Creating multiple domains allows users to configure separate groups of IP addresses. One use case for this scenario is grouping IPs for different environments such as prod, dev, qa, etc into different domains and zones with different zone rules. In this lab, students will learn to configure multiple domains for the same name server in the `/etc/named.conf`. We will then create the associated zone flies and test the configuration using the `nslookup` command.

Learning Objectives

Successfully complete this lab by achieving the following learning objectives:

Install the bind and bind-utils Packages with YUM

```
$ yum install bind bind-utils -y
```

Configure Zones for localdomain.com and domain2.com in the /etc/named.conf File

```
vim /etc/named.conf

zone "localdomain.com" {
type master;
file "fwd.localdomain.com.db";
allow-update { none; };
};

zone "1.0.10.in-addr.arpa" {
type master;
file "1.0.10.db";
allow-update { none; };
};

zone "domain2.com" {
type master;
file "fwd.domain2.com.db";
allow-update { none; };
};
```

Check the named.conf File for Syntax Errors

```
named-checkconf
```

Create the Forward and Reverse Zone Files in /var/named

```
$ cd /var/named
$ touch fwd.localdomain.com.db 1.0.10.db fwd.domain2.com.db
$ ls -al
$ chown named:named *.db
```

Populate the Forward Zone File for localdomain.com with TTL, SOA, NS, and A, and CNAME Records

```
$ vim /var/named/fwd.localdomain.com.db

$TTL 86400
@ IN SOA ns.localdomain.com. root.localdomain.com. (
10030 ;Serial
```

```
3600 ;Refresh
1800 ;Retry
604800 ;Expiry
86400 ;Minimum TTL
)
; Name Server
@ IN NS ns.localdomain.com.
;A Record Definitions
ns IN A 10.0.1.201
; Canonical Name/Alias
dns IN CNAME ns.localdomain.com.
```

Run the named-checkzone Command to Check the Forward Zone File for localdomain.com for Syntax Errors

```
$ named-checkzone localdomain.com fwd.localdomain.com.db
```

Populate the Forward Zone File for domain2.com with the TTL, SOA, NS, A, and CNAME Records

```
$ vim fwd.domain2.com.db

$TTL 86400
@ IN SOA ns.localdomain.com. root.localdomain.com. (
10030 ;Serial
3600 ;Refresh
1800 ;Retry
604800 ;Expiry
86400 ;Minimum TTL
)
; Name Server
@ IN NS ns.localdomain.com.
;A Record Definitions
server1 IN A 10.0.1.220
server2 IN A 10.0.1.221
; Canonical Name/Alias
prod IN CNAME server1.domain2.com.
```

Check the Forward Zone for domain2.com for Syntax Errors

```
$ named-checkzone domain2.com fwd.domain2.com.db
```

Populate the Reverse File for Both Zones with the TTL, SOA, NS, and PTR Records

```
$ vim 1.0.10.db

$TTL 86400
@ IN SOA ns.localdomain.com. root.localdomain.com. (
10030 ;Serial
3600 ;Refresh
1800 ;Retry
604800 ;Expiry
86400 ;Minimum TTL
)
; Name Server
@ IN NS ns.localdomain.com.
```

```
;PTR Records
201 IN PTR ns.localdomain.com.
220 IN PTR server1.domain2.com.
221 IN PTR server2.domain2.com.
```

Start the named Service

```
systemctl start named
```

Use the nslookup Command to Verify the Records That Were Configured Resolve

```
$ nslookup ns.localdomain.com localhost
$ nslookup server1.domain2.com localhost
$ nslookup server2.domain2.com localhost
$ nslookup 10.0.1.220 localhost
```