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#577

Cairn University School of Business

CIS122 Essentials of Networking

Project 4

Project objective:

Prepare the network infrastructure of a new site.

Equipment used:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Equipment Description | Vendor | Vendor Item # | Retail price | Actual price (if known) |
| Equipment rack | Kenuco | RACK-LNWORA-9U | 84.99 | Not known |
| Patch Panel 24 ports \*4 | Sytec101 | SYSPP24 | $29.00 | 24.00 |
| Network Copiers \*4 | CopyFaxes | 9548B006 | 549.00 | Not known |
| Wireless Access Points 800mb/300mb \* 7 | Newegg/ Google Express | UAP-AC-LR-US/ EAP115 | $97.98/ $36.98 | Not known |
| Cat 6 cabling (solid core) \* 5 (5 different colors) | Showmecables | 85-600-345 BK | $30 | Not Known |
| Cat 6 patch cabling \* 4 (4 different colors, shielded) | Showmecables | 85-600-310 RD | $49 | Not known |
| Ethernet signal repeater\*15 - 75 | SIENOC | OC-6018 | $9.60 | Not known |
| RJ-45 connectors \*2 | Platinum connect | 07758969336458 | 19.50 | Not Known |
| Female outlet with brackets – 22 -29 | Fly Tiger | 18033 | 19.66 | Not Known |
| Connector boots cover | uxcell | a13122300ux0115 | 6.27 | Not known |
| One high speed switch | Netgear | JGS524NA | 169.99 | Not Known |

Detailed list of software and operating platforms used, including version numbers and licensing requirements:

Windows OS to verify connectivity on work stations

Network diagram: Physical copy

Configurations:

The Runs are to be done underneath the floor, this would also mean the sockets would come from the floor and not the wall; as a result this will minimize the length of patch cabling and would also not force workstations to be near the wall.

As a result, hardware like switches, hubs and wireless access points are placed on or next to walls, so that vertical cabling can be placed without much worry of human contact.

The Horizontal runs would connect together at an equipment rack which is in the same room as the Access Control Panel, Patch panels would be used to connect the cables to the demark.

Signal repeaters would be connected to individual cables once they have reached their max distance

Wireless Access Points, Copiers, switches and other networking hardware would connect directly to the solid core cabling, in other words their location would be more or less permanent and not to be tampered with.

It’s important to note that the network copiers cost more than the whole network installation.

The total cost range of how much this would cost is -$3773.63 – $4337.26