

TW-EAV510AC(b) Test Case:

➤ Server: TW-EAV510AC(b)

Local IP: 192.168.18.254, WAN IP: 111.251.220.210 (DDNS=billionpqa5.ddns.net)

➤ Client: TW-EAV510AC-LTE

Local IP: 192.168.81.254

■ Case 1: Remote Access:

1.TW-EAV510AC (b) server setting:

1.1.On VPN>OpenVPN Server,please set Port Number: 1194 on default,Tunnel Network: 6.6.6.0/255.255.255.0.

Server Account: test/test and Connection type: Remote Access. Others are as below.

The screenshot shows the 'OpenVPN Server Configuration' page. The left sidebar contains a 'Site contents' menu with options like Status, LAN, WLAN, WAN, Services, VPN, PPTP, L2TP, IPsec, GRE Settings, OpenVPN Server, OpenVPN CA, OpenVPN Client, Advance, Diagnostics, Management, Statistics, Language, Reboot, and Logout. The main content area is titled 'OpenVPN Server Configuration' and includes a description: 'This page is used to configure the parameters for OpenVPN.' The configuration fields are as follows:

- Name:** OVPN_ser
- Active:** ☒ Yes ☐ No
- Port Number:** 1194
- Tunnel Network (Virtual interface):**
 - IP Address:** 6.6.6.0
 - Netmask:** 255.255.255.0
- Local Access Range:**
 - IP Address:** 192.168.18.0
 - Netmask:** 255.255.255.0
 - Interface:** Any
 - Protocol:** TCP
- Cryptographic Suite:**
 - Cipher:** Blowfish in CBC mode
 - HMAC:** SHA1
 - Izo Compression:** Adaptive
 - Keepalive:** Disable
 - Interval:** 0 seconds
- Server Account:**
 - Name:** (empty)
 - Username:** (empty)
 - Connection Type:** ☒ Remote Access ☐ LAN to LAN
 - Peer Network IP:** (empty)
 - Peer Netmask:** (empty)
 - Tunnel:** ☐ Disable ☒ Enable
 - Password:** (empty)

Below the configuration fields is a table titled 'OVPN Server Table' with columns: Edit, Name, Enable, Username, Connection Type, Peer Network IP, Peer Netmask, and Select. The table contains two entries:

Edit	Name	Enable	Username	Connection Type	Peer Network IP	Peer Netmask	Select
<input type="radio"/>	test	Enable	test	Remote Access			<input type="checkbox"/>
<input type="radio"/>	abc	Enable	abc	LAN to LAN	192.168.81.0	255.255.255.0	<input type="checkbox"/>

Buttons for 'Save', 'Add', 'Edit', and 'Delete Selected' are also visible.

1.2. Export TW-EAV510AC(b) CA file and share with client site.

The screenshot shows the 'OpenVPN CA' page. The left sidebar is the same as in the previous screenshot. The main content area is titled 'OpenVPN CA' and includes a description: 'You can view OpenVPN trusted CA and export client.ovpn file here.' The page displays a 'Certificate' section with a long string of text representing the certificate. Below the certificate text, there is a red box containing the text 'Export client.ovpn file' and an 'Export' button.

1.3. Check Status on Status>VPN>OpenVPN.

The screenshot shows the 'OpenVPN Status' page of a TeleWell 3G/LTE Wireless xDSL Firewall Router. The left sidebar contains a tree view with 'Status' expanded, showing 'VPN' and 'OpenVPN' selected. The main content area displays two tables:

OpenVPN Server Status			
Name	Active	Service Port	Tunnel Network
OVPN_ser	Yes	1194	6.6.6.0/255.255.255.0

OpenVPN Client Status				
Connection Name	Active	Server Port	Server Address	Remote Network

2. TW-EAV510AC-LTE client setting

2.1 Load the CA that get from Server site on VPN>OpenVPN>OpenVPN client

The screenshot shows the 'VPN' configuration page of a TeleWell TW-EAV510 AC / LTE Wireless ADSL/VDSL Firewall Router. The left sidebar shows 'VPN' expanded, with 'OpenVPN Client' selected. The main content area displays the 'OpenVPN Client' configuration form:

Parameters:

- Name: [Empty]
- Username: [Empty]
- OpenVPN Server Address: [Empty]
- Protocol: TCP
- Cipher Encryption: BF-CBC
- Certificate Authority: [Empty] (uploadCA button highlighted)
- Import CA: F:\ovpn_client.ovpn (upload button highlighted)
- WAN Interface: Default
- Password: [Empty]
- Izo Compression: [Checked] Enable
- Port Number: 1194
- HMAC Authentication: SHA1
- TLS Authentication: [Unchecked] Enable (uploadTLS button highlighted)

Buttons: Add, Edit / Delete

2.2 Set OpenVPN Client on VPN>OpenVPN>OpenVPN client.

Input username/password=test/test and Server IP as below.

The screenshot shows the 'VPN' configuration page of a TeleWell TW-EAV510 AC / LTE Wireless ADSL/VDSL Firewall Router. The left sidebar shows 'VPN' expanded, with 'OpenVPN Client' selected. The main content area displays the 'OpenVPN Client' configuration form and a table of existing clients:

Parameters:

- Name: test
- Username: test
- OpenVPN Server Address: 111.251.220.210
- Protocol: TCP
- Cipher Encryption: BF-CBC
- Certificate Authority: ovpn_client.ovpn (uploadCA button highlighted)
- WAN Interface: Default
- Password: ****
- Izo Compression: [Checked] Enable
- Port Number: 1194
- HMAC Authentication: SHA1
- TLS Authentication: [Unchecked] Enable (uploadTLS button highlighted)

Buttons: Add, Edit / Delete

Edit	Enable	Name	WAN Interface	OpenVPN Server Address	Protocol	Port Number	Delete
<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	test	default	111.251.220.210	TCP	1194	<input type="checkbox"/>

2.3 Check Status on Status>VPN>OpenVPN.

Status

Summary

WAN

Statistics

Bandwidth Usage

3G/4G/LTE Status

Route

ARP

DHCP

VPN

IPSec

PPTP

L2TP

OpenVPN

GRE

Log

Load Balance Status

Quick Start

Configuration

VPN

Advanced Setup

Language

Status

OpenVPN Status

OpenVPN Server

Name	Enable	Status	Connection Type	Peer Network IP	Server IP	Connect By	Action
OpenVPN Client							
Name	Enable	Status	Peer Network IP	Client IP	Action		
test	✓	Connected	192.168.18.0 (111.251.220.210)	6.6.6.2	Disconnect		

Refresh

2.4 Check Result.

Ping Server IP: 192.168.18.254

```

C:\Users\FAE>ping 192.168.18.254

Pinging 192.168.18.254 with 32 bytes of data:
Reply from 192.168.18.254: bytes=32 time<1ms TTL=64
Reply from 192.168.18.254: bytes=32 time<1ms TTL=64
Reply from 192.168.18.254: bytes=32 time=1ms TTL=64
Reply from 192.168.18.254: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.18.254:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

```

Ping Remote PC IP: 192.168.18.1

```

C:\Users\FAE>ping 192.168.18.1

Pinging 192.168.18.1 with 32 bytes of data:
Reply from 192.168.18.1: bytes=32 time<1ms TTL=128
Reply from 192.168.18.1: bytes=32 time<1ms TTL=128
Reply from 192.168.18.1: bytes=32 time<1ms TTL=128
Reply from 192.168.18.1: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.18.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

```

■Case2: LAN to LAN

1.TW-EAV510AC (b) server setting:

1.1 On VPN>OpenVPN Server,please set Port Number=1194 on default.Tunnel Network: 6.6.6.0/255.255.255.0.

Server Account: abc/abc and Connection type: LAN to LAN. Others are same as below.

TeleWell

3G/LTE Wireless xDSL Firewall Router

Site contents

- Status
- Device
- 3G/4G LTE Status
- AP Neighbor
- IPv6
- VPN
 - PPTP
 - L2TP
 - IPsec
 - OpenVPN
- LAN Port
- ARP Table
- DHCP
- MAC Address
- System Log
- LAN
- WLAN
- WAN
- Services

OpenVPN Status

OpenVPN Server Status				
Name	Active	Service Port	Tunnel Network	
OVPN_ser	Yes	1194	6.6.6.0/255.255.255.0	

OpenVPN Client Status				
Connection Name	Active	Server Port	Server Address	Remote Network

2. TW-EAV510AC-LTE client setting.

2.1 Load the CA that get from Server site on VPN>OpenVPN>OpenVPN client.

TeleWell

TW-EAV510 AC / LTE Wireless ADSL/VDSL Firewall Router

Status

Quick Start

Configuration

VPN

- IPSec
- VPN Account
- Exceptional Rule Group
- PPTP
- L2TP
- OpenVPN
 - OpenVPN Server
 - OpenVPN CA
 - OpenVPN Client
- GRE

Advanced Setup

Language

VPN

OpenVPN Client

Parameters

Name

Username

OpenVPN Server Address

Protocol

TCP

Cipher Encryption

BF-CBC

Certificate Authority

uploadCA

Import CA

F:\ovpn_client.ovpn

Import

Upload

Add

Edit / Delete

WAN Interface

Default

Password

Izo Compression

Enable

Port Number

1194

HMAC Authentication

SHA1

TLS Authentication

Enable

uploadTLS

2.2 Set OpenVPN Client on VPN>OpenVPN>OpenVPN client.

Input username/password=abc/abc and Server DDNS=billionpqa5.ddns.net as below.

Status

Quick Start

Configuration

VPN

- IPSec
- VPN Account
- Exceptional Rule Group
- PPTP
- L2TP
- OpenVPN
 - OpenVPN Server
 - OpenVPN CA
 - OpenVPN Client
- GRE

Advanced Setup

Language

VPN

OpenVPN Client

Parameters

Name

abc

Username

abc

OpenVPN Server Address

billionpqa5.ddns.net

Protocol

TCP

Cipher Encryption

BF-CBC

Certificate Authority

ovpn_client.ovpn

uploadCA

Add

Edit / Delete

WAN Interface

Default

Password

...

Izo Compression

Enable

Port Number

1194

HMAC Authentication

SHA1

TLS Authentication

Enable

uploadTLS

Edit	Enable	Name	WAN Interface	OpenVPN Server Address	Protocol	Port Number	Delete
<input checked="" type="radio"/>	<input checked="" type="checkbox"/>	abc	default	billionpqa5.ddns.net	TCP	1194	<input type="checkbox"/>

2.3 Check Status



Status

▼ Status

• Summary

• WAN

• Statistics

• Bandwidth Usage

• 3G/4G/LTE Status

• Route

• ARP

• DHCP

▼ VPN

• IP Sec

• PPTP

• L2TP

• OpenVPN

• GRE

• Log

• Load Balance Status

Status

▼ OpenVPN Status

OpenVPN Server ▼

Name ▼	Enable	Status	Connection Type	Peer Network IP	Server IP	Connect By	Action
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OpenVPN Client ▼

Name	Enable	Status	Peer Network IP	Client IP	Action
abc	✓	Connected	192.168.18.0 (billionpqa5.ddns.net)	6.6.6.2	<div>Disconnect</div>

Refresh

2.4 Check Result.

Ping Server IP: 192.168.18.254

```
C:\Users\FAE>ping 192.168.18.254

Pinging 192.168.18.254 with 32 bytes of data:
Reply from 192.168.18.254: bytes=32 time<1ms TTL=64
Reply from 192.168.18.254: bytes=32 time<1ms TTL=64
Reply from 192.168.18.254: bytes=32 time=1ms TTL=64
Reply from 192.168.18.254: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.18.254:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Ping Remote PC IP: 192.168.18.1

```
C:\Users\FAE>ping 192.168.18.1

Pinging 192.168.18.1 with 32 bytes of data:
Reply from 192.168.18.1: bytes=32 time<1ms TTL=128
Reply from 192.168.18.1: bytes=32 time<1ms TTL=128
Reply from 192.168.18.1: bytes=32 time<1ms TTL=128
Reply from 192.168.18.1: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.18.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```