Experiment No ***:*** *05*
Experiment Name ***:*** DNS server configuration

Objective:

In this experiment we're going to simulate and evaluate the networking principle of DNS server. A DNS server is any computer registered to join the Domain Name System. A DNS server runs special-purpose networking software, features a public IP address, and contains a database of network names and addresses for other Internet hosts. We'll be using two DNS servers for two virtual websites and test the working principle

Design procedure:

- Here a simple network connection using Routers, Switches and DNS servers:

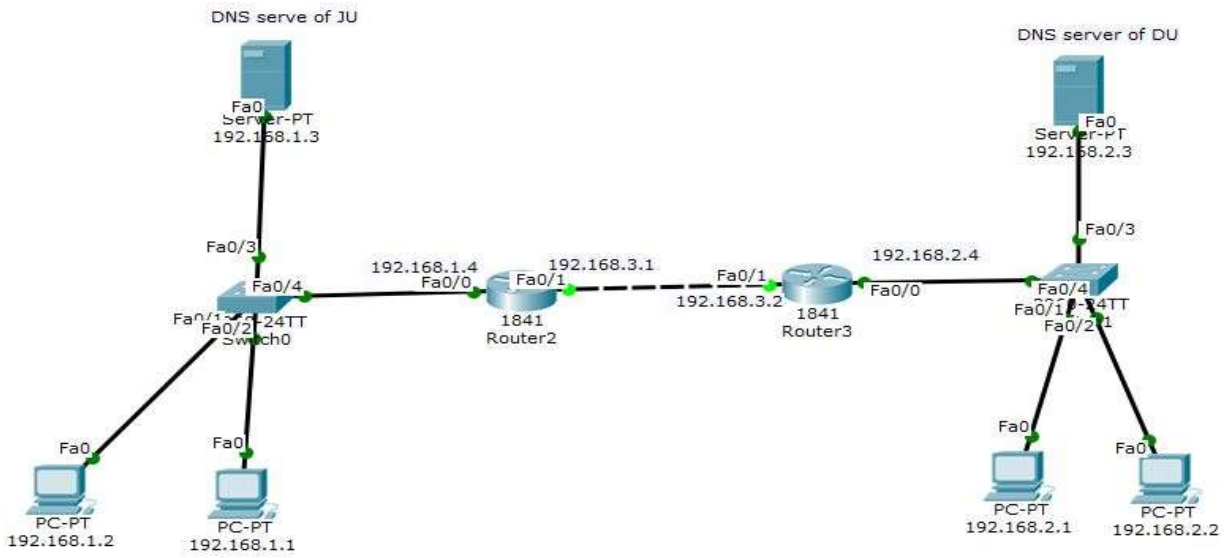
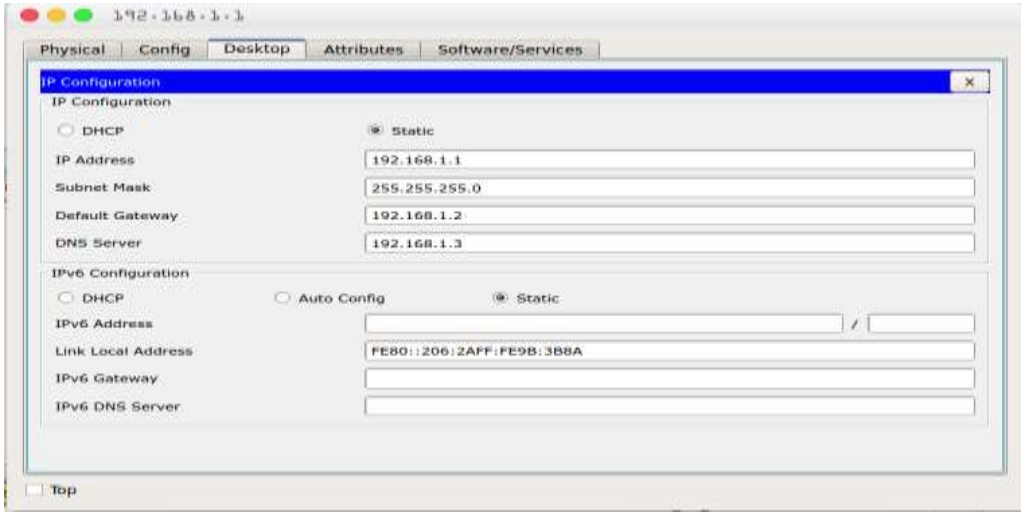


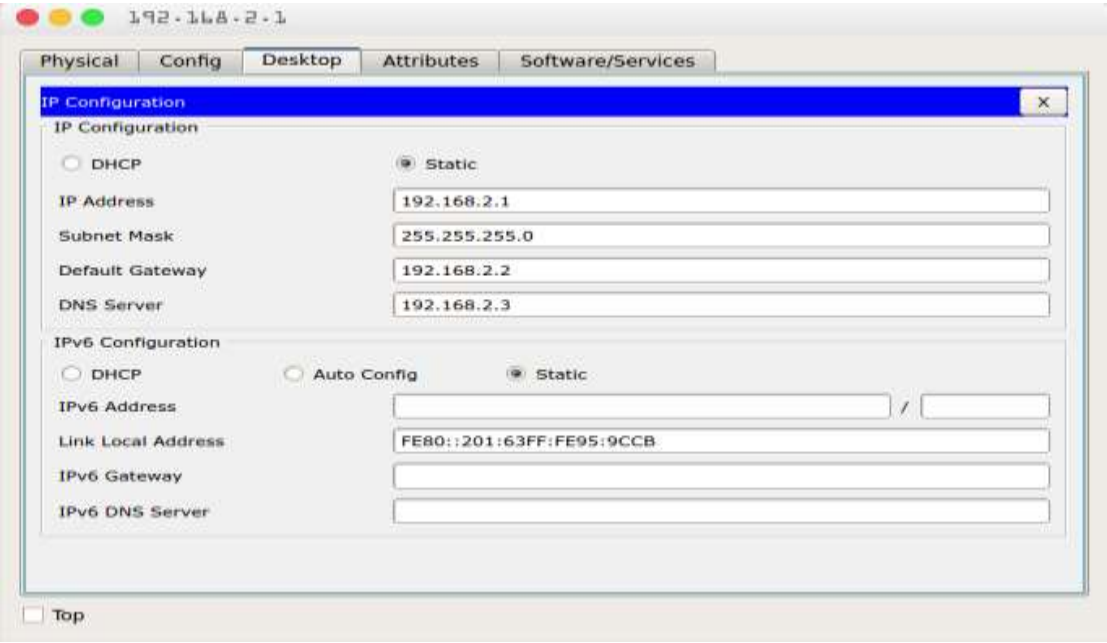
Illustration 1: DNS server connected to switch, connected via two routers.

The above figure shows the connection among PCs, switches, routers & DNS servers.

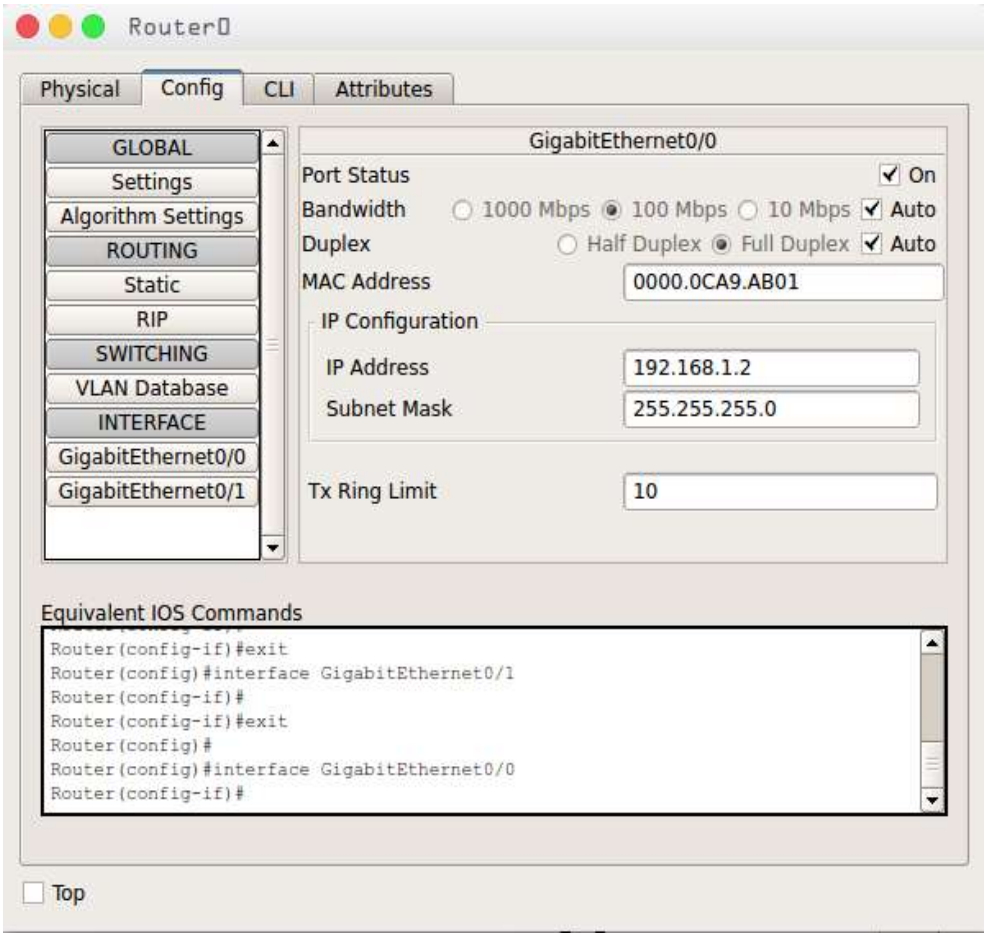
- ***Details procedure of router, End Device configuration:***
  - ***End Device IP address configure:*** *These are sample configuration, not all end-device configuration has shown,*
  - ***Device 1***



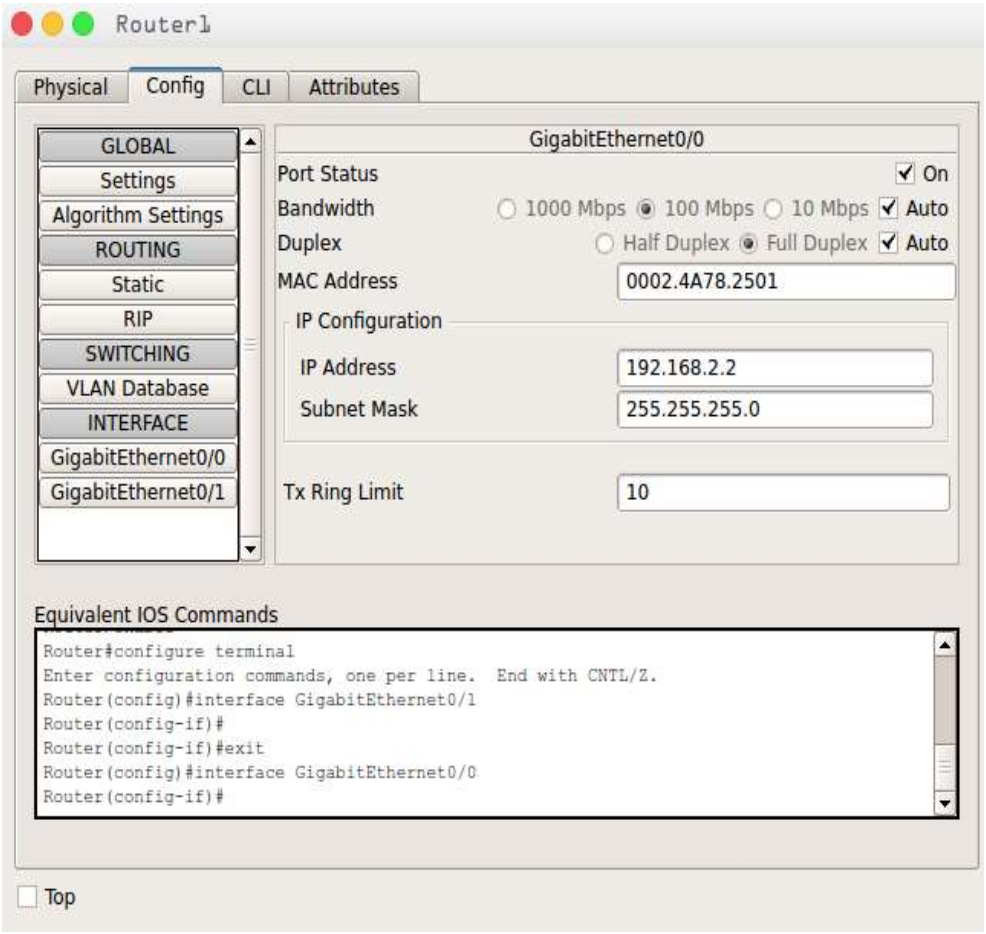
- ***Device 2***



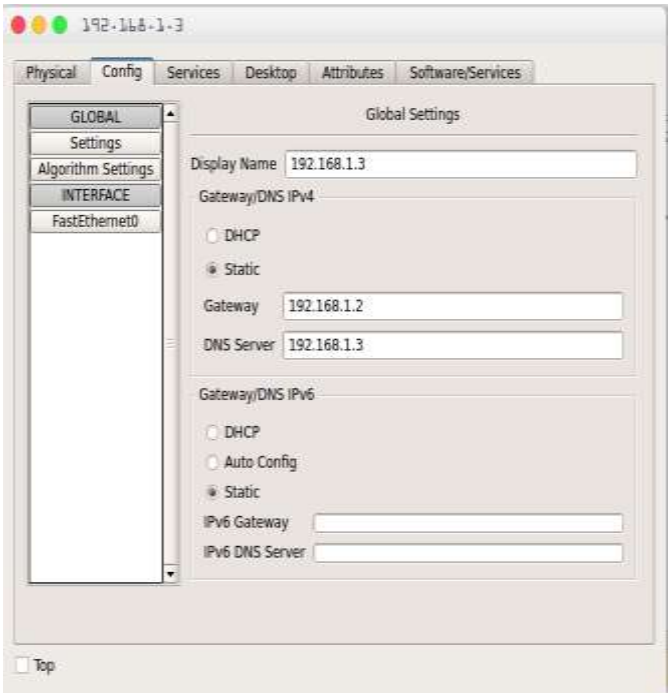
- ***2. Router configuration:*** *Each Router requires two step to be fully functional, first step we assign IP-addresses relative to each router. The second step we setup the routing table**:***
  - ***Router:0***

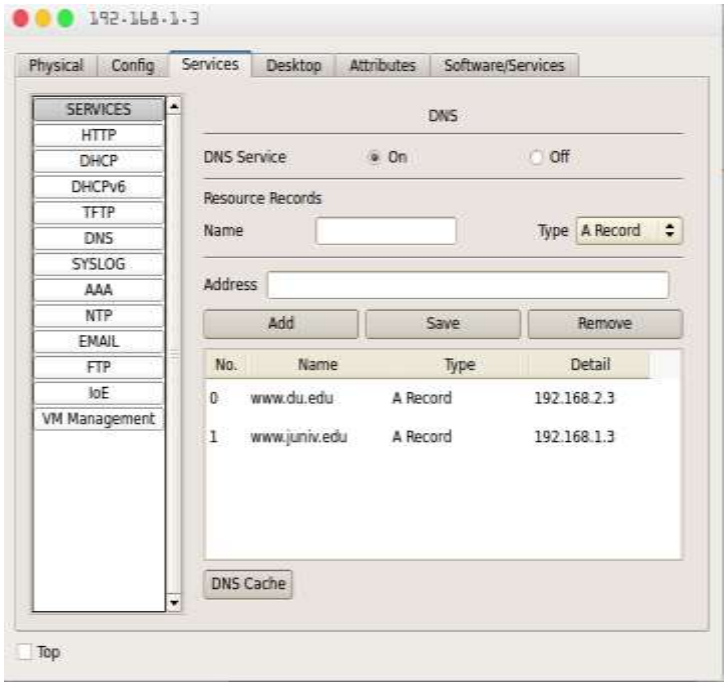


- ***Router:1***

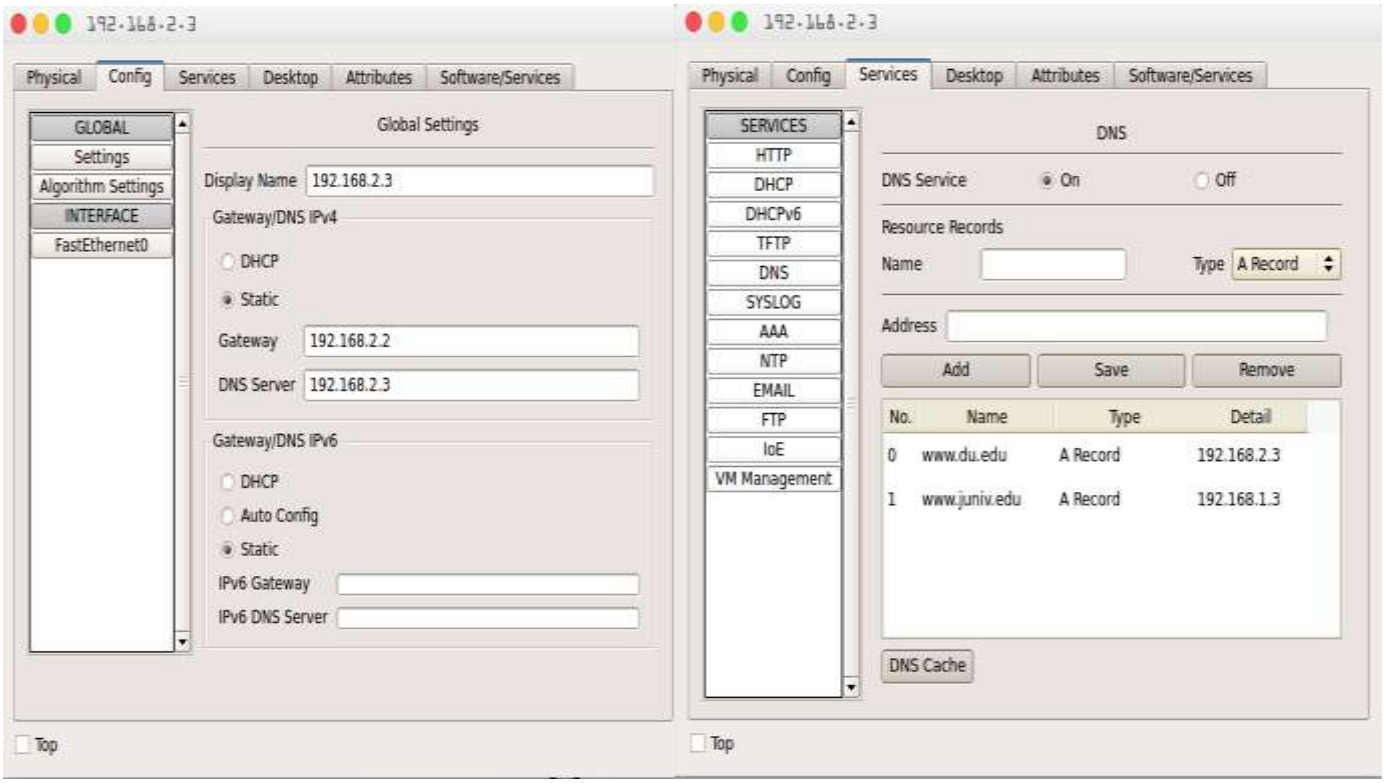


- ***DNS server configuration: We need to configure both of the DNS servers as follows***
  - ***DNS Server 1:***





- ***DNS Server 2:***



Testing DNS Record: *Visiting one of the websites from any PC will make sure the DNS service*