

FreeBSD Administration - Support #694

Install a Forwarding DNS Server With Unbound on FreeBSD 9

11/11/2015 12:10 PM - Daniel Curtis

Status:	Closed	Start date:	10/18/2015
Priority:	Normal	Due date:	
Assignee:	Daniel Curtis	% Done:	100%
Category:	Domain Name Server	Estimated time:	1.00 hour
Target version:	FreeBSD 9	Spent time:	1.50 hour

Description

This is a guide on installing an authoritative DNS server using the Unbound on FreeBSD 9.

Prepare the Environment

- Make sure the system is up to date:

```
pkg update && pkg upgrade
```

Install Unbound

- Install unbound:

```
pkg install unbound
```

- Create an unbound config from the installed sample:

```
cp /usr/local/etc/unbound/unbound.conf.sample /usr/local/etc/unbound/unbound.conf
```

- Make a config directory for the various domains served by unbound:

```
mkdir /usr/local/etc/unbound/conf.d
```

- Edit the unbound config:

```
vi /usr/local/etc/unbound/unbound.conf
```

- And add the following:

```
## Authoritative, validating, recursive caching DNS
server:
  verbosity: 1
  logfile: "/var/log/unbound.log"

  interface: 0.0.0.0

  port: 53

  do-ip4: yes
  do-udp: yes
  do-tcp: yes
```

```
access-control: 127.0.0.0/8 allow
access-control: 10.0.0.0/16 allow
```

```
include: "/usr/local/etc/unbound/conf.d/*.conf"
```

```
chroot: ""
```

```
hide-identity: yes
hide-version: yes
harden-glue: yes
harden-dnssec-stripped: yes
use-caps-for-id: yes
prefetch: yes
```

```
forward-zone:
  name: "."
  forward-addr: 208.67.222.222
```

- Create an unbound config for the example.com domain:

```
vi /usr/local/etc/unbound/conf.d/example.com.conf
```

- And add the following:

```
# example.com domain
local-zone: "example.com." static

local-data: "gateway.example.com. IN A 192.168.55.1"
local-data: "nas.example.com. IN A 192.168.55.2"
local-data: "pc1.example.com. IN A 192.168.55.3"
local-data: "pc2.example.com. IN A 192.168.55.4"
local-data: "wap1.example.com. IN A 192.168.55.5"
local-data: "dhcp1.example.com. IN A 192.168.55.6"
local-data: "dhcp2.example.com. IN A 192.168.55.7"

local-data-ptr: "192.168.55.1 gateway.example.com"
local-data-ptr: "192.168.55.2 nas.example.com"
local-data-ptr: "192.168.55.3 pc1.example.com"
local-data-ptr: "192.168.55.4 pc2.example.com"
local-data-ptr: "192.168.55.5 wap1.example.com"
local-data-ptr: "192.168.55.6 dhcp1.example.com"
local-data-ptr: "192.168.55.7 dhcp2.example.com"
```

- Start and enable unbound at boot:

```
echo 'unbound_enable="YES"' >> /etc/rc.conf
service unbound start
```

- With unbound configured and running edit the resolve config file:

```
vi /etc/resolv.conf
```

- And change the nameserver to the localhost:

```
nameserver 127.0.0.1
```

Resources

- https://calomel.org/unbound_dns.html
- <https://www.digitalocean.com/community/tutorials/how-to-set-up-the-unbound-caching-dns-resolver-on-freebsd-10-1>
- <http://www.prado.it/2012/04/23/how-to-configure-unbound-with-dnssec-validation-on-freebsd-9-0/>

Related issues:

Copied from FreeBSD Administration - Support #677: Install an Authoritative D...

Closed

10/18/2015

History**#1 - 11/11/2015 12:10 PM - Daniel Curtis**

- Copied from Support #677: Install an Authoritative DNS Server With Unbound on FreeBSD 10 added

#2 - 11/11/2015 12:29 PM - Daniel Curtis

- Status changed from New to In Progress

- % Done changed from 0 to 50

#3 - 11/15/2015 06:08 PM - Daniel Curtis

- Status changed from In Progress to Resolved

- % Done changed from 50 to 100

#4 - 11/27/2015 03:43 PM - Daniel Curtis

- Status changed from Resolved to Closed