



User Guide

Festa VPN Gateway

This guide uses Festa FR205 as an example

CONTENTS

About This Guide

Intended Readers	1
Conventions.....	1
More Information	1

Accessing the Gateway

Determine the Management Method	3
Web Interface Access.....	4

Configuring Network

Overview	7
Supported Features	7
WAN Configuration	8
Configuring the Number of WAN Ports	8
Configuring the WAN Connection	8
LAN Configuration	18
Configuring the IP Address of the LAN Port.....	18
Configuring the DHCP Server.....	19
Configuring the DHCP Relay	22
Viewing the DHCP Client List.....	22

System Tools

Overview	25
Overview.....	25
Supported Features	25
Management.....	26
Factory Default Restore	26
Reboot	26
Firmware Upgrade.....	26
Controller Settings.....	28
Enable Cloud-Based Controller Management.....	28
Configure Controller Inform URL	28
Diagnostics	29
Remote Assistance	29

About This Guide

This User Guide provides information for managing Festa VPN Gateway in standalone mode. The Standalone mode for Festa devices only supports some basic troubleshooting. For device management, please use the Festa Cloud-Based Controller.

Intended Readers

This Guide is intended for network managers familiar with IT concepts and network terminologies.

Conventions

When using this guide, notice that features available may vary by model and software version. All images, steps, and descriptions in this guide are only examples and may not reflect your actual experience. This guide uses images of the Festa FR205 for demonstration.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute the warranty of any kind, express or implied. Users must take full responsibility for their application of any products.

In this Guide, the following conventions are used:

- The symbol  stands for Note. Notes contain suggestions or references that helps you make better use of your device.
- **Menu Name > Submenu Name > Tab** page indicates the menu structure. **Network > LAN > LAN** means the Interface Statistics page under the Traffic Statistics menu option that is located under the Status menu.
- **Bold** font indicates a button, toolbar icon, menu or menu item.

More Information

- The latest software and documentations can be found at Download Center at <https://www.tp-link.com/support>.
- The Installation Guide (IG) can be found where you find this guide or inside the package of the gateway.
- Specifications can be found on the product page at <https://www.tp-link.com>.
- To ask questions, find answers, and communicate with TP-Link users or engineers, please visit <https://community.tp-link.com> to join TP-Link Community.
- Our Technical Support contact information can be found at the Contact Technical Support page at <https://www.tp-link.com/support>.

Part 1

Accessing the Gateway

CHAPTERS

1. Determine the Management Method
2. Web Interface Access

1 Determine the Management Method

Before building your network, choose a proper method to manage your gateway based on your actual network situation. The gateway supports two configuration options: Standalone Mode or Controller Mode.

Firstly, you should configure the gateway in Standalone mode to connect it to the internet, then you can manage it in controller mode via Festa SDN Controller.

■ Controller Mode

If you want to configure and manage a large-scale network centrally, which consists of mass devices such as access points, switches, and gateways, Controller Mode is recommended. In Controller Mode, the gateway can be centrally configured and monitored via Festa SDN Controller.

To prepare the gateway for Festa SDN Controller Management, refer to Controller Settings. For detailed instructions about the network topology in such situations and how to use Festa SDN Controller, refer to the User Guide of Festa SDN Controller. The guide can be found on the download center of our official website: <https://www.tp-link.com/support/download/>.

■ Standalone Mode

In Standalone Mode, you can access and manage the gateway using the GUI (Graphical User Interface, also called web interface in this text).

This User Guide introduces how to configure the gateway in Standalone Mode.

Note:

The GUI is inaccessible while the gateway is managed by a controller. To turn the gateway back to Standalone Mode and access its GUI, you can forget the gateway on the controller or reset the gateway.

2 Web Interface Access

The following example shows how to log in via the web browser.

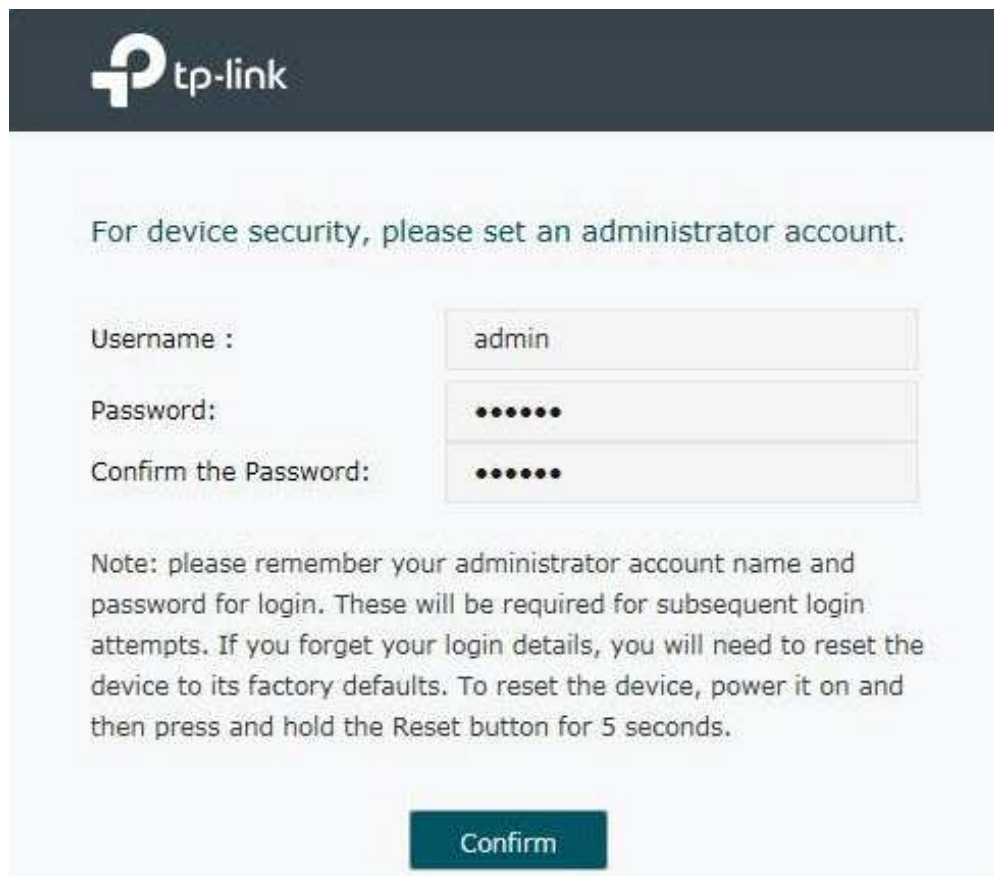
- 1) Connect a PC to a LAN port of the gateway with an RJ45 port properly. If your computer is configured with a fixed IP address, change it to "Obtain an IP address automatically".
- 2) Open a web browser and type the default management address `http://192.168.0.1` in the address field of the browser, then press the Enter key.

Figure 2-1 Enter the gateway's IP Address In the Browser

A screenshot of a web browser's address bar. It features a globe icon on the left, followed by the text "192.168.0.1" in a standard sans-serif font. The entire address bar is enclosed in a thin grey border.

- 3) Create a username and a password for subsequent login attempts.

Figure 2-2 Create a Username and a Password

A screenshot of the TP-Link web interface for creating an administrator account. At the top, there is a dark grey header with the TP-Link logo. Below the header, the main content area has a light blue background. It starts with the text "For device security, please set an administrator account." in a bold, dark font. Below this text, there are three input fields: "Username :" with the value "admin", "Password:" with masked characters "••••••", and "Confirm the Password:" also with masked characters "••••••". Below the input fields, there is a note in a smaller font: "Note: please remember your administrator account name and password for login. These will be required for subsequent login attempts. If you forget your login details, you will need to reset the device to its factory defaults. To reset the device, power it on and then press and hold the Reset button for 5 seconds." At the bottom of the form, there is a dark teal button with the word "Confirm" in white text.

- 4) Use the username and password set above to log in to the webpage.

Figure 2-3 Login Authentication

The image shows a login authentication form for a TP-Link device. At the top, there is a dark blue header with the TP-Link logo. Below the header, the form is centered on a light gray background. It contains two input fields: 'Username' with the text 'admin' and 'Password' with seven dots. Below these fields are two buttons: 'Log In' and 'Clear'.

- 5) After a successful login, you can configure the function by clicking the setup menu on the left side of the screen.

Part 2

Configuring Network

CHAPTERS

1. Overview
2. WAN Configuration
3. LAN Configuration

1 Overview

The Network module provides basic gateway functions, including WAN connection and LAN settings.

1.1 Supported Features

WAN

WAN ports connect to the internet. You can configure multiple WAN ports for your network. Each WAN port has its own connection type and parameters, which you should configure according to the requirements of your ISP.

LAN

When the LAN ports of the gateway connect to your local network devices, the gateway functions as the gateway, which allows those devices to connect to the internet.

2 WAN Configuration

You can configure multiple WAN ports for your network. Each WAN port can have its own WAN connection, providing link backup and load balancing.

To complete WAN configuration, follow these steps:

- 1) Configure the number of WAN ports.
- 2) Configure the WAN connection.

2.1 Configuring the Number of WAN Ports

Choose the menu **Network > WAN > WAN Mode** to load the following page.

Figure 2-1 Configuring the WAN Mode

WAN Mode

Determine the number of WAN ports according to your needs. To enable a port as WAN port, check the box of the desired port. To configure multiple WAN ports, enable the ports one by one. Only WAN, WAN/LAN, SFP WAN (for certain devices) and USB Modem can function as WAN port.

Note:

Any change to the number of WAN ports may lead your current configurations to be lost. Make sure you have backed up your configurations before proceeding.

2.2 Configuring the WAN Connection

The gateway supports five connection types: **Static IP, Dynamic IP, PPPoE, L2TP, PPTP**, you can choose one according to the service provided by your ISP.

Static IP: If your ISP provides you with a fixed IP address and the corresponding parameters, choose Static IP.

Dynamic IP: If your ISP automatically assigns the IP address and the corresponding parameters, choose Dynamic IP.

PPPoE: If your ISP provides you with a PPPoE account, choose PPPoE.

L2TP: If your ISP provides you with an L2TP account, choose L2TP.

PPTP: If your ISP provides you with a PPTP account, choose PPTP.

 Note:

The number of configurable WAN ports is decided by **WAN Mode**. To configure **Wan Mode**, refer to [Configuring the Number of WAN Ports](#).

■ **Configuring the Dynamic IP**

Choose the menu **Network > WAN > WAN** to load the following page.

Figure 2-2 Configuring the Dynamic IP

Connection Configuration

Connection Type

Dynamic IP

Host Name

(0-50 characters, optional)

Upstream Bandwidth

1000000

Kbps (100-1000000)

Downstream Bandwidth

1000000

Kbps (100-1000000)

MTU

1500

(576-1500)

Primary DNS

(Optional)

Secondary DNS

(Optional)

Vlan

☐ Enable

Vlan ID

4094

(1-4094)

☐ Get IP using Unified DHCP

Connection Status

Disconnected

IP Address

0.0.0.0

Subnet Mask

0.0.0.0

Default Gateway

0.0.0.0

Primary DNS

0.0.0.0

Secondary DNS

0.0.0.0

In the **Connection Configuration** section, select the connection type as Dynamic IP. Enter the corresponding parameters and click **Save**.

Connection Type	Choose the connection type as Dynamic IP if your ISP automatically assigns the IP address.
Host Name	(Optional) Enter a name for the gateway. It is null by default.
Upstream Bandwidth	Specify the upstream bandwidth of the WAN port. The value configured here is the upper limit of the "Maximum Upstream Bandwidth" in Bandwidth Control set on the Festa Cloud-Based Controller, to make "Bandwidth Control" take effect, please ensure this parameter is set correctly.
Downstream Bandwidth	Specify the downstream bandwidth of the WAN port. The value configured here is the upper limit of the "Maximum Downstream Bandwidth" in Bandwidth Control set on the Festa Cloud-Based Controller, to make "Bandwidth Control" take effect, please ensure this parameter is set correctly.

MTU	Specify the MTU (Maximum Transmission Unit) of the WAN port. MTU is the maximum data unit transmitted in the physical network. When Dynamic IP is selected, MTU can be set in the range of 576-1500 bytes. The default value is 1500.
Primary/ Secondary DNS	(Optional) Enter the IP address of the DNS server provided by your ISP.
VLAN	Add the WAN port to a VLAN. Generally, you don't need to manually configure it unless required by your ISP. By default, the WAN port is automatically assigned to a VLAN, and the egress rule of the VLAN is UNTAG, so the packets are transmitted by the WAN port without VLAN tags. If you want the WAN port to transmit packets with VLAN tag, you need to create the corresponding VLAN first and configure its egress rule as TAG, then manually add the WAN port to that VLAN. To create VLANs, go to Festa Cloud-Based Controller.
Get IP using Unicast DHCP	The broadcasting requirement may not be supported by a few ISPs. Select this option if you can not get the IP address from your ISP even with a normal network connection. This option is not required generally.
Connect/ Disconnect	Click the button to active/terminate the connection.

■ **Configuring the Static IP**

Choose the menu **Network > WAN > WAN** to load the following page.

Figure 2-3 Configuring the Static IP

Connection Configuration

Connection Type:

Static IP

IP Address:

Subnet Mask:

Default Gateways:

(Optional)

Upstream Bandwidth:

1000000

Kbps (100-1000000)

Downstream Bandwidth:

1000000

Kbps (100-1000000)

MTU:

1500

(576-1500)

Primary DNS:

(Optional)

Secondary DNS:

(Optional)

Vlan:

☐ Enable

Vlan ID:

1001

(1-1001)

Connection Status

Connection Status:

Disconnected

IP Address:

0.0.0.0

Subnet Mask:

0.0.0.0

Default Gateway:

0.0.0.0

Primary DNS:

0.0.0.0

Secondary DNS:

0.0.0.0

In **Connection Configuration** section, select the connection type as Static IP. Enter the corresponding parameters and click **Save**.

Connection Type	Choose the connection type as Static IP if your ISP has offered you a fixed IP address.
-----------------	---

IP Address	Enter the IP address provided by your ISP.
Subnet Mask	Enter the subnet mask provided by your ISP.
Default Gateway	Enter the default gateway provided by your ISP.
Upstream Bandwidth	Specify the downstream bandwidth of the WAN port. The value configured here is the upper limit of the "Maximum Downstream Bandwidth" in Bandwidth Control set on the Festa Cloud-Based Controller,, to make "Bandwidth Control" take effect, please ensure this parameter is set correctly.
Downstream Bandwidth	Specify the downstream bandwidth of the WAN port. The value configured here is the upper limit of the "Maximum Downstream Bandwidth" in Bandwidth Control set on the Festa Cloud-Based Controller,, to make "Bandwidth Control" take effect, please ensure this parameter is set correctly.
MTU	Specify the MTU (Maximum Transmission Unit) of the WAN port. MTU is the maximum data unit transmitted in the physical network. When Static IP is selected, MTU can be set in the range of 576-1500 bytes. The default value is 1500.
Primary/ Secondary DNS	(Optional) Enter the IP address of the DNS server provided by your ISP.
VLAN	Add the WAN port to a VLAN. Generally, you don't need to manually configure it unless required by your ISP. By default, the WAN port is automatically assigned to a VLAN, and the egress rule of the VLAN is UNTAG, so the packets are transmitted by the WAN port without VLAN tags. If you want the WAN port to transmit packets with VLAN tag, you need to create the corresponding VLAN first and configure its egress rule as TAG, then manually add the WAN port to that VLAN. To create VLANs, go to Festa Cloud-Based Controller.

■ **Configuring the PPPoE**

Choose the menu **Network > WAN > WAN** to load the following page.

Figure 2-4 Configuring the PPPoE

Connection Configuration

Connection Type:

PPPoE

Username:

Password:

Connection Mode:

Connect Automatically

Upstream Bandwidth:

1000000

Kbps (100-1000000)

Downstream Bandwidth:

1000000

Kbps (100-1000000)

MTU:

1492

(576-1492)

MRU:

1492

(576-1492)

MSS Clamping:

Auto

Service Name:

(1-128 characters, optional)

Primary DNS:

(Optional)

Secondary DNS:

(Optional)

Vlan:

☐ Enable

Vlan ID:

4094

(1-4094)

Priority (802.1q):

Connection Status

Connection Status

Disconnected

IP Address

0.0.0.0

Subnet Mask

0.0.0.0

Default Gateway

0.0.0.0

Primary DNS

0.0.0.0

Secondary DNS

0.0.0.0

Secondary Connection

IP Address

0.0.0.0

Subnet Mask

0.0.0.0

In the **Connection Configuration** section, select the connection type as PPPoE. Enter the corresponding parameters and click **Save**.

Connection Type	Choose the connection type as PPPoE if your ISP provides you with a PPPoE account.
Username	Enter the PPPoE username provided by your ISP.
Password	Enter the PPPoE password provided by your ISP.
Connection Mode	Choose the connection mode, including Connect Automatically, Connect Manually and Time-Based. Connect Automatically: The gateway will activate the connection automatically when the gateway reboots or the connection is down. Connect Manually: You can manually activate or terminate the connection. Time-Based: During the specified period, the gateway will automatically activate the connection.
Time	Choose the effective time range when the Connection Mode is chosen as Time-Based . To create the time range, go to Festa Cloud-Based Controller .
Upstream Bandwidth	Specify the upstream bandwidth of the WAN port. The value configured here is the upper limit of the "Maximum Upstream Bandwidth" in Bandwidth Control set on the Festa Cloud-Based Controller, to make "Bandwidth Control" take effect, please ensure this parameter is set correctly.

Downstream Bandwidth	Specify the downstream bandwidth of the WAN port. The value configured here is the upper limit of the "Maximum Downstream Bandwidth" on Transmission > Bandwidth Control > Bandwidth Control page, to make "Bandwidth Control" take effect, please ensure this parameter is set correctly.
MTU	Specify the MTU (Maximum Transmission Unit) of the WAN port. MTU is the maximum data unit transmitted in the physical network. When PPPoE is selected, MTU can be set in the range of 576-1492 bytes. The default value is 1492.
Service Name	(Optional) Enter the service name. This parameter is not required unless provided by your ISP. It is null by default.
Primary/Secondary DNS	(Optional) Enter the IP address of the DNS server provided by your ISP.
VLAN	Add the WAN port to a VLAN. Generally, you don't need to manually configure it unless required by your ISP. By default, the WAN port is automatically assigned to a VLAN, and the egress rule of the VLAN is UNTAG, so the packets are transmitted by the WAN port without VLAN tags. If you want the WAN port to transmit packets with VLAN tag, you need to create the corresponding VLAN first and configure its egress rule as TAG, then manually add the WAN port to that VLAN. To create VLANs, go to Festa Cloud-Based Controller.
Secondary Connection	Secondary connection is required by some ISPs. Select the connection type required by your ISP. None: Select this if the secondary connection is not required by your ISP. Dynamic IP: Select this if your ISP automatically assigns the IP address and subnet mask for the secondary connection. Static IP: Select this if your ISP provides you with a fixed IP address and subnet mask for the secondary connection.
Connect/Disconnect	Click the button to active/terminate the connection.

■ **Configuring the L2TP**

Choose the menu **Network > WAN > WAN** to load the following page.

Figure 2-5 Configuring the L2TP

Connection Configuration

Connection Type:

L2TP

Username:

Password:

Connection Mode:

Connect Automatically

Upstream Bandwidth:

1000000

Kbps (100-1000000)

Downstream Bandwidth:

1000000

Kbps (100-1000000)

MTU:

1460

(576-1460)

MSS Clamping:

Auto

Primary DNS:

(Optional)

Secondary DNS:

(Optional)

Vlan:

☐ Enable

Vlan ID:

4094

(1-4094)

Priority (802.1q):

Secondary Connection:

☒ Dynamic IP ☐ Static IP

VPN Server IP/Domain Name:

IP Address:

Subnet Mask:

Default Gateway:

(Optional)

Connection Status

Connection Status

Disconnected

IP Address

0.0.0.0

Subnet Mask

0.0.0.0

Default Gateway

0.0.0.0

Primary DNS

0.0.0.0

Secondary DNS

0.0.0.0

Secondary Connection

IP Address

0.0.0.0

Subnet Mask

0.0.0.0

Default Gateway

0.0.0.0

Primary DNS

0.0.0.0

Secondary DNS

0.0.0.0

In the **Connection Configuration** section, select the connection type as L2TP. Enter the corresponding parameters and click **Save**.

Connection Type	Choose the connection type as L2TP if your ISP provides you with an L2TP account.
Username	Enter the L2TP username provided by your ISP.
Password	Enter the L2TP password provided by your ISP.
Connection Mode	Choose the connection mode, including Connect Automatically, Connect Manually and Time-Based. Connect Automatically: The gateway will activate the connection automatically when the gateway reboots or the connection is down. Connect Manually: You can manually activate or terminate the connection. Time-Based: During the specified period, the gateway will automatically activate the connection.
Time	Choose the effective time range when the Connection Mode is chosen as Time-Based . To create the time range, go to Festa Cloud-Based Controller .

Upstream Bandwidth	Specify the upstream bandwidth of the WAN port. The value configured here is the upper limit of the "Maximum Upstream Bandwidth" in Bandwidth Control set on the Festa Cloud-Based Controller, to make "Bandwidth Control" take effect, please ensure this parameter is set correctly.
Downstream Bandwidth	Specify the downstream bandwidth of the WAN port. The value configured here is the upper limit of the "Maximum Downstream Bandwidth" in Bandwidth Control set on the Festa Cloud-Based Controller, to make "Bandwidth Control" take effect, please ensure this parameter is set correctly.
MTU	Specify the MTU (Maximum Transmission Unit) of the WAN port. MTU is the maximum data unit transmitted in the physical network. When L2TP is selected, MTU can be set in the range of 576-1460 bytes. The default value is 1460.
Primary/Secondary DNS	(Optional) Enter the IP address of the DNS server provided by your ISP.
VLAN	Add the WAN port to a VLAN. Generally, you don't need to manually configure it unless required by your ISP. By default, the WAN port is automatically assigned to a VLAN, and the egress rule of the VLAN is UNTAG, so the packets are transmitted by the WAN port without VLAN tags. If you want the WAN port to transmit packets with VLAN tag, you need to create the corresponding VLAN first and configure its egress rule as TAG, then manually add the WAN port to that VLAN. To create VLANs, go to Festa Cloud-Based Controller .
Secondary Connection	Select the secondary connection type provided by your ISP. If you select the secondary connection type as Static IP, you need to configure IP Address, Subnet Mask, Default Gateway, Primary/Second DNS. The secondary connection is required for L2TP connection. The gateway will get some necessary information after the secondary connection succeeded. These information will be used in the L2TP connection process.
VPN Server/Domain Name	Enter the VPN Server/Domain Name provided by your ISP.
IP Address	Enter the IP address provided by your ISP for the secondary connection.
Subnet Mask	Enter the subnet mask provided by your ISP for the secondary connection.
Default Gateway	Enter the default gateway provided by your ISP for the secondary connection.
Primary/Secondary DNS	Enter the primary/secondary DNS provided by your ISP for the secondary connection.
Connect/Disconnect	Click the button to active/terminate the connection.

■ **Configuring the PPTP**

Choose the menu **Network > WAN > WAN** to load the following page.

Figure 2-6 Configuring the PPTP

Connection Configuration

Connection Type: PPTP

Username:

Password:

Connection Mode: Connect Automatically

Upstream Bandwidth: 1000000 kbps (100-1000000)

Downstream Bandwidth: 1000000 kbps (100-1000000)

MTU: 1420 (576-1420)

MSS Clamping: Auto

Primary DNS: (Optional)

Secondary DNS: (Optional)

Vlan: ☐ Enable

Vlan ID: 0 (1-4094)

Priority (802.1p):

Secondary Connection: ☒ Dynamic IP ☐ Static IP

VPN Server IP/Domain Name:

IP Address:

Subnet Mask:

Default Gateway: (Optional)

Connection Status

Connection Status: Disconnected

IP Address: 0.0.0.0

Subnet Mask: 0.0.0.0

Default Gateway: 0.0.0.0

Primary DNS: 0.0.0.0

Secondary DNS: 0.0.0.0

Secondary Connection

IP Address: 0.0.0.0

Subnet Mask: 0.0.0.0

Default Gateway: 0.0.0.0

Primary DNS: 0.0.0.0

Secondary DNS: 0.0.0.0

In **Connection Configuration** section, select the connection as PPTP. Enter the corresponding parameters and click **Save**.

Connection Type	Choose the connection type as PPTP if your ISP provides you with a PPTP account.
Username	Enter the PPTP username provided by your ISP.
Password	Enter the PPTP password provided by your ISP.
Connection Mode	Choose the connection mode, including Connect Automatically, Connect Manually and Time-Based. Connect Automatically: The gateway will activate the connection automatically when the gateway reboots or the connection is down. Connect Manually: You can manually activate or terminate the connection. Time-Based: During the specified period, the gateway will automatically activate the connection.
Time	Choose the effective time range when the Connection Mode is chosen as Time-Based . To create the time range, go to Festa Cloud-Based Controller .

Upstream Bandwidth	Specify the upstream bandwidth of the WAN port. The value configured here is the upper limit of the "Maximum Upstream Bandwidth" in Bandwidth Control set on the Festa Cloud-Based Controller, to make "Bandwidth Control" take effect, please ensure this parameter is set correctly.
Downstream Bandwidth	Specify the downstream bandwidth of the WAN port. The value configured here is the upper limit of the "Maximum Downstream Bandwidth" in Bandwidth Control set on the Festa Cloud-Based Controller, to make "Bandwidth Control" take effect, please ensure this parameter is set correctly.
MTU	Specify the MTU (Maximum Transmission Unit) of the WAN port. MTU is the maximum data unit transmitted in the physical network. When PPTP is selected, MTU can be set in the range of 576-1420 bytes. The default value is 1420.
Primary/Secondary DNS	(Optional) Enter the IP address of the DNS server provided by your ISP.
VLAN	Add the WAN port to a VLAN. Generally, you don't need to manually configure it unless required by your ISP. By default, the WAN port is automatically assigned to a VLAN by default, and the egress rule of the VLAN is UNTAG, so the packets are transmitted by the WAN port without VLAN tags. If you want the WAN port to transmit packets with VLAN tag, you need to create the corresponding VLAN first and configure its egress rule as TAG, then manually add the WAN port to that VLAN. To create VLANs, go to Festa Cloud-Based Controller .
Secondary Connection	Select the secondary connection type provided by your ISP. If you select the secondary connection type as Static IP, you need to configure IP Address, Subnet Mask, Default Gateway, Primary/Second DNS. The secondary connection is required for PPTP connection. The gateway will get some necessary information after the secondary connection succeeded. These information will be used in the PPTP connection process.
VPN Server/Domain Name	Enter the VPN Server/Domain Name provided by your ISP.
IP Address	Enter the IP address provided by your ISP for the secondary connection.
Subnet Mask	Enter the subnet mask provided by your ISP for the secondary connection.
Default Gateway	Enter the default gateway provided by your ISP for the secondary connection.
Primary/Secondary DNS	Enter the primary/secondary DNS provided by your ISP for the secondary connection.
Connect/Disconnect	Click the button to active/terminate the connection.

3 LAN Configuration

The LAN port is used to connect to the LAN clients, and works as the default gateway for these clients. You can configure the DHCP server for the LAN clients, and clients will automatically be assigned to IP addresses if the method of obtaining IP addresses is set as "Obtain IP address automatically".

For LAN configuration, you can:

- Configure the IP address of the LAN port.
- Configure the DHCP server.
- Configure the DHCP relay.
- View the DHCP Client List

3.1 Configuring the IP Address of the LAN Port

Choose the menu **Network > LAN > LAN** to load the following page.

Figure 3-1 Configuring the LAN IP Address

Settings

IGMP Proxy:

☒ Enable

IGMP Version:

V2

IGMP Interfaces:

WAN

Save

Note:

IGMP only takes effect when WAN mode is enabled for port WAN.

Network List

	ID	Name	Vlan	IP Address	Subnet Mask	DHCP Server	DHCP Relay	Operation
☐	1	LAN	1	192.168.0.1	255.255.255.0	Enabled	Disabled	

(Optional) With LAN Settings, you can set up IGMP Proxy.

IGMP Proxy	Check the box to enable IGMP Proxy. IGMP Proxy sends IGMP querier packets to the LAN ports to detect if there is any multicast member connected to the LAN ports.
IGMP Version	Choose the IGMP version as V2 or V3. The default is IGMP V2.

Click the Edit button to load the following page. Enter the IP address of the LAN port, and click **OK**.

Network List								
	ID	Name	Vlan	IP Address	Subnet Mask	DHCP Server	DHCP Relay	Operation
☐	1	LAN	1	192.168.0.1	255.255.255.0	Enabled	Disabled	

Name:	LAN
IP Address:	192.168.0.1
Subnet Mask:	255.255.255.0
Mode:	☒ Normal ☐ Bridge
Vlan:	1 (1-4096)

IP Address Enter the IP address of the LAN port.

This IP address is the default gateway of the LAN clients, and the IP addresses of all the LAN clients should be in the same subnet with this LAN IP address.

Subnet Mask Enter the subnet mask of the LAN port.

Mode Specify whether to use a normal VLAN or bridge VLANs. When bridge is selected, you can configure multiple VLANs for devices to access the LAN network.

Vlan Specify the VLAN of the LAN port, only the clients in the specified VLAN can access and manage the gateway.

Note:

- Changing the IP address of LAN port will automatically redirect the browser to the new management page. If the redirecting failed, please try to reconnect your PC to the gateway to automatically get a new IP address, or configure a proper static IP address manually.
- Changing the IP address of the LAN port may affect some related functions, like the IP pool of the DHCP server.

3.2 Configuring the DHCP Server

You can configure an IP address pool for the DHCP server to assign IP addresses. When clients send requests to the DHCP server, the server will automatically assign IP addresses and the corresponding parameters to the clients.

Choose the menu **Network > LAN > LAN** to load the following page. Click the **Edit** button in the **Network List** section.

Figure 3-2 Configuring the DHCP Server

DHCP

DHCP Mode: ☒ DHCP Server ☐ DHCP Relay

Status: ☒ Enable

Starting IP Address:

Ending IP Address:

Lease Time: minutes (1-2880. The default value is 120)

Default Gateway: (Optional)

Default Domain: (Optional)

Primary DNS: (Optional)

Secondary DNS: (Optional)

☐ Advanced Settings

 Add
 Delete

☐	Name	Code	Type	Value	Operation
--	--	--	--	--	--

Select **DHCP Server**, and configure the parameters of the DHCP server, then click **Save**.

Starting/Ending IP Address	Enter the starting IP address and ending IP address of the DHCP server's IP pool. The IP pool defines the IP range that can be assigned to the clients in the LAN. Note: The starting IP address and ending IP address should be in the same subnet with the IP address of the LAN port.
Lease Time	Specify the lease time for DHCP clients. Lease time defines how long the clients can use the IP address assigned by the DHCP server. Generally, the client will automatically request the DHCP server for extending the lease time before the lease expired. If the request failed, the client will have to stop using that IP address when the lease finally expired, and try to get a new IP address from the other DHCP servers.
Default Gateway	(Optional) It is recommended to enter the IP address of the LAN port.
Default Domain	(Optional) Enter the domain name of your network.
Primary/Secondary DNS	(Optional) Enter the DNS server address provided by your ISP. If you are not clear, please consult your ISP.
Status	Check the box to enable the DHCP server.

Click **Advanced Settings** to configure more settings.

Advanced Settings

DHCP NTP Servers: (Input one or two Ip addresses, use "," to divide addresses, Optional)

DHCP Network Boot: (Optional)

DHCP Time Offset: (Optional)

DHCP TFTP Server: (Optional)

DHCP WPAD URL: (Optional)

Option60: (Optional)

Option138: (Optional)

Option150: (Optional)

Option159: (Optional)

Option160: (Optional)

Option176: (Optional)

Option212: (Optional)

+ Add - Delete

	Name	Code	Type	Value	Operation
☐					

DHCP NTP Server

(Option 42) Enter one or two DHCP NTP Server addresses to get the system time from internet. Use "," to divide addresses.

DHCP Network Boot

(Option 67) Enter the value for DHCP Option 67. It specifies the boot file name.

DHCP Time Offset

(Option 2) Enter the time offset of the DHCP client's subnet in seconds from the UTC time.

DHCP WPAD URL

(Option 252) Enter the DHCP WPAD (Web Proxy Auto-Discovery) URL for the DHCP client to configure its proxy settings.

DHCP TFTP Server

(Option 66) Enter the TFTP server address for file transfer.

Option60

(Optional) Enter the value for DHCP Option 60. DHCP clients use this field to optionally identify the vendor type and configuration of a DHCP client. Mostly, it is used in the scenario where the APs apply for different IP addresses from different servers according to the needs. For detailed information, please consult the vendor. For TP-Link, this entry should be TP-Link.

Option138

(Optional) Enter the value for DHCP Option 138. It is used in discovering the devices by the Omada controller.

Option150

(Optional) Enter the value for DHCP Option 150. It specifies the TFTP server information and supports multiple TFTP server IP addresses.

Option159

(Optional) Enter the value for DHCP Option 159. This option is used to configure a set of ports bound to a shared IPv4 address.

Option160	(Optional) Enter the value for DHCP Option 160. This option is used to configure DHCP captive portal.
Option176	(Optional) Enter the value for DHCP Option 176. This option is used to configure parameters for IP phones.
Option242	(Optional) Enter the value for DHCP Option 242. This option is used to provide the TMS address automatically.
Add	Click to add a DHCP option entry

3.3 Configuring the DHCP Relay

If you select DHCP Relay as DHCP Mode, the gateway will relay DHCP requests from LAN clients to the DHCP server in another network. Then the DHCP server will assign IP addresses to the LAN clients. Configure the following parameters.

Choose the menu **Network > LAN > LAN** to load the following page. Click the **Edit** button in the **Network List** section.

Figure 3-3 Configuring the DHCP Relay

DHCP

DHCP Mode:

☐ DHCP Server

☒ DHCP Relay

Status:

☒ Enable

Server Address:

OK

Cancel

Select **DHCP Relay**, and configure the parameters of the DHCP replay, then click **Save**.

Status	Check the box to enable DHCP Relay.
Server Address	Enter the IP address of the DHCP server.

3.4 Viewing the DHCP Client List

Choose the menu **Network > LAN > DHCP Client List** to load the following page.

Figure 3-4 Viewing the DHCP Client List

DHCP Client List					
Total Clients: 0					
ID	Client Name	MAC Address	Assigned IP Address	Lease Time	Operation
--	--	--	--	--	--

Here you can view the DHCP client list.

Client Name	Displays the name of the client.
MAC Address	Displays the MAC address of the client.
Assigned IP Address	Displays the IP address assigned to the client.
Lease Time	Displays the remaining lease time of the assigned IP address. After the lease expires, the IP address will be re-assigned.

Part 3

System Tools

CHAPTERS

1. Overview
2. Management
3. Controller Settings
4. Diagnostics

1 Overview

1.1 Overview

The System Tools module provides several system management tools for users to manage the gateway.

1.2 Supported Features

Management

With this function, you can reset the gateway, reboot the gateway and upgrade the firmware.

Controller Settings

Configure your gateway to be discovered by Festa SDN Controller, then it can be managed centrally via Festa Cloud-Based Controller.

Diagnostics

Enable the Remote Assistance function to get help from the technicians if you fail to solve your network problem.

2 Management

In Management module, you can configure the following features:

- Factory Default Restore
- Reboot
- Firmware Upgrade

2.1 Factory Default Restore

Choose the menu **System Tools > Management > Factory Default Restore** to load the following page.

Figure 2-1 Resetting the Device



Click **Factory Restore** to reset the device.

2.2 Reboot

Choose the menu **System Tools > Management > Reboot** to load the following page.

Figure 2-2 Rebooting the Device



Click **Reboot** to reboot the device.

2.3 Firmware Upgrade

Choose the menu **System Tools > Management > Firmware Upgrade** to load the following page.

Figure 2-3 Configure System Settings



The screenshot shows a web-based interface for firmware management. At the top, there is a header bar labeled "Firmware Upgrade". Below this, the interface displays the current "Firmware Version" as "1.0.0 (Build 20240729 16:14:49)" and the "Hardware Version" as "Festa PR205 v1.0". Under the "New Firmware File:" label, there is a text input field and a "Browse" button. At the bottom of the section, there is an "Upgrade" button.

Select one firmware file and click **Upgrade** to upgrade the firmware of the device.

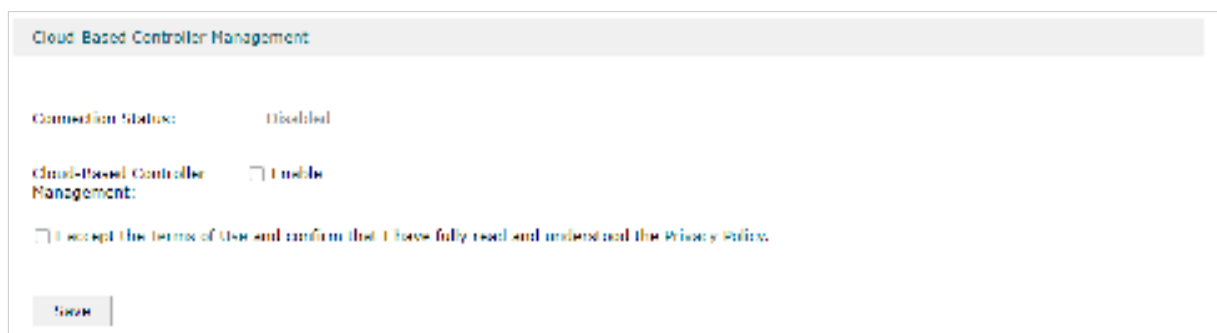
3 Controller Settings

To make your controller adopt your gateway, make sure the gateway is connected to the internet and configure controller Settings enable your gateway to be discovered by the Festa Cloud-Based Controlle.

3.1 Enable Cloud-Based Controller Management

Choose the menu **System Tools > Controller Settings** page. In the Cloud-Based Controller Management section, enable Cloud-Based Controller Management and click **Save**. You can check the connection status on this page.

Figure 3-1 Cloud-Based Controller Management



The screenshot shows the 'Cloud Based Controller Management' section. It includes a 'Connection Status' field set to 'Disabled'. Below it, the 'Cloud-Based Controller Management' checkbox is checked, with the label 'Enable' next to it. At the bottom, there is a checkbox for 'I accept the terms of Use and confirm that I have fully read and understood the Privacy Policy.' and a 'Save' button.

3.2 Configure Controller Inform URL

Choose the menu **System Tools > Controller Settings** page. In the Controller Inform URL section, inform the gateway of the controller's URL/IP address, and click **Save**. Then the gateway makes contact with the controller so that the controller can discover the gateway.

Figure 3-2 Cloud-Based Controller Management



The screenshot shows the 'Controller Inform URL' section. It features a text input field labeled 'Inform URL/IP Address:'. Below the input field is a 'Save' button.

4 Diagnostics

In Diagnostics module, you can configure the following features:

- Remote Assistance

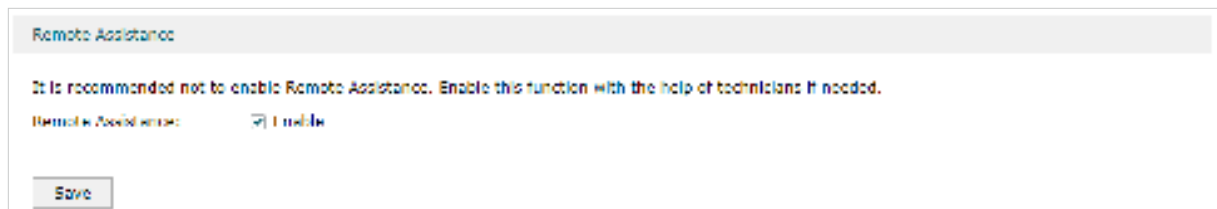
4.1 Remote Assistance

 Note:

Please make contact with the technicians before trying to use this function.

Choose the menu **System Tools > Diagnostics > Remote Assistance** to load the following page.

Figure 4-1 Remote Assistance Page



Check the box and click **Save** to enable the remote assistance function and then the technicians can access your gateway and help to solve the problems by SSH..