

# 802.1X Configuration example for TP-LINK 1500G-8T LAN switch

Example of LAN switches supporting 802.1X security: TP-LINK 1500G-8T. Connect to the switch Web configuration interface and configure the switch as described below:

Security/AAA/Dot1x config/ menu	value
Authentication method	radius
Accounting method	radius

tp-link

SYSTEML2 FEATURES L3 FEATURES QoSSECURITYMAINTENANCE

Save Log Out

Access Security >

AAA ▾

• Global Config

• Method Config

• Dot1x Config

• Server Group

• RADIUS Config

• TACACS+ Config

802.1x >

Port Security >

ACL >

IPv4 IMPB >

IPv6 IMPB >

DHCP Filter >

DoS Defend >

Authentication Dot1x Method

Method: default

Pri1: radius

Apply

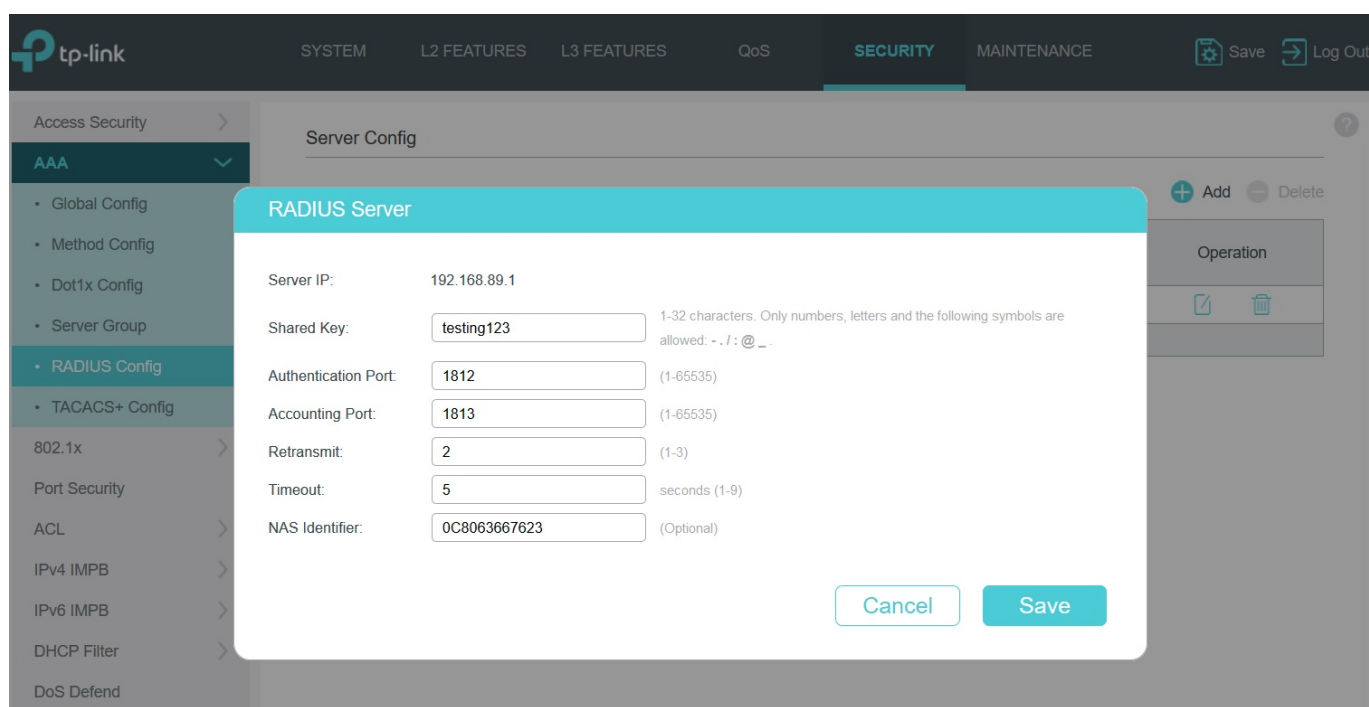
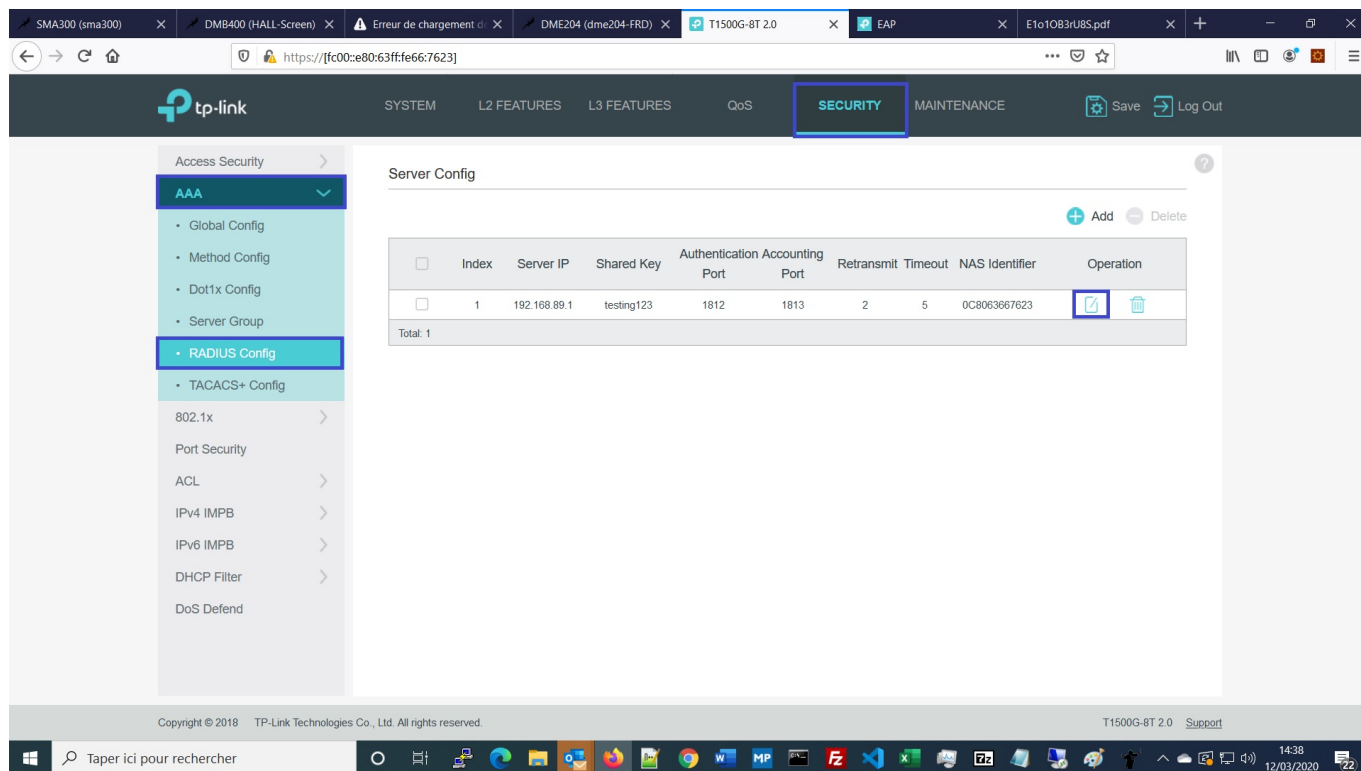
Accounting Dot1x Method

Method: default

Pri1: radius

Apply

Security/AAA/Radius config menu	value
Server IP	<IP_address_of_the_RADIUS_authentication_server> <sup>1</sup>
Shared key	
Authentication port	1812
Accounting port	1813



<sup>1</sup> Warning: the IP address ending with the number 0 (for example, XXX.XXX.XXX.0) may not be supported in the TP-LINK 1500G-8T interface.

<i>Security/802.1x/Global Config</i> menu	value
<i>802.1X</i>	Enabled
<i>Authentication protocol</i>	EAP
<i>Accounting</i>	Enabled

Security/802.1x/Global Config menu value

Handshake	Disabled
VLAN assignment	Disabled

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SYSTEML2 FEATURES L3 FEATURES QoSSECURITYMAINTENANCE

Save Log Out

Access Security >AAA >802.1x >Global ConfigPort ConfigAuthenticator StatePort SecurityACL >IPv4 IMPB >IPv6 IMPB >DHCP Filter >DoS Defend

Global Config

802.1x: ☒ EnableAuthentication Protocol: EAPAccounting: ☒ EnableHandshake: ☐ EnableVLAN Assignment: ☐ Enable

Apply

Security/802.1x/Port Config menu value (for each port number from 2 to 8, except the port number 1 !!!)

Status	Enabled
MAB	Disabled (Enabled for MAC-based authentication instead of login/password)
Guest VLAN	0 (Disabled)
Port Control	Auto
Port Method	MAC based

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SYSTEML2 FEATURES L3 FEATURES QoSSECURITYMAINTENANCE

Save Log Out

Access Security >AAA >802.1x >Global ConfigPort ConfigAuthenticator StatePort SecurityACL >IPv4 IMPB >IPv6 IMPB >DHCP Filter >DoS Defend

Port Config

UNIT1

	Port	Status	MAB	Guest VLAN (0-4094)	Port Control	Port Method	Maximum Request (1-9)	Quiet Period (0-999)	Supplicant Timeout (1-9)
<input type="checkbox"/>	1/0/1	Disable	Disable	0	Auto	MAC Based	3	10	3
<input type="checkbox"/>	1/0/2	Enable	Disable	0	Auto	MAC Based	3	10	3
<input type="checkbox"/>	1/0/3	Enable	Disable	0	Auto	MAC Based	3	10	3
<input type="checkbox"/>	1/0/4	Enable	Disable	0	Auto	MAC Based	3	10	3
<input type="checkbox"/>	1/0/5	Enable	Disable	0	Auto	MAC Based	3	10	3
<input type="checkbox"/>	1/0/6	Enable	Disable	0	Auto	MAC Based	3	10	3
<input type="checkbox"/>	1/0/7	Enable	Disable	0	Auto	MAC Based	3	10	3
<input type="checkbox"/>	1/0/8	Enable	Disable	0	Auto	MAC Based	3	10	3

Total: 8

Check that the switch IPV4 address is the same as the one declared in the **RADIUS** server.

The screenshot shows the TP-Link web interface. The top navigation bar includes 'tp-link', 'SYSTEM' (highlighted), 'L2 FEATURES', 'L3 FEATURES', 'QoS', 'SECURITY', and 'MAINTENANCE'. On the right of the top bar are 'Save' and 'Log Out' buttons. The left sidebar has a 'System Info' dropdown menu with options: System Summary, Device Description, System Time, Daylight Saving Time, System IP (highlighted), System IPv6, User Management, System Tools, EEE, SDM Template, and Time Range. The main content area is titled 'System IP Config'. It contains the following fields: MAC Address (0C-80-63-66-76-23), Management VLAN ID (1, with a range of 1-4094), IP Address Mode (Static, DHCP (selected), BOOTP), IP Address (192.168.1.129, with a format hint), Subnet Mask (255.255.128.0, with a format hint), Default Gateway (192.168.0.1, with a format hint), and DHCP Option 12 (empty, with a hint of 64 characters maximum). An 'Apply' button is at the bottom right. A 'Notes' section at the bottom states: 'Changing IP Address to a different IP segment will interrupt the network communication, so please keep the new IP address in the same IP segment with the local network.'

## Trouble shooting options

- In case authentication issue, check that:
  - your switch is running properly, with the appropriate IP address of the **RADIUS** server properly entered,
  - **802.1X** security is activated for the wished ports