Minnesota State Community and Technical College



[Name of Committee] Meeting

Date ---April 14, 2010

Location ---MSCTC RM B150

Membership: (Attendees will appear in bold): **Brian Kappel, Don Stieha, Kris Boland, Tim Sanden, Nick Dyrendahl, Andy Haugen, Barb Halverson, John Steiner, Bruce Curtis, James Anderson, Joseph Colvin, Deb Flaskerud, Tim Preuss, Chris Goltz, Dave Hjalmquist, and Randy Johnson**

Meeting Notes

| Topic | **Responsible**  **Party** | Discussion/Outcome |
| --- | --- | --- |
| **Welcome** Introductions along with current business trends |  | ***Background*** *–*  ***Current Status*** *–*  ***Action Needed*** *–* |
|  | Kris | Nodak Mutual Insurance is replacing 30 PC’s with thin clients |
|  | Bruce | NDSU is using IPv6, DNS SEC, and wireless in residence halls |
|  | Joe | Fargo Schools is using VoIP |
|  | James | City of West Fargo is using VoIP and is moving to HP away from Cisco |
|  | Nick | Flint Communications is using virtual servers and Hyper-V, |
|  | Barb | SEI is adding new POS software featuring added security for SSN and credit card numbers |
|  | Brian | Skills & Technology Training center is seeing their graduates go on to certification |
|  | John | Fargo Schools is using VoIP, Cisco thin client over wireless, with some client side issues |
|  | Tim S | Cass County Electric is working more with security compliance, perimeter security, email encryption, Cisco Iron Port, 3rd party certificate, mobile data |
|  | Andy | Phoenix is using more ERP (Enterprise Resource Planning), SQL server, IT restructuring, SIP |
|  |  |  |
|  |  |  |
|  |  |  |
| **Curriculum and Instruction Questions and Recommendations** |  | ***Background*** *–*  ***Current Status*** *–*  ***Action Needed*** *–* |
|  | Tim P | What should graduates know for 2013-14? |
|  | Kris | Web development, SQL code in HTML |
|  | Don | Web development |
|  | John | Fargo School Interns are from MSCTC; Cisco knowledge is a priority |
|  | Andy | Interns and 4 yr students don’t know/understand business requirements and have problems with documentation; would rather see them over documenting |
|  | Barb | Written and verbal communication are problems as well as documentation |
|  | Nick | Virtualization, NAS servers, problem solving skills, using your resources to get to the issue, computer problems are never the same problem, documentation is job security |
|  | James | More understanding of VoIP from new hires, basic understanding of programming, ability to see small problems |
|  | Don | Medium businesses are looking for database administrators as well as Oracle and SQL |
|  | Bruce | QoS, Mac/Apple technology |
|  | Nick | MAC class/course; enterprise integration |
|  | Andy | Virtual servers that are transportable |
|  | Don | Clustering, disaster recovery, synchronization |
|  | Bruce | Build redundancy into networks, students depend on it for classes, outages can be costly, finding time to service network; new devices on network can overload it |
|  | Nick | Don’t want a single point of failure; select users on specific portions of network; virtualization helps minimize downtime |
|  | Bruce | Small shop employees fix everything, big shop employees can specialize, ultimately comes down to who manages the environment; future trends include IPv6, DNS SE; Nanog.org is assigning the roots; firewalls, packet size changes hindering firewalls; BGP, Autonomous System Numbers will be changing from 2 digit to 4 digit; State of ND is turning on IPv6; IPv6 has advertising problems; Google |
|  | Tim P | What should students know about electrical and electronic basics? |
|  | Nick | You’ll need to know it for server room: power consumption, backup generator |
|  | Don | Deciding what needs to be on backup generator |
|  | John | It’s not so much that student were not trained in specific areas, the question is can they learn new things |
|  | Don | Conditioned voltage lines |
|  | John | Closets heat up; POE, wireless access points |
|  | Don | VoIP Caller ID being programmed right |
|  | Tim S | In a case where design conditions were left to architects who did not know IT systems, problems occurred |
|  | John | Agrees about architects who do not know network design |
|  | Bruce | Cost of power is more than the computing equipment |
|  | Tim P | How about mobility? |
|  | Don | Salespeople have laptops, blackberries, |
|  | Bruce | Native IPSec; devices can bring security issues: small devices get lost; Moral: encrypt your data |
|  | Nick | Eventually there will be1 mobile device will do all tasks |
|  | James | Data is more expensive than servers; 3 bad passwords will erase the hard drive |
|  | Barb | Finding ways to enforce security policies |
|  | Tim S | Let Google offer redundant applications |
|  | Bruce | The industry is focused on security |
|  | Tim S | If a company uses The Cloud then what happens when Email goes down for a day |
|  | Don | Database level vs. network level security |
|  | Andy | Software vendors may not have back end security – Oracle software can read the data |
|  | Nick | US is behind in wireless speeds (100Mb in Canadian branches) |
|  | Bruce | NDSU has 10 Gb connectivity |
|  | Tim | Is there anything we should quit teaching? |
|  | Nick | Vista |
|  | Bruce | Frame relay, ATM |
|  | James | Keep teaching databases; area of productivity |
|  | Don | ERP can be used in organizations of 200-250 employees |
|  | Joe | Spend less time on routers since there are cheaper routers available |
|  | Bruce | Switches are now doing tasks once performed by for routers; OSPF |
|  | Don | Small shops don’t have to have the expertise on everything, but need to know when to bring in someone who does |
|  | Nick | CLI vs. GUI |
|  | Bruce | MSCTC should teach more wireless, WPA2, RADIUS server, more servers running on Linux |
|  | James | Can be done through MSCTC’s Systems Projects class, pick the processes for students as opposed to having them choose. |
|  | Kris | New software programs from scratch as opposed to modifying existing code |
|  | John | Wireless technologies and thin client deployment |
|  | Bruce | DHCP and DNS, also a background in signed certificates for secure websites and access points |
|  | Tim P | Do we need Email Exchange Server |
|  | Don | Email tasks are more in the management than setup |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**Vision Statement:**

MSCTC will be a regionally recognized organization focused on and partnering for innovation, learning, and your future.

**Mission Statement:**

To provide accessible education with vigor and integrity to diverse learners, preparing them for dynamic learning, living, working, and serving.