

CDC University is a small college in Metropolitan, Iowa. Until recently the campus has relied on the old fashioned methods of information exchange as there was never a push to implement technology beyond what the students brought with them. However the board of directors has recently decided that a computer network on the campus is inevitable and would provide many benefits to the curriculum at CDCU. The University has formed an Information Technology department, purchased equipment, and hired a team of network administrators to implement this network for them. This team is now responsible for the initial set up of the network.

Given the small startup budget the university gave the Information Technology department, a less than generous amount of equipment has been purchased. However, this is a small network for a small campus so the board sees no need for additional equipment.

No specific software requirements have been outlined by the board, however it is expected that whatever software is used does not add to the cost of the program or violate any copyright laws. This said, the board will be happy with any implementation as long as it meets the following requirements:

1 A Web Server for www.cdcu.edu

1.1 The board has hired an outside web development team create the site, and will provide the network administration team with the content once the server is operational. The only requirements for this are that the web server be PHP compatible, as dynamic content on the pages will be developed in PHP. Resolution of www.cdcu.edu will need to be handled by the network administration team. This means you will need to set up some sort of DNS.

2 An Email Server for @cdc.edu

2.1 This service will provide accounts for the students and staff with spam filtering and virus protection. A list of users will be provided (between 25 and 50 are expected for now). Additionally, configuration of cdcu.edu is needed, so that mail is directed to the appropriate address (DNS resolution). Users should be able to check email from both inside and outside the campus network using both POP and IMAP. The Administration Team is also expected to set up some sort of Web based e-mail system allowing users to access their accounts via a web browser.

3 A File Server

3.1 There is currently a ftp and smb server running by Professor Evans. This server needs to stay running as various faculty members need it for research and classroom instruction. This server can be patched for security purposes but it cannot be updated to a newer or different operating system due to faculty protests.

4 Remotely Accessible Programming Environment

4.1 The newly formed programming department requests remote access to a lab server so that students can work on C/C++ programming assignments. Users should be able to log in to this service via command line with the same credentials as above and compile simple C/C++ programs using GCC.

5 Firewall

5.1 To test security the board asks for the ability to shut off the firewall for small periods of times. This will allow a complete tests of the internal security and help encourage board confidence in you and your setup. Please build in a switch to shutdown the all firewalls within 15 minutes for testing purposes.

6 Wireless

6.1 To increase the appeal of our school to students of the technical nature we ask that you set up a wireless access point that students can employ to access your network. You can use whatever you wish to secure this but we would prefer it to be a standard that is accessible to numerous students.