

## How to Configure the DNS Caching Service for Queries of Forward and Stub Zones

<https://campus.barracuda.com/doc/79463300/>

The DNS caching service can also serve as a source for delivering information only about the authoritative name servers for a queried zone. The zone at this server must be obtained from another DNS server, the default master DNS, that hosts the zone.

### Step 1. Configure DNS Settings

Do not install both the forwarding/caching DNS (bdns) service and a running DNS service. The forwarding/caching DNS (bdns) configuration will collide with the DNS service.

1. Go to **CONFIGURATION > Configuration Tree > Box > Administrative Settings**.
2. In the left menu, click **DNS Settings**.
3. From the **Configuration Mode** menu, select **Switch to Advanced View**.
4. Click **Lock**.
5. Enter the **Box DNS Domain** that the CloudGen Firewall belongs to.
6. In case there are entries in the **DNS Server IP** table, delete all entries.
7. From the **DNS Query Rotation** list, select **no**.

### Step 2. Configure Caching DNS Service

1. In the left menu, click **Caching DNS Service**.
2. From the **Run Forwarding/Caching DNS** list, select **yes**.
3. From the **Run Slave DNS** list, select **yes**.
4. From the **Query Source Address** list, select which IP address to use as source address when querying the DNS or master DNS servers. You can select one of the following options:
  - **Wildcard (default)** - IP selection is accounted for dynamically according to definitions in the routing table.
  - **VIP (managed firewalls only)** - Uses the firewall's VIP IP address.
  - **MIP** - Uses the system's management IP address, which is the **Main Box IP**.
  - **Other** - Select this check box to explicitly specify an IPv4 or IPv6 address.
5. In the **DNS Query ACL** table, add the single IPv4 / IPv6 addresses or netmasks that can access the DNS service via an app redirect access rule.
6. If necessary, enable **Log DNS Queries** to log every DNS query.
7. Click **+** to add all **Default Master DNS** servers to the table.
8. Click **+** to add a **DNS Slave Zone** entry to serve as the stub zone.

**Caching DNS Settings**

Run Forwarding/Caching DNS:

Run DNS Forwarder:

Run Slave DNS:

Query Source Address:   Other

DNS Query ACL:

Log DNS Queries:

DNS Forwarding:

Name	Active	DNS Forwarder IP
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Default Master DNS:

DNS Slave Zones:

Name	Active Zone	Zone Type
StubZone	yes	Forward Lookup

9. The **DNS Slave Zone** window opens. Enter a name for the stub zone.
10. Click **Ok....**
11. From the **Active Zone** list, select **yes**.
12. From the **Zone Type** list, select **Forward Lookup**.
13. From the **Replication Mode** list, select **QueryForward**.
14. Click **OK**.

**Slave Zone Settings**

Active Zone	<input type="text" value="yes"/>	
Zone Type	<input type="text" value="Forward Lookup"/>	
Replication Mode	<input type="text" value="QueryForward"/>	
DNS Master IP	<div style="border: 1px solid #ccc; height: 50px; width: 100%;"></div>       	
Reverse Lookup Net	<input type="text"/>	
Reverse Lookup Netmask	<input type="text" value="8-Bit"/>	
Transfer Source Address	<input type="text" value="Wildcard"/> <input type="checkbox"/> Other	

- 15. Click **Send Changes**.
- 16. Click **Activate**.

## Figures

1. forward\_stub\_zone\_caching\_dns\_settings.png
2. forward\_stub\_zone\_slave\_zone\_settings.png

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