Barracuda CloudGen Firewall

How to Configure DHCP Option Templates

https://campus.barracuda.com/doc/17311/

Create DHCP option templates to simplify the configuration of multiple DHCP subnets and apply them to your configured address pools. Extended template settings allow you to integrate vendor details to exchange vendor-specific information and provides the option of configuring additional server settings.

Before You Begin

Before configuring DHCP option templates, enable advanced pool configuration in the DHCP service setup. For more information, see How to Configure Advanced DHCP Settings.

Configure DHCP Option Templates

1. Go to **CONFIGURATION > Configuration Tree > Box > Assigned Services > DHCP > DHCP Enterprise Configuration**.
2. In the left menu, expand Configuration Mode and click **Switch to Advanced View**.
3. In the left menu, select **DHCP Option Templates**.
4. Click **Lock**.
5. In the **DHCP Options** table, click **+** to add an option template.
6. Enter a **Name** for the template and click **OK**. The **DHCP Options** window opens.
7. Select the required **Subnetmask**.
8. In the **Router** table, add the IP addresses of the default gateways.
9. In the **DNS Servers** table, add the IP addresses of the domain name servers.
10. Enter the **Domain Name**.
11. In the **Access Control Service IPs/Names** table, add the required info for a client to receive valid policy server information if you set the **Barracuda Network Access Clients Policy** of an **Address Pool** to *Barracuda Network Access Clients* or *guests.* You can add vendor IDs, policy server IP addresses, or DNS resolvable policy server names.
12. You can also edit the settings in the **Extended Options** section.
13. Click **OK**.
14. Click **Send Changes** and **Activate**.

You can now apply your configured template to your DHCP subnets. For more information, see How to Configure DHCP Subnets and Address Pools.

Extended Options

- **Vendor ID / Raw Vendor ID** – Enter one vendor ID or a semicolon-separated list of two or more vendor IDs. Use ASCII encoded characters (**Vendor ID**) or hexadecimal string (**Raw Vendor ID**) if required.

  > Configuring **Access Control Service IPs/Names** (see above) and **Vendor ID** simultaneously is not valid. The client will receive any policy server information. Only one of the settings can be configured at a time. To provide policy server IP addresses to clients, configure **Access Control Service IPs/Names** instead.

- **Broadcast Address** – The broadcast address.
- **NIS Domain Name** – Enter the domain of the NIS in this field.
- **NIS Server** – In this table, add the IP addresses of the NIS servers.
- **NTP Server** – To enable synchronized times, enter the IP addresses of the NTP servers in this table.
- **WINS Server** – If you are using WINS servers, enter the IP addresses of the servers in this table.
- **NBDD Server** – If you are using NBDD servers, enter the IP addresses of the servers in this table.
- **Netbios Node Type** – If you are using a Linux client, select not-set from this list. Otherwise, you can select one of the following options to allow NetBIOS to configure TCP/IP clients:
  - **b-node** – Broadcast; like clients use broadcast for name registration/resolution. Do not select this option for use with large networks because broadcasts use lots of bandwidth.
  - **p-node** – Point; like client registers itself at the NetBIOS server (point-to-point).
  - **m-node** – Multi; like client first uses b-node. If it fails, p-node is used. Do not select this option for use with large networks because broadcasts use lots of bandwidth.
  - **h-node** – Hybrid; like m-node, but uses p-node first and then b-node (as a last resort).
- **Netbios Scope Id** – If you are using a Linux client, leave this field blank. If you are using NetBIOS Scope IDs (e.g., for isolating NetBIOS traffic or for giving the same name to different computers), enter the ID in this field. The NetBIOS Scope ID is case-sensitive.
- **LPR Server** – If you are using the LPR protocol for Unix systems, enter the IP address of the printer in this field.
- **Log Server** – If you are using a stand-alone log server, enter the IP address of the server in this field.
- **Time Server** – If you are using a time server according to RFC868, enter the IP address of the server in this field.
- **Time Offset** – In this field, enter the client's time offset (in seconds) from UTC. This field also accepts negative values as a relative offset.
- **IEN Name Server** – If you are using an IEN name server, add the IP address of the server to this table.
- **Cookie Server** – If you are using a stand-alone cookie server, add the IP address of the server to this table.
- **Swap Server** – If you are using a separate swap server, enter the IP address of the server in this field.
- **Local Subnets** – To use local subnets, select *true*. Default: *not-set*.
- **Impress Server** – If you are using an image impress server, add the IP address of the server to this table.

- **Resource Location Server** – In this table, add the RFC 887 Resource Location servers that are available to the client. List the servers in order of preference.
- **Perform Mask Discovery** – (not supported with Linux clients) Specifies if a subnet mask discovery is performed. From this list, you can select:
    - **true** – Client uses ICMP for subnet mask discovery.
    - **false** – No subnet mask discovery is to be performed.
    - **not-set** – (default) Deactivates the setting.
- **Perform Router Discovery** – (not supported with Linux clients) Specifies if a router discovery is performed. From this list, you can select:
    - **true** – Client performs ICMP router discovery (according to RFC1256).
    - **false** – No router discovery is to be performed.
    - **not-set** – (default) Deactivates the setting.
- **Static Route Net** – In this table, 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. The routes are made up of IP address pairs. The first address is the destination address. The second address is the router for the destination. The default route (0.0.0.0) is an illegal destination for a static route.
    - In the **Router** field, specify the default route. The following options are available:
        - **Static Route Net** – Enter the destination IP address.
        - **Static Route GW** – Enter the gateway IP address.
- **TFTP Server Name** – If the 'name' field in the DHCP header has been used for DHCP options, enter the TFTP server name in this field.
- **TFTP Server IP Address** – The TFTP server IP addresses for Cisco CallManager devices. In this field, you can enter a comma-delimited list of IP addresses.
- **Proxy Automatic Discovery** – This field lets you specify a Web Proxy Automatic Discovery (WPAD) URL, for example http://foo.com/proxy.pac
- **Boot File Name** – If the 'file' field in the DHCP header has been used for DHCP options, enter the boot file name in this field.