**Rough guide to your design plan (Task 1)**

**Submit plan for feedback: 1/4/19**

Look back at your previous assignment. Anything you can reuse/help with the design plan? Justify your decisions and selections throughout.

**Things to include:**

**Installation**

* Outline and select all hardware, software (Could also include cabling) for the network. Reflect back to assignment 1. Infrastructure or standalone? Storage requirements? Which NOS will you use?
* Include minimum specs of software needed and extra costs involved.
* Hardware specs and recommendations for upgrades including costs.
* Include existing hardware and software here along with items to be bought.
* Network Layout diagram – See next page for example – Ms Visio/www.draw.io could be used

**Service**

* What services need to be configured - DNS, DHCP, Active Directory, Printer services etc. Why?

**Naming system**

* Domain name and local server name.
* User name and passwords for users. Use a table.

**Addressing: method eg allocation of addresses for NOS services**

* IP Address list for hardware.

**Security**

* Policy eg patch management, anti-viral management, access requirement/rights, administrative rights, authentication, password policy.
* Explain your intruder detection system e.g firewall with filers and rules, email monitoring, application and packet monitoring
* Physical security(Server room access)
* Explain the router setup(Firewall, encrypted WI-FI)
* Anti-Virus

**Disaster recovery**

* Disaster recovery setup - Devise a regular backup plan/methodology – where will this data be stored? How? Backup-power supply? Off site management? How will you ensure high availability and fault tolerance.
* Backup Software? (e.g Windows Server Backup, Acronis. Which and why.)

**Security Policies & Procedures to consider**

* Password(timeout, requirements, history)
* Security(Group policy, CCTV, guards, check points)
* Vetting (DBS, CRB, references)
* Physical protection (Doors & locks)
* Encryption(Bitlocker etc)
* Timeout(Session, PC, User account)
* User roles (Admin, non-admin, restricted admin, guest)
* Backup & Data evacuation
* Data protection act, GDPR
* Two factor Authentication (Software, hardware, physical)

**Current network setup:**

|  |  |
| --- | --- |
| **Old server with no NOS installed:**Processor: Core 2 DuoHardrive: 500GB HDDRAM: 4GB | **8 Dell PC’s all running Windows 7:**Processor: Core 2 DuoHardrive: 500GB HDDRAM: 2GB |

**Other hardware:**

Switch
CAT 5 Cabling with patch panel
Router (With WiFi)
Printer

**See assignment scenario for software**

**Note:** If upgrading or suggesting new hardware remember it is a small business (consider value and need) and you must justify your selection.

**Network Diagram Example**