Assignments:-17

Module:- COSA(Domain Name System)

Name:- Prithviraj Nikam

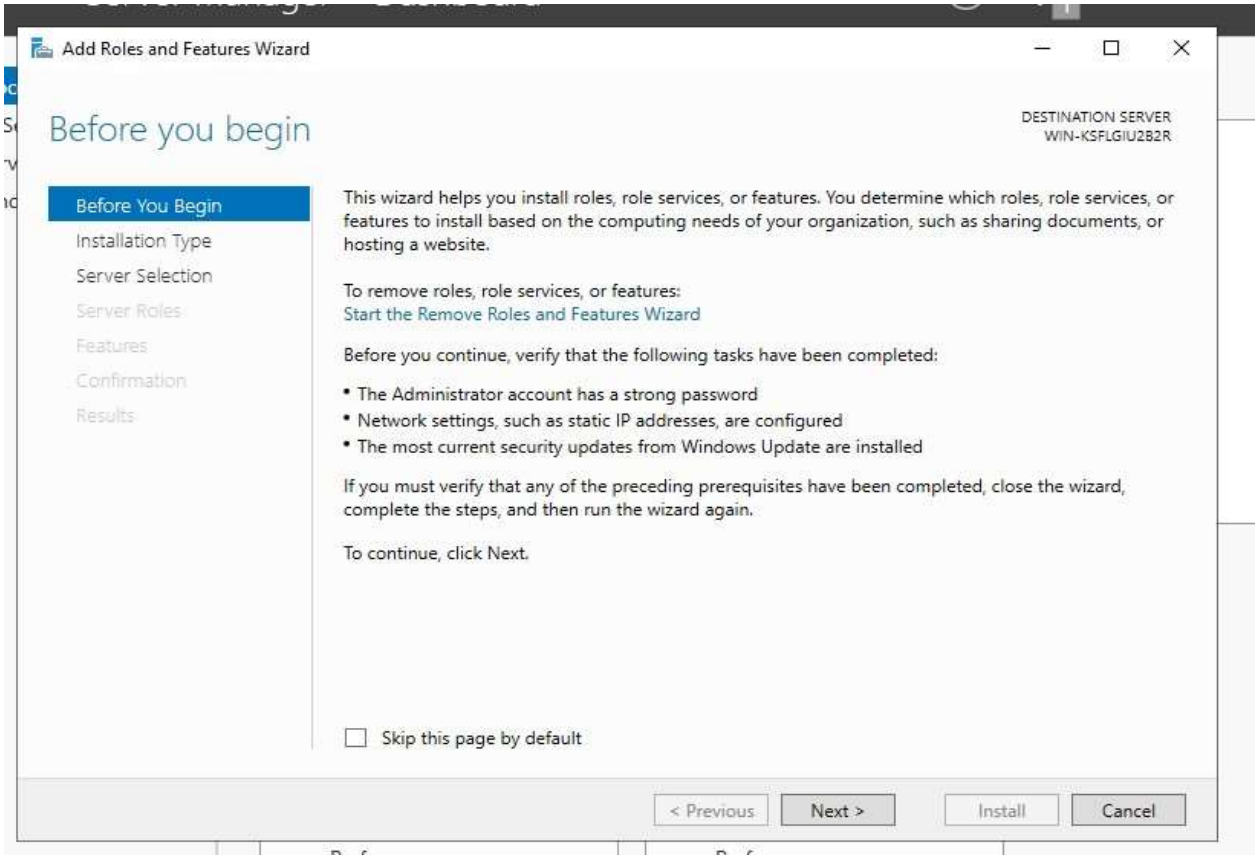
Lab Assignment :-

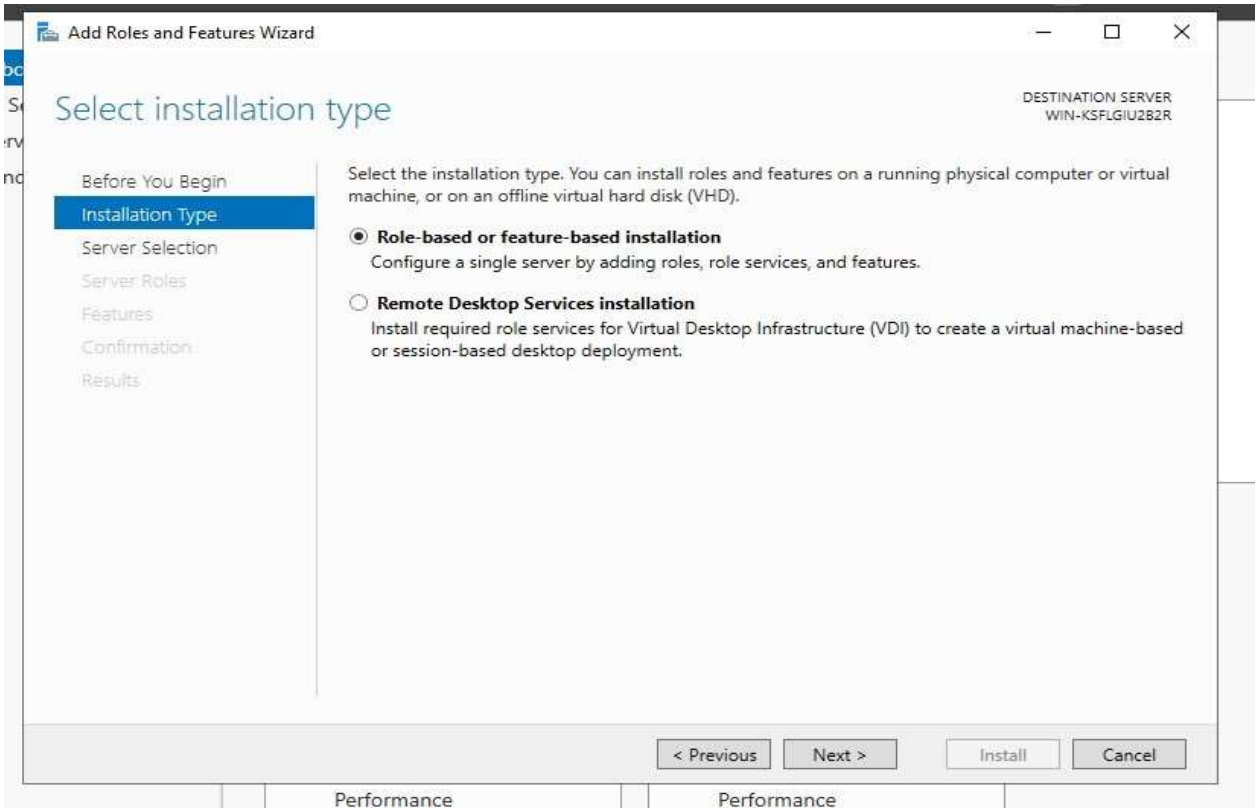
1. Install and configure DNS server on windows server 2019. Configure a domain named "your-name" as primary domain. Add following resource records:

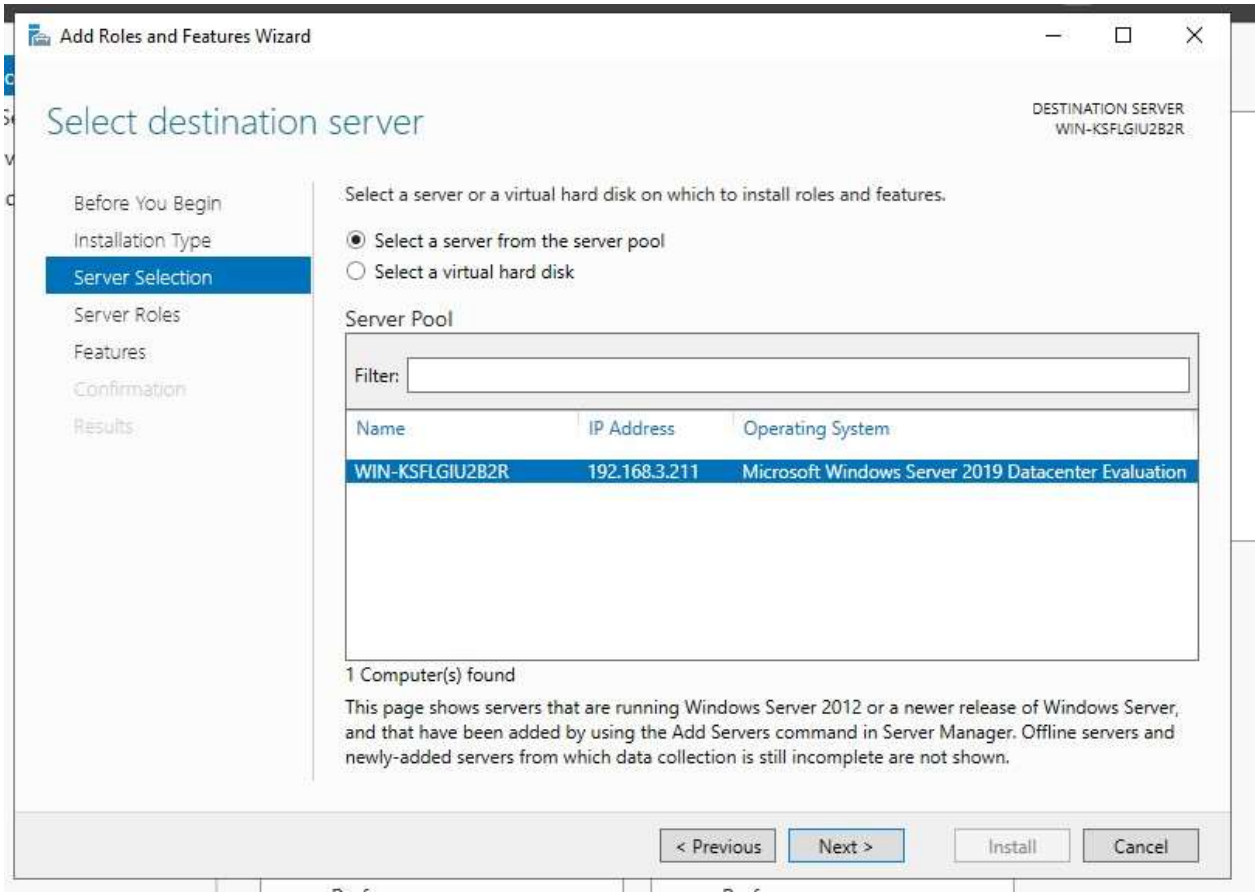
www A 192.168.3.100
Mail A 192.168.3.101

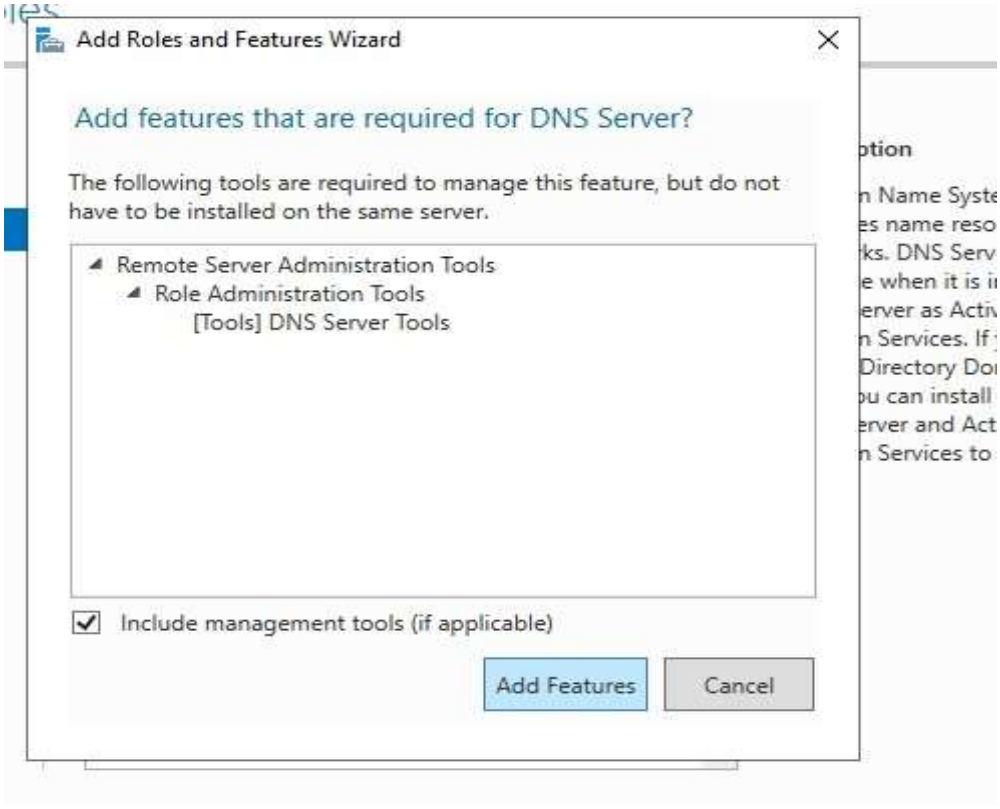
Configure reverse lookup for the above resource records.
Add a conditional forwarder as 192.168.1.3 for blr1.cdac.in domain.
Create a stub zone for the domain google.com

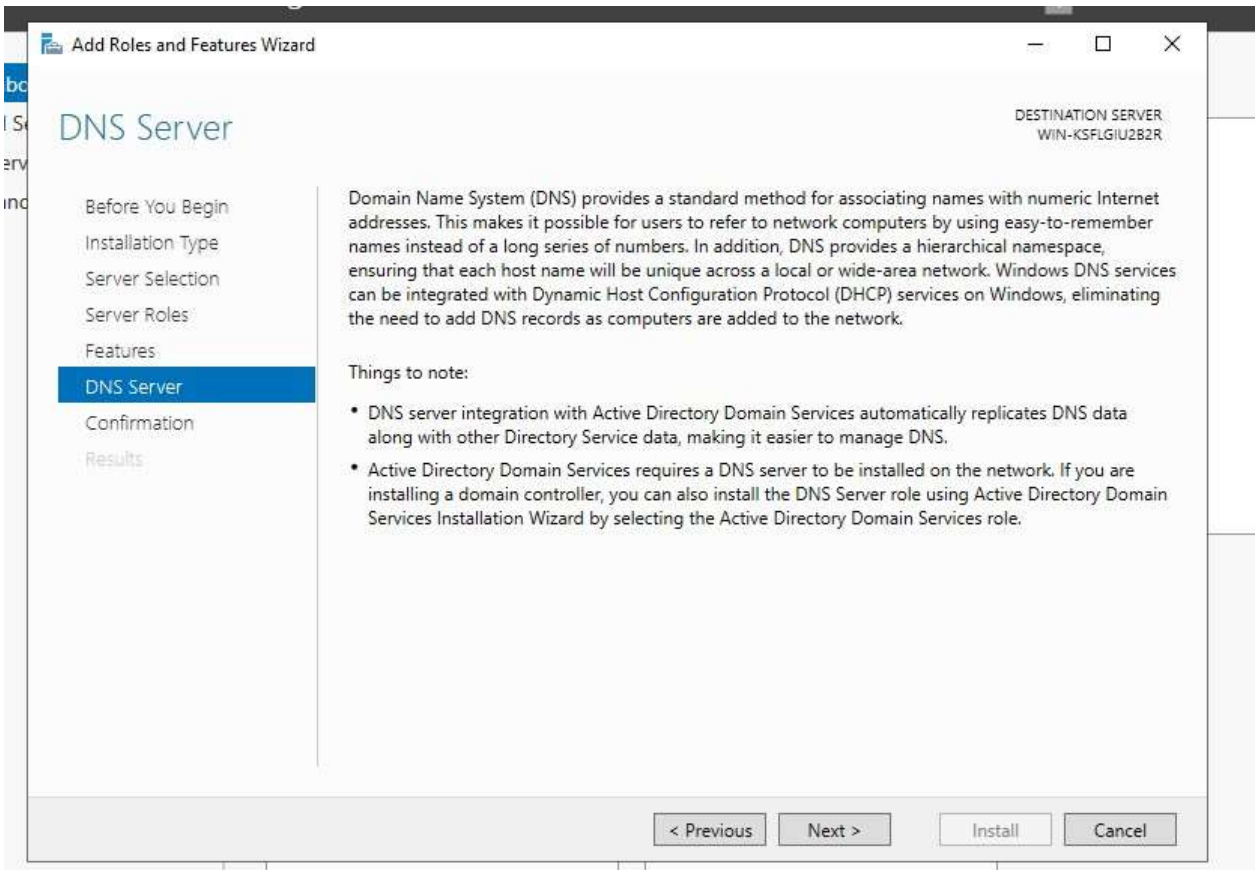
Step-1:- Add role DNS Feature and service



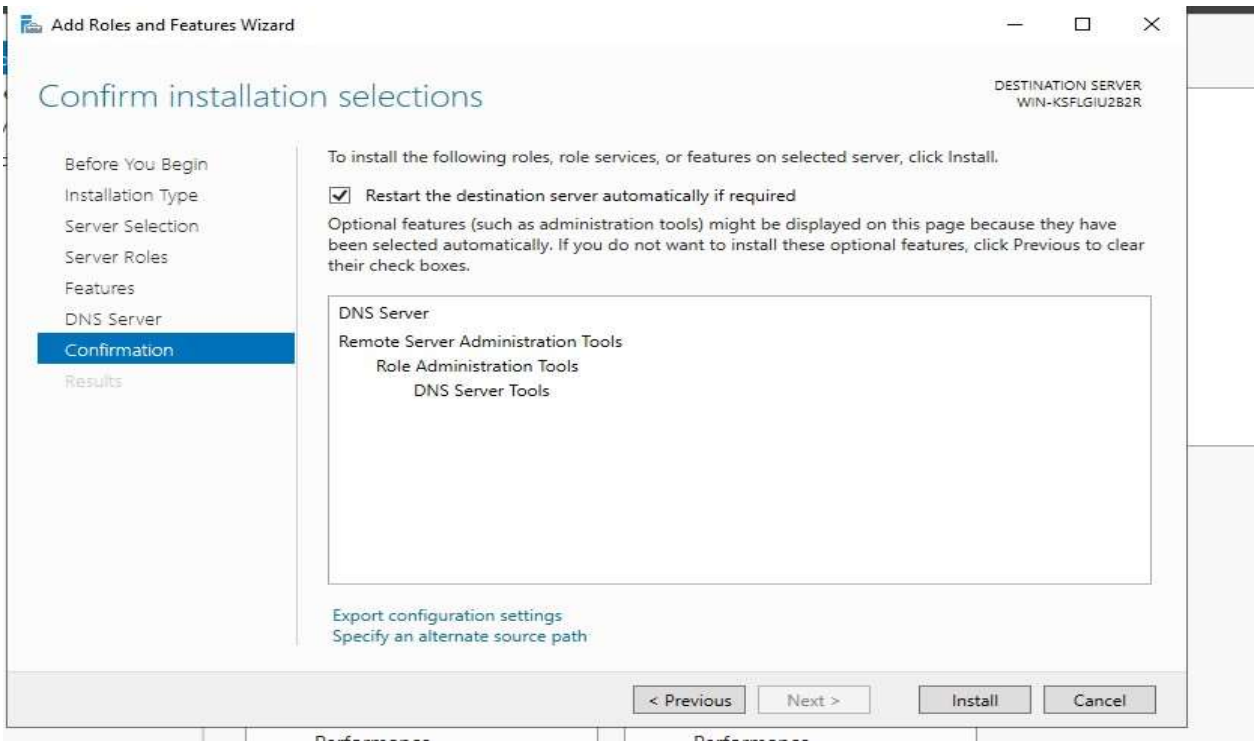

Add Roles and Features Wizard
Select installation type
DESTINATION SERVER
WIN-KSFLGIU2B2R
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select the installation type. You can install roles and features on a running physical computer or virtual machine, or on an offline virtual hard disk (VHD).
Role-based or feature-based installation
Configure a single server by adding roles, role services, and features.
Remote Desktop Services installation
Install required role services for Virtual Desktop Infrastructure (VDI) to create a virtual machine-based or session-based desktop deployment.
< Previous
Next >
Install
Cancel
Performance
Performance


Add Roles and Features Wizard
Select destination server
DESTINATION SERVER
WIN-KSFLGIU2B2R
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results
Select a server or a virtual hard disk on which to install roles and features.
Select a server from the server pool
Select a virtual hard disk
Server Pool
Filter:
Name
IP Address
Operating System
WIN-KSFLGIU2B2R
192.168.3.211
Microsoft Windows Server 2019 Datacenter Evaluation
1 Computer(s) found
This page shows servers that are running Windows Server 2012 or a newer release of Windows Server, and that have been added by using the Add Servers command in Server Manager. Offline servers and newly-added servers from which data collection is still incomplete are not shown.
< Previous
Next >
Install
Cancel

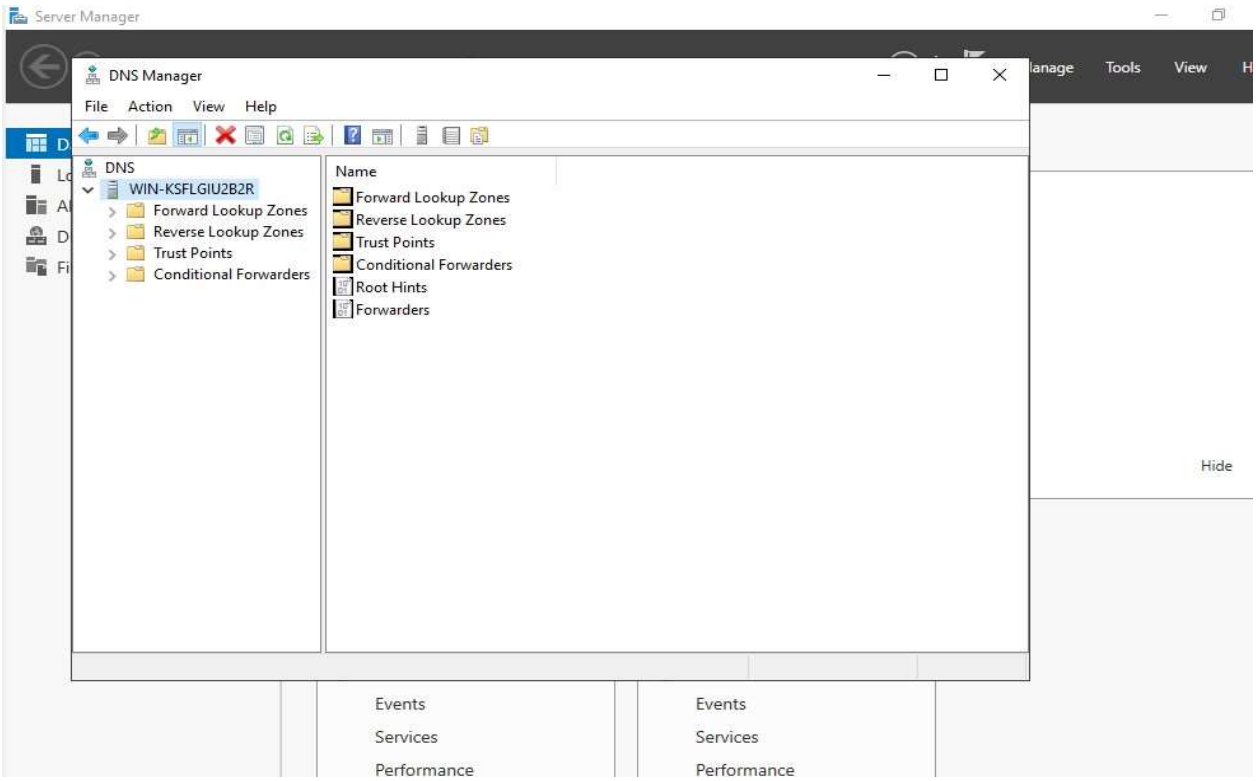

Add Roles and Features Wizard
Add features that are required for DNS Server?
The following tools are required to manage this feature, but do not have to be installed on the same server.
Remote Server Administration Tools
Role Administration Tools
[Tools] DNS Server Tools
Include management tools (if applicable)
Add Features
Cancel


Add Roles and Features Wizard
DNS Server
DESTINATION SERVER
WIN-KSFLGIU2B2R
Before You Begin
Installation Type
Server Selection
Server Roles
Features
DNS Server
Confirmation
Results
Domain Name System (DNS) provides a standard method for associating names with numeric Internet addresses. This makes it possible for users to refer to network computers by using easy-to-remember names instead of a long series of numbers. In addition, DNS provides a hierarchical namespace, ensuring that each host name will be unique across a local or wide-area network. Windows DNS services can be integrated with Dynamic Host Configuration Protocol (DHCP) services on Windows, eliminating the need to add DNS records as computers are added to the network.
Things to note:
DNS server integration with Active Directory Domain Services automatically replicates DNS data along with other Directory Service data, making it easier to manage DNS.
Active Directory Domain Services requires a DNS server to be installed on the network. If you are installing a domain controller, you can also install the DNS Server role using Active Directory Domain Services Installation Wizard by selecting the Active Directory Domain Services role.
< Previous
Next >
Install
Cancel

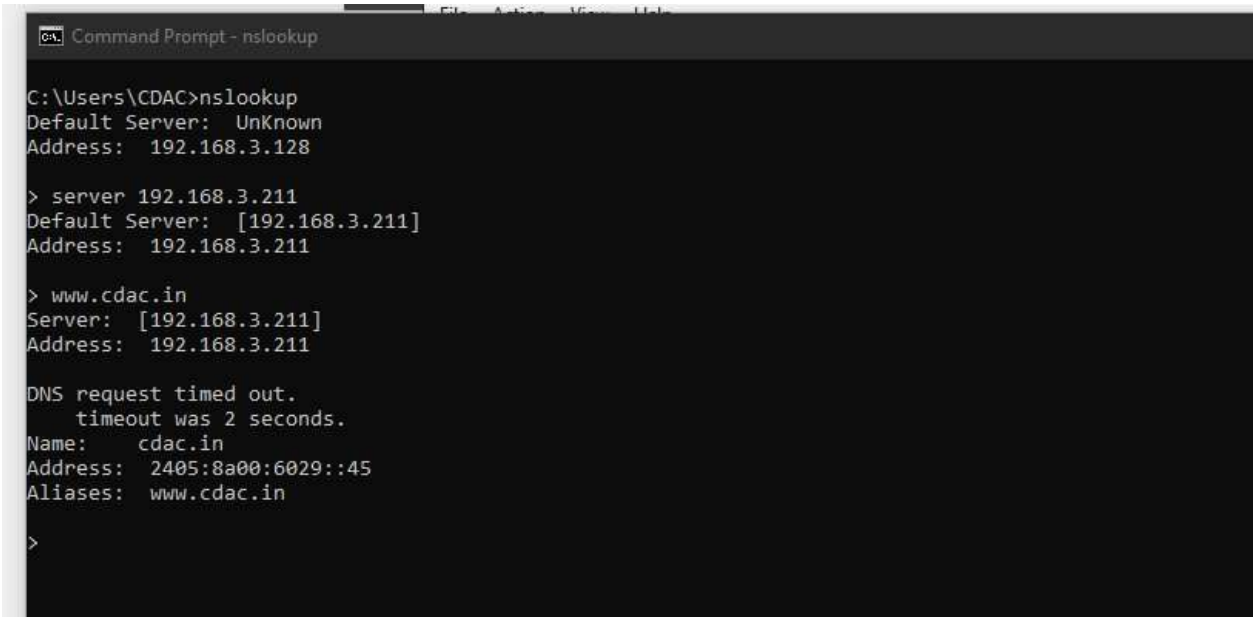
Install DNS Service



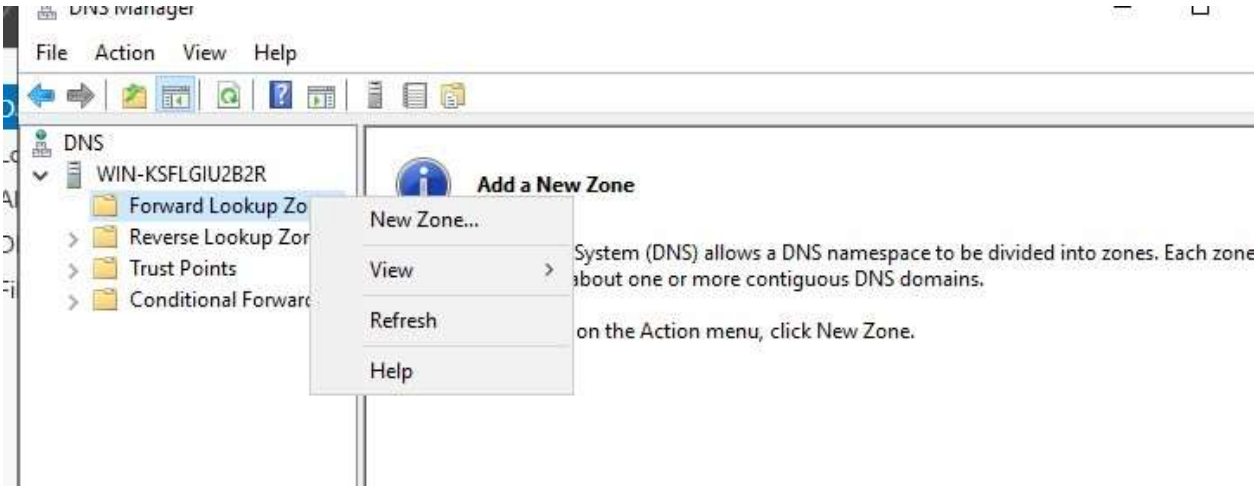
Open DNS in Tool Option



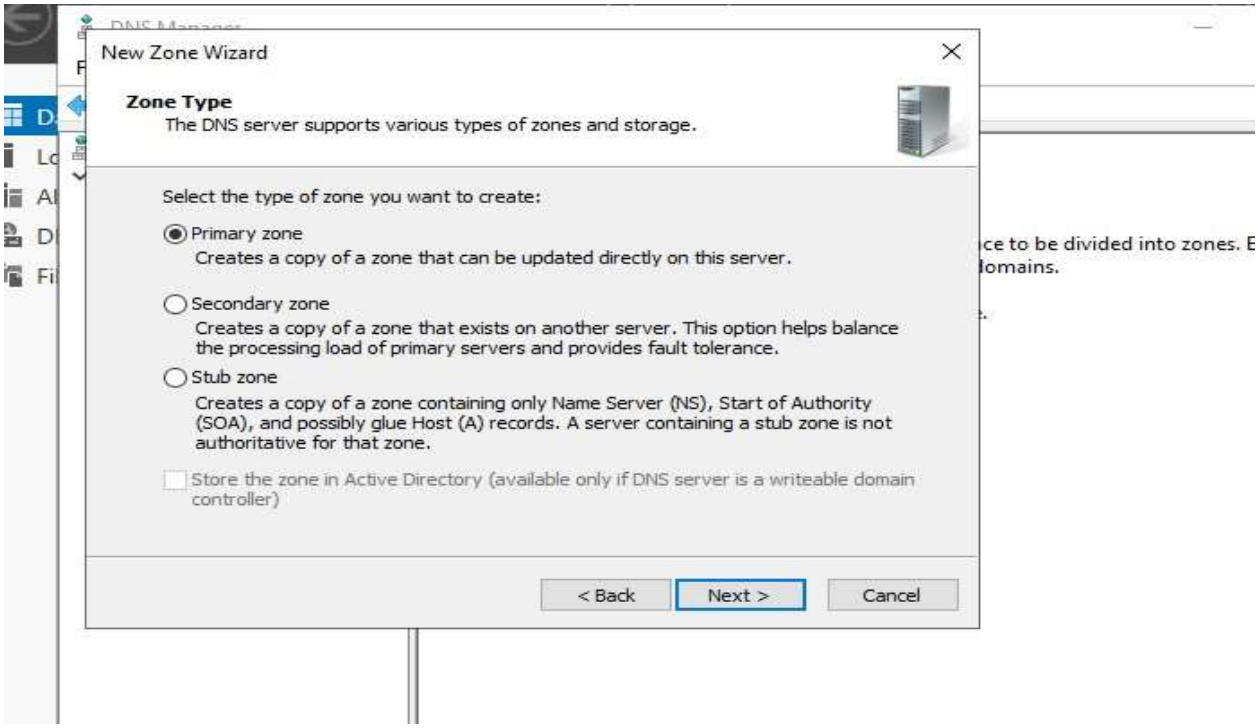
Step-2:- Check DNS working



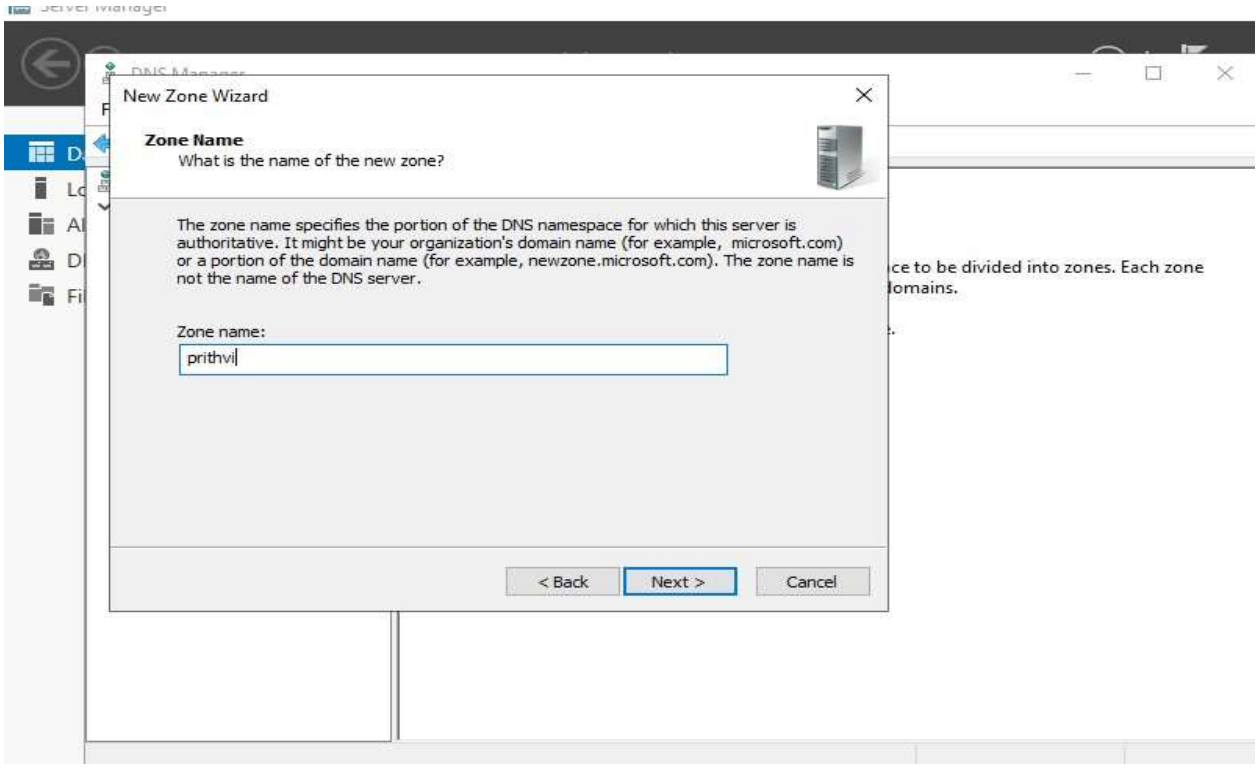
Step- 3:- Add New Zone in Forward Lookup

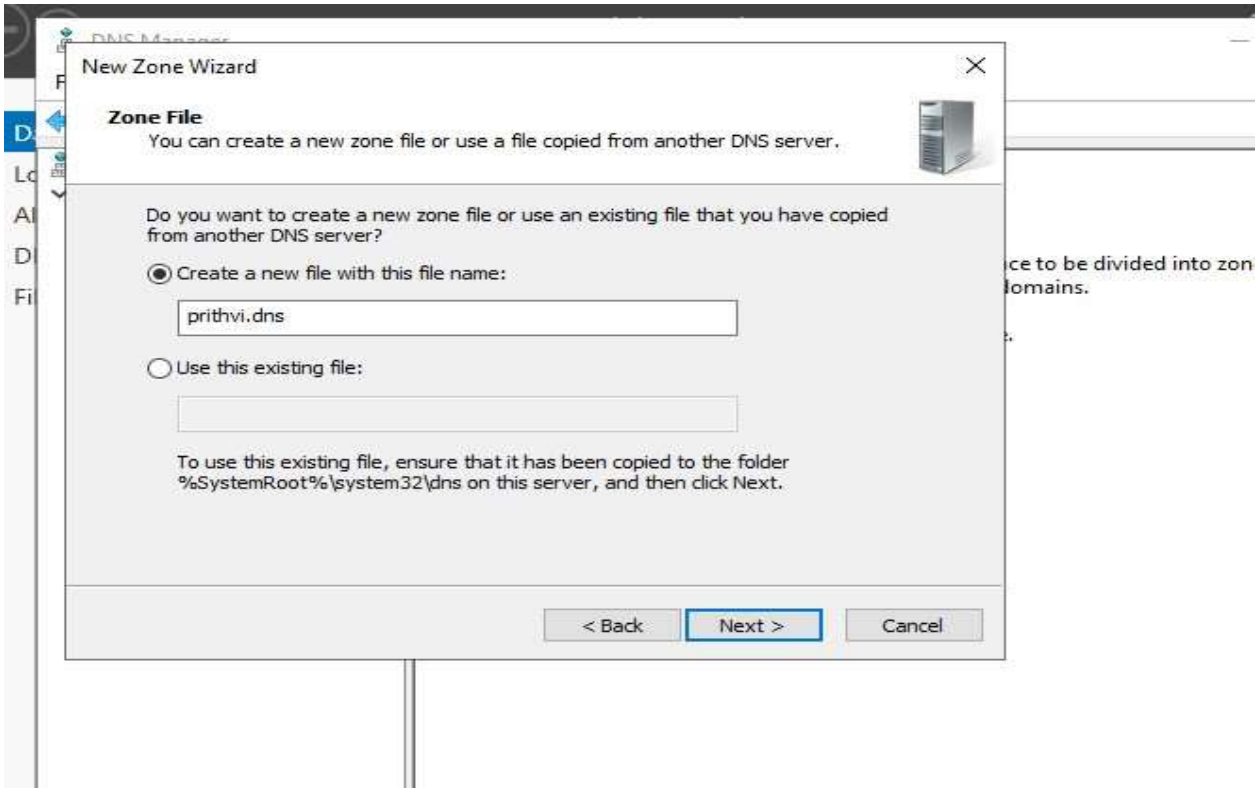


Select Primary Zone

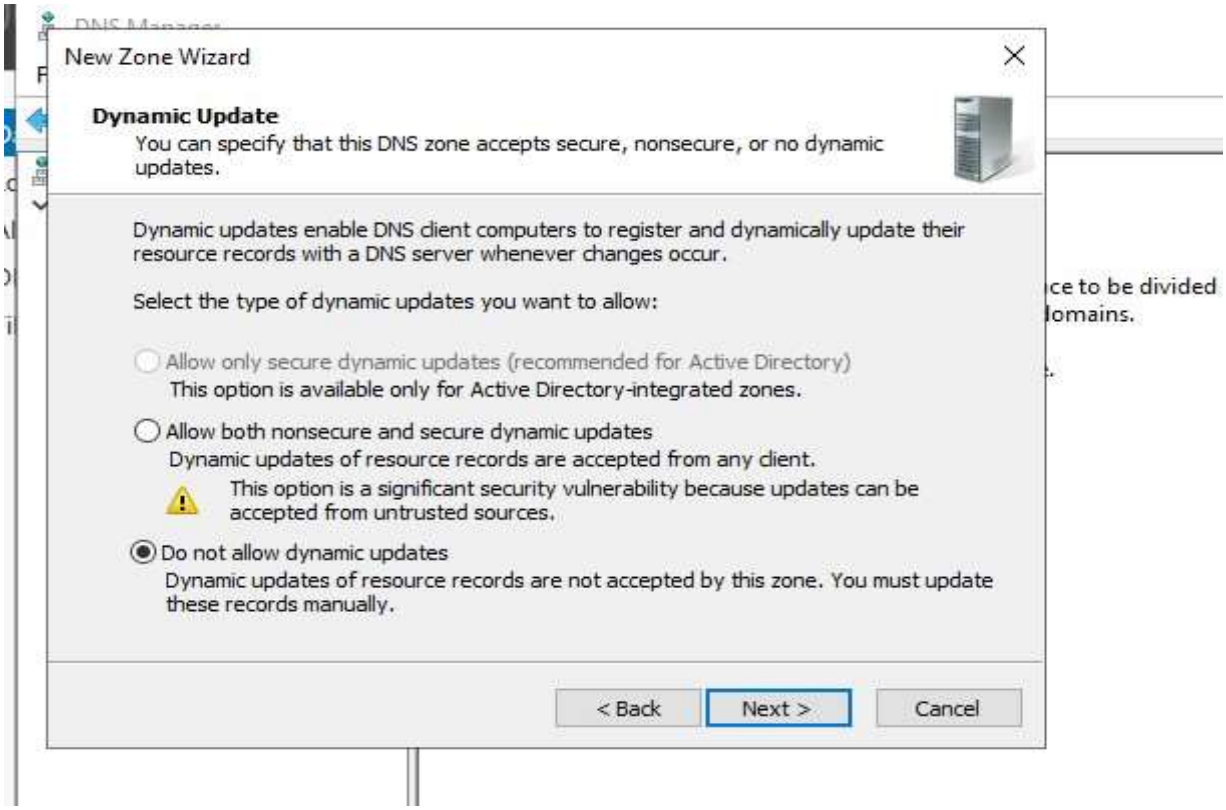


Add Zone name “prithvi”

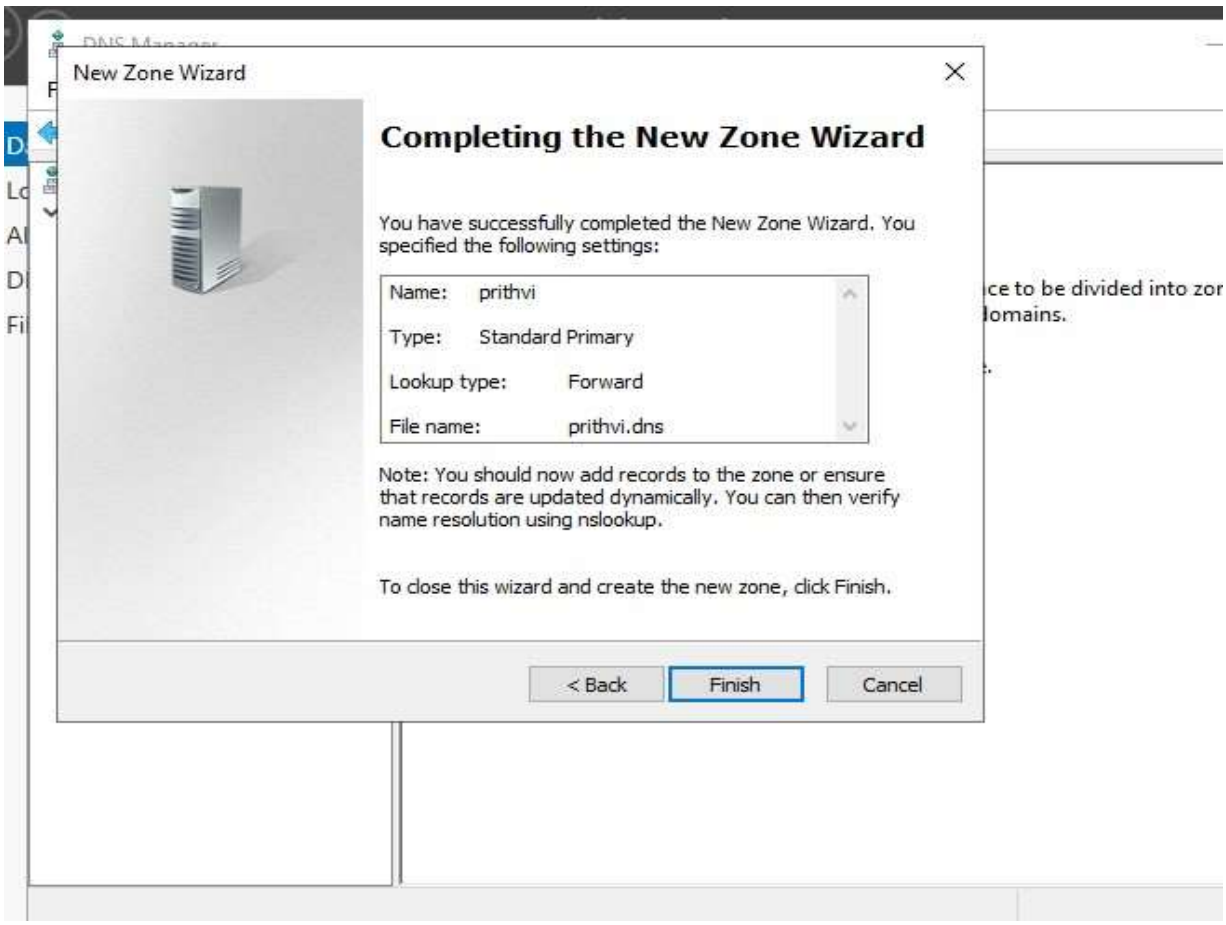




Click Do not Allow Dynamic Update

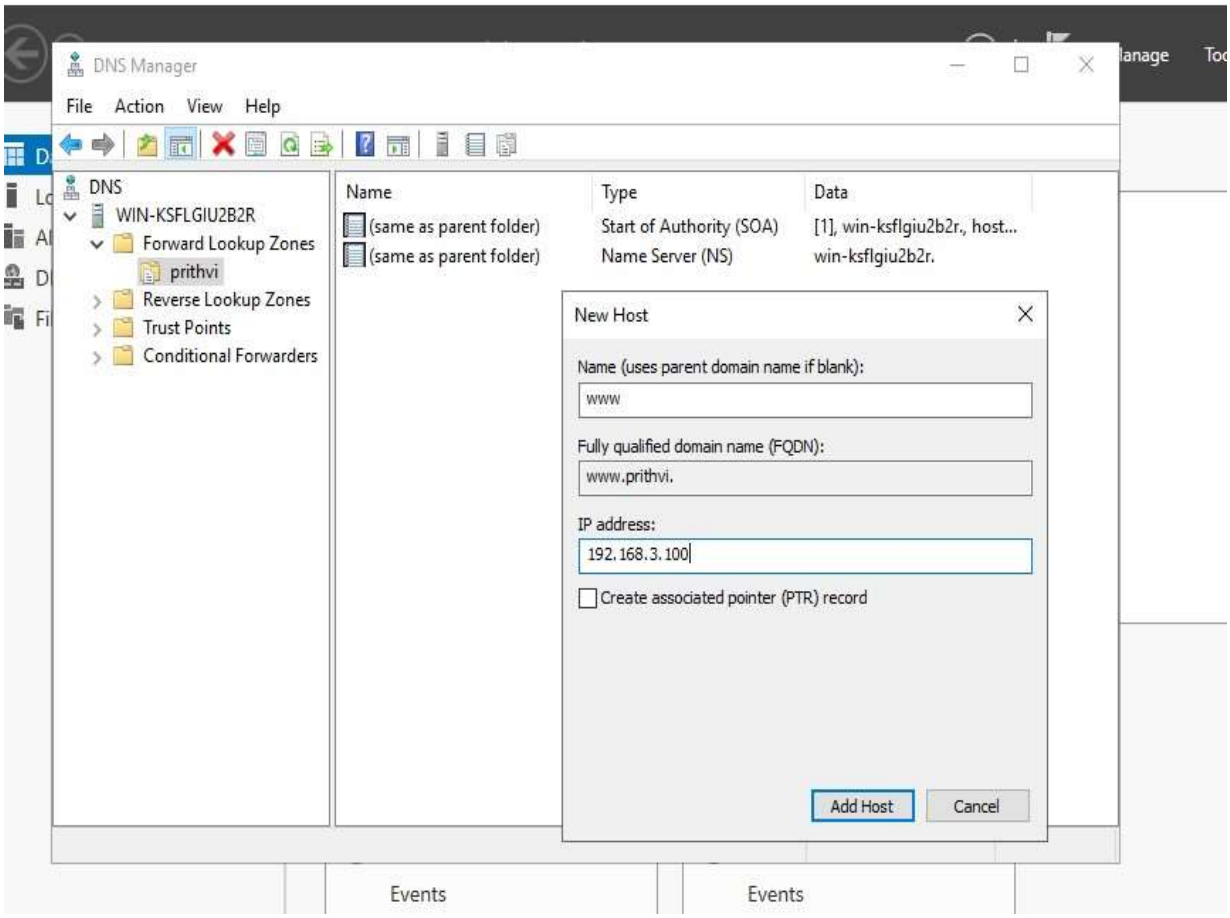


Finish the Zone Wizard

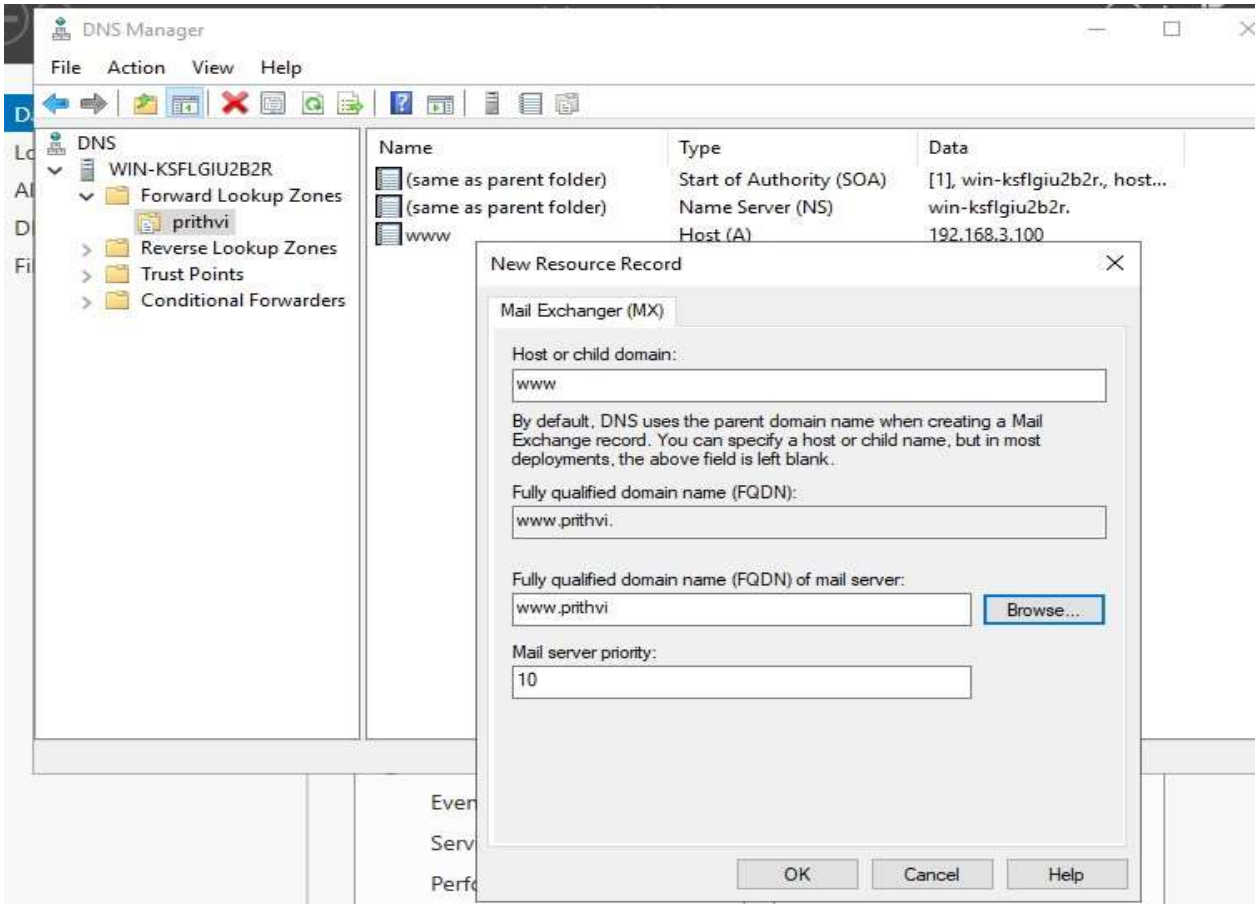


Step-4:- Forward Lookup Zone ---->prithvi ----->Right Click ------>select A or AAAA(Add Host)

Give IP 192.168.3.100

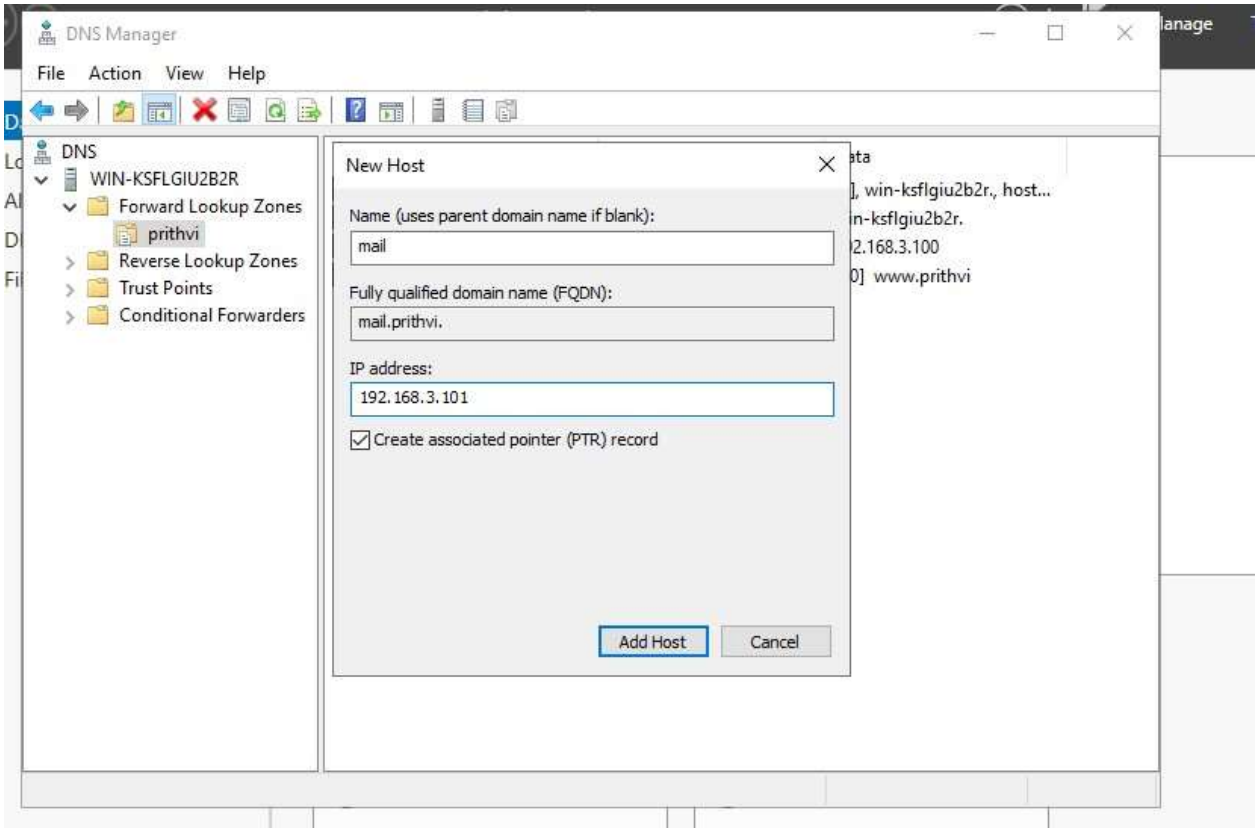


Step-5:- Forward Lookup Zone ---->prithvi ----->Right Click ------>select Mail Exchanger

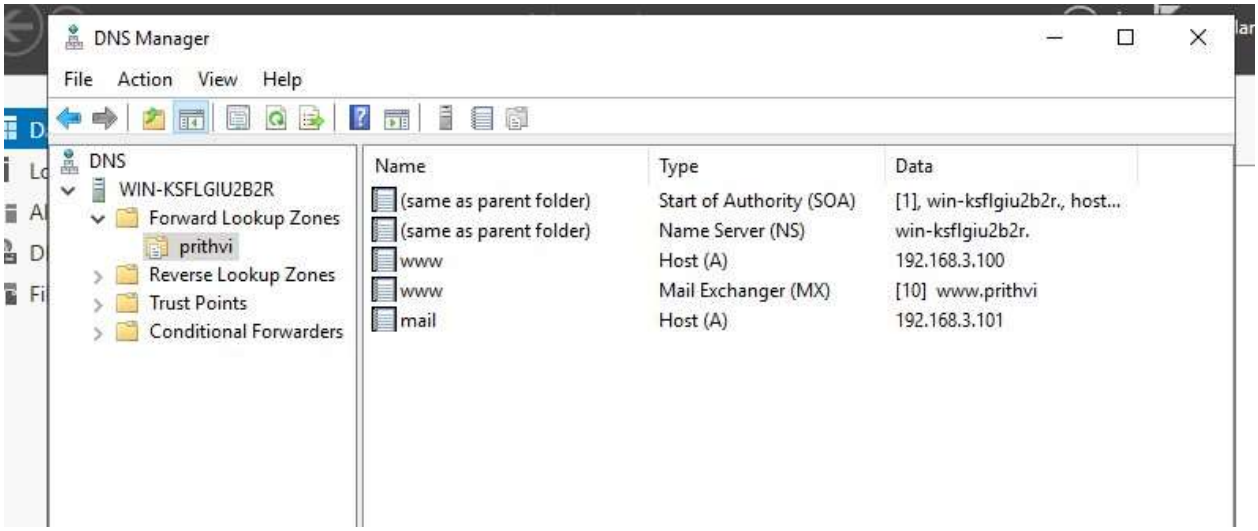


Forward Lookup Zone ---->prithvi ----->Right Click ------>select A or AAAA(Add Host)

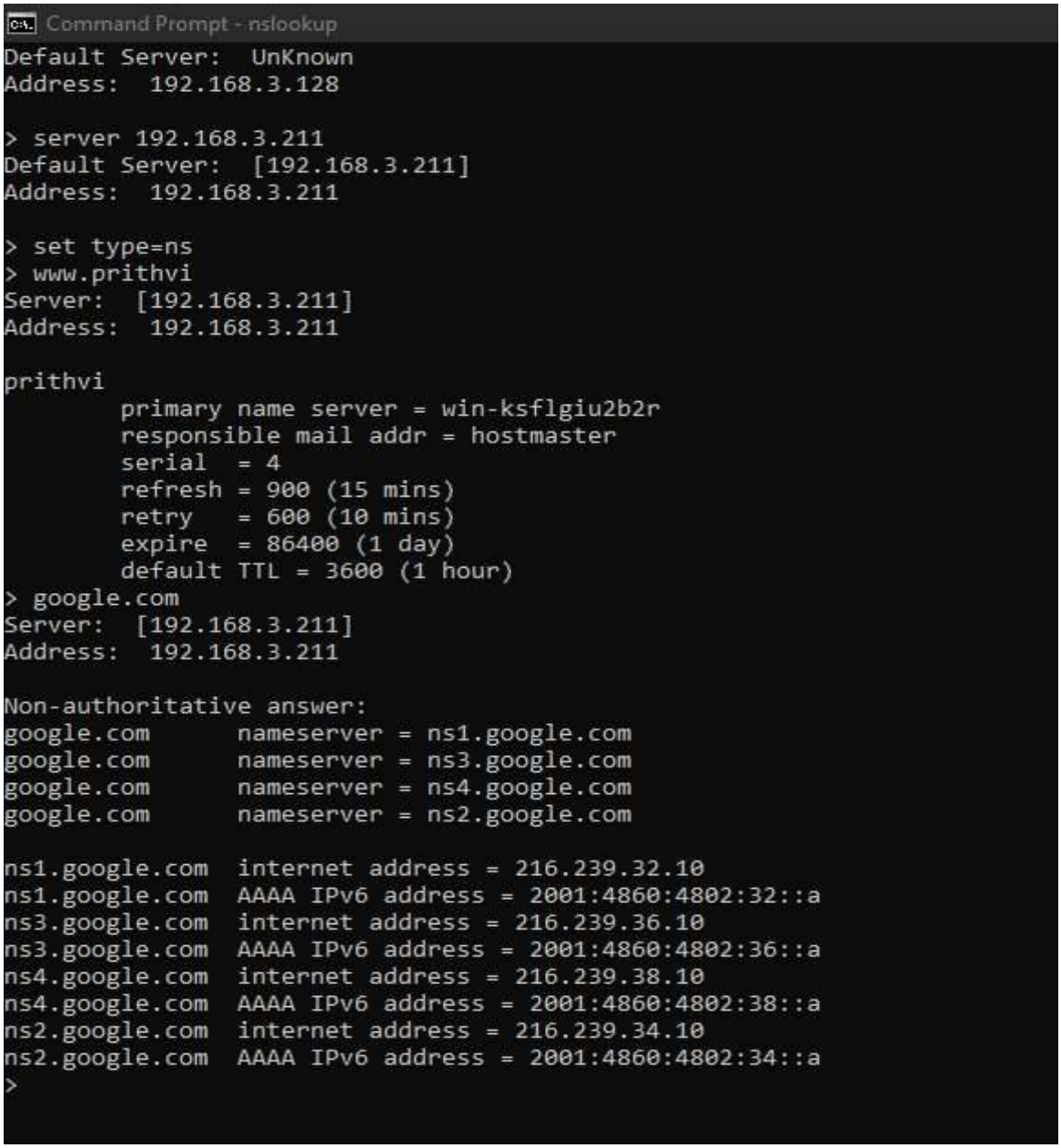
Give IP 192.168.3.101

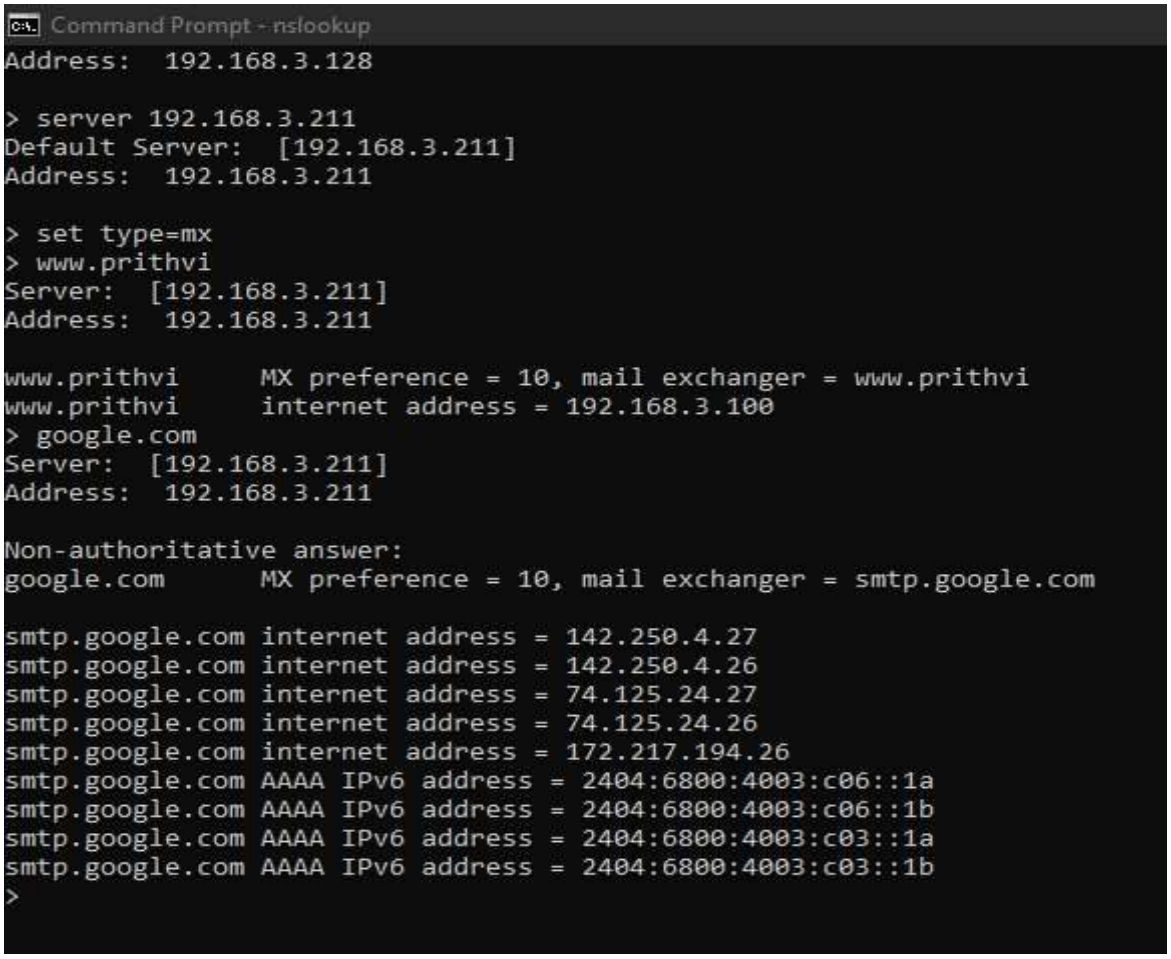


Now,The Name Server and Mail Server added

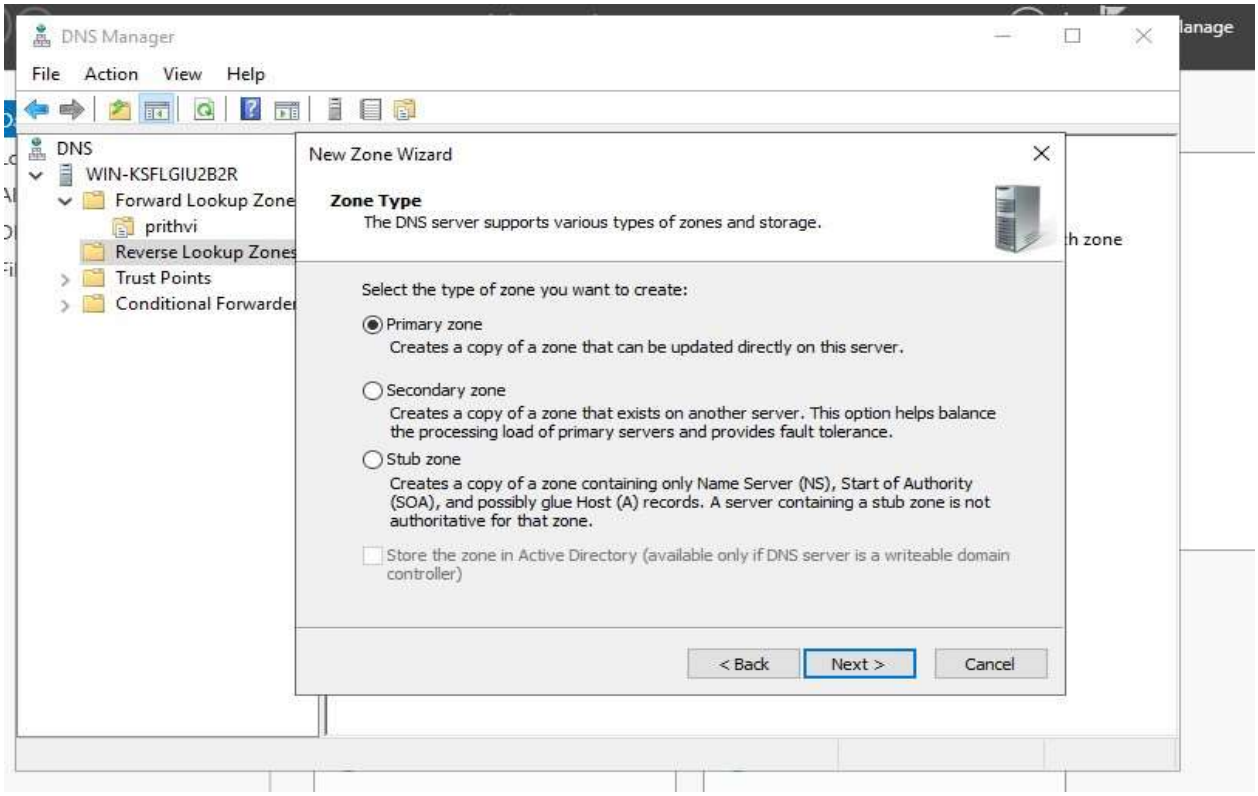


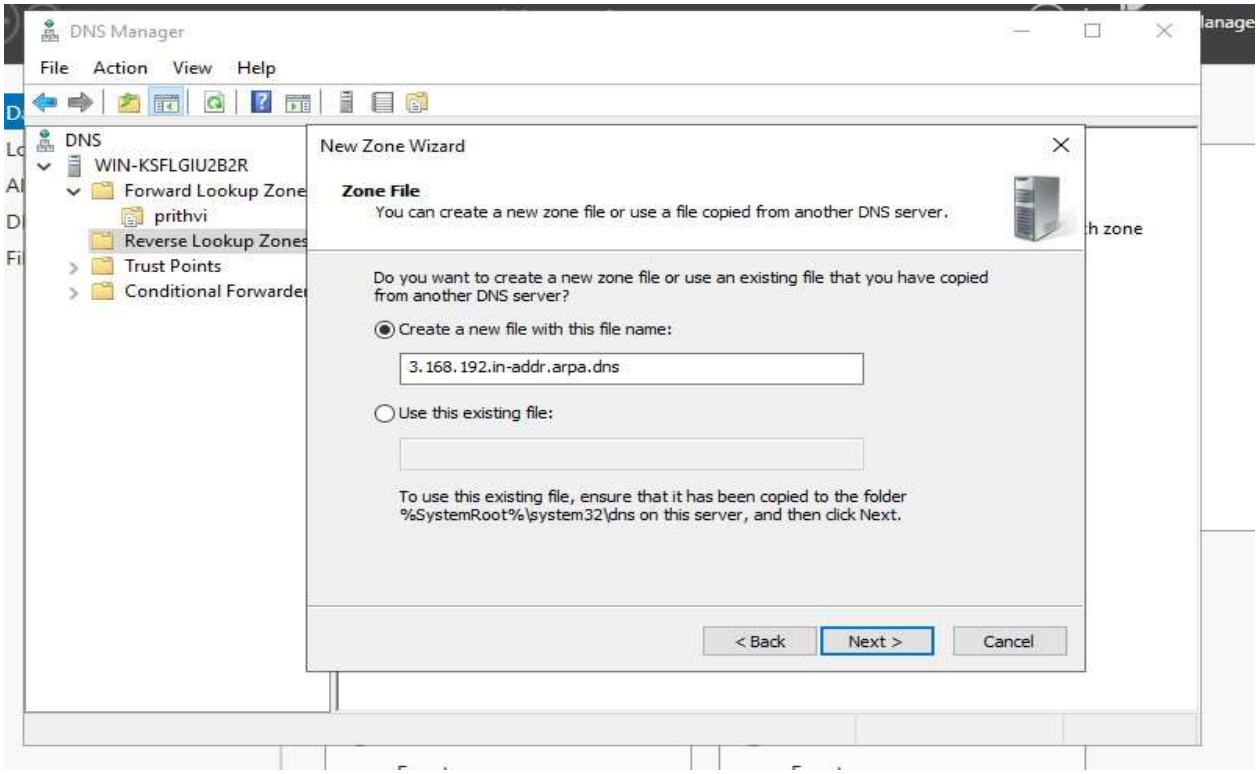
Step- 6 :- Go to client And Check The DNS Working


Command Prompt - nslookup
Default Server: UnKnown
Address: 192.168.3.128
> server 192.168.3.211
Default Server: [192.168.3.211]
Address: 192.168.3.211
> set type=ns
> www.prithvi
Server: [192.168.3.211]
Address: 192.168.3.211
prithvi
primary name server = win-ksflgiu2b2r
responsible mail addr = hostmaster
serial = 4
refresh = 900 (15 mins)
retry   = 600 (10 mins)
expire = 86400 (1 day)
default TTL = 3600 (1 hour)
> google.com
Server: [192.168.3.211]
Address: 192.168.3.211
Non-authoritative answer:
google.com nameserver = ns1.google.com
google.com nameserver = ns3.google.com
google.com nameserver = ns4.google.com
google.com nameserver = ns2.google.com
ns1.google.com internet address = 216.239.32.10
ns1.google.com AAAA IPv6 address = 2001:4860:4802:32::a
ns3.google.com internet address = 216.239.36.10
ns3.google.com AAAA IPv6 address = 2001:4860:4802:36::a
ns4.google.com internet address = 216.239.38.10
ns4.google.com AAAA IPv6 address = 2001:4860:4802:38::a
ns2.google.com internet address = 216.239.34.10
ns2.google.com AAAA IPv6 address = 2001:4860:4802:34::a
>

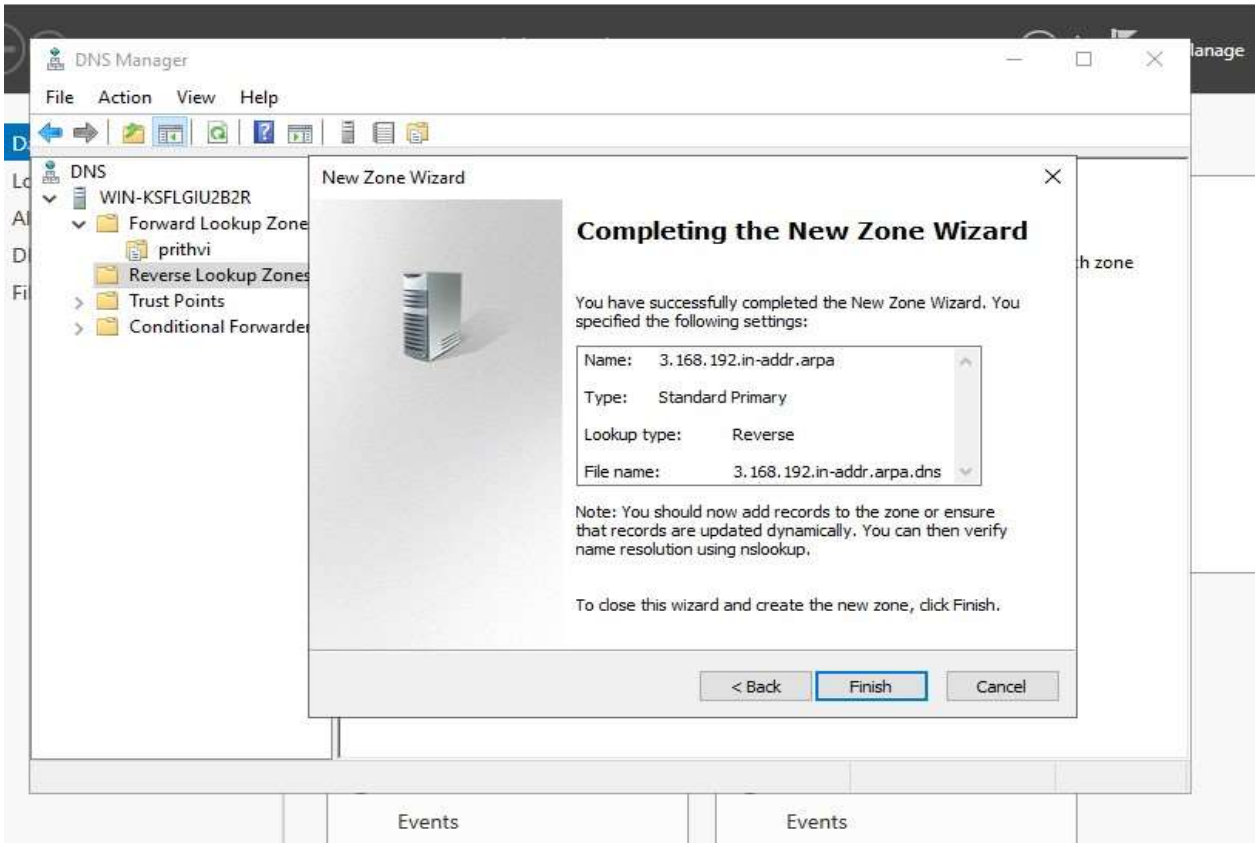


Step-7:- Now Add New Zone In Reverse Lookup —----> Right Click select New Primary Zone

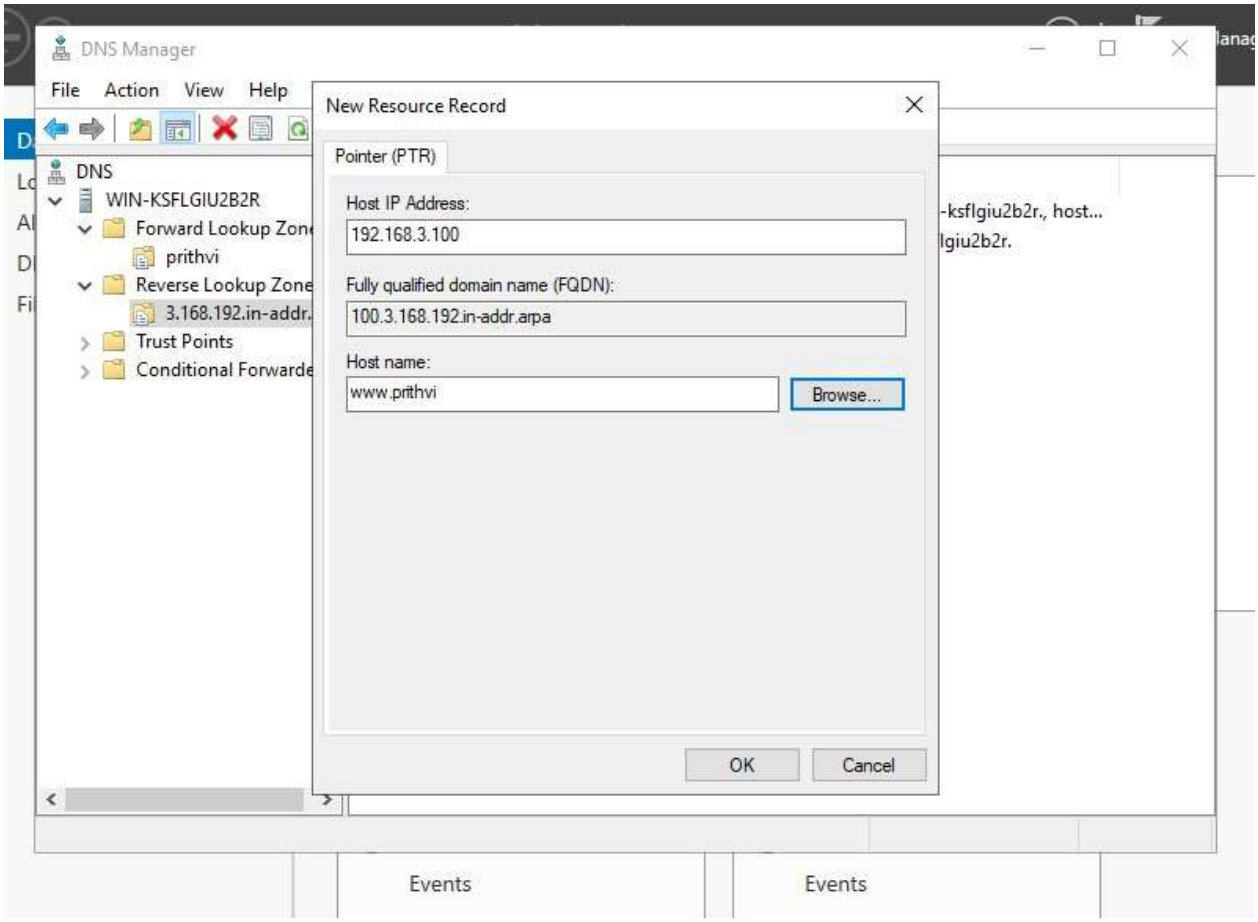

DNS Manager
File Action View Help
DNS
WIN-KSFLGIU2B2R
Forward Lookup Zone
prithvi
Reverse Lookup Zones
Trust Points
Conditional Forwarde
New Zone Wizard
Zone Type
The DNS server supports various types of zones and storage.
Select the type of zone you want to create:
Primary zone
Creates a copy of a zone that can be updated directly on this server.
Secondary zone
Creates a copy of a zone that exists on another server. This option helps balance the processing load of primary servers and provides fault tolerance.
Stub zone
Creates a copy of a zone containing only Name Server (NS), Start of Authority (SOA), and possibly glue Host (A) records. A server containing a stub zone is not authoritative for that zone.
Store the zone in Active Directory (available only if DNS server is a writeable domain controller)
< Back
Next >
Cancel


DNS Manager
File Action View Help
DNS
WIN-KSFLGIU2B2R
Forward Lookup Zone
prithvi
Reverse Lookup Zones
Trust Points
Conditional Forwarde
New Zone Wizard
Zone File
You can create a new zone file or use a file copied from another DNS server.
Do you want to create a new zone file or use an existing file that you have copied from another DNS server?
Create a new file with this file name:
3.168.192.in-addr.arpa.dns
Use this existing file:
To use this existing file, ensure that it has been copied to the folder %SystemRoot%\system32\dns on this server, and then click Next.
< Back
Next >
Cancel

Finish the Zone wizard

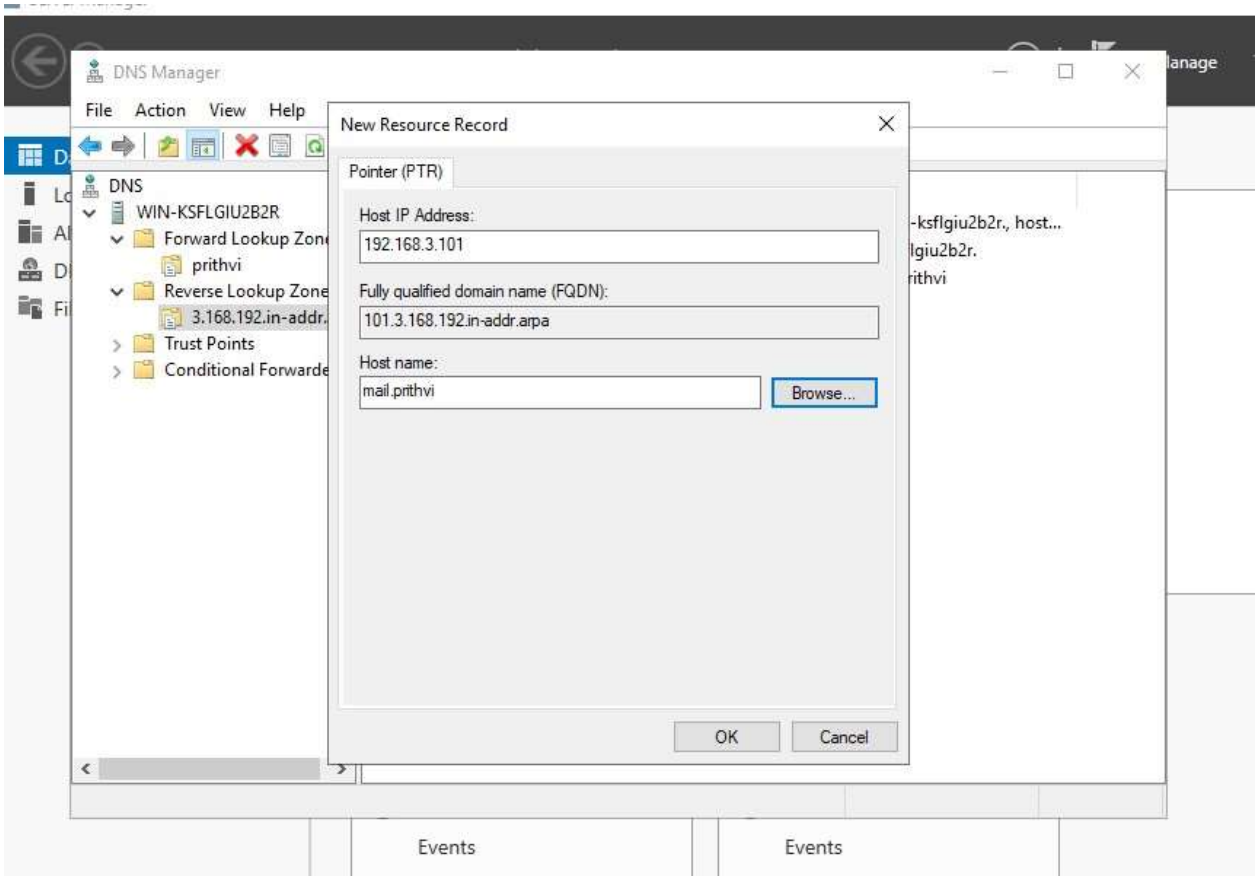


Step- 8:- After adding New Zone in Reverse lookup . Go to Reverse Lookup—-> 3.168.192.in-addr.arpa—-->Right Click —---Add new Record(PTR)
Give IP 192.168.3.100

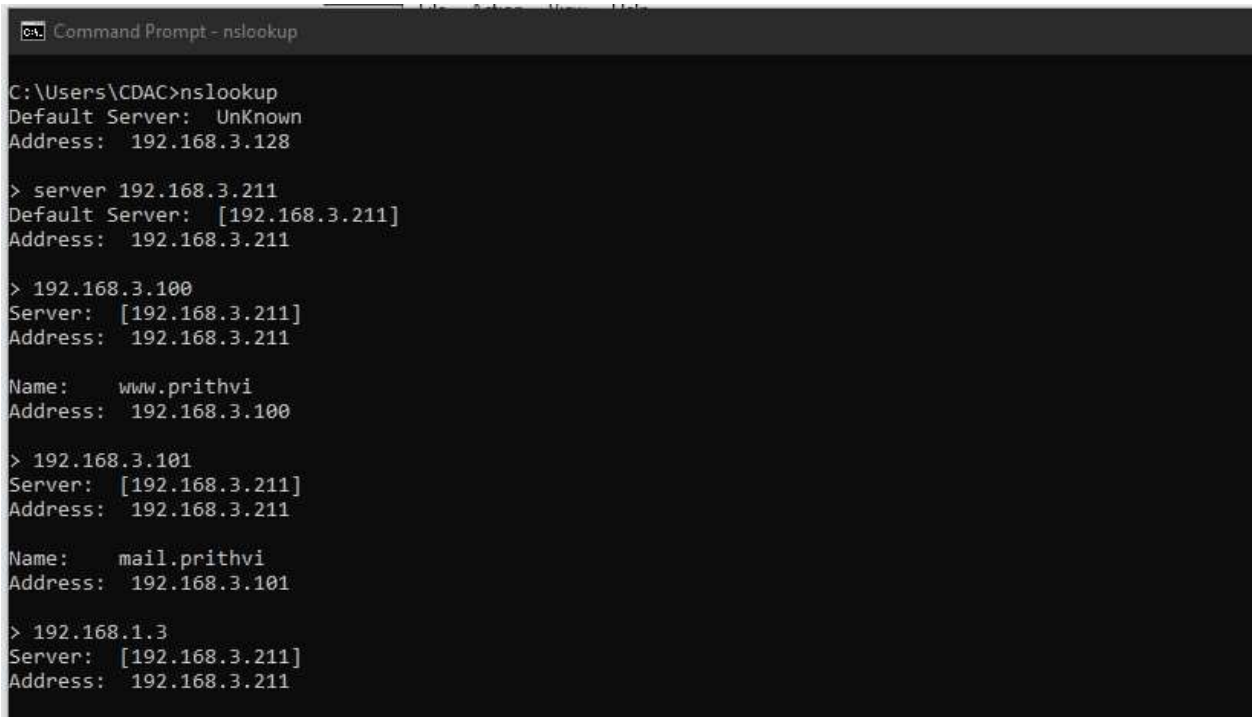


Go to Reverse Lookup—-> 3.168.192.in-addr.arpa—-->Right Click —---Add new Record(PTR)

Give IP 192.168.3.101 For Mail



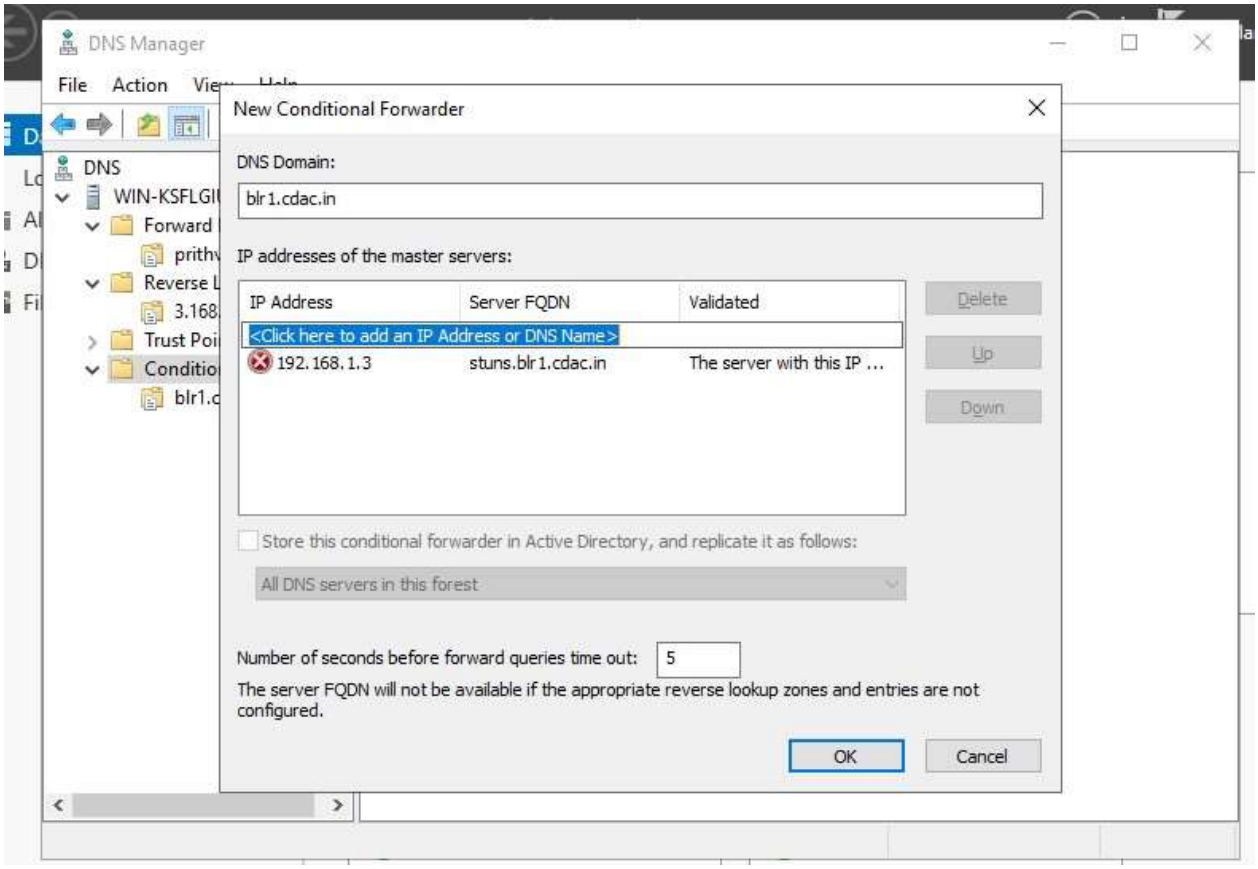
Step-9:- Go to client check Reverse Lookup



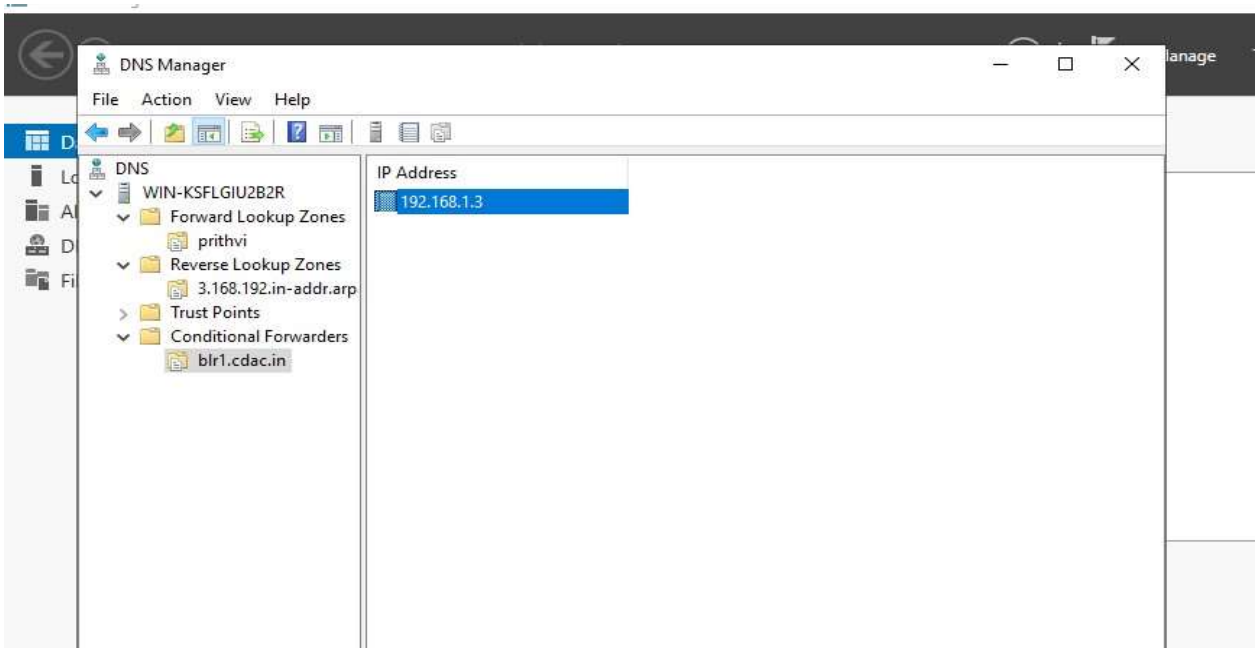
Step-10:- Now Select Conditional Forward —---> right Click —---> New Conditional Forworder

Give Domain : blr1.cdac.in

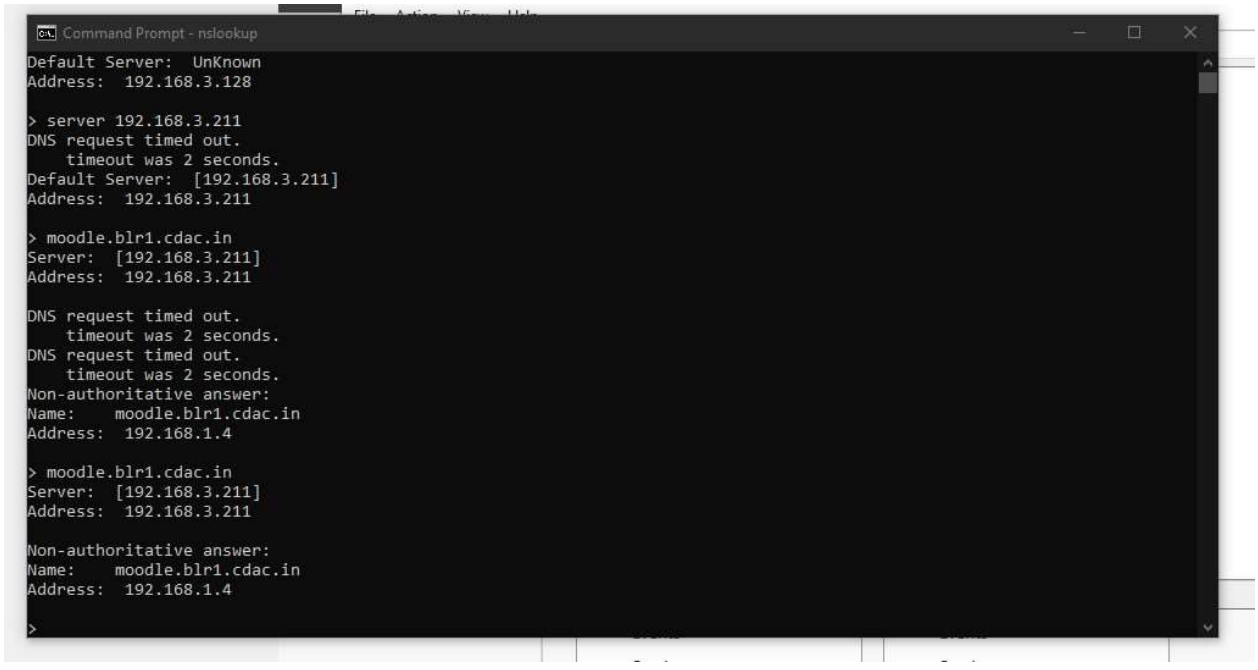
IP: 192.168.1.3



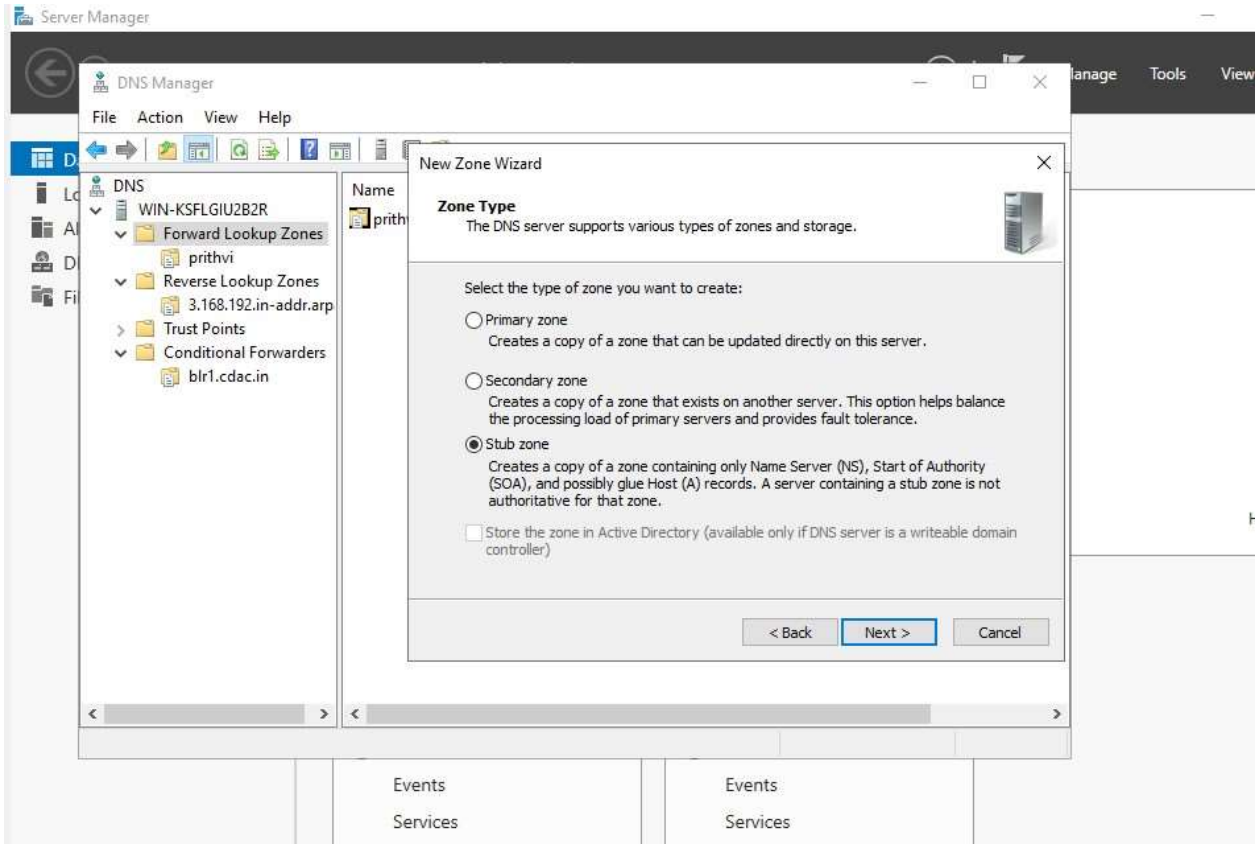
Now Conditional Forwarder added



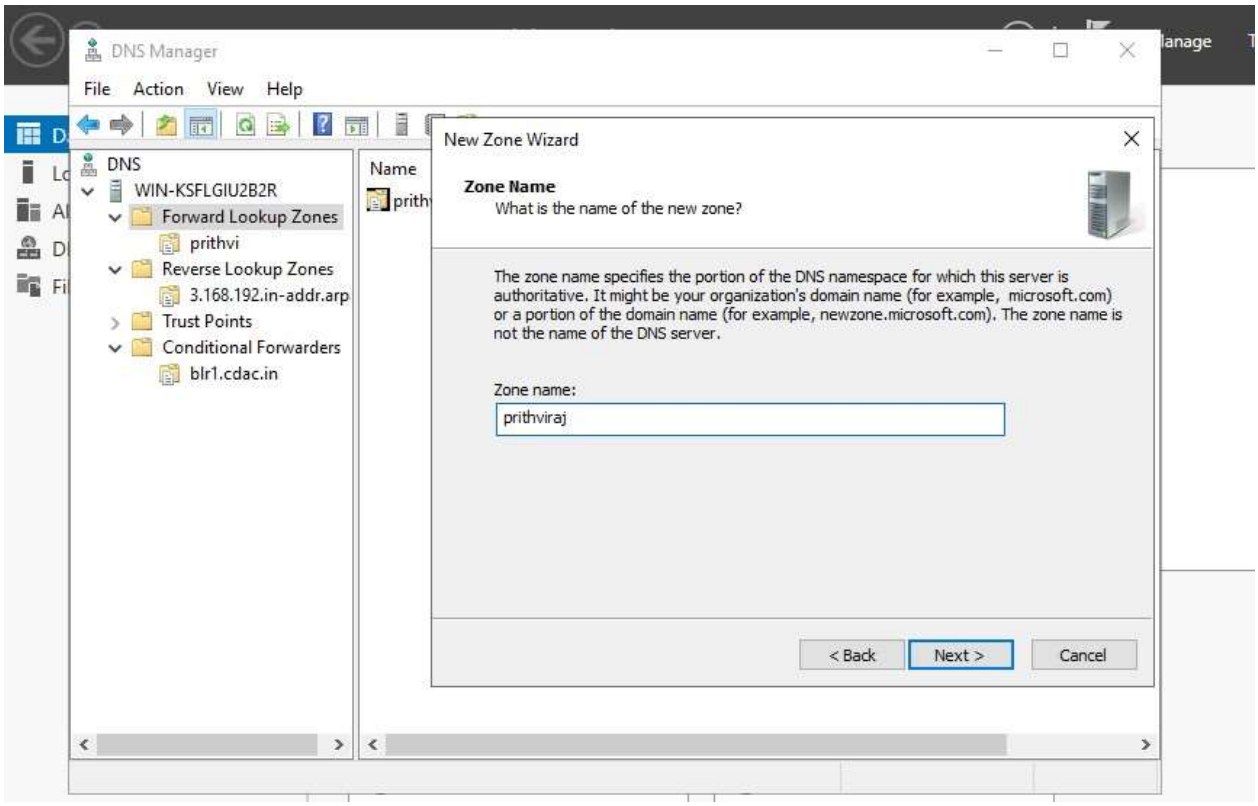
Step-11:- Go to Client check Conditional Forwarder

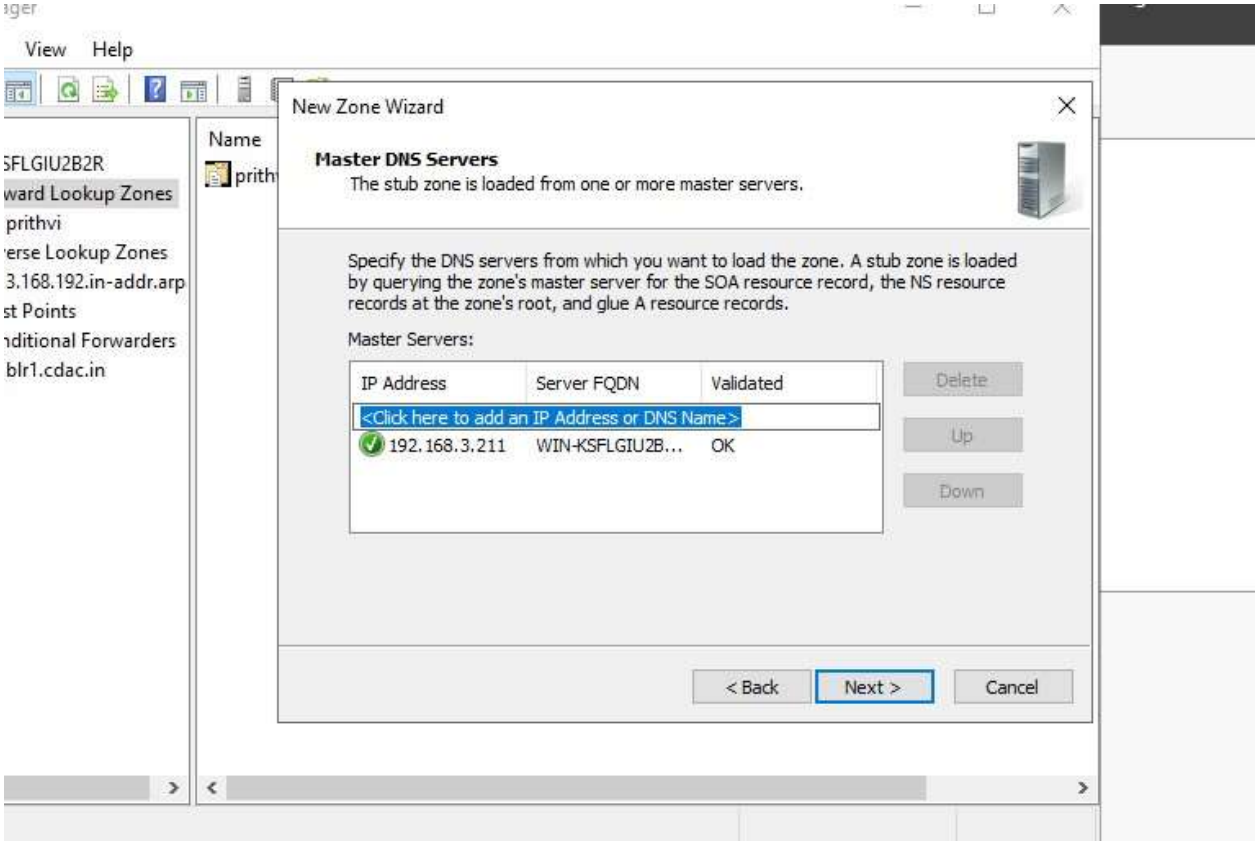


Step-12:- Now add the Stub Zone Go to Forward Lookup —--> Right Click —-> Add Zone —--> Select Stube Zone



Give Zone Name prithviraj



After adding new zone Select Prithviraj —---> Right Click —--> Open New Zone Wizard

Give IP: 192.168.3.211