# How to Configure the DHCP Service

https://campus.barracuda.com/doc/96026069/

Configure the DHCP service and specify a network range from which the IP address for the clients will be assigned. In the advanced settings for DHCP, you can configure additional service availability settings,and set up HA synchronization.

## Configure the DHCP Service

1. Go to **CONFIGURATION > Configuration Tree > Box > Assigned Services > DHCP-Service > DHCP Enterprise Configuration**.
2. Click **Lock**.
3. In the left menu, select **Operational Setup IPv4** or **6**.
4. In the **Address Pool Configuration** window, enable DHCP.
5. Click **+** to add an entry to the **Subnets** table .
6. Enter a descriptive name for the subnet and click **OK**. The **Subnets** configuration window opens.
7. From the **Used Subnet** list, select one of the available IPv4 subnets or select *explicit* and enter the IP address in the **Network Address** field.

   When using IPv6 select *any (stateless dhcp)* to use DHCPv6 to extend IPv6 with DHCP capabilities (assigning domain name or DNS servers).
8. In the **DHCP Server Identifier** field, enter the IP address of the server. This IP address is provided to the client.
9. Click **+** to add a new entry to the **Pool Ranges** table.
10. Specify the following for each range:
    - **IP Begin** – The first IP address in the network range. E.g.: `10.10.10.20`
    - **IP End** – The last IP address in the network range. E.g.: `10.10.10.40`
11. Click **OK**.
12. (optional) Add MAC to IP address mappings to the **Reservations** table:
    1. Enter the **Reserved IP** for the client.
    2. Enter the **MAC Address** of the client.
13. Click **OK**.
14. In the **Router** table, add the default gateway IP address. E.g.: `10.10.10.100`
15. In the **DNS Servers** table, add the DNS server IP address. E.g.: `10.10.10.100`
16. Enter the **Domain Name** if the client range is part of a domain.
17. Enter the **NIS Domain Name** and specify the details required for all servers that should be assigned.
18. In the **Static Route Net** table, click **+** to add static routes that the client should install in its routing cache. If there are multiple routes to the same destination, list them in descending order of priority.
    1. In the **Static Route Net** field, enter the destination IP address.
    2. In the **Static Route GW** field, e nter the IP address of the router.
    3. Click **OK** .

19. Enter the **TFTP Server Name** i f the 'sname' field in the DHCP header has been used for DHCP options.
20. Enter the **TFTP Server IP Address** for Cisco CallManager devices. In this field, you can enter a comma-delimited list of addresses.
21. Enter the **Boot File Name** i f the 'file' field in the DHCP header has been used for DHCP options.
22. If you set the **Barracuda Network Access Clients Policy** of an **Address Pool** to *Barracuda Network Access Clients* or *guests* , add the required info to the **Access Control Service IPs/Names** table for a client to receive valid policy server information.

    > You can add vendor IDs, policy server IP addresses, or DNS resolvable policy server names. If the **Barracuda Network Access Clients Policy** field is set to *none* , the information in the **Access Control Service IPs/Names** table is ignored.

23. For information on dynamic DNS configuration, refer to [How to Configure DHCP with Dynamic DNS](#) .
24. For information on lease configuration, refer to [How to Configure DHCP Parameter Templates](#) .
25. Click **OK**.
26. Click **Send Changes** and **Activate**.

## Check the DHCP Server Status

Click the **DHCP** Tab to check the real-time status of the configured DHCP server.

## Configure Advanced DHCP Settings

1. Go to **CONFIGURATION > Configuration Tree > Box > Assigned Services > DHCP-Service > DHCP Enterprise Configuration** .
2. From the left **Configuration Mode** menu, select **Switch to Advanced View**.
3. Click **Lock**.
4. In the left pane, select **Operational Setup IPv4** or **6**.
5. In the **Address Pool Configuration** window, enable DHCP.
6. Enable **Use Advanced Pool Configuration**. This disables the **Subnets** section and allows configuration of address pools.
7. In the **DHCP Server Identifier** field, enter the name of the server. This name is provided to the client.
8. Enable **Server Is Authoritative**.

    > When the DHCP server receives a DHCPREQUEST message from a DHCP client requesting a specific IP address, the DHCP protocol requires that the server determines whether the IP address is valid for the network to which the client is attached. If the address is not valid, the DHCP server should respond with a DHCPNAK message, forcing the client to acquire a new IP address. To make this determination for IP addresses on a particular network segment, the DHCP server must have complete configuration information for that

network segment. Unfortunately, it is not safe to assume that DHCP servers are configured with complete information. Therefore, the DHCP server normally assumes that it does not have complete information and, thus, is not sufficiently authoritative to safely send DHCPNAK messages as required by the protocol.

9. Select the **UDP Listen Port** on which the DHCP server listens for DHCP requests. By default, the server listens on port 67.
10. For an HA setup, edit the settings in the **HA Synchronization Setup** section to synchronize the DHCP database between both units:
    1. Enable **HA Synchronization** to synchronize the DHCP database between the HA units.
    2. Specify the HA synchronization interval if required (default: 300 seconds).
11. Click **Send Changes** and **Activate**.