

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

<https://campus.barracuda.com/doc/71861326/>

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 NextGen 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; padding: 5px;">     </div> <div style="border: 1px solid #ccc; height: 60px; margin-top: 5px;"></div> <div style="border: 1px solid #ccc; padding: 2px 5px; text-align: center;"></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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