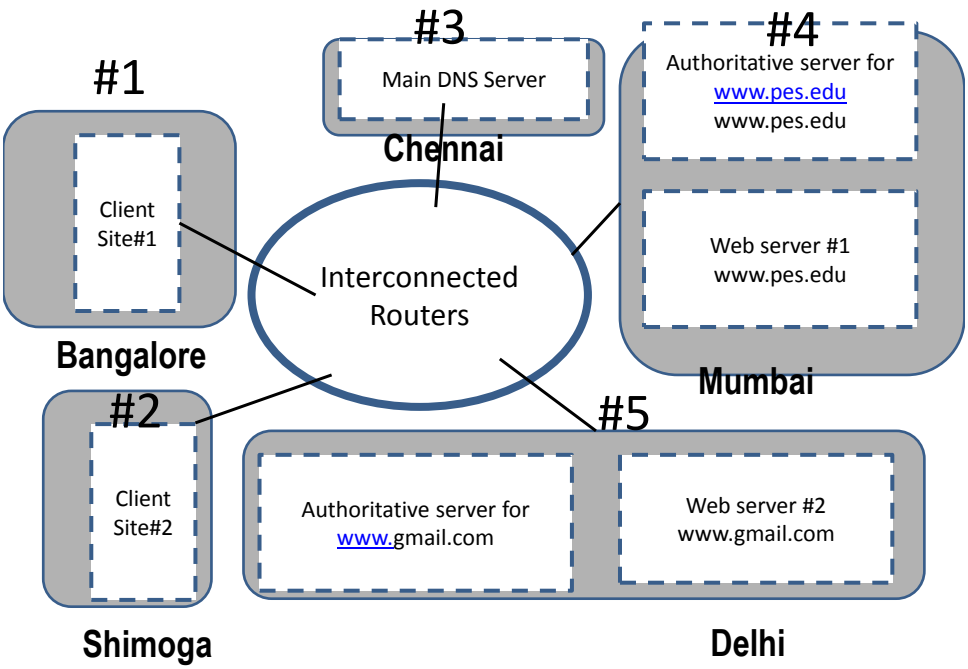
Week#8 – Starting from Feb 29th – 2016

1.Learning objectives:

A. Integrate the learning gained in all previous labs.
B. Know how to design and engineer a typical internet

2.Design, Configure , Simulate and test a network for the following requirements.

2.1. High level architecture :



2.2. Detailed requirements

[You are free to add any additional server required]

Client Site#1 – Bangalore

Number of fixed hosts with static IP addresses	4
Number of fixed hosts with Dynamic IP addresses	4
Number of wireless hosts with Dynamic IP addresses	2
IP address space	

Client Site#2 – Shimoga

Number of fixed hosts with static IP addresses	None
Number of fixed hosts with Dynamic IP addresses	2

Site#3 – Chennai

	Main DNS Server	1	Should direct the DNS request to the respective authoritative server

Site#4 – Mumbai

Web server	1	Hosting www.pes.edu
Authoritative server 1	1	Having the IP address of www.pes.edu

Site#5 – Delhi

Web server	1	Hosting www.gmail.com
Authoritative server 2	1	Having the IP address of www.gmail.com

Conditions:

- Each site must have a router.
- You are free to select any IP address space.

2.3. FINAL OUTPUT TO BE OBTAINED

1	When user enters in any client host : www.pes.edu/index.html	following text should be displayed WELCOME TO PES UNIVERSITY
2	When user enters in any client host : www.pes.edu/cse.html following text should be displayed	WELCOME TO THE DEPARTMENT OF COMPUTER SCIENCE
3	When user enters in any client host : www.gmail.com	following text should be displayed WELCOME TO GMAIL