1. **Install DNS (BIND)**

*yum -y install bind bind-utils*

*firewall-cmd --add-service=dns --permanent;firewall-cmd --reload*

1. **Configure DNS (BIND)**

By default, BIND listens on the localhost. So, we will configure the DNS server to listen on the system IP address to let clients can reach to DNS server for resolving domain names

*listen-on port 53 { 127.0.0.1; 10.55.8.24; };*

1. **Allow Network**

This setting will allow clients from the mentioned network can query the DNS for the name to ip translation.

*allow-query { localhost; 10.55.8.0/24; };*

1. **Create Forward Zones**

*zone "ingress.local" IN {*

*type master;*

*file "/var/named/fwd.ingress.local.db";*

*allow-update { none;* };

1. **Create Forward Zone Files**

vim /var/named/fwd.ingress.local.db

*$TTL 3H*

*@ IN SOA @ ingress.local. (*

*0 ; serial*

*1D ; refresh*

*1H ; retry*

*1W ; expire*

*3H ) ; minimum*

*NS @*

*A 127.0.0.1*

*AAAA ::1*

*@ IN NS node01.ingress.local.*

*node01 IN A 10.55.8.21*

*node02 IN A 10.55.8.22*

*node07 IN CNAME node02.ingress.local.*

*mail IN A 10.55.8.23*

*@ IN MX 10 mail.ingress.local*

1. **Create Reverse Zone**

*zone "8.55.10.in-addr.arpa" IN {*

*type master;*

*file "10.55.8.zone";*

*forwarders {};*

*};*

1. **Create Reverse Zone Files**

*$TTL 3H*

*@ IN SOA @ ingress.local. (*

*2 ; serial*

*1M ; refresh*

*1H ; retry*

*1W ; expire*

*3H ) ; minimum*

*; owner TTL CL type RDATA*

*600 IN NS ns1.ingress.local.*

*131 IN PTR master.ingress.local.*

*132 IN PTR mailserver.ingress.local.*

*130.8.55.10.in-addr.arpa. IN PTR slave.ingress.local.*

*134 IN PTR server2.ingress.local.*

1. **Slave configuration**

*allow-transfer { localhost; 10.55.8.23; };*  ***add to master BIND***

*yum -y install bind bind-utils*

*firewall-cmd --add-service=dns --permanent;firewall-cmd –reload*

*zone "ingress.az" IN {*

*type slave;*

*file "/var/named/fwd.ingress.az.db";*

*masters { 10.55.8.24; };*

*masterfile-format text;*

*zone "8.55.10.in-addr.arpa" IN {*

*type slave;*

*file "10.5..8.zone";*

*masters {10.55.8.22; };*

*masterfile-format text;*

* **Primary Name Server** – The nameserver that contains the original zone file and not an AXFR transferred copy.
* **Hostmaster Email** – Address of the party responsible for the zone. A period “.” is used in place of an “@” symbol. For email addresses that contain a period, this will be escaped with a slash “/”.
* **Serial Number** – Version number of the zone. As you make changes to your zone file, the serial number will increase.
* **Time To Refresh** – How long in seconds a nameserver should wait prior to checking for a Serial Number increase within the primary zone file. An increased Serial Number means a transfer is needed to sync your records. Only applies to zones using [secondary DNS](https://help.dyn.com/using-external-nameservers/).
* **Time To Retry** – How long in seconds a nameserver should wait prior to retrying to update a zone after a failed attempt. Only applies to zones using [secondary DNS](https://help.dyn.com/using-external-nameservers/).
* **Time To Expire** – How long in seconds a nameserver should wait prior to considering data from a secondary zone invalid and stop answering queries for that zone. Only applies to zones using [secondary DNS](https://help.dyn.com/using-external-nameservers/).
* **Minimum TTL** – How long in seconds that a nameserver or resolver should cache a negative response.