



# **Configure a Caching-only DNS Server**

# Agenda

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- What is a Caching Only DNS Server?
- Setting Up a Caching Only DNS Server
- Testing the Deployment



# What's a Caching Only DNS?

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- Why do we need DNS? --- **Name Resolution & Translation**
- Why do we need caching? --- **Faster lookups**
- Caching name servers use '**Unbound**' ( is a validating, recursive, and caching DNS server software ) back in RHEL/CentOS 6.x (where x is version number) we used **BIND** software to configure DNS servers.

# Deploying UNBOUND

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- To Unbound Caching DNS Server will do the following:

1. Before installing 'Unbound' package, we must update the our system to latest version, after that we can install the unbound package.

```
# yum update -y
```

```
# yum install unbound -y
```

2. After package has been installed, make a copy of the unbound configuration file before making any changes to original file.

```
# cp /etc/unbound/unbound.conf  
/etc/unbound/unbound.conf.original
```

```
# vim /etc/unbound/unbound.conf
```

# Deploying UNBOUND

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3. Once the file is opened for editing, make the following changes:

+Interfaces

Search for Interface and enable the interface which we going to use or if our server have multiple interfaces we have to enable the interface 0.0.0.0.

Here Our server IP was 192.168.0.10, So, am going to use unbound in this interface.

Interface 192.168.0.10

# Deploying UNBOUND

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+Enable IPv4 and Protocol Supports

Search for the following string and make it 'Yes'.

do-ip4: yes

do-udp: yes

do-tcp: yes

Enable the logging

+To enable the log, add the variable as below, it will log every unbound activities.

logfile: /var/log/unbound

Hide Identity and Version

# Deploying UNBOUND

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+Enable following parameter to hide id.server and hostname.bind queries.

hide-identity: yes

+Enable following parameter to hide version.server and version.bind queries.

hide-version: yes

Forward Zones

# Deploying UNBOUND

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+Change the forwarders for our requested query not fulfilled by this server it will forward to root domain ( . ) and resolve the query.

forward-zone:

name: "."

forward-addr: 8.8.8.8

forward-addr: 8.8.4.4

+Save and quit the configuration file using x!



# Deploying UNBOUND

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4. # unbound-checkconf /etc/unbound/unbound.conf (Verify the config file)
5. # systemctl start unbound.service (Start the services)  
# sudo systemctl enable unbound.service

# Testing the Deployment

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**Command:**

**drill intellipa.com @192.168.0.10**

Check the "**Query time**" on First & Subsequent Attempts.

# Thank You

Email us – [support@intellipaat.com](mailto:support@intellipaat.com)

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