



How to Configure DHCP with Dynamic DNS

Configure dynamic DNS updates for the Barracuda NextGen Firewall F-Series DHCP service. The DDNS update style is evaluated once after reading the dhcpd.conf file, not each time a client is assigned an IP address. As a result, the same DNS update style is used for all clients.

Before you begin

- Before configuring dynamic DNS, enable advanced pool configuration in the DHCP service setup. For more information, see [How to Configure Advanced DHCP Settings](#).
- Make sure that a DNS service is created and configured on your F-Series Firewall. For more information, see [How to Configure the DNS Service](#).

Step 1. Configure the DNS zones

Configure DNS zones for your clients. If a forward and a reverse lookup must be done, a valid zone must be configured where updates are allowed. A reverse zone is not required if only a forward lookup should be done.

- In the advanced zone properties of the DNS zones used, set the parameter **Allow updates** to the server IP address from where the updates are performed.

The screenshot shows a 'Properties of' dialog box with an 'Advanced' sub-dialog box open. The 'Advanced' dialog has two sections: 'Interface' and 'Security'. The 'Interface' section includes 'notify:', 'also notify:', and 'transfer-source-ip:'. The 'Security' section includes 'allow notify:', 'allow query:', 'allow update:', and 'allow transfer:'. The 'allow update:' field is highlighted with an orange border and contains the IP address '10.0.10.20'. There are 'OK' and 'Cancel' buttons at the bottom of both dialog boxes.

For more information, see [How to Configure DNS Zones](#).

Step 2. Create a DHCP subnet

Create a DHCP subnet for the clients that should receive DDNS updates. For more information, see [How to Configure DHCP Subnets and Address Pools](#).

Step 3. Create a parameter template

Create a DHCP parameter template for the subnet the clients reside in:

- In the **Dynamic DNS Parameters** settings, set **Do Fwd Updates** to **true**.
- For dynamic DNS to work, you must also enter the **DDNS Domainname**.



Dynamic DNS Parameters	
Do Fwd Updates	<input type="text" value="true"/>
Optimized Updates	<input type="text" value="false"/>
Update Static Leases	<input type="text" value="false"/>
DDNS Domainname	<input type="text" value="com"/>
Rev DDNS Domainname	<input type="text"/>

For more information, see [How to Configure DHCP Parameter Templates](#).

Step 4. Configure dynamic DNS

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, select **Dynamic DNS**.
4. Click **Lock**.
5. Select whether to use a **DNS Update Scheme**.
 - When selecting **interim**, choose an option from the **Client Updates** list.

The DHCP server does not necessarily always update both the A and the PTR records. The FQDN (fully qualified domain name) option includes a flag that, when sent by the client, indicates that the client wishes to update its own A record. In that case, the server can be configured either to honor the client's intentions or ignore them. This is done with either the statement "allow client-updates" or "ignore client-updates". By default, client updates are ignored.

6. (optional) In the **Zone Keys** table, click **+** and add the HMAC-MD5 keys for the DNS zones.
7. In the **DNS Zones** table, click **+** and add the DNS zones.
8. Specify the **Zone Type**. You can select:
 - **Forward** – (default) The hostname is looked up.
 - Enter the network of the forward lookup in the **Forward Zone Name** field.
 - **Reverse** – The IP address is looked up.
 - Enter the network of the reverse lookup in the **Reverse Lookup Net/Netmask** fields.
 - **Both** – IP address and hostname are looked up.
 - Enter the network of the forward and reverse lookup in the **Forward Zone Name** and **Reverse Lookup Net/Netmask** fields.
9. Enter the **DNS Server IP** address.
10. Select the **Authentication Key** for the zone that was entered in the **Zone Keys** table.
11. (optional) Click **+** and add additional DNS zones.
12. Click **OK**.
13. Click **Send Changes** and **Activate**.

