* **How set up DNS server in windows and Linux?**

**1. Setting Up DNS Server in Linux**

Linux commonly uses **BIND (Berkeley Internet Name Domain)** for DNS services.

**Step 1: Install BIND**

1. **Update Packages**:

sudo apt update # For Debian/Ubuntu

sudo yum update # For RHEL/CentOS

1. **Install BIND**:

sudo apt install bind9 # Debian/Ubuntu

sudo yum install bind # RHEL/CentOS

**Step 2: Configure BIND**

1. **Edit the Main Configuration File**:
   * Open the file:

sudo nano /etc/bind/named.conf.options # Debian/Ubuntu

sudo nano /etc/named.conf # RHEL/CentOS

* + Set the DNS server to listen on your IP address:

options {

directory "/var/cache/bind";

forwarders {

8.8.8.8; 8.8.4.4; # Use Google Public DNS as a fallback

};

allow-query { any; }; # Allow all clients to query

recursion yes;

};

1. **Create Zone Files**:
   * Edit /etc/bind/named.conf.local (Debian/Ubuntu) or /etc/named.conf (RHEL/CentOS) to define zones:

zone "example.com" {

type master;

file "/etc/bind/db.example.com"; # Path to the zone file

};

* + Create the zone file:

sudo nano /etc/bind/db.example.com

Example content:

$TTL 604800

@ IN SOA example.com. admin.example.com. (

2 ; Serial

604800 ; Refresh

86400 ; Retry

2419200; Expire

604800 ); Minimum TTL

@ IN NS ns1.example.com.

ns1 IN A 192.168.1.1

www IN A 192.168.1.2

**Step 3: Start and Enable BIND**

1. **Restart the Service**:

sudo systemctl restart bind9 # Debian/Ubuntu

sudo systemctl restart named # RHEL/CentOS

1. **Enable on Boot**:

sudo systemctl enable bind9 # Debian/Ubuntu

sudo systemctl enable named # RHEL/CentOS

**Step 4: Test Configuration**

1. **Check Syntax**:

named-checkconf

1. **Check Zone Files**:

named-checkzone example.com /etc/bind/db.example.com

1. **Query DNS**:

dig @192.168.1.1 example.com