TP 4 (première partie)
Domain Name System (DNS)

1. Préliminaires : interrogation d'un serveur DNS Plusieurs commandes (clients *resolver*) permettent l'interrogation d'un serveur de nom : host , dig et nslookup). Consulter le manuel unix pour ces commandes
2. Exécuter les commandes_suivantes puis _observer les résultats_:_ _

```
host www.fsr.ac.ma
host -v www.fsr.ac.ma
host -t ns www.fsr.ac.ma remarque ? essayer host –t ns fsr.ac.ma
host –t mx www.fsr.ac.ma remarque ? essayer host fsr.ac.ma
host –t soa www.fsr.ac.ma  remarque ? essayer fsr.ac.ma
host –a www.fsr.ac.ma
```

3.

```
dig fsr.ac.ma
dig fsr.ac.ma ns
dig fsr.ac.ma mx
dig fsr.ac.ma soa
dig fsr.ac.ma any
```

4.

```
nslookup
>server      observer votre serveur de nom par défaut vous pouvez le changer par
server @serveurdenom
>www.fsr.ac.ma
>set type=ns
>ensias.ma
>set type=mx
>ensias.ma
>set type=ptr
>@adresseValide
```

5. **sudo apt-get install bind9**
6. sudo apt-get install dnsutils

Configuration

There are many ways to configure BIND9. Some of the most common configurations are a caching
nameserver, primary master, and as a secondary master.
• When configured as a caching nameserver BIND9 will find the answer to name queries and remember the answer when the domain is queried again.
• As a primary master server BIND9 reads the data for a zone from a file on it's host and is authoritative for that zone.
• In a secondary master configuration BIND9 gets the zone data from another nameserver authoritative for the zone.

2.1. Overview

The DNS configuration files are stored in the /etc/bind directory. The primary configuration file is /etc/bind/named.conf.
The include line specifies the filename which contains the DNS options. The directory line in the /
etc/bind/named.conf.options file tells DNS where to look for files. All files BIND uses will be relative to this directory.
The file named /etc/bind/db.root describes the root nameservers in the world. The servers change over time, so the /etc/bind/db.root file must be maintained now and then. This is usually done as updates to the bind9 package. The zone section defines a master server, and it is stored in a file mentioned in the file option.
It is possible to configure the same server to be a caching name server, primary master, and secondary
master. A server can be the Start of Authority (SOA) for one zone, while providing secondary service
for another zone. All the while providing caching services for hosts on the local LAN