

How to Configure Known Clients

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Configure DHCP client groups and assign hostnames and option templates. Host declarations are matched to actual DHCP or BOOTP clients by matching the dhcp-client-identifier option specified in the host declaration to the one supplied by the client, or, if the host declaration or the client does not provide a dhcp-client-identifier option, by matching the hardware parameter in the host declaration to the network hardware address supplied by the client. BOOTP clients do not normally provide a dhcp-client-identifier, so the hardware address must be used for all clients that may boot using the BOOTP protocol.

Before You Begin

Before configuring known clients for use with the DHCP service, enable advanced pool configuration in the DHCP service setup. For more information, see [How to Configure Advanced DHCP Settings](#).

Configure Known Clients

1. Go to **CONFIGURATION > Configuration Tree > Box > Virtual Servers > your virtual server > Assigned Services > DHCP > DHCP Enterprise Configuration**.
2. In the left menu expand the **Configuration Mode** section and click **Advanced View**.
3. In the left menu, click **Known Clients**.
4. Click **Lock**.
5. In the **Client Groups** table, click **+** and add a client group.
6. Enter a **Name** for the group and click **OK**. The **Client Groups** window opens.
7. From the **Group DHCP Options** list, select the DHCP options template which settings should be used for the group. For more information, see [How to Configure DHCP Option Templates](#).
8. From the **Group Parameters** list, select the DHCP parameter template which settings should be used for the group. For more information, see [How to Configure DHCP Parameter Templates](#).
9. Enable or disable **Automatic Hostname Assignment**. You can select:
 - **true** - For every host declaration of this group of known clients, the name provided for host declaration will be supplied to the client as its hostname.
 - **false** - (default) The setting is disabled.
10. In the **Clients** table, click **+** and add the client group members.
11. Enter a **Name** for the client and click **OK**. The **Clients** window opens.
12. Enter the **DHCP Client Identifier** that identifies the host client when requesting an IP address.

Only the **DHCP Client Identifier** setting and hardware address can be used to match a host declaration. E.g., it is not possible to match a host declaration to a host-name option. This is because the host-name option cannot be guaranteed to be unique for any given client, whereas both, hardware address and DHCP Client Identifier option, are at least

theoretically guaranteed to be unique to a given client.

13. Enter the **MAC Address** of the client required for identification.
14. From the **MAC Type** list, select the type of network card requesting a lease.
15. (optional) Enter the static IP address(es) that are sent to the client in the **Fixed IP Addresses** field.
16. For advanced configuration settings, see the [Advanced Client Assignments](#).
17. Click **OK**.
18. Click **Send Changes** and **Activate**.

Advanced Client Assignments

In the **Advanced Client Assignments** section you can apply templates to be used for your clients and configure advanced settings for server responses and host declaration.

For each client entry, you can edit the following settings:

- **Client DHCP Options** – From this list, select the DHCP options template which settings should be used for the client. For more information, see [How to Configure DHCP Option Templates](#).
- **Client Parameters** – From this list, select the DHCP parameter template which settings should be used for the client. For more information, see [How to Configure DHCP Parameter Templates](#).
- **Allowed Broadcast Reply** – DHCP and BOOTP protocols both require DHCP and BOOTP clients to set the broadcast bit in the flags field of the BOOTP message header. Unfortunately, some DHCP and BOOTP clients do not do this, and therefore may not receive responses from the DHCP server. The DHCP server can be configured to always broadcast its responses to clients by setting this flag to *yes* for the relevant scope; relevant scopes would be inside a conditional statement, as a parameter for a class or as a parameter for a host declaration. In order to avoid creating excessive broadcast traffic on your network, Barracuda Networks recommends that you restrict the use of this option to as few clients as possible.
- **Duplicates Policy** – From this list, you can select either *allow* or *deny*. Host declarations can match client messages based on the **DHCP Client Identifier** option or on the client's network hardware type and MAC address. If the MAC address is used, the host declaration will match any client with that MAC address – even clients with different client identifiers. This is possible when one computer has more than one operating system installed on it. For example, Microsoft Windows and NetBSD or Linux.

This setting tells the DHCP server that if a request is received from a client matching the MAC address of a host declaration or any other lease matching that MAC address, it should be discarded by the server even if the UID is not the same. This does not adhere to the DHCP standard but can prevent clients whose client identifiers change regularly from holding too many leases at the same time.

- **Client Hostname** – If a name is entered, the statement within a host declaration will override the use of the name in the host declaration.
- **DDNS Hostname** – Defines the hostname to be used in setting up the client's A and PTR records; if not specified, the server will derive the hostname automatically, using an algorithm

that varies for each of the different update methods.

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