

# DHCP Server

The DHCP server is used to automatically assign IP addresses to network devices on the LAN.

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SafeUTM interface allows you to configure a range of IP addresses for automatic assignment, as well as to form static bindings of IP addresses to MAC addresses of these devices. Network devices on the local network must be configured to automatically receive network details from the DHCP server. Thus, clients send a broadcast request to a LAN segment, and the server intercepts and sends responses to these requests containing the necessary settings for the client.

A static IP address must be configured on the local SafeUTM interface participating in the distribution of addresses.

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## Configuring Server

In order to configure DHCP for the local interface, you need to go to **Services -> DHCP server** and click **Add**.

As a rule, the SafeUTM server is the gateway and DNS server for all LAN network devices, so in most cases, the service configuration is limited to determining the range of IP addresses. If necessary, you can specify DNS servers, static routes, and WINS server addresses. The list of DHCP server parameters can be seen in the table below:

\*If **DNS interception** is configured on SafeUTM, then name resolution will be performed using the server specified in the DNS interception settings.

If you set the checkbox in the **Issue IP addresses specified in authorizations via IP without MAC** checkbox, then IP addresses (with the exception of the rule with IP+MAC) used as a user authorization factor (**Authorization** section) will be issued by the DHCP server.

An example of configuring a DHCP server is shown in the screenshot below:

**DHCP server** Stopped ▼

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**Settings**   Binding IP to MAC

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### Configure DHCP server

Select interface

**Subnets of selected interface:**

10.200.1.103/16

IP range

**Add range**

DNS-1    DNS-2

Fields are optional

### Static routes

Host    Gateway

Fields are optional   Fields are optional

**Add route**

### WINS servers

WINS server (optional)

**Add server**

**Save**   **Cancel**

If no value is specified in the DNS-1 or DNS-2 field, then the DNS server will be SafeUTM for all network devices on the local network.

You can enable/disable, edit or delete rules for issuing IP addresses using control buttons in the **Operations** column.

Also, when using a DHCP server, do not forget to move the slider at the top of the screen near the inscription **DHCP server** to the **Enabled** position.

**DHCP server** Working

Settings Binding IP to MAC

Offer IP addresses, used in IP authorization without MAC.  
When enabled, the DHCP server will give out IP addresses to anyone.

+ Add

| Interface       | IP range                  | Operations |
|-----------------|---------------------------|------------|
| Local interface | 10.200.1.200-10.200.1.250 |            |

## Configuring DHCP server with IP Binding to MAC

To configure the binding of the IP address to the MAC address in the DHCP server, follow these steps:

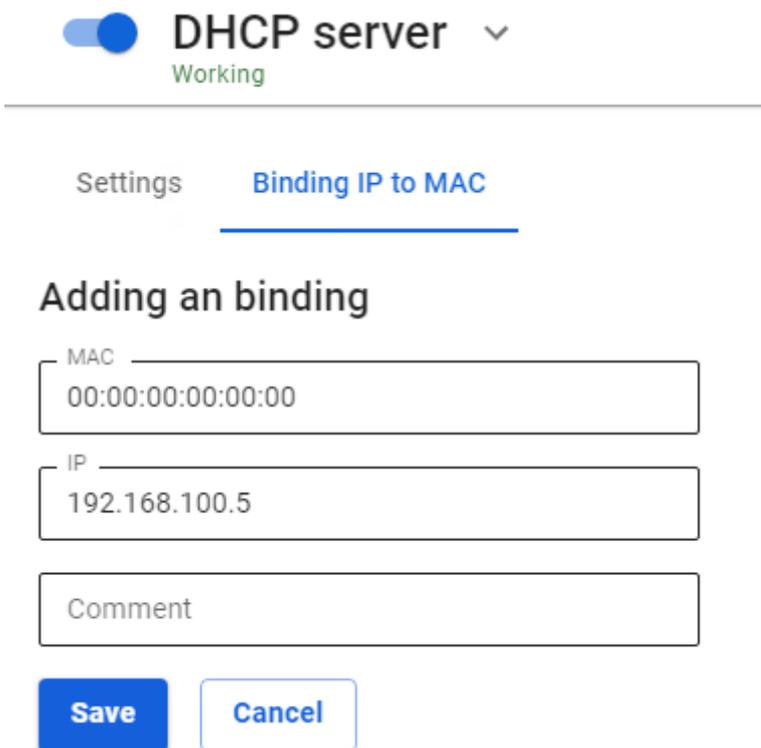
1. In the section **Services** -> **DHCP server** select the tab **Binding IP to MAC**.

**DHCP server** Working

Settings **Binding IP to MAC**

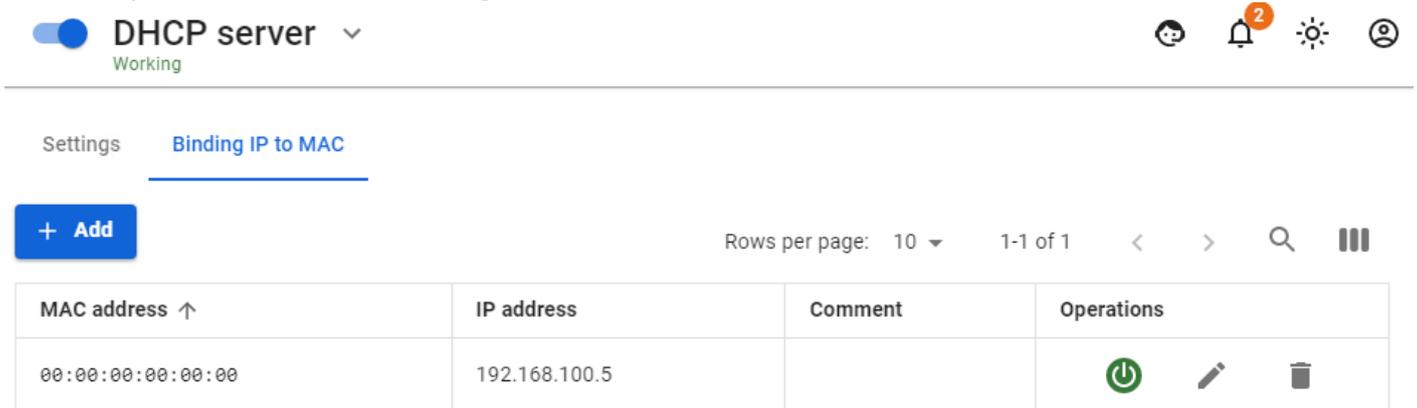
+ Add

2. Create an **IP-to-MAC** binding rule:



The screenshot shows the DHCP server interface with the 'DHCP server' toggle set to 'Working'. The 'Binding IP to MAC' tab is selected. The form contains three input fields: 'MAC' with the value '00:00:00:00:00:00', 'IP' with the value '192.168.100.5', and an empty 'Comment' field. At the bottom, there are 'Save' and 'Cancel' buttons.

An example of the created binding rule is shown in the screenshot below:



The screenshot shows the DHCP server interface with the 'DHCP server' toggle set to 'Working'. The 'Binding IP to MAC' tab is selected. A table displays the binding rules. The table has four columns: 'MAC address', 'IP address', 'Comment', and 'Operations'. The first row shows a MAC address of '00:00:00:00:00:00', an IP address of '192.168.100.5', and an empty comment. The 'Operations' column contains icons for power, edit, and delete.

| MAC address ↑     | IP address    | Comment | Operations  |
|-------------------|---------------|---------|---|
| 00:00:00:00:00:00 | 192.168.100.5 |         |    |

To check the created rule, on the computer with the MAC address specified in the rule, get an IP address via DHCP and check the result using the command `ipconfig /all`

### Tips for configuring clients

Some devices provide a MAC address with hyphenated octets ( 01-02-03-04-05-06 ). In the SafeUTM settings, MAC address octets are separated only by colons ( 01:02:03:04:05:06 ). Therefore, be careful when coordinating the settings of client devices and the DHCP server on SafeUTM.

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