

# Advanced Systems Administration

## Presentation 2010

During the three weeks post Easter, lab sessions will be given over to presentations. You must prepare a 15 minute presentation outlining your proposals to deal with the following scenario. This is individual work. You must supply a printed copy of the slides you will use.

A simple network setup is shown below. You may assume the following :

The external router is providing filtering (by port, protocol & IP), Address translation (inbound and outbound) to manage the network traffic to, from and through the router.

Both internal routers are providing similar filtering.

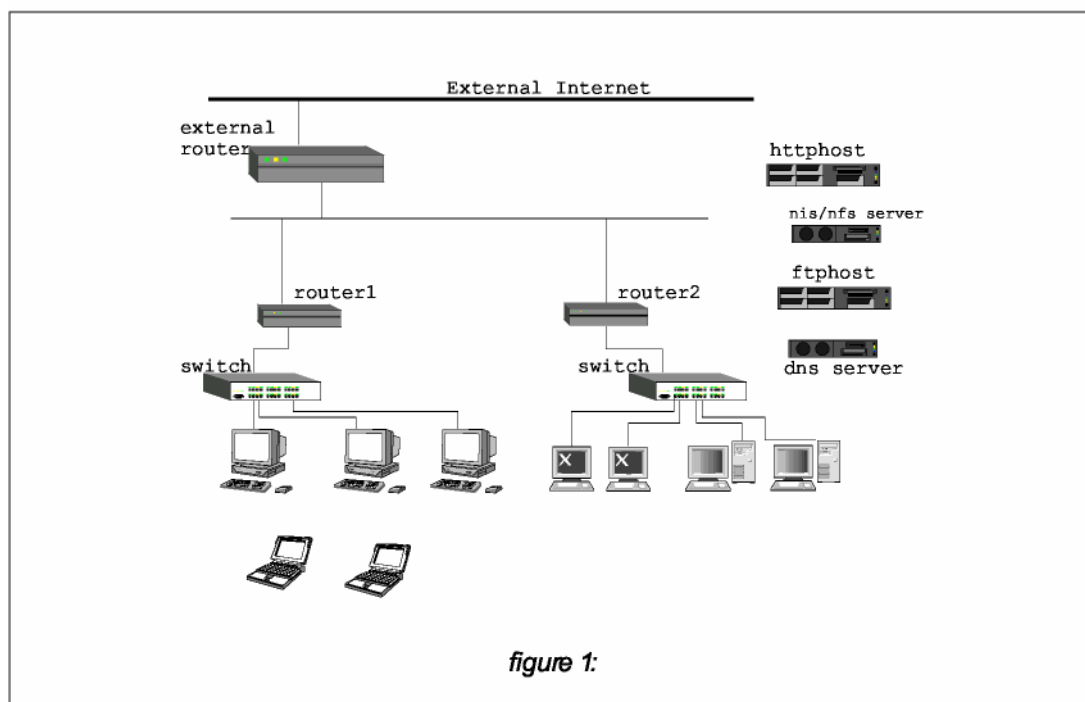
The *httphost* and *ftphost* servers are accessible from the Internet as well as from the internal networks.

The network provides a DMZ and 2 subnets, one for trusted users and one for untrusted users.

Computers on the *untrusted* network may only access the *internet*, the *ftphost* and *httphost*, authentication, file & mail servers, as well as any machine on the untrusted net.

Computers on the *trusted* network may access any server or machine on any subnet as well as the internet.

It is possible that laptops might be connected to either subnet



Your client has asked you to provide a useable and secure proposal for configuring and managing this network.

You should provide at a minimum in your slides:

1. A labelled sketch of your proposed network-topology to include the location of servers, gateways and filters. IP subnet and host addresses should be clearly shown.
2. Justification for your choices of where to locate the servers, the interface addresses and subnet addresses that you will use.
3. What network traffic you would filter at each of the gateways in your network. You should indicate either port and/or service and/or protocol as appropriate, along with IP addresses for source and destination.
4. A description of how you would manage logins and the users home space. You should indicate the applications that you would use.

Marking will be based on the technical content and justifications that you present to defend your proposals.