




# User Guide

802.1X Client Software



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# 802.1X Client Software

The IEEE 802.1x port-based authentication on the TP-Link switch prevents unauthorized clients from accessing the network. 802.1x operates in the typical client/server model. When using the TP-Link switch as the authenticator system, please read this user guide to acquire information about the installation and configuration of the 802.1X Client Software.

## 1 Installation

### 1. Typical Topology

The 802.1x architecture consists of three entities: Supplicant System (Client), Authenticator System and Authentication System.



Figure 1-1 802.1x Topology

**Supplicant System:** The supplicant system is an entity in LAN and is authenticated by the authenticator system. The supplicant system is usually a common user terminal computer.

**Authenticator System:** The authenticator system is usually an 802.1X-supported network device, such as this TP-Link switch. It provides the physical or logical port for the supplicant system to access the LAN and authenticates the supplicant system.

**Authentication Server System:** The authentication server system is an entity that provides authentication service to the authenticator system. The server system is normally in the form of a RADIUS server.

The 802.1X client software should be installed on the terminal computer in the Supplicant System.

### 2. Supported Platforms

- 32-bit Windows Server 2008
- 32-bit Windows XP SP3
- 32-bit Windows 7 SP1
- 64-bit Windows 7
- 32-bit Windows 8
- 64-bit Windows 8
- 32-bit Windows 8.1
- 64-bit Windows 8.1

### 3. Installation

The 802.1X Client Software is in the same directory with this User Guide. This software is also available at our official website. Follow the InstallShield Wizard to accomplish the installation.

## 2 Configuration


1. After completing installation, double click the icon  to run the TP-Link 802.1X Client Software. The following screen will appear.



Figure 1-2 TP-Link 802.1X Client

Enter the **Name** and the **Password** for EAP-MD5 or PAP authentication method specified in the Authentication Server. The length of **Name** and **Password** should be less than 31 characters. Try to enter no more than 16 characters as Name and Password if your switch does not support advanced authentication.

2. Select **Advanced Authentication** and click **Advanced Setting** to perform EAP-TLS, EAP-TTLS or PEAP authentication.

#### **Note:**

When using this interface, please ensure that both the TP-Link switch and the authentication server supports the authentication methods in the following figure.

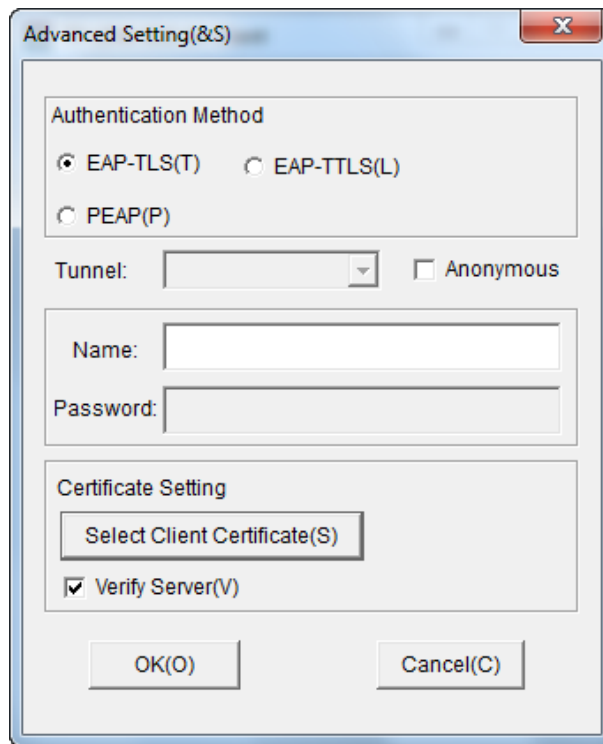


Figure 1-3 Advanced Setting

**Authentication Method:** EAP-TLS, EAP-TTLS or PEAP authentication method can be selected.

**Tunnel:** The authentication methods adopted for EAP-TTLS or PEAP after the TLS secure tunnel is established. For EAP-TTLS, EAP/MSCHAPV2, EAP/MD5, EAP/GTC, MSCHAPV2, MSCHAP, CHAP and PAP can be selected. For PEAP, EAP/MSCHAPV2, EAP/MD5 and EAP/GTC can be selected.

If **Anonymous** is selected, the clients will use anonymous as the identity to initiate the authentication.

**Name/Password:** Name and password for EAP-TTLS, PEAP or EAP-TLS (name required only) authentication method. Both Name and password should be less than 31 characters.

**Certificate Setting:** A client certificate is needed for EAP-TLS authentication. Click to select the certificate.

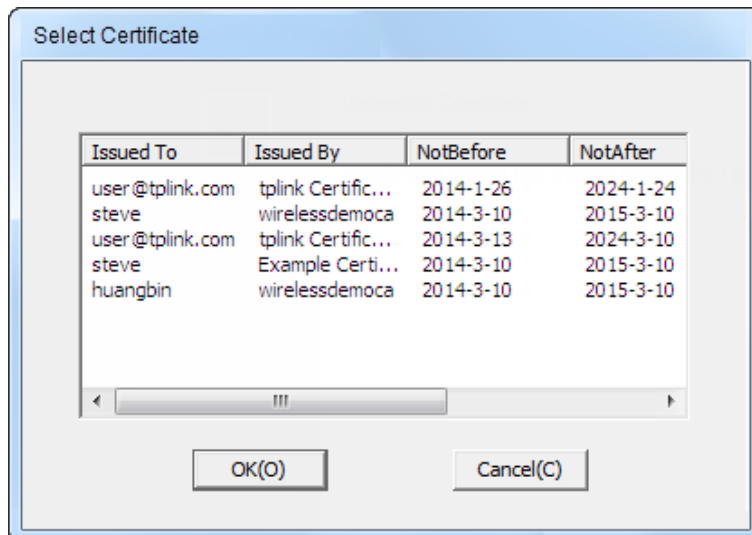


Figure 1-4 Select Certificate

**Verify Server:** Select this option to verify the server certificate.

3. Click the **Properties** button on Figure B-12 to load the following screen for configuring the connection properties.

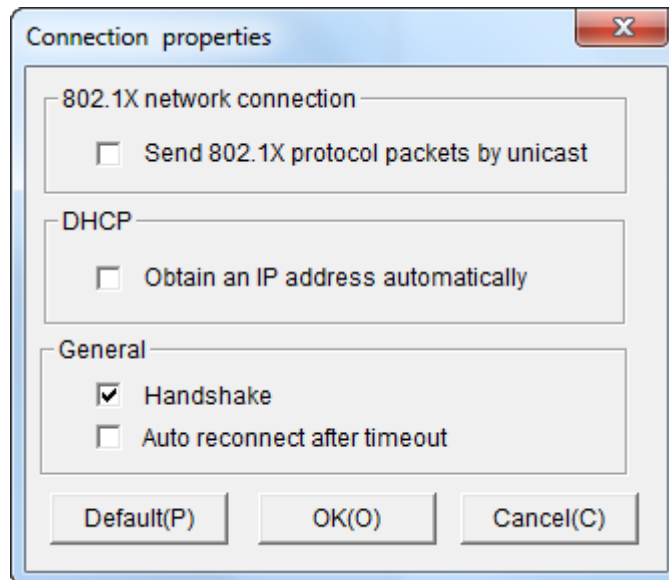


Figure 1-5 Connection Properties

**Send 802.1X protocol packets by Unicast:** When this option is selected, the Client will send the EAPOL Start packets to the switch via multicast and send the 802.1X authentication packets via unicast.

**Obtain an IP address automatically:** Select this option if the Client automatically obtains the IP address from DHCP server. After passing the authentication, the Client can be assigned the IP address by DHCP server. The Client can access the network after getting the new IP address.

**Handshake:** When this option is selected, the notification of network disconnection will pop up after Handshake timeout.

**Auto reconnect after timeout:** Select this option to allow the Client to automatically start the connection again when it does not receive the handshake reply packets from the switch within a period.

- To continue, click **Connect** button after entering the **Name** and **Password** on Figure B-12. Then the following screen will appear to prompt that the Radius server is being searched.

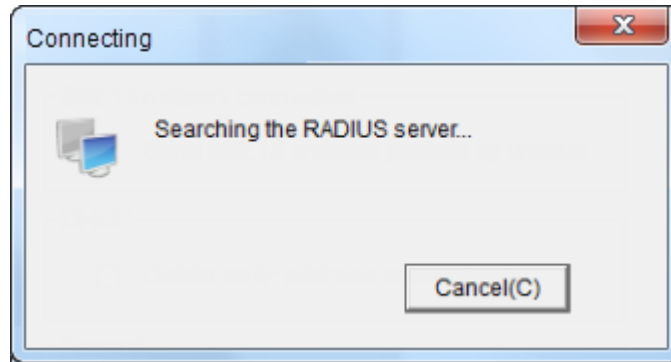


Figure 1-6 Authentication Dialog

- When passing the authentication, the following screen will appear.

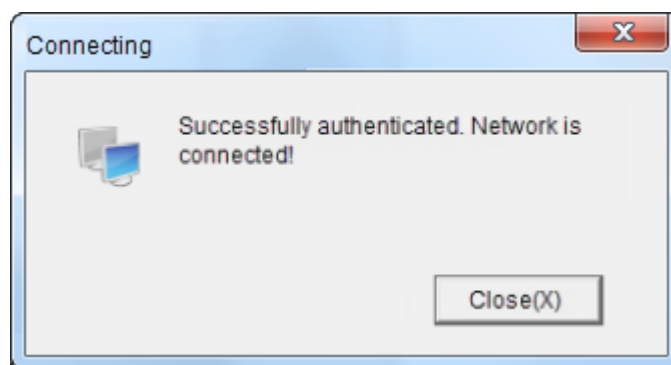



Figure 1-7 Successfully Authenticated

- Double click the icon  on the right corner of desktop, and then the following connection status screen will pop up.

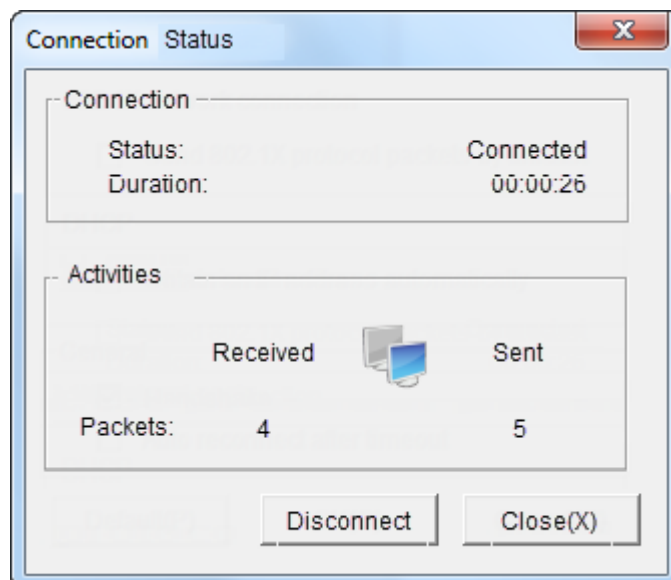
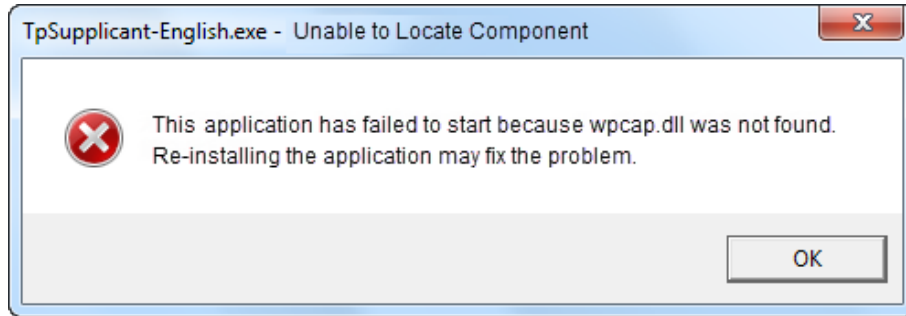


Figure 1-8 Connection Status



### 3 FAQ

**Q1:** Why does this error dialog box pop up when starting up the TP-Link 802.1X Client Software?



**A1:** It's because the supported DLL file is missing. You are suggested to go to <http://www.winpcap.org> to download WinPcap 4.0.2 or the higher version for installation, and run the client software again.

**Q2:** Is this TP-Link 802.1X Client Software compliable with the switches of the other manufacturers?

**A2:** No. This TP-Link 802.1X Client Software is customized for TP-Link switches.

**Q3:** Is it safe to set the password being automatically saved?

**A3:** Yes. The password saved in the configuration files is encrypted.