



# Web Server User Guide

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This document provides a guideline of web configuration for AP mode.

Please note that only IE 8 and chrome browser have been verified.

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# 1 Introduction

This document provides a guideline of how to use web server. There are two ways to use web server, either in AP mode or INTERACTIVE mode. A connection must be established between the browser and the web server before you can access AP configuration page. Firstly, configure the device to AP mode or INTERACTIVE mode with default settings. Secondly, let the Wi-Fi device of the client PC connect to the AP. Finally, open the browser in the client PC and enter correct URL.

## 2 Configurations

### 2.1 Configuration of AP Mode

The following is the configuration about AP mode. CONFIG\_INIT\_NET in main.c is used to enable network stack and Wi-Fi driver. CONFIG\_START\_AP makes Wi-Fi driver automatically change to AP mode and create a network with a pre-defined SSID when system initialization. Set CONFIG\_WPA2 to 1 for WPA2-AES PSK connection. The created network SSID, default channel and passphrase can be pre-defined by AP\_MODE\_SSID, AP\_DEFAULT\_CH and WPA\_PASSPHRASE in main.h.

```
//Config in main.c
#define CONFIG_INIT_NET          1
#define CONFIG_START_STA        0
#define CONFIG_START_AP         1
#define CONFIG_START_MP         0
#define CONFIG_WPA2             0
#define CONFIG_INTERACTIVE_MODE 0
#define CONFIG_DHCP_SERVER      1

//Config in main.h
#define AP_MODE_SSID             "wlan_ap_ssid"
#define AP_DEFAULT_CH           6
#define WPA_PASSPHRASE          "12345678"
#define IP_ADDR0                192
#define IP_ADDR1                168
#define IP_ADDR2                1
#define IP_ADDR3                50
```

IP\_ADDR0, IP\_ADDR1, IP\_ADDR2 and IP\_ADDR3 in main.h define the IP Address of the device AP. Set CONFIG\_DHCP\_SERVER to 1 to enable DHCP server and 0 to use static IP.

## 2.2 Configuration of INTERACTIVE mode

The following is the configuration about INTERACTIVE mode. CONFIG\_INIT\_NET in main.c is used to enable network stack and Wi-Fi driver. CONFIG\_INTERACTIVE\_MODE makes Wi-Fi driver automatically change to INTERACTIVE mode. Set CONFIG\_WPA2 to 1 for WPA2-AES PSK connection.

```
//Config in main.c
#define CONFIG_INIT_NET                1
#define CONFIG_START_STA               0
#define CONFIG_START_AP                0
#define CONFIG_START_MP                0
#define CONFIG_WPA2                    0
#define CONFIG_INTERACTIVE_MODE        1
#define CONFIG_DHCP_SERVER              1
//Config in wifi_interactive_mode.c
#define CONFIG_WEBSERVER                1
```

Set CONFIG\_DHCP\_SERVER to 1 to enable DHCP server and 0 to use static IP. Set CONFIG\_WEBSERVER to 1 to enable wifi\_start\_webserver command in INTERACTIVE mode.

To use web server under INTERACTIVE mode, a wifi\_ap command should be performed first to change Wi-Fi driver to AP mode, another command wifi\_start\_webserver can start web server automatically.

## 2.3 Configuration of Web Server

The following is the configuration for Web Server. Set CONFIG\_WEB\_SERVER to 1 to enable web server and 0 to disable web server. If set CONFIG\_READ\_FLASH to 1, AP settings from the web page will be saved to FLASH Sector 11. After power off/on or reset, AP will be started with these settings. When CONFIG\_READ\_FLASH is set to 0, your new AP settings will disappear after power off/on or reset button pushed.

If you forget your AP settings When CONFIG\_READ\_FLASH is 1, please set CONFIG\_READ\_FLASH to 0, then recompile and re-download IMG to restore default settings.

```
//Config in main.c
#define CONFIG_WEB_SERVER                1

//Config in webserver.c
```

```
#define CONFIG_READ_FLASH
```

```
0
```

## 3 Web Server Introduction

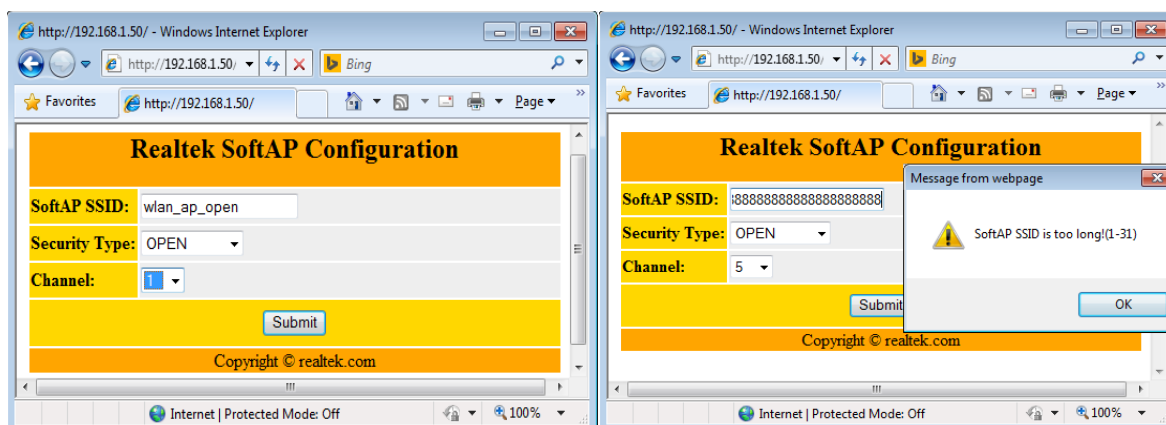
When the Wi-Fi device of the client PC has already connected to the AP, please open browser and enter <http://192.168.1.50/>.

### 3.1 Page of OPEN

When “Security Type” selected “OPEN”, the web page is shown below.

When “Submit” button is clicked, string length of the input SSID will be checked. Only SSID length is between 1 to 31 characters, the page will be posted to the web server successfully.

If nothing changed when “Submit” button is clicked, the page will keep unchanged, but still post the content to the web server. Otherwise, after submitting, page will jump to the Wait Page, and the device AP is going to restart with new settings.

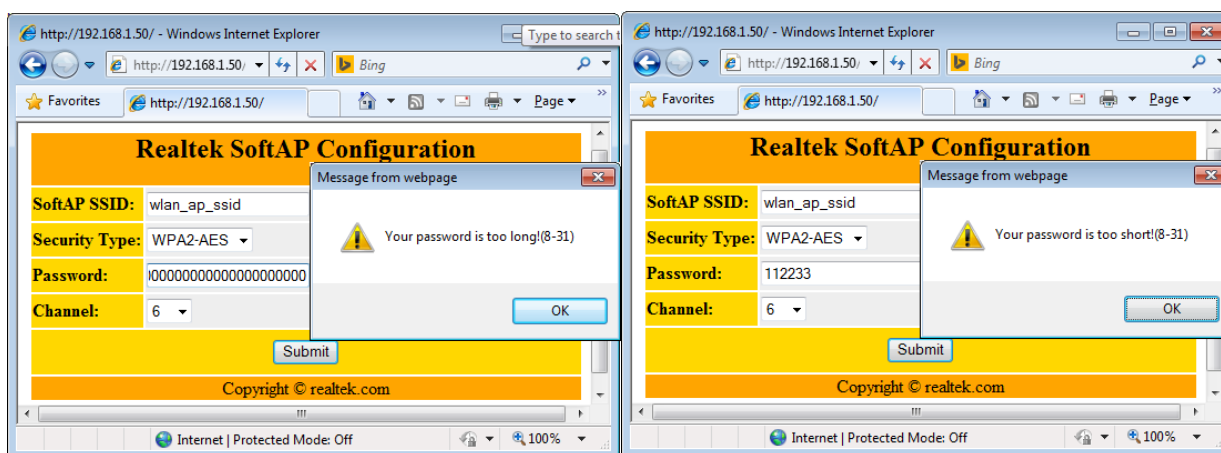
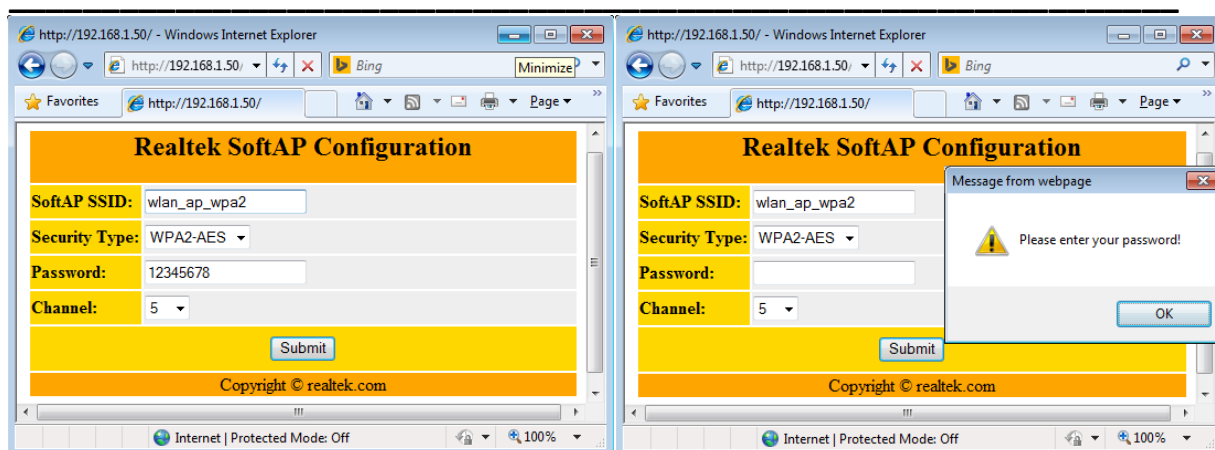


### 3.2 Page of WPA2

When “Security Type” selected “WPA2-AES”, the web page is shown below.

When “Submit” button is clicked, string length of the input SSID and Password will be checked. SSID length should be between 1 to 31 characters and Password length between 8 to 31 characters.

After submitting, page will jump to the Wait Page, and the device AP is going to restart with new settings.



### 3.3 Page of Wait

The Wait Page is shown below. The AP will restart after about 3~5 seconds.

