NETWORKING ADVISORY COMMITTEE MINUTES 3/8/02

The meeting began at 8:16 am. Tom Jones opened the meeting by introducing both Serena Johnson and himself. He concluded his opening by stressing the need for input from the advisory council, stating, "we cannot move forward without your feedback". Tom turned the meeting over to Serena.

Serena Johnson gave a PowerPoint presentation of the Cisco Networking Academy explaining to the members what the academy was and that it bridged high school and college. She concluded that she wanted to know from the committee whether anything needed to be added to the program then turned the meeting back over to Tom.

Tom Jones gave a PowerPoint presentation on computer networking. Pointed out that computer networking was not exclusive to Cisco but included Microsoft, Linux, and security.

George Beatty (Alcatel) asked how many CCNA classes applied toward a degree. Tom replied that currently these classes were Cisco 1 and Cisco 2.

Tom mentioned the new convergence technology lab and the new technology lab that will be built and equipped to respond to the industry's changing needs.

Tom announced the appointing of Bob Ortega (WorldCom) as chairperson of the advisory committee.

Bob asked about certificates. "What does it take to set up a program? I'm thinking of Linux and security certificates. Could they possibly combine?"

Tom: "Setting up new classes is relatively easy but if they are part of a certificate program it gets a little more involved. You have to get input from the industry and build the curriculum. Once that is done, you present the suggested curriculum to the Curriculum Advisory Board. You need a 6-9 month lead-time. Once approved, it goes into the catalog. It can't be offered as credit until it's in the catalog."

Natalie Greenwell (Continuing Education) asked Bob who would take security. CCNA?

Bob: "Recommend that CCNA take it. There are no real prerequisites."

Natalie: "If there's a need for it, the class can be set up sooner."

Bob: "Everything set up is ideal. I am looking into taking courses but I attended a Cisco seminar on managed security service providers. Had experts giving presentations. Not

just Cisco people. Used system analyst program approach. CCNP, CCNA, Linux, Microsoft, UNIX, all kinds of people. The business is growing."

Ann Beheler (Dean/Engineering Technology) "Our course is security, CIW security analyst certification. Cisco is coming out with security for the academy. We have to do lots on security. I'd love to see a sub-committee from this group work on security."

Bob: "Concern with the internet. Taking a different view. Looking at security issues first. Starting to look at needing people who can do this. Everyone needs to get involved with security."

Helen Sullivan (NSF) asked about the Convergence Lab and whether there was security in that.

Bob: "We have it as part of Design and Capabilities."

Toni Jenkins (Executive VP/CCCCD) mentioned the need to be more responsive in curriculum and maybe start some courses through Continuing Education. Asked if the committee was open to that. Mentioned that some companies don't want to fund non-credit courses and have a problem transferring from non-credit to credit.

Ann B. asked how important that was to the group.

George B. "Most programs require credit (at Alcatel). I will look into that."

Toni: "For person who needs credit something can be worked out."

George B.: "It's difficult to pay for non-credit. When I interview people I'm finding they don't have Sonet, ATM, etc. training. We have to train them ourselves. A foundation is so important. Carving out a specialty is so important for added value. You can't get rid of a person if they are so important. So many CCNA, CCNP..they've taken these but need to build on them. How many need to work in security? Not many. VIVID program went away. Build on the foundation, they know IP, SONET, frame relay so they can train in our programs."

Tom: Two problems. Funding (equipment expensive) and can't find components. They are not manufactured for labs. We have plans to implement technology but we need your help."

Bob: "My lab's difficult to build. You can look at concepts but can't touch product until actually working with the company. Command line interface same as Cisco so that training helpful. Optics, Optical Engineering, frame relay, ATM, some basic training would help. We'll teach Alcatel programs but we need a base to start with – a foundation."

Ann: "Six degrees in division. We are working on optical engineering. Integrate programs. We need at cost equipment or donations from corporations so students can get experience on company programs."

George B: "It's amazing how much we push out the back door. The problem is we push it out because it's older technology and no one can use it."

Bob: "I've seen more third-party software from Sun Systems. Good first step from various levels. Some are UNIX, some not. My students are telling me they wish the Cisco classes were a little more robust."

George B.: "Without hands-0n you don't know the product. The problem with implementing a lab is the cost, looking for donations. You want current stuff. All commercial programs are hungry for business. This is a good time. You don't want to align too closely with their business or you run them out of business. <u>Teaching Systems Management</u>. Be able to get experience managing a network."

Toni: "We're not trying to replicate Nortel or WorldCom. We're trying to set up where people who supply can be educated. We've been awarded three demos for wireless. It's a piece of this convergence lab. Does that make sense?"

George B. agreed.

Bob: "Good point, I'd like to have some good looks at building a program robust enough not to get into current trends that are no good. Databases. Oracle is a player we can approach."

George B.: "Database certainly is an area to explore."

Bob: "Many times database is the core."

Natalie: "It hasn't got a lot of interest."

George B.: "Not a lot of people are doing it."

Kyle Fahrenthold (WorldCom): "Documentation. One of the weaknesses I see is in technical writing. We use so many documents. We have brilliant engineers who can't come up with step-by-step documents. I think that's a good area to explore."

Bob: "That's a project requirement in my class. Document to show how you did your program. They also have to do oral presentations. That's important because they will probably be giving presentations, standing in front of a room full of people."

Helen: "Do you have to re-write what the engineers give you?"

Kyle: "We don't rewrite but reprocess."

Helen: "Have requirements?"

Kyle: "Yes. If vendor can supply specs with documentation that explains things we take data and re-create test plans. Technical writing class gives them an idea of how to write documents, how to put it in step-by-step order. I know I had technical writing as part of my college education. It really helped. One more thing, Legacy Telecomm. There's a weakness in that in younger engineers. I don't want to see it get lost in all the new stuff."

George B.: "I come from a LAN environment. Other people use voice. There's a big gap between us. Now converging TDM, millions of dollars invested in those systems."

Kyle: "Now they have programs transport Legacy. Need to have something covered in the classes for existing telecommunications."

George B: "Colleges can help us give a foundation."

Yang Lai (TISG): "I like what's been said here. I know foundations people pick up technology but don't know about foundations. If I know the foundation of one I can figure out the others...IP is IP whether it's Microsoft or Cisco. Technical writing and project management are a big thing."

Natalie: "Talking with all non-tech people you have to deal with."

Ann: "Are presentation skills important?"

Kyle: "It's nice to be able to stand in front of a group of people and know what you're doing."

Bob: "Communication and presentations. If you know how to communicate, you don't need PowerPoint."

Ann: "At Richland it was a required project with the teams. They were graded by the instructor and other members of the team. Many used these in their portfolios."

George B.: "Good. A project like that is good if it has energy and gets people interested and participating."

Ann: "What's the next step? Is there anything else? We want to hear from all of you beyond this meeting."

George B.: "Optical Networking. Extend on Sonic, wireless, DSL, network management."

Bob: "What timeframe? Should we formalize our needs?"

Ann: "Wayne Jones is working on optical. Any new degree programs will be needed by November 1 to be offered in January."

Toni: "We can start them off as special topics to see what interest there is."

Ann: "Curriculum in alignment with what industry needs. Promoting. I've asked others to help promote convergence lab. It could give the company a great deal of publicity. Combination on community effort and money."

Toni: "NSF project grant is coming to an end. How can we go about making students aware? We could have classroom visits from industry people showing what they do."

Ann: "Info Nights to tell potential students what they're getting into. People from industry can come and talk about careers."

Toni: "Workforce shortage. We've had one and it could happen again."

It was decided the next meeting would be during the summer (no specific date set). Bob Ortega said once he got a copy of the minutes, he'd prioritize.

Meeting adjourned at 9:55.

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