

Internet Café Network Design: Answers to Student Questions

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Getting Started

Q. How can we start on this project? Do we have to go look for a coffee shop or place that needs a network set up for them?

The best place to start is by making a list of the equipment that will be needed for the network and try drawing an initial network diagram. First, look through the textbook and just writing the list down on a piece of paper without doing any research. Later on, you will want to check Internet sources or go to a computer stores to get the actual details on the equipment you will use.

Network Diagrams & Cisco Icons

Q. I was wondering if we had to choose all our icons from the Cisco Icon list.

Do your best to draw a network diagram using Cisco icons. I understand that you may not be able to find a suitable icon for everything on the network, but I expect that a reasonable attempt be made to use as many Cisco icons as possible in the network diagram.

Q. Does the cafe (layout with dimensions) on page three of the assignment handout need to be the same for our cafe?

Yes, this is the layout of the café in the assignment, although it's not that important an issue since the assignment calls for a network diagram, not a layout diagram. The layouts are given to help you decide on the number of wireless access points, which is sensitive to distance considerations.

Q. I've never drawn a network diagram before. Where can I find an example of one and what program should I use to draw it?

There are a number of network diagrams in the book, so the way to begin understanding how to draw one is to look through the network diagrams in the text. Some people like to use Visio to draw a network diagram, but it isn't necessary. A simpler approach is to use the drawing features of PowerPoint (on a blank slide) and it takes only a few minutes to get started using them.

Q. Also you mentioned you wanted a wireless connection in the patio but do you also want all the wiring to be wireless or a combination of both.

I'm expecting that the desktop computers at the indoor café tables will be wired and those outside (brought to the café by customers) will be wireless.

Q. Is the patio covered and enclosed or outside? If it's outside and/or not covered (or protected from the elements), are we to assume that the computers must come in at night or inclement weather?

This is not really an issue since outside wireless access is only for customers who bring their own laptops if the weather is bad, nobody will be using the network from the patio.

Gantt Charts

Q. There is requirement to use a Grantt Chart for this project, and I don't have Microsoft Project program at home to do this job. Is the program available in any lab at school? and is it easy to create a chart?

Using Microsoft Project is not necessary for this assignment. Just look on Google and type in "Gantt Chart" and "Excel" as key words, you will find a lot of options.

Network Specs

Q. Are we responsible for the office computer(s)? Or just Internet Café computers? If we are to include the office computer(s): How many? What applications?

The computers and applications required for the network are listed in the Network configuration section of the assignment.

Q. Are we providing Internet Access only? Or are we to provide other applications on the computers? If other applications, which ones?

This is a network design project, so the primary application is Internet access. Any other software required for the project is listed in the assignment. If it's not there, it's not required.

Q. Are we charging for computer usage, or is it free with the coffee?

This is not relevant. You're designing the network, not running the café.

Q. Are we providing printing services? If so, black/white or color or both?

Printing services, while possibly relevant in an actual café, are not listed in the assignment specs., so you can assume that they will **not** be provided.

Q. Are the computers static? Or are we to allow them to be moved around?

I don't see how this matters.

Q. Do we need to include prices for computer tables, hutches, and/or racks?

No. Again, this is a network design, so the furniture is not an important issue. Assume that all the furniture that will be needed is already in the café.

Q. It is stated that a server will be required with support for a generic office environment. Could you please specify what the server will need to do in such an environment. Also, will the server be used for hosting a website or filesharing?

I haven't specified that on purpose, so as not to complicate the assignment. Obviously in a real Internet café, the server might be used for a variety of interesting purposes. So, you are only being asked to include a small server on the network but the server's whose functionality has not been specified.

Q. What will be the peak number of users for this LAN?

You should be able to calculate this based on the information taken from the assignment.

Q. Will customers be able to use various computer applications or is this strictly a place where you can check out your favorite websites while drinking a cup of coffee?

Good question, but not one covered by the assignment.

Q. Would it be possible to go over an example of calculating a WAN capacity in class (the method of calculating this value is very fuzzy to me)?

Yes, we can do that. It's meant to be an estimate really, just to get you to think about how to size a networking link.

Q. Will the kitchen computer need addition software like MS Office or software to help manage the business?

Conceivably it might, but this is not specified in the assignment.

More Assignment Specs

Q. For the paper are we restricted to a certain number of pages?

There's no explicit restriction on the number of pages. I'd prefer the papers to be of "reasonable" length, i.e., not too long or too short. I'd guess about 15-18 pages will do.

Q. Under the Budget description, I noticed that you didn't provide us with a set amount. Isn't our client supposed to give the amount she is willing to spend on such investment? Or do you want us to design something and come up with prices base only on equipment? And also with the recurring costs- monthly maintenance does this include a computer network technician cost???

No there is no set amount for the project. Remember this is meant to be a friend who you are giving advice to. In fact, for an RFP (which will be the subject of the next assignment) no total is given either, instead this become an important decision making criterion for the company issuing the RFP.

The total costs will be a combination of fixed and variable costs. In terms of labor, you can assume that there is an installation fee but no maintenance fee.