLAN** and set the VLAN ID as **2**. Specify the IP address mode as **Static**. Specify the IP address as **172.16.10.1**, and the subnet mask as **255.255.255.0**. Enable the admin status. Click **Create**.

Figure 2-11 Create Interface VLAN 2

Creating Interface

Interface ID:   (1-4094)

IP Address Mode:  None  **Static**  DHCP  BOOTP

IP Address:  (Format: 192.168.0.1)

Subnet Mask:  (Format: 255.255.255.0)

Admin Status:

Interface Name:  (Optional. 1-16 characters)

Similarly, configure another two interfaces as the following figures show.

Figure 2-12 Configure Interface VLAN 1

Modify Interface

Interface ID:

IP Address Mode:  None  **Static**  DHCP  BOOTP

IP Address:  (Format: 192.168.0.1)

Subnet Mask:  (Format: 255.255.255.0)

Admin Status:

Interface Name:  (Optional. 1-16 characters)

Figure 2-13 Creating Interface VLAN 3

Creating Interface

Interface ID:   (1-4094)

IP Address Mode:  None  **Static**  DHCP  BOOTP

IP Address:  (Format: 192.168.0.1)

Subnet Mask:  (Format: 255.255.255.0)

Admin Status:

Interface Name:  (Optional. 1-16 characters)

- 4) Choose the menu **Routing > Static Routing > IPv4 Static Routing Config** to load the following page. Specify the destination IP and subnet mask as **0.0.0.0**, which means all the traffic. Specify the next hop as **192.168.1.1**. Click **Create**.

Figure 2-14 Configure Static Route for All the Traffic

IPv4 Static Routing Config

Destination:  (Format: 10.10.10.0)

Subnet Mask:  (Format: 255.255.255.0)

Next Hop:  (Format: 192.168.0.2)

Distance:  (Optional. range: 1-255)

- 5) Choose the menu **Routing > DHCP Server > DHCP Server** to load the following page. In the **Global Config** section, enable the DHCP server and click **Apply**.

Figure 2-15 Enable DHCP Server

**Global Config**

DHCP Server  **Enable**  Disable

Option 60:  (Optional) Apply

Option 138:  (Optional. Format: 192.168.0.1)

---

**Ping Time Config**

Ping Packets:  (0-10 packets, 0 for disable ping) Apply

Ping Timeout:  (100-10000 milliseconds)

---

**Excluded IP Address**

Start IP Address:  (Format: 192.168.0.1)

End IP Address:  (Format: 192.168.0.1) Create

---

**Excluded IP Address Table**

Select	ID	Start IP Address	End IP Address
No entry in the table.			

All
Delete
Help

- 6) Choose the menu **Routing > DHCP Server > Pool Setting** to load the following page. Specify the pool name. Here, we specify the pool name as **pool1** for example. Specify

the network address as **192.168.0.0** and the subnet mask as **255.255.255.0**. Specify the default gateway as **192.168.0.1**. Specify the DNS server as **192.168.1.1**. Click **Apply**.

Figure 2-16 Configure DHCP Server Pool 1

DHCP Server Pool		
Pool Name:	<input type="text" value="pool1"/>	(8 characters maximum)
Network Address:	<input type="text" value="192.168.0.0"/>	(Format: 192.168.0.0)
Subnet Mask:	<input type="text" value="255.255.255.0"/>	(Format: 255.255.255.0)
Lease Time:	<input type="text" value="120"/>	(1-2880 min, Default: 120)
Default Gateway:	<input type="text" value="192.168.0.1"/>	(Optional, Format: 192.168.0.1)
	<input type="text"/>	
	<input type="text"/>	
	<input type="text"/>	
	<input type="text"/>	
DNS Server:	<input type="text" value="192.168.1.1"/>	(Optional, Format: 192.168.0.1)
	<input type="text"/>	
	<input type="text"/>	
	<input type="text"/>	
	<input type="text"/>	
Netbios Server:	<input type="text"/>	(Optional, Format: 192.168.0.1)
Netbios Node Type:	<input type="text" value="b"/>	(Optional, b/p/m/h/none)
Next Server Address:	<input type="text"/>	(Optional, Format: 192.168.0.1)
Domain Name:	<input type="text"/>	(Optional, 0 to 200 characters)
Bootfile:	<input type="text"/>	(Optional, 0 to 128 characters)

Similarly, add another DHCP server pool as the following figure shows.

Figure 2-17 Configure DHCP Server Pool 2

**DHCP Server Pool**

Pool Name:  (8 characters maximum)

Network Address:  (Format: 192.168.0.0)

Subnet Mask:  (Format: 255.255.255.0)

Lease Time:  (1-2880 min, Default: 120)

Default Gateway:  (Optional, Format: 192.168.0.1)

DNS Server:  (Optional, Format: 192.168.0.1)

Netbios Server :  (Optional, Format: 192.168.0.1)

Netbios Node Type:  (Optional, b/p/m/h/none)

### 2.1.3 Configuring the EAP Controller

The EAP can be managed by the EAP Controller, which can be downloaded on the website: <http://www.tp-link.com/en/download/EAP-Controller.html>.

Follow these steps to configure the EAP Controller:

- 1) Run the EAP Controller and the management web page will pop up automatically. Choose the menu **Access Points > Pending** to load the following page. Click **Adopt** to adopt the EAP.

Figure 2-18 Adopt the EAP

Name/MAC Address	IP Address	Status	Model	Hardware Version	Firmware Version	Client Number	Download	Upload	Action
ec:08:6b:d4:a9:bc	192.168.0.10	Pending	EAP330	2.0	1.1.2 Build 20170711 Rel. 51586	0	0 Bytes	0 Bytes	<input type="button" value="Adopt"/>

- 2) Choose the menu **Wireless Settings > Basic Wireless Setting**, choose 2.4GHz or 5GHz, and click **Add** to load the following page. Specify the SSID name as **SSID1**. Specify the wireless VLAN ID as **1**. Enable SSID broadcast. Specify the security mode

as **WPA-PSK**. Specify the version as **WPA2-PSK**, and encryption as **AES**. Configure the wireless password for the SSID. Enable the portal. Click **Apply**.

Figure 2-19 Add SSID1

### Add 2.4GHz SSID

**Basic Info**

SSID Name:

Wireless Vlan ID:  (0-4094, 0 is used to disable VLAN tagging.)

SSID Broadcast:  Enable

Security Mode:

Version:  Auto  WPA-PSK  WPA2-PSK

Encryption:  Auto  TKIP  AES

Wireless Password:

Group Key Update Period:  seconds(30-8640000,0 means no upgrade.)

Portal:  Enable

SSID Isolation:  Enable

Access Control Rule:

**Rate Limit**

Similarly, add another SSID as the following figure shows.

Figure 2-20 Add SSID2

**Add 2.4GHz SSID**

**Basic Info**

SSID Name:

Wireless Vlan ID:  (0-4094, 0 is used to disable VLAN tagging.)

SSID Broadcast:  Enable

Security Mode:

Version:  Auto  WPA-PSK  WPA2-PSK

Encryption:  Auto  TKIP  AES

Wireless Password:

Group Key Update Period:  seconds(30-8640000,0 means no upgrade).

Portal:  Enable

SSID Isolation:  Enable

Access Control Rule:

**Rate Limit**

- 3) Choose the menu **Wireless Control > Portal** to load the following page. Specify the authentication type as **Hotspot**. Click **Apply**.

Figure 2-21 Configure the Portal

Authentication Type:

[Hotspot Manager](#)

Redirect:  Enable

Redirect URL:

**Login Page**

Portal Title:

Term of Use:

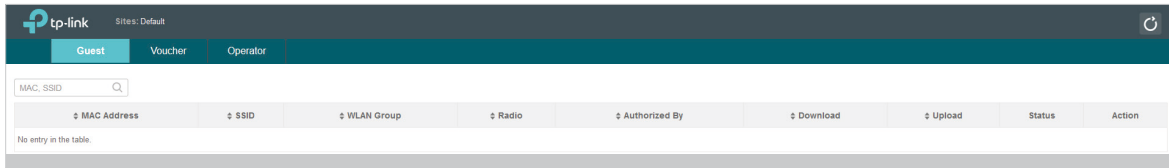
Logo Image: Best aspect ratio 1:1; Size 100KB;

Background Image: Best aspect ratio 3:5; Size 2MB ;

Preview Login Page: [Preview Login Page](#)

- 4) Choose the menu **Wireless Control > Portal** and click **Hotspot Manager** to load the following page.

Figure 2-22 Launch the Hotspot Manager



- 5) Choose the menu **Voucher** and click **Create Vouchers** to load the following page. Specify the amount of the vouchers according to your needs. Click **Apply**.

Figure 2-23 Create Vouchers

## 2.2 Configuring ACL

After the basic network configuration, all the users in the two SSIDs can access the EAP controller and manage the EAP, which causes network security problems. To ensure only the users in Group 1 can access and manage the EAP Controller, configure the ACL (Access



Control List) function on the switch. Follow these steps to configure the ACL function on the switch.

- 1) Choose the menu **ACL > ACL Config > ACL Create** to load the following page. Specify the ACL ID in the range of extended-IP ACL. Here, we specify the ACL ID as **1500** for example. Click **Apply**.

Figure 2-24 Create ACL

- 2) Choose the menu **ACL > ACL Config > Extend-IP ACL** to load the following page. Select **ACL 1500** as the ACL ID. Specify the rule ID as **1**. Select **Permit** as the operation. Enable **S-IP** and specify the S-IP as **172.16.10.0** and the mask as **255.255.255.0**. Enable **D-IP** and specify the D-IP as **192.168.0.2** and the mask as **255.255.255.0**. Note that the D-IP should be the IP address of the EAP Controller. Select **6 TCP** as the IP protocol. Enable **D-Port** and specify the D-Port as **8088**, which serves for the portal on the EAP Controller. Click **Apply**.

Figure 2-25 Create Extend-IP Rule 1

- 3) Choose the menu **ACL > ACL Config > Extend-IP ACL** to load the following page. Select **ACL 1500** as the ACL ID. Specify the rule ID as **2**. Select **Deny** as the operation. Enable **S-IP** and specify the S-IP as **172.16.10.0** and the mask as **255.255.255.0**. Enable **D-IP** and specify the D-IP as **192.168.0.2** and the mask as **255.255.255.0**. Note that the D-IP should be the IP address of the EAP Controller. Select **All** as the IP protocol. Click **Apply**.

Figure 2-26 Create Extend-IP Rule 2

**Create Extend-IP Rule**

ACL ID: **ACL 1500** (0-1999)

Rule ID: **2** (0-1999)

Operation: **Deny**

Fragment:

S-IP: **172.16.10.0** Mask: **255.255.255.0** (Format: 192.168.0.1)

D-IP: **192.168.0.2** Mask: **255.255.255.0**

IP Protocol: **All**

TCP Flag: URG \*  ACK \*  PSH \*  RST \*  SYN \*  FIN \*

S-Port:

D-Port:

DSCP: **No Limit**

IP ToS: **No Limit** IP Pre: **No Limit**

Time-Range: **No Limit**

**Apply** **Help**

- 4) Choose the menu **ACL > ACL Binding > Port Binding** to load the following page. Select **1500** as the ACL ID and bind the ACL with port 1/0/4, which is connected to the EAP Controller. Click **Apply**.

Figure 2-27 Bind ACL to the Port

**Port-Bind Config**

ACL ID: **1500**

Port:

UNIT: **1**

2 4 6 8 10 12 14 16 18 20 22 24 26 28

1 3 5 7 9 11 13 15 17 19 21 23 25 27

**Apply** **Help**

# 3 Testing the Configuration

After all parts of the configuration are complete, you can test whether access control in multiple SSIDs works normally. Follow these steps to test access control in multiple SSIDs:

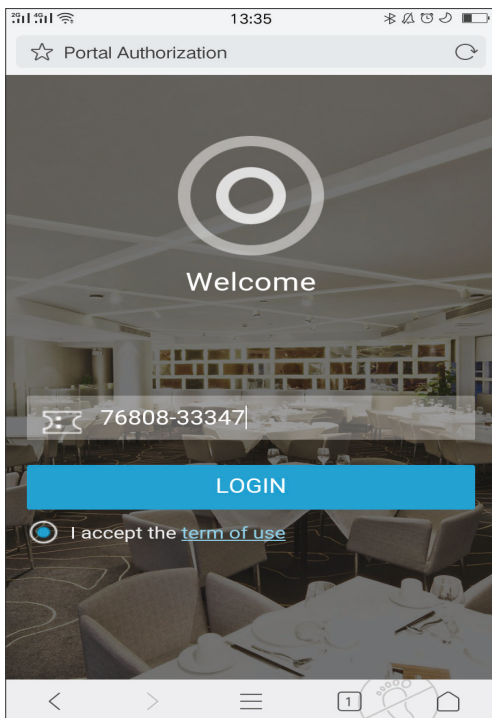
- 1) Test SSID1.
- 2) Test SSID2.

## 3.1 Testing SSID1

Follow these steps to test SSID1:

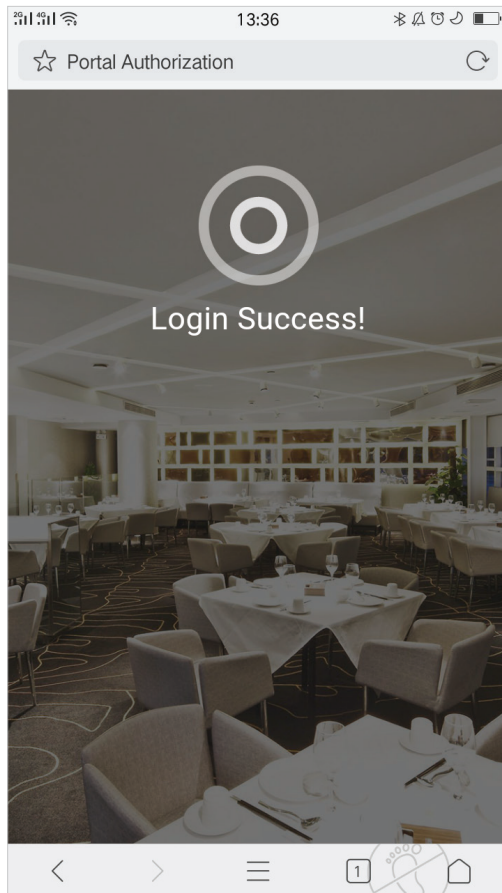
- 1) Connect your smart phone to SSID1. A portal will pop up. If it doesn't, please go to <http://www.tp-link.com> to open the portal in a browser. It will look like this:

Figure 3-1 Launch the Portal Page



- 2) Enter a valid voucher code and click **LOGIN**. When the following page is displayed, you can access the internet after connecting to SSID1.

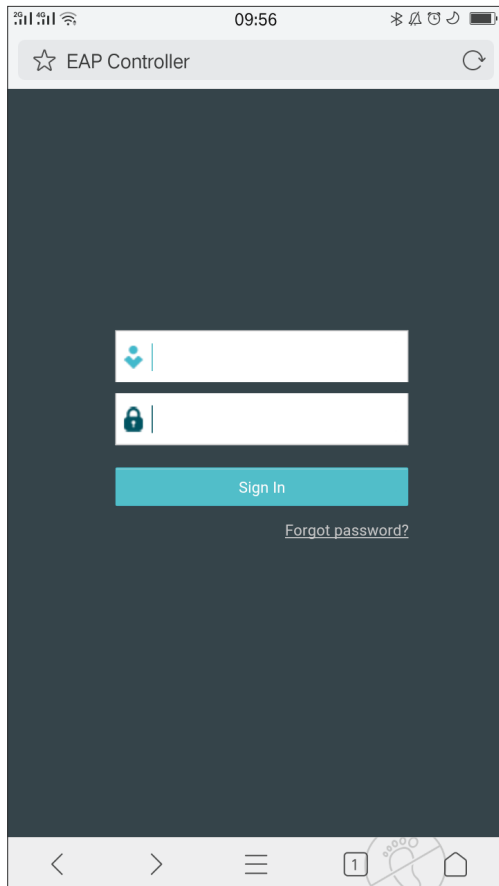
Figure 3-2 Log in



- 3) Enter <https://192.168.0.2:8043> in the address bar of your browser to load the following page. Note that you should enter "https" instead of "http". "192.168.0.2" is the IP address of EAP Controller. "8043" is the EAP Controller service port. Enter your account

name and password to load the EAP Controller web page. You can then access and manage the EAP Controller while connected to SSID1.

Figure 3-3 Access the EAP Controller

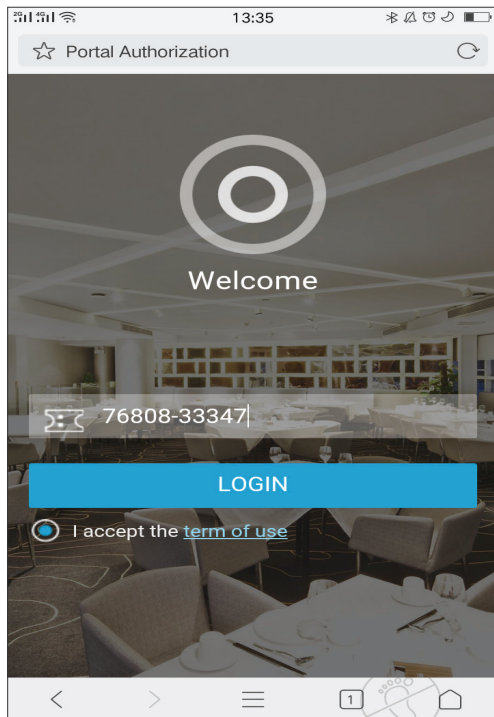


## 3.2 Testing SSID2

Follow these steps to test SSID2:

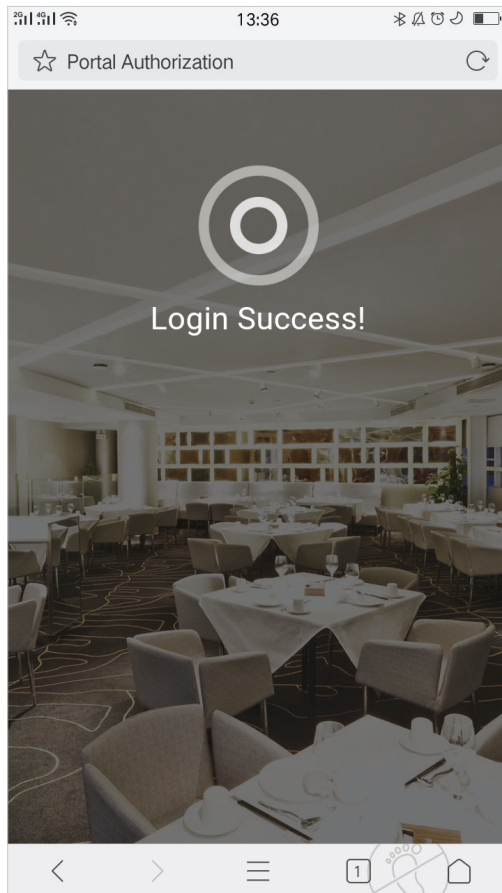
- 1) Connect your smart phone to SSID2. A portal will pop up. If it doesn't, please go to <http://www.tp-link.com> to open the portal in a browser. It will look like this:

Figure 3-4 Launch the Portal Page



- 2) Enter a valid voucher code and click **LOGIN**. When the following page is displayed, you can access the internet after connecting to SSID2.


Figure 3-5 Log in



- 3) Enter <https://192.168.0.2:8043> in the address bar of your browser. You can't access the EAP Controller management webpage while connected to SSID2.

When the steps above are complete, access control in multiple SSIDs should work normally.

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