

Secure Network Services – Final Assessment (50%)

Create a network the company based on the following information.

Company Name – “**Corona Fightback Solution**”. They have 200 staff (140 in medical research, 20 in Marketing, 10 in accounts, 10 technical staff, 10 managers and 10 receptionists).

1. Medical research - 10 application servers. The Marketing dept 5 - application servers.
2. Everyone has access to the internet and to a single Email server.
3. Each network should have access to a web server which you should customise.
4. Subnet the network by department. A class B network of 172.16.0.0/16.
5. VLAN's need to be set up for each department.
6. Set up the security of the network based on the elements of this semesters practical work.

Use Cisco Packet Tracer to create this network. This can be downloaded: <https://www.netacad.com>

If you don't have an account, you need to create one and download the latest version of Packet Tracer from the website.

You will need to create an IP addressing scheme (Excel) for the network for all end devices to have connectivity, you should use a service for allocating addresses for one department.

Write a 3000-word (-10%) research report on the Network Design on how you created, tested and researched the network. Upload your assignment to the link on Blackboard by the due date.

Your assignment should contain your packet tracer file, IP addressing scheme and Word document.

Use Harvard references for any websites or books that were utilised.

The assignment is worth 50% of the module.

40% (of the 100%) of the marks for the assignment will be allotted for implementing security characteristics we didn't research in class but are from personal investigative implementation, justification and documentation.

Use Harvard referencing.