How to Configure the DHCP Server

https://campus.barracuda.com/doc/13306521/

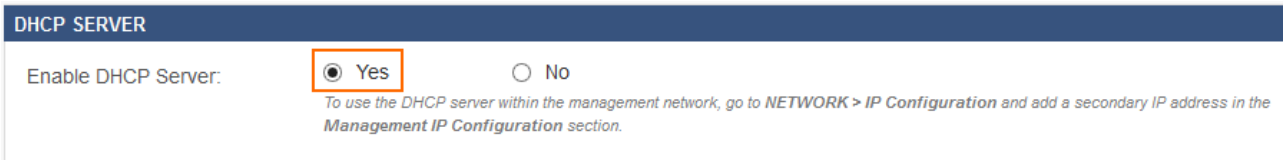
The DHCP server of the Barracuda NextGen Firewall X-Series automatically assigns IP addresses to clients that reside in a defined subnet. This article provides an example of how to configure a DHCP server on the NextGen Firewall X-Series.

Before you begin

Configure a static interface by using the network the DHCP server subnet is in. For more information, see How to Configure Static Network Interfaces

Step 1. Enable the DHCP server

1. Go to the **NETWORK > DHCP Server** page.
2. In the **DHCP Server** section, select **Yes** to enable the DHCP server.



3. Click **Save**.

To use the DHCP server within the management network, go to the **NETWORK > IP Configuration** page and add a secondary IP address in the **Management IP Configuration** section.

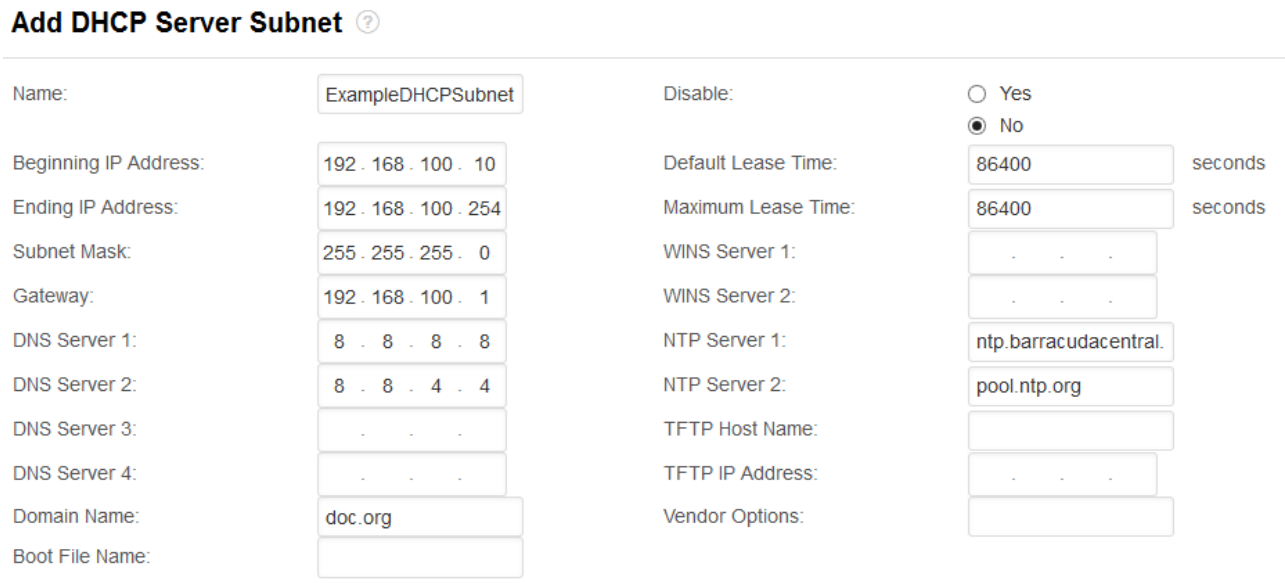
Step 2. Configure the DHCP server subnet

This example configures a DHCP server subnet named LAN that uses an IP range from 192.168.200.150 to 192.168.200.160, a subnet mask of 255.255.255.0, and an NTP server at ntp.barracudacentral.com.

1. Go to the **NETWORK > DHCP Server** page.
2. Click **Add DHCP Server Subnet**. The **Add DHCP Server Subnet** popover opens.
3. Enter the DHCP server subnet settings:
   - **Name** – Enter the Name of the DHCP server subnet.

- **Beginning IP Address** – Enter the first IP address in the DHCP server subnet. E.g., `192.168.200.150`
- **Ending IP Address** – Enter the last IP address in the DHCP server subnet. E.g., `192.168.200.160`
- **Subnet Mask** – Enter the subnet mask. E.g., `255.255.255.0`
- **Gateway** – Enter the gateway IP address. E.g., `192.168.200.200`
- **DNS Server 1** to **4** – Enter the IP address(es) of your DNS server(s).
- **NTP Server 1** to **2** – Enter `ntp.barracudacentral.com`
- **(optional) Vendor Options** – Enter any string containing DHCP options required by your DHCP clients. Make sure to use the exact formatting and delimiters required by your DHCP clients.

4. (optional) Specify the **Default Lease Time** and **Maximum Lease Time**.
5. If you use WINS servers in your network, enter their IP addresses in the **WINS Server 1** and **WINS Server 2** fields.



6. Click **Save**.

Step 3. Configure the client

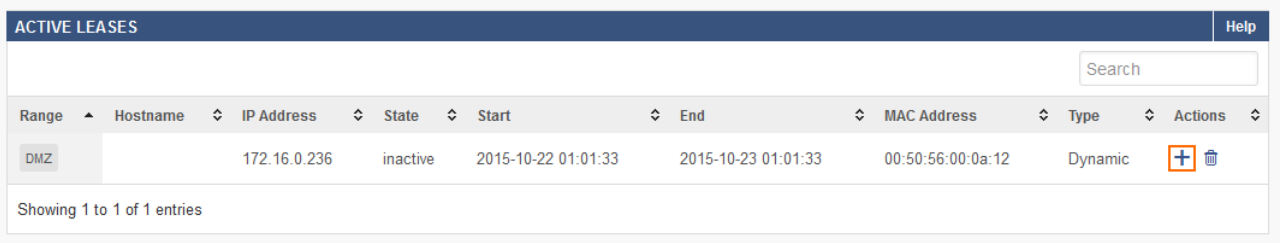
The DHCP server is now ready to assign DHCP leases to connected clients. For clients that currently have manually assigned IP addresses, reconfigure them to receive IP addresses from the DHCP server.

Assigning static IP addresses via DHCP

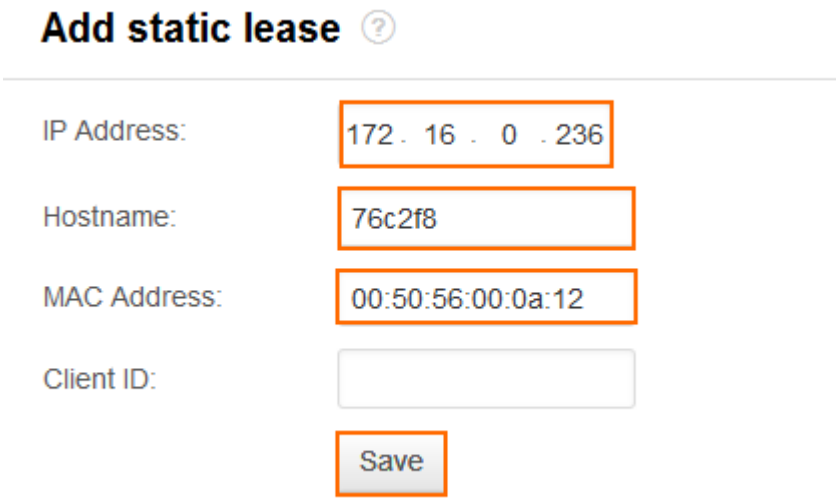
For a client to always receive the same IP address, configure a static DHCP lease. The DHCP server

uses the MAC address to identify the client.

1. In the **ACTIVE LEASES** section, click **+** in the **Actions** column. The **Add DHCP static lease** pop-over window opens.



2. Enter the following settings:
   - **IP Address** – Enter the IP address that you want to assign to the system. Click the plus sign (**+**) next to the address line.
   - **Hostname** – Enter a name for the system to be assigned a static address. For example, `Workstation`.
   - **MAC Address** – Enter the MAC address of the selected system. You can also copy the MAC address from the **Active Leases** section.
   - **(optional) Client ID** – Enter the client identifier for this client.



3. Click **Save**.

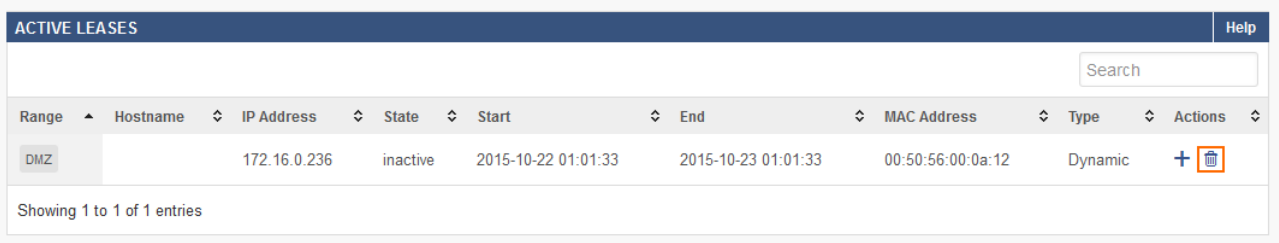
In the **Active Leases** section of the **DHCP Server** window, the IP address lease is displayed as **Static**.

Removing a DHCP lease

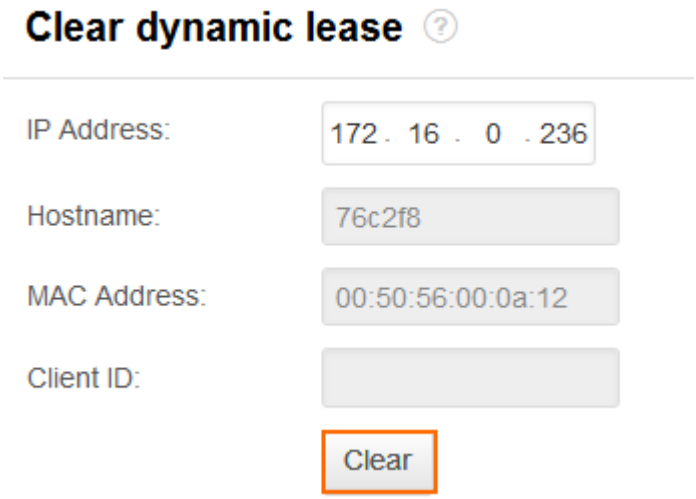
To free up an IP address that is in use for another DHCP lease, you can delete DHCP leases for inactive DHCP clients. Power off or disconnect the client for the DHCP lease to change its state from active to inactive.

You must force the client to renew the DHCP lease after removing the DHCP lease on the X-Series Firewall; otherwise, it will continue using the original lease until the maximum lease time expires. This may result in duplicate IP errors in your network!

1. In the **DHCP Server Subnets** section, click the trashcan icon in the **Actions** column. The **Clear dynamic lease** pop-over window opens.



2. Verify the IP addresses matches the DHCP lease you want to delete, and click **Clear**.



3. Force the client using this DHCP lease to renew the DHCP lease.

Monitoring active leases

In the **Active Leases** section of the **NETWORK > DHCP Server** page, you can monitor active DHCP leases. The information for each lease is displayed in the following columns:

Column	Description
Range	The IP range of the subnet.
Hostname	The hostname of the Windows client.
IP Address	The percentage of actively used IP addresses from the range.
State	The current state of the lease pool and the number of addresses that are in use.
Start	The start lease time of the IP address range.
End	The end lease time of the IP address range.

MAC Address	The MAC address of the client.
Type	The type of the IP address. The IP address can be either **Static** or **Dynamic**.

Figures

1. DHCP_01.png
2. DHCP_02.png
3. dhcp_static_ip00.png
4. dhcp_static_ip01.png
5. dhcp_clear_lease_01.png
6. dhcp_clear_lease_02.png