Group B Project

Project Name: Company Network Design and Implementation

Najah Group Support Center They have recently Extended’s 600 Employees Stuff and Result Need to move to a new building and building Has been Identified But has no network This means that Before They can make to move out new network service needs to be designed and implemented in the new building exciting network Comprises Of the following element

* Example.

1. First floor (sales and marketing department 120 users expected. Human resource and. Logistic department. 120. Users. Expected)

2. Second floor (finance and accounting department. 120 users. Expected. Administration. And public relations Department. 120. Users. Expected)

3. Third floor (iCT 120 users. Expected. Server- room 12 devices. Expected)

Therefore. As a key member of the network team. You have been tasked. To design a network. For the. New building. At this stage. logical design.

Is required. Which shows the measure. That you will but in place to ensure. That the new network meet is the current business. Need. And it is. Future proofing.

* Requirements.

1. Use Cisco packet tracer and implemented the network solution.

2. Use hierarchical model Providing Redundancy At every layer I.e. Two routers and two multilayer switches Are Expected To be used to provide Redundancy.

3. The network also expected to connect At least Two ISPs to provide Redundancy And each router to connect the two ISPs

4. Department It's required to have a wireless network for the users

5. Each department should be in a different VLan and in. Different sub network.

6. Provided A base network off 172. 16. 1. 0 carry out uh. Subnetting. To allocate the correct number of Ip address to each department

7. The company network It’s a connected Static Public IP address. (Internet. Protocol)195.136.17.0. /30, 195.136.17.4./30, 195.136.17.8/30 195. 136. 17. 12./30 Connected to the two Internet Providers

8. Configure Basic device Sitting Such As host name Console password Enable password Banner Message disable Ip domain Look up

9. Devices.in all departments are required to communicate with each other with the respective multilayer switch configured For Inter-VLAN routing

10. The multilayer switch are expected to carry out Both Routing and switching functionality that will be assigned Ip address

11. All Devices And the network are Expected To obtain Ip address dynamically from the Dedicated DHCP servers Located at the Server From

12. Devices in the server room are to be allocated IP addresses Statically