

This laboratory task concerns configuring and simulating a local network topology. Consider the computer network shown in figure. This is composed of a number of subnets, and by some gateway / firewall interconnection. Each subnet has its own collision domain different than other subnets. The Gateways have a number of network cards equal to the number of subnets to which they are connected to, each of which is part of the collision domain network which it is connected.

You should accomplish the following:

-Assign IP Addresses ; (assign IP addresses assuming having available the 10.1.0.0/16 range):

-Setup routing tables;

-Configure a firewall:

- A1, A2 and A3 can produce client traffic only
- The network A3 can create connections to the networks A1 and A2:
- Any network connections created by A2 can not be targeted to the networks A1 or A3;
- All networks should be able to create connections to the Internet (allowed http, ftp, ssh protocols)
- The network A3 must not be visible externally
- It is allowed http, ftp traffic from outside to A2 network
- It is allowed ssh traffic from outside to A1 network
- It must be forbidden any other type of traffic

General configuration:

