

DHCP Relay configuration example new

[Main Page](#) > [General Information](#) > [Configuration Examples](#) > [Router control and monitoring](#) > **DHCP Relay configuration example new**

The information on this page is updated in accordance with the **00.07.08** firmware version .
firmware version .

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Contents

- [1 Introduction](#)
- [2 Prerequisites & Topology](#)
 - [2.1 Prerequisites](#)
 - [2.2 Topology](#)
- [3 Configuration](#)
 - [3.1 DHCP Server Configuration](#)
 - [3.1.1 LAN Configuration](#)
 - [3.1.1.1 General Settings](#)
 - [3.1.2 Lease Configuration](#)
 - [3.1.3 Static Route Configuration](#)
 - [3.1.3.1 Static IPv4 Routes](#)
 - [3.2 DHCP Relay Configuration](#)
 - [3.2.1 Relay WAN Configuration](#)
 - [3.2.1.1 General Settings](#)
 - [3.2.2 Relay LAN Configuration](#)
 - [3.2.2.1 General Settings](#)
 - [3.2.3 Firewall Rule Configuration](#)
 - [3.2.3.1 Firewall - Traffic Rules - Allow-DHCP-Renew](#)
 - [3.2.4 DHCP Replay Configuration](#)
 - [3.2.4.1 DHCPv4: lan](#)
- [4 Additional notes](#)

Introduction

DHCP Relay is a router that forwards IP addresses from the DHCP Server to the user devices, even if the server is on a different network. The main benefit of this approach is that a single DHCP Server can distribute IP addresses to multiple networks. Bellow you will find an example of how to configure a basic DHCP Relay configuration.

Prerequisites & Topology

Prerequisites

1. For this configuration you will need 2 routers. One as a DHCP Server and the other as a DHCP Relay.
2. DHCP Relay device WAN port needs to be connected to DHCP server LAN port.

Topology

DHCP Relay network settings:

LAN IP/subnet: 192.168.2.1/24

WAN IP: 192.168.4.194

DHCP server network settings:

LAN IP/subnet: 192.168.4.1/24



Configuration

If you're having trouble finding this page or some of the parameters described here on your device's WebUI, you should **turn on "Advanced WebUI" mode**. You can do that by clicking the "Advanced" button, located at the top of the WebUI.



DHCP Server Configuration

LAN Configuration

Open router's **WebUI** → **Network** → **LAN** click  on current available LAN interface configuration:

General Settings

Make the following changes:

1. Enter IPv4 address: **192.168.4.1**



Lease Configuration

Open router's **WebUI** → **System** → **Maintenance** → **CLI**

Enter this command to CLI:

```
echo "dhcp-range=192.168.2.100,192.168.2.200,12h" >> /etc/dnsmasq.conf
```



Static Route Configuration

Open **WebUI** → **Network** → **Routing** → **Static routes**

Static IPv4 Routes

click  and apply this to the route:

1. Select Interface: **lan** | Enter Target: **192.168.2.0** | Enter IPv4-Netmask: **255.255.255.0** | Enter IPv4-Gateway: **192.168.4.194**



DHCP Relay Configuration

Relay WAN Configuration

Open router's **WebUI** → **Network** → **WAN** → **WAN interfaces** click  current available WAN interface configuration:

General Settings

Make the following changes:

1. Select Protocol: **Static**
2. Enter IPv4 address: **192.168.4.194**



Relay LAN Configuration

Open router's **WebUI** → **Network** → **LAN** click  current available LAN interface configuration:

General Settings

Make the following changes:

1. Enter IPv4 address: **192.168.2.1**



Firewall Rule Configuration

Open router's **WebUI** → **Network** → **Firewall** → **Traffic Rules** click  on Allow-DHCP-Renew rule:

Firewall - Traffic Rules - Allow-DHCP-Renew

1. Enter Destination Port: **67**



DHCP Replay Configuration

Open router's **WebUI** → **Network** → **DHCP** → **Server Settings** → **IPv4** → **DHCPv4 servers** click 
current available server interface configuration:

DHCPv4: lan

Make the following changes:

1. Enable: **on**
2. Select DHCPv4 mode: **Relay**
3. Enter DHCP server address: **192.168.4.1**



Additional notes

Note: It's strongly recommended to use static IP configuration for DHCP Relay WAN interface otherwise there might be cases when WAN interface will receive new IP address which will cause static route to stop working.