

FISCAL YEAR PROGRESS REPORT - INFORMATION TECHNOLOGY

Fiscal Year 2004 (July 1, 2003 through June 30, 2004)

Infrastructure and Audio Visual

- Removed all information technology assets from Michigan Space Center. Implemented much of this technology in main campus buildings.
- Designed and installed multimedia technologies at JCC@VoTech including computer, remote manageable projection system, wireless presentation tools, audio system, screens, VCR and DVD.
- Installed complete phone system at JCC@ VoTech: phones in every classroom and office with toll-free link between the center and main campus and voicemail system identical to main campus.
- Installed extensive flexible unified voice/video/data cabling system at JCC@ VoTech. Cabling jacks are present in virtually every space in the center and can be activated with telephone, data, or video service on short notice.
- Installed projector monitoring and control system at JCC@ VoTech which should decrease lamp expense and allow better remote assistance for projector problems.
- Installed 3-station CATS testing and network at Lenawee Flight Center for improved testing service.
- Installed CyberCafe for drop-in internet access in Potter Center.
- Converted Potter Center Box Office to internet-based ticketing system, replacing dedicated system no longer supported by vendor.
- Relocated network equipment and wiring in Potter Center phone room to prepare for installation of generator and uninterrupted power supply.
- Installed and upgraded network infrastructure in main campus cafeteria.
- Installed new television monitors in main campus cafeteria.
- Planned for Information Technology move to JW 176. Move cancelled.
- Remodeled Information Technology Server Room to improve power distribution and cooling.
- Mounted majority of computer servers in 19" racks to allow space for additional servers in Information Technology Server Room where power and physical security is more reliable.
- Added 5 new servers to support new initiatives (e.g., Project Server and Remote Access) as well as upgrading existing web and database services.
- Installed new KVM (keyboard-video-monitor) switch in Information Technology Server Room with capacity for 128 servers (old unit handled 32) and multiple simultaneous remote access to servers and Information Technology personnel.
- Installed new tape backup equipment and software to allow quicker backup and restore of critical data.
- Installed new network monitoring and control tool to allow better management of data network switching infrastructure.
- Removed a substantial amount of obsolete wiring and equipment from Information Technology Server Room allowing additional space for new equipment as well as easier maintenance and troubleshooting.
- Converted dedicated T1 data link between Jackson District Library and main campus to a shared Internet link resulting in substantial savings.

- Commissioned a Voice-over-IP readiness study of the JCC network to document existing network and to identify areas which will need improvement before data and telephone service could be converged.
- Changed phone service vendors from SBC to TDS Metrocom resulting in substantial savings in monthly phone bills.
- Added disk capacity to Colleague to support simultaneous use of Releases 13 and 17 and to support both test and production environments.
- Began Novell to Microsoft migration to reduce annual software expenditures and to allow deeper staffing in network operating system support.
- Relocated Center for Student Success to west side of Walker Hall.
- Relocated Human Resources to Potter Center.
- Relocated JCC Foundation to Potter Center
- Relocated Purchasing to Campus Services building.
- Facilitated numerous faculty and staff moves.
- Reconfigured telephone Auto Call Distribution and Hunt Groups for Student Services, Financial Aid, Business Office, and Human Resources due to personnel and duty shifts.
- Installed three new high-speed printers in Campus Services. These machines are copiers that can be used as computer printers.

Workstations: Software and Hardware

- Created Academic Standard load for model e-4650, e-6000, and e-6100 desktop classroom/lab computers on main campus, at JCC@ VoTech, and at the Clyde LeTarte Hillsdale Center to support academic programs.

Creation of Academic Standard load includes the following upgrade/installation: Maple 8.0 to Maple 9, Office XP to Office 2003, Visual Studio 6.0 to Visual Studio 2003, Visio Standard 2002 to Visio Professional 2003, Project Professional 2002 to Project Professional 2003, Flash 5 to Flash MX 2004, Photoshop 6 to Photoshop CS, Illustrator 11 to Illustrator 11 CS, Adobe Imageready 6 to Adobe Imageready CS, Dreamweaver MX 2002, Adobe Acrobat Pro, Adobe GoLive, Adobe InDesign, Macromedia Fireworks MX 2004, Macromedia Freehand MX 2004.
- Installed updated utilities to provide a better learning environment in classroom and labs.
- Installed 4.9 Novell Client to provide better network access in classroom and labs.
- Created Office Standard load for model e-4650, e-6000, and e-6100 desktop computers and for model 600, 675, 9500, 5350, and 200 notebook computers to support current versions of applications used in JCC work environment.
- Created and installed Solution Center dual load software allowing better support to the college for both old and new versions of software.
- Installed and configured secondary SUS (Software Update Service) server in order to better deliver software operating system updates to machines in the process of being reloaded for maintenance and support.
- Streamlined and updated virus definition files to workstations on all computers college-wide to minimize virus infection/outbreak.
- Increased allocated space on local storage points for software updates offering client ability to install updates at will as well as increased system security.
- Updated HP Jet administration software providing improved print management.

- Upgraded Exchange server virus scanning solution to version 6.0 to ensure continued vendor support on current and future production Exchange server.
- Installed and configured Townsend Press software on Plato server as academic programs required.
- Installed multiple versions of HESI (Health Education Systems, Inc.: nursing exit exam) testing software as nursing program required.
- Installed and configured SPSS (Statistical Package for Social Sciences) software licensing service updated for better client support.
- Installed and configured updated SPSS software in Institutional Research and Distance Learning for use in reporting trends and statistics.
- Updated Edexpress and Edconnect Suites for financial aid to remain compliant with federal requirements.

Continued design and deployment of Active Directory Unification project which enables JCC to remain within the Microsoft support cycle, and ensures JCC's ability to deploy current technology (e-Student Services, on-line bill pay, data mining, on-line courses) and to make use of future technology innovation.

Active Directory is an essential component of the Windows 2000 and Windows XP architecture and presents the college with a directory service (database) designed for distributed computing environments and allows centrally managed desktop computers and desktop security.

- Installed and configured MSDSS on domain controller server running Active Directory. This server is in production and the software will provide JCC users password Synchronization.
- Installed and configured mailboxes on new Exchange server running Active Directory. This server is in production and will replace the existing Exchange server.
- Migrated all Information Technology mailboxes, groups, policies, and public folders to new Exchange server running Active Directory.
- Installed and configured Windows 2003 on member servers in Active Directory. Servers are in production and will replace servers providing the following services to JCC: terminal access, web application, SQL database, web presence, Information Technology's project initiative, new file backup, and Sharepoint.
- With Network group, installed and configured Windows 2003 on member servers in Active Directory. Servers are in production and will replace servers providing the following services to JCC: new DHCP and Wins Service, new backup DHCP and Wins Service, switch management, and firewall.
- Coordinated mechanical tool-kits for Information Technology and supported labs/classrooms to better manage tools.
- Monitored power usage in supported labs/classrooms to better manage power failure. Worked closely with Facilities to ensure success.
- Coordinated computer hardware inventory enterprise wide to better monitor hardware dispersal and movement.
- Coordinated the use of two-way radios in Information Technology to better manage equipment.
- Coordinated purchase, repair, and disposal of all PDA (personal digital assistant) devices.
- Coordinated three hardware purchases. Worked with numerous individuals and departments to ensure proper hardware was purchased. Purchased 245 new computer systems. Relocated old computers to accommodate new systems.
- Purchased 200 flat panels displays and replaced old monitors across main campus. New flat panel displays have a longer life, use less electricity, and better use limited space.

- Increased the quantity and quality of notebooks for Audio Visual checkout for better client support.
- Coordinated short and long-term checkout of computer technology.
- Supported printing equipment enterprise wide, including repair, replacement, maintenance, and consumables (toner). Supported design jet wide format printer.
- Coordinated shipping and receiving for Information Technology.
- Provided computer support at the extension centers including Dahlem and Flight Centers.
- Coordinated auction with Director of Purchasing for the proper sale or disposal of JCC computer assets.
- Provided back-up personnel to Audio Visual to ensure continuity of work.
- Maintained small parts stock to assist in the timely repair of computer hardware.
- Coordinated printer and scanner warranties to ensure vendor service.
- Facilitated computer hardware moves to accommodate office moves required with college reorganization of services.
- Worked with security personnel to enhance security in hardware/audio visual area.
- Removed and dispersed all information technology equipment from the old Lenawee center.
- Provided computer hardware for CyberCafe.

Database and Internet Systems

Automated Provisioning (AP)

- Reorganized AP program to work around conflicts between AP processes and the backup of Colleague and the backup of the Novell Directory Database.
- Modified AP program to accommodate change in name of new building from old building in Adrian.
- Modified AP program to generate data for Distance Learning (student ID data, Faculty ID data, course list, student enrollment per course section, and faculty per course section) and transmit files to a share on the local network for JCC's Distance Learning office and directly to UCompass network for their web site setup.
- Investigated various available applications that might be used in new Microsoft Active Directory environment to manage provisioning, such as Safari, EDX export of data to LDAP, Microsoft MIIS, and Novell iChain.

Asset Inventory System (AIS)

- Analyzed AIS database, client, and scanner, and client work processes. Redesigned AIS data input forms to conform to work processes, and changed forms accordingly; reprogrammed AIS as necessitated by new forms, and streamlined data queries to develop faster and more robust application.
- Set up transitional SQL 2000 server (as stage in migration to consolidated Microsoft Active Directory domain) and migrated AIS database to this transitional server. Designed and implemented backup and recovery system on transitional SQL server.
- Generated custom reports for budget analysis and projection.
- Entered new assets from Winter and Spring 04 computer purchases.
- Updated asset information changed by new building in Adrian

- Entered updated asset data, including space ID, space type, user ID, and use type data gathered in latest inventory update.
- Analyzed and reviewed quality of data in AIS database, generated reports of incomplete or faulty data, developed plan to clean up data, wrote code to implement automation of cleanup processes.

Network Consolidation Project

- Participated in development of Consolidation Project plan for migration of NT domain with JCC's Web Sites, Web Services, and SQL database services.
- Researched new Microsoft Visual Studio integrated software development environment using Visual Basic and C++ for web applications, desktop applications, and for use in updating Automated Provisioning process in new Active Directory Domain.
- Designed and developed Automated Provisioning Override Manager as pilot project in new Microsoft development environment (Visual Studio.Net). Installed application on new Microsoft Web Application Server running in the Dot.Net runtime environment.

Research Development Methodology for Mobile Devices

- Reviewed and documented hard coded IP addresses in web sites and web applications in preparation for implementation of new security systems including firewall and a private IP address system.
- Developed system of conventions for naming objects in new Active Directory Domain, such as servers, service accounts, etc., and for securely archiving critical Server information, such as Administrator login credentials, IP, MAC, etc., in an encrypted store.

Lab Survey

- Migrated Lab Survey databases to new transitional SQL server, modified and tested code, ran lab survey, generated report of results from data gathered in SQL database

Michigan Public School Employee Retirement System

- Reviewed, consolidated, and modified UniBasic source code in Colleague as needed to meet continually changing state reporting requirements. E.g., Tax Deferred Payment report format changed.
- Reviewed, consolidated, and modified custom desktop application developed in Visual Basic 6 as needed to meet continually changing state reporting requirements.

Colleague

- Modified Colleague code to read bank data from file rather than from tape.

Business Intelligence Technology

- Researched available Data Driven Decision making systems, Mining technology, Mining algorithms, multidimensional Data Cube design, client access applications with browse and drill down capability.
- Set up Windows 2003 server with Microsoft's SQL 2000 Data Analysis service, sample databases, sample data cubes, and Microsoft's free client desktop application as pilot BI project, published access to Information Technology staff through remote desktop connection so personnel could explore and familiarize themselves with Business Intelligence technology.
- Set up and connected both Windows 2003 Report Services and Crystal Reports to sample data cubes to explore functionality as tools for clients to explore data systems and to implement Data Driven Decision making.

Enterprise Resource Planning

- Developed a Microsoft Access based Dashboard environment for tracking and trend analysis of Critical Performance Indicators (CPI's) related to operational (program review), performance (Associate Degree Outcomes, aka ADO's) and Strategic Plan initiatives.
- Migrated the JCC Foundation Blackbaud database from Sybase SQL anywhere to Microsoft SQL server.
- Upgraded the JCC Foundation Raiser's Edge software from 6.41 to 7.6.
- Revised the scheduled tasks on the Colleague server via CRON to provide a more efficient and reliable backup.
- Established a set of system monitoring utilities and procedures for the Colleague Server.
- Participated in AQIP initiative.

Administrative Systems

- Implemented FACOD (Financial Aid – Common Origination & Disbursement) processing to automate pell processing with the Department of Education.
- Upgraded the DMI listener (key component used for e-Services and COD processing) from version 2.1 to 2.2 and again from version 2.2 to 3.0.
- Completed the Colleague Release 17 Conversion.
- Upgraded WebAdvisor (e-Services) from version 2.06 to 2.12 providing increased WebAdvisor capabilities.
- Participated in consulting to implement Communication Management for the Financial Aid office providing improved communication to students regarding their financial aid status.
- Presented at the Great Lakes Users Group (GLUG) on Downloading Data from Colleague and manipulating it in Microsoft Access.
- Implemented the Grades by Term, Leave Plan Summary, Student Profile and My Budget workflows in e-Services providing additional services.
- Modified account generation process to automatically provide e-Services account to all employees on their start date.
- Rebuilt registry for e-Services accounts to enhance system security.
- Enabled printers for colleague use at JCC@ VoTech.
- Assisted Academic Dean's office in the implementation and use of faculty office hours.
- Applied 294 software updates to Test & Live Colleague Environments, performed all related pre-installation and post-installation procedures to ensure software performance.
- Upgraded Colleague operating system, AIX, from version 4.3 to 5.2, as required to maintain software support.
- Upgraded Unidata from version 5.1 to 6.0, as needed to maintain software support.
- Collaborated with Students Services and Foundation Studies departments to implement the use of non-course equivalencies.
- Trained 82 users on the new Colleague User Interface (UI). Installed UI on over 100 desktops.
- Enabled all active programs which printed to the line printer to be printed on laser printers. This allowed for the retirement of the line printer.
- Created a new process to allow Human Resources and Accounts Payable checks to be reconciled from a text file instead of a magnetic tape.
- Participated in 10 days of Human Resources module consulting, with topics such as benefits, leave plans, positions, and Human Resources reporting techniques.
- Participated in 3 days of Student Systems consulting with members of the Student Services staff.
- Participated in 2 days of Envision programming consulting. During this time modifications were made to the transcript print routine and the pay advice/paycheck print routines.
- Attended the Datatel Users Group conference.
- Assisted in revising the process used to produce W-2's.
- Trained Student Services staff on the building of programs for use in the degree audit module of Colleague.

- Organized and participated in webinars analyzing the effectiveness of several optional colleague web based modules, including Student Educational Planning, Time & Attendance Entry and Vacancy Management.
- Participated in webinars on topics including W-2 processing and credit card refunding.
- Modified the CRON script, providing more efficient nightly job processing.
- Provided data to Performance Auditor.
- Converted Colleague from envision indexing to database indexing for increased performance and compliance for Release 18.
- Migrated programs that were run at the colon prompt to menus, so they could be accessed in User Interface.

Support – Training – Policy - Communication

- Staffed Solution Center 54 hours per week during winter and fall and 39 hours per week during spring to ensure support for clients.
- Supported an average of 50 client contacts (email, phone, walk-in) at Solution Center per day.
- Staffed computer labs 60 hours per week to serve student and faculty clients.
Monday – Thursday multiple labs are open for a total available computer lab hours of 148 per week.
Student Consultants also support computer classrooms.
- Supported student requests in computer labs. Approximately 2800 students logged in 53,000 times in Information Technology supported computer labs. Requests from students are resolved by Student Consultants.
- Coordinated the install of 100 new computer systems and relocated 100 computers to accommodate replacements.
- Coordinated departmental training plan.
- Coordinated departmental communications.
- Supported JCC@ VoTech and Hillsdale with on-site student computer consultants.
- Implemented weekly student schedule changes to accommodate decreased Student Consultant and decreased Solution Center staff.
- Provided over 400 Student Consultant hours of individual web and course site creation to support faculty.
- Expanded Testing Lab collaboration with Foundation Studies. Proctored 1700 prospective JCC students.
- Developed Student Consultant training to enhance client support at Solution Center and in labs..
- Created, revised, and published 400 FAQs (Frequently Asked Questions) for client support.
- Transitioned Student Consultant paper reference to web format to conserve resources.
- Coordinated Information Technology Liaisons group.
- Developed support process for multimedia rooms.
- Scheduled and supported computer classroom events as required.
- Monitored labs/classrooms equipment weekly to ensure operational environment for clients and for security, cleanliness, and supplies.

- Participated in Project Management Office planning and development.
- Researched departmental survey needs.
- Participated in AQIP initiative.

Work Requests

6132 assignments completed from 4366 work requests. Work requests may include multiple assignments.

Infrastructure-Audio Visual

- 470 Audio Visual assignments completed.
- 200 Network assignments completed.
- 455 Account assignments completed.
- 198 Telephony assignments completed.

Workstations: Software - Hardware

- 537 Software assignments completed.
- 220 Postmaster assignments completed.
- 522 Hardware assignments completed.

Administrative Systems – Enterprise Resource Planning - Database/Internet Systems

- 687 Administrative Computing assignments completed.
- 233 Databases-Internet Systems assignments completed.
- 61 Enterprise Resource Planning assignments completed.

Support –Communication – Management - Project

- 488 Student Consultant assignments completed.
- 2027 Solution Center assignments completed.
- 5 Project assignments completed.
- 29 Management assignments completed.

Event Scheduling

224 Computer lab/classroom event requests scheduled and supported.