

## **Problem No: 09**

**Problem Name:** Configure Your Mobile With New DNS Address

### **Objective**

To configure a mobile device with a custom DNS address and observe its effect on internet connectivity and domain resolution.

### **Theory**

DNS (Domain Name System) translates domain names into IP addresses. By default, mobile devices use DNS provided by the ISP. Changing DNS allows users to use alternative DNS services such as:

- Google DNS (8.8.8.8, 8.8.4.4)
- Cloudflare DNS (1.1.1.1, 1.0.0.1)
- OpenDNS (208.67.222.222)

Advantages of using custom DNS:

- Faster domain resolution
- Improved security
- Content filtering
- Bypassing ISP-level restrictions

When DNS is changed, all domain queries from the mobile device are sent to the configured DNS server instead of the default ISP DNS.

### **Application**

Custom DNS configuration is widely used for:

- Network troubleshooting
- Enhanced privacy
- Parental control filtering
- Faster browsing performance

### **Implementation Procedure**

#### **Method 1: Configure DNS in WiFi Settings**

1. Open Mobile Settings
2. Go to WiFi settings
3. Select connected network
4. Choose Modify Network
5. Change IP Settings to Static
6. Enter DNS 1: 8.8.8.8
7. Enter DNS 2: 8.8.4.4
8. Save settings

#### **Method 2: Private DNS (Android)**

1. Go to Settings
2. Select Network & Internet
3. Choose Private DNS
4. Select Private DNS provider hostname
5. Enter: dns.google
6. Save configuration

# **Testing and Verification**

After configuration:

- Open browser and visit a website
- Use DNS checker website
- Verify internet connectivity
- Confirm DNS server change

## **Result**

The mobile device successfully used the newly configured DNS server for domain name resolution, confirming proper DNS configuration.

## **Discussion**

Changing DNS allows better control over domain resolution and can improve browsing speed and security. However, incorrect DNS configuration may cause connectivity issues.

## **Conclusion**

The mobile device was successfully configured with a new DNS address. This experiment demonstrates practical implementation of DNS configuration and its impact on internet communication.