



MOORPARK COLLEGE

**Information Technology Operational Plan  
2011-2012**

## Table of Contents

Introduction .....	4	Deleted: 3
Mission .....	4	
Objectives .....	4	
Support Standards .....	5	Deleted: 4
Service Levels .....	5	Deleted: 4
Work Tracking .....	5	
Resource Sharing .....	6	Deleted: 5
Common Methodologies .....	6	Deleted: 5
Staffing Levels .....	6	
College and District Responsibilities .....	6	
Staffing Plan .....	7	
Communications .....	7	
<b>CAMPUS IT BUDGET .....</b>	<b>8</b>	
Staffing Costs .....	8	
Computer Supplies and Parts .....	8	
New Hardware .....	8	
Software Licenses .....	8	
Training and Travel .....	8	
Budget Details .....	9	
<b>MAJOR TECHNOLOGY PROJECTS FOR 2011-2012 .....</b>	<b>10</b>	
Overview .....	10	
Windows 7 / MS Office 2010 .....	10	
MS Exchange 2010 & Unified Messaging .....	10	
Campus Network Switch Updating .....	10	
Banner 8 & Financial Aid .....	10	
Desktop Virtualization Initiative (VDI) .....	10	
Identity Management (IdM) .....	11	
Capital Projects .....	11	
Safety Initiatives .....	11	
<b>TECHNOLOGY REFRESH PLAN .....</b>	<b>13</b>	
Overview .....	13	
Existing Refresh Method .....	13	
Three- to Four-Year Desktop Refresh Program .....	13	
Peripherals .....	13	
Monitors .....	13	
Printers .....	14	
Smart Classrooms .....	14	
Standard Components .....	14	
Ceiling Mounted LCD Projector .....	14	
DVD/VCR combo deck .....	14	
Self-Amplified Powered Speakers .....	14	
Projector Control System .....	14	

Document Camera.....	14
Projector Installation and Cables.....	14
Instructor's Multimedia Workstation.....	14
PC Workstation w/19" LCD display.....	14
Current Standards.....	14
Desktop Computer.....	15
Laptop Computer.....	15
Ultra-Light Laptop .....	15
<b>DISTANCE LEARNING .....</b>	<b>17</b>
Overview.....	17
Course Management System - Hosting.....	17
Synchronous Meeting Technology .....	17
Wimba .....	17
Required Hardware for Wimba.....	17
USB WebCam.....	17
USB Tablet with pen and mouse.....	17
Headset & Boom Mic.....	17
CCC Confer.....	18
Plagiarism Prevention Services.....	18
Turnitin.com.....	18
INTELECOM Online Resources Network.....	18
Respondus .....	18
Training Rooms .....	18
Camtasia Studio .....	18
<b>TECHNOLOGY INFRASTRUCTURE AND NETWORK .....</b>	<b>19</b>
Overview.....	19
Cabling Infrastructure.....	19
Local Area Network Topology and Infrastructure .....	19
Wide Area Network .....	19
Internet Connectivity .....	20
Wireless .....	20
Voice Communications .....	20
<b>INFORMATION SECURITY.....</b>	<b>21</b>
Overview.....	21
Firewall.....	21
Funding.....	21
<b>APPENDIX A. IT DEPARTMENT BUDGET .....</b>	<b>22</b>
<b>APPENDIX B. SOFTWARE INVENTORY .....</b>	<b>23</b>

## **Introduction**

Technology support is a consolidated service through District Information Technology. IT maintains a full-time on-site IT department at Moorpark College, comprised of a supervisor, and three technology support specialists. The campus technicians support a collaborative framework, allowing the IT department to leverage skill sets between campuses. The District Administration Center supports administrative computing, core fiscal and operational system, and administers networked services district wide.

## **OVERVIEW**

Through an active collaboration with District IT, Moorpark College has developed a Strategic Technology Plan that encompasses all aspects of technology. The plan is aligned with the Educational Master Plan and the Facilities Master Plan. The plan lays out the strategic goals and objectives for technology at Moorpark College.

This Technology Operational Plan will guide the development of tactical business plans, alignment with the District's and College's vision, mission, strategic initiatives, and prioritization criteria.

Resource prioritization and allocation are facilitated by campus technology committees and driven through the college's program review process. Currently, there is one technology committee and one subcommittee at Moorpark College:

- The Technology Committee on Accreditation and Planning (TCAP) which plans, monitors, and evaluates institutional technology including hardware and training needed to support student learning; the Technology Master Plan and Technology Inventory; funding for technology based on an allocation of at least 30% of instructional equipment funding dedicated each year to technology equipment, and hardware needs identified in the Technology Plan and annual program plans.
- A working group of TCAP is the Technology Resource Allocation Committee (TRAC). This subcommittee has been tasked with prioritizing purchase requests of new and replacement computers and related equipment and also working with other committees that need to have information relating to campus use of technology. A standards and criteria document has been established to formalize the ranking of needs. The document is available on MCShare.

## **Mission**

The mission of the Moorpark College Information Technology Services department is to serve the technology needs of the institution. The following objectives must be met to satisfy the growing technology and service support needs of the College:

## **Objectives**

The following are guidelines to meet the growing technology support needs of the College:

- Maintain high level of support services.
- Use resources efficiently to better serve campus.
- Continue use of Track-It work order system to measure service levels and outcomes.
- Enhance and maintain open communication with all users.
- Facilitate innovation and planning in order to meet technology needs.

## Support Standards

### Service Levels

The campus ITS department will continue to maintain effective service levels through proper use of campus committees, as well as collaborative relationships with other campus groups and/or departments.

Service Level Agreements (SLA) are internal contracts that define the prioritization and timeframe for delivery of services. The agreements set expectation levels for support services. For example, the SLAs might require that classroom computers are repaired within 4 hours and that other systems would be repaired in 24 to 48 hours, depending on predefined classifications.

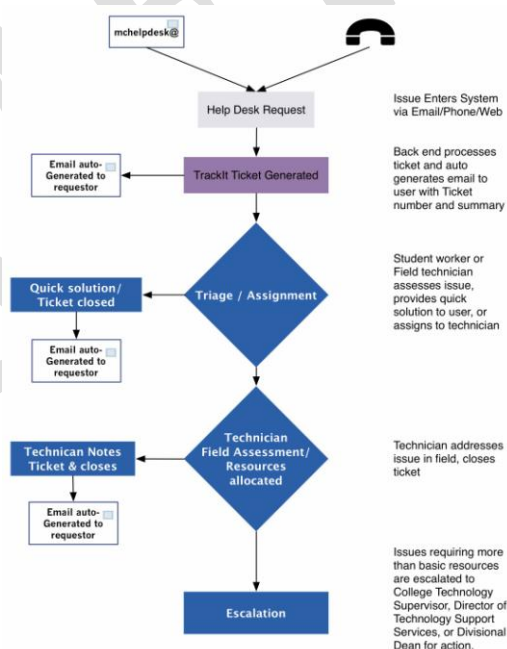
There are no service level agreements (SLAs) currently in place. SLAs will be developed to create a common understanding about services, priorities and responsibilities. Currently in development, it is anticipated that this document will be come part of the annual review cycles for ITS to strenghten collaborative links, and insure support efforts are directed appropriately. The SLAs will be developed by the supervisor in conjunction with the Technology Committee, and monitored for compliance by the Director of Technical Support Services in collaboration with the Business Manager and Vice President of Business Services.

### Work Tracking

Technology related work order requests are tracked via the Track-It system and Help Desk which is located in the ITS department. Track-It software was implemented to capture work order requests and provide a mechanism for measuring efficiency and determining staffing level adjustments. Functionality includes call management and tracking, knowledge management, problem resolution, and self-help capabilities.

The Help Desk is currently maintained by student workers Monday through Friday and offers an alternate method for communicating service requests. The day-to-day supervision of the Help Desk falls under the Technology Support Services Supervisor.

The District utilizes the Track-It software program to manage work order requests in union with their Help Desk. The ITS department is committed to working closely with the District in this endeavor, as the Track-It software has become the District's standard for IT support tracking.



### Resource Sharing

Resources for technology support (parts, vendors, tools) are centrally shared. The college also depends on the District IT Department for certain levels of repairs and support issues. This alliance creates an environment of shared resources and provides for greater efficiency and reduction of waste.

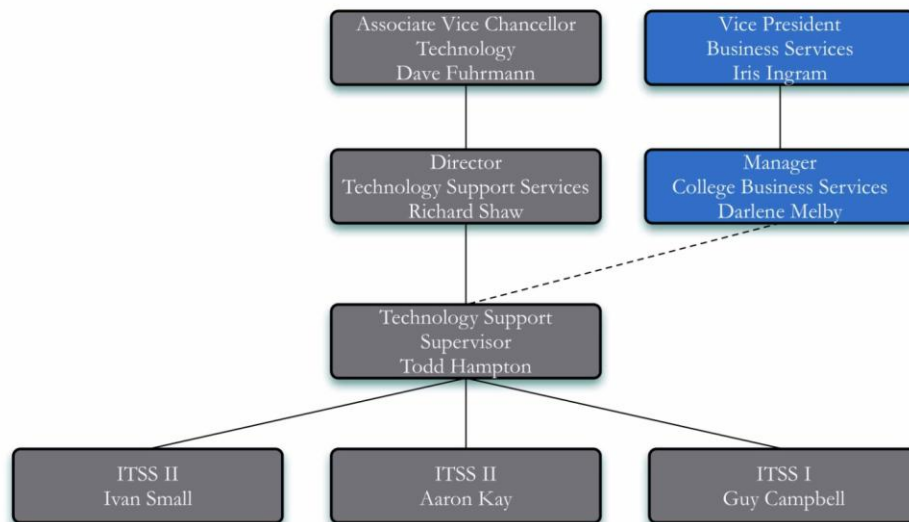
### Common Methodologies

Common methodologies and processes for implementing and maintaining technology on each campus will be supported and actively cultivated to maximize efficiencies. This will allow for training of staff and will allow flexibility in allocating staffing resources.

### Staffing Levels

The Director of Technology Support Services provides oversight of the ITS at Moorpark College, with the Technology Support Services Supervisor directing day-to-day operations. The department also consists of two Information Technology Support Specialist IIs, and one Information Technology Support Specialist I. Each staff member is dedicated to supporting technology needs across the campus.

Additional staffing cannot be allocated at this time, due to a lack of funding.



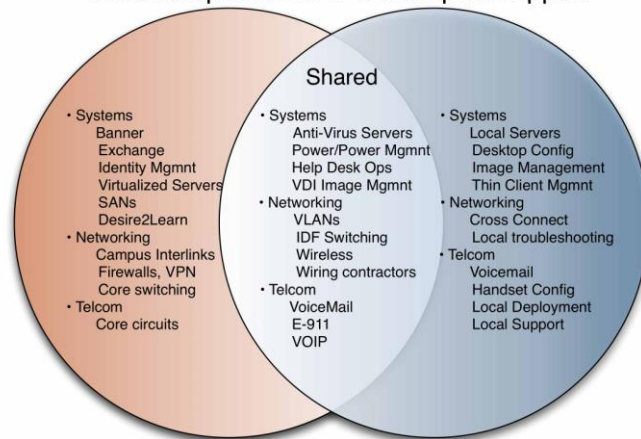
### College and District Responsibilities

The District Administration Center has an IT department that provides support in a number of key areas:

- Administrative applications, including Banner and Outlook (email)
- Campus connectivity to other District facilities and the Internet
- Campus cabling infrastructure, to the wiring closet level
- Campus network backbone, including switches and routers

## Distribution of Support Responsibilities

### District Operations <--> Campus Support



The District's Director of Technical Support Services will coordinate infrastructure or administrative computing work on the campus through the local supervisor in active consultation with the College Business Manager and the Vice President of Business Services.

### **Staffing Plan**

In order for this Operations Plan to be effective, it is critical that the supervisor and college leadership ensure each element of the document is clearly communicated at all appropriate levels within the college environment. The Operations Plan will be the driving document that communicates day-to-day operational structure and long and short term goals as determined by institutional and district needs.

The Director of Technology Support Services will be responsible for working with the campus Technology Committee on Accreditation and Planning (TCAP) to streamline support processes. The Technology Support Services Supervisor will be an active member of (TRAC) and will provide data and feedback to the committee in order to assist in the recommendation of prioritization of technology needs. The supervisor, as a member of the District's IT team, will continue to work to enhance the work order tracking system (Track-It!), development of Service Level Agreements, continued consolidation of resources, as appropriate for central management, and improved communication.

### **Communications**

The Technology Committee on Accreditation and Planning (TCAP) and the Technology Resource Allocation Committee (TRAC) will meet regularly to improve communications and provide recommendations to the ITS department and college. There will also be regular meetings between the College and District Office technical staffs to improve coordination on issues with infrastructure projects and administrative computing.

## **Campus IT Budget**

### **Staffing Costs**

- (1) Technology Support Services Supervisor
- (1) Information Technology Support Specialist I
- (2) Information Technology Support Specialist II

### **Computer Supplies and Parts**

The IT department covers the costs for repairs to campus computers and related equipment. This budget includes money for parts to replace out of warranty equipment.

Equipment purchased with technology refresh money (see below) will include a warranty long enough to cover the useful life of the computer, so that the cost of parts is covered by the manufacturer.

Specialized repairs, such as printers, are outsourced to vendors and paid for by the IT department.

### **New Hardware**

New hardware expenditures are not budgeted by the IT department. The college has a technology refresh budget, with funds set aside to replenish the budget each fiscal year. Programs requesting replacement of older equipment or new equipment submit their requests on their program plans. The program plans are reviewed by TRAC. TRAC develops two prioritization lists of the technology needs, one for refresh funding to replace existing equipment which needs to be replaced and one for new equipment. Programs with outside funding (grants, ACCESS, CTE) may purchase equipment outside of the campus refresh budget, depending on the program's needs. Capital construction projects also include an FFE (furniture, fixtures, and equipment) budget that may cover new technology purchases as part of the overall building costs.

### **Software Licenses**

Centralized applications, such as Banner and email, are budgeted for and licensed by the District IT department. The licenses are paid for by a district-wide budget that prorates the costs of the licenses to the campuses based upon the budget allocation model.

Licenses for campus desktop applications are covered by various agreements with vendors. The campus has a fixed cost that covers all licenses for Microsoft operating systems and Office productivity software. The cost is based upon the number of full time equivalent employees, so the cost will vary from year to year based upon the college staffing levels. Other desktop applications are licensed and paid for by the individual departments. The IT department manages all software licenses on campus.

College programs initially fund classroom server applications. Ongoing maintenance is paid for by various funding sources.

### **Training and Travel**

The IT department has a limited budget for training and travel. The amount will vary depending on budget constraints and identified needs.



Campus or District IT personnel usually provide employee user training on technology. Vendors may be brought in for specialized training, depending on the scope and demonstrated need.

The District IT department will arrange for training for district-wide supported applications. This will usually involve train-the-trainer sessions to transfer knowledge to campus personnel, who can then pass it on to others on campus.

Training for campus faculty on instructional technology is provided by a full-time Instructional Technologist in the division of Mathematics and Extended Learning.

### **Budget Details**

Budget detail is available in Appendix A.

DRAFT

## Major Technology Projects for 2011-2012

### Overview

The campus has numerous technology initiatives each year that involve upgrades to existing technology and new technology deployments.

There are many major technology projects for the 2011-12 academic year. Some of the projects are district-wide initiatives and others are local projects.

#### **Windows 7 / MS Office 2010**

The latest release of the Windows desktop operating system and Office productivity suite will be available from Microsoft. The IT department has begun testing for compatibility with existing applications. Pilot installations will begin in the mid-2010 timeframe in selected areas. Early adopters will be sought for testing and feedback. Large scale rollout will occur over the coming academic year, with Windows 7 becoming the new standard desktop deployment. According to Microsoft, "Windows 7 introduces a number of manageability improvements that can reduce total cost of ownership by helping to increase automation, improve user productivity, and provide flexible administrative control to meet compliance requirements".

#### **MS Exchange 2010 & Unified Messaging**

Through the spring semester 2011 District IT will be engaged in an upgrade to our MS Exchange servers to MS Exchange 2010. This will become the foundation to future integration of our phone services and Microsoft's Unified Messaging. Over this academic year we will be forming focus groups and work groups to test features and assess their viability for roll out. Widescale deployment and migration of accounts to the new server will occur over the Summer '11. Some of these features include voicemail to the desktop, voice over ip, and work group instant messaging.

#### **Campus Network Switch Updating**

Summer '11 District IT will issue an RFP for the next generation of departmental and edge switch deployments to include PoE Switches (Power over Ethernet) to support a long term migration to Voice over IP across the college. Upgrade of switches and migration to a VoIP architecture is anticipated to be a 24-36 month project.

#### **Banner 8 & Financial Aid**

The District has completed an eighteen month development cycle to upgrade our core administrative systems, Banner, and migrate our Financial Aid administration from PowerFacts to Banner. Timed to coincide with the award and assessment cycles of Financial Aid; training, working groups and substantial testing will be done in parallel to our existing services to provide a minimal disruption for our students. Integration of Financial Aid is scheduled to be completed in August 2011. Once completed we anticipate being in maintenance mode, keeping current with patching cycles, but doing no major upgrade work during Academic year 11/12.

#### **Desktop Virtualization Initiative (VDI)**

Desktop Virtualization is a shift in the mechanisms by which applications and operating systems are delivered for desktop and remote users. The 'desktop' device becomes a delivery conduit, and all computing power and applications are hosted and provisioned at a central server on each campus. Academic year 11/12 will see the first wide-scale deployments of VDI at Moorpark, with the refresh cycle of desktops in the LLR and other

locations/labs across campus. Benefits of this restructuring of technology delivery are dramatic. In the past when a lab had to be re-tasked or re-imaged, all devices in that room had to be touched physically and software installed. In this new paradigm IT maintains one image of the system and one image of the applications, and all computers in a lab are targeted to those images, dramatically reducing the reset time for a facility. This project, coupled with the Identity Management initiative(below) provide mechanisms for better accountability of software licensing, reducing reset times for a lab, and the potential of delivering instructional applications to students regardless of their location. Over the next 24 – 36 months approximately 90% of lab and public access devices will be refreshed to a thin-client/VDI structure.

#### Identity Management (IdM)

Expanding the foundational systems that drive web delivered services, Identity Management is the combination of business process and technology used to manage data on IT systems and applications to deliver services to users. Managed data includes user objects, identity attributes, security entitlements and authentication factors. These attributes could be enrollment status, CRN, major, etc., all are data points that will be criteria behind the provisioning of applications and services.

Federation of Identity Management has become a priority at the State Chancellor's Office. In a Federated Structure, the same authentication, access and attribute structures here with the District could be used to facilitate access to a number of web based services state-wide, e.g., CCCApply.

#### Capital Projects

The campus IT department is involved with various phases of capital construction projects. This includes working closely with multiple groups on the projects to ensure that the information technology infrastructure in all new facilities meets the current district standards and long-term needs of the campus. These groups include District IT, the Capital Planning, Design and Construction office managed by Heery International, and the building architects. The collaboration focuses on design of low-voltage cabling for voice, data, wireless, and security systems, as well as audio-visual design for smart classrooms.

The active projects in 2011-2012 include:

- Health Sciences, expected occupancy Summer 2011
- Exotic Animal Training and Management, expected occupancy Summer 2011
- Parking Structure – in planning

Beyond the planning phases, the IT department is very involved with the moves of offices and labs from old to new facilities. This includes migration of equipment and phones between facilities, as well as coordinating and assisting with the implementation of core network equipment and smart classroom devices.

#### Safety Initiatives

Information Technology is working closely with the Chief of Police to deploy technology to improve campus safety, per a previously accepted plan. The technologies include on and off campus mass notification, video surveillance, emergency phones, and radio systems improvements. Also included were plans for systems and storage to be deployed at a second data center for disaster recovery of mission critical software applications.

The final project is in progress. Video surveillance cameras and software have been acquired. The cabling infrastructure installation to support the cameras will continue through the year, with expected project completion by the end of August 2011.

Moorpark College TechOps Timeline  
Academic Year 2011-2012

Projects	2011							2012					
	Jun	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Windows 7 / MS Office 2010 Rollout													
MS Exchange / Unified Messaging													
Campus Network Switch Updates													
Banner 8 / FInAid Migration													
Desktop Virtualization Initiative													
Identity Management (IdM)													
Safety Initiatives													
Capital Projects													
Health Sciences													
EATM													
Parking Structure													
Refresh													
Smart Classrooms													
VDI													
Desktop Cascades													

## Technology Refresh Plan

### Overview

The College currently has a plan in place for replacing aging computer hardware. As technology continually evolves, there is a need to keep the computer equipment reasonably current. New technologies may require additional capacity and computing power that older systems do not have.

The plan was created through the cooperation of the Technology Committee on Accreditation and Planning (TCAP). The plan will guide the campus technology efforts as it relates to campus growth and needs.

With the increase in new technology cycles, the baseline for technology requirements has been raised. New technologies in the areas of information search and streaming video have significant processing requirements.

### Existing Refresh Method

The current system for replacing aging equipment is a “trickle-down” process. New equipment has been purchased using various funding sources, including IELM and lottery funds. The equipment being replaced is then redeployed based upon need. Eventually, older equipment is cycled out of the system.

### Three- to Four-Year Desktop Refresh Program

Most standards for organizations and white papers recommend a three- to four-year refresh period for technology. The College has been very proactive over the last few years, via the Refresh Program. The ability for the Refresh Program to remain proactive will be greatly influenced by future budgets. While the California Community College Technology II Initiative in 2001 set a goal for state campuses to have a three-year program to refresh equipment, the District currently has adopted a four-year program.

As funding improves, a three-year program may be attainable. Recommendations for the College will be presented from both the TCAP and TRAC committees document located on [MCSHARE > Document Center > Documents > Governance and Organizational Groups > Governance Groups > Standing Committees > Technology CAP > TRAC.](#)

### Peripherals

#### **Monitors**

LCD flat-panel monitors have a theoretical useful life of over ten years. Any systems purchased that are replacing systems with CRT monitors will include an LCD flat panel. A 19 inch LCD will be sufficient for classes that teach one application at a time. Computers that require use of multiple applications simultaneously will require a 22 inch LCD or larger. These areas include certain administrative offices, the staff resource center, and computers in the LLR open access lab set up for general student use. Other exceptions include systems purchased for use by the visually disabled, and programs that require high-end graphics, such as the AutoCAD and Adobe CS programs.

LCD monitors will be replaced on an as-needed basis.

### **Printers**

Printers are purchased on an as needed basis, depending upon use, program needs, and changing technology. For purposes of better energy and consumables management, future purchases will prioritize the use of workgroup printers, de-emphasizing the deployment of individual devices.

## **Smart Classrooms**

### **Standard Components**

#### ***Ceiling Mounted LCD Projector***

Unit should have XGA or better resolution with high brightness to allow use under classroom lighting conditions; power zoom and lens shift, 2000 hour or better lamp life; dual RGB and video inputs; case should incorporate cover for cable connection panel; 3-year or better overnight replacement warranty. Current standard: Epson 6110i.

Projector Mounting Bracket

Projector-specific mounting bracket, ceiling mounting bracket/plate.

#### ***DVD/VCR combo deck***

Basic DVD/VCR combo sets for showing video materials.

#### ***Self-Amplified Powered Speakers***

Ceiling mounted speakers, connected through projector for volume control.

#### ***Projector Control System***

Smart panel programmable control system, mounted on instructor's station providing power and volume control, source selection, DVD/VCR transport Controls. Current standard: Crestron MPS system. VCR/VHS capacity will be phased out, and not replaced, as equipment fails.

#### ***Document Camera***

Digital presenters for physical demonstrations.

#### ***Projector Installation and Cables***

Type of projector and cables vary by installation and classroom use

#### ***Instructor's Multimedia Workstation***

Teaching station with locking cabinets for audio-visual equipment and internally mounted computer and monitor. Projector control system panel mounted on top surface. Cabling provisions for connecting laptop computer.

#### ***PC Workstation w/19" LCD display***

Standard Dell or HP CPU mounted in instructor's workstation.

## **Current Standards**

To maximize purchasing and support resources, the District has established a standard for desktop and laptop systems with Dell systems, for desktop and laptop computers. The configuration outlined below is

reviewed and updated as warranted. Alternate platforms can be identified and implemented based upon business or instructional need. The 2010-2011 standard:

#### Desktop Computer

- Dell OptiPlex 980 Energy Smart Small Form Factor
- CPU: Intel® Core™ 2 Quad Processor Q9400 (2.66GHz, 6M, VT, 1333MHz FSB)
- Operating System: Ordered with Windows Vista, loaded with Windows XP SP3
- Memory: 4.0GB DDR2 Non-ECC SDRAM, 800MHz, (2DIMM)
- Keyboard: Dell USB Enhanced Multimedia Keyboard
- Monitor: Dell 19 inch UltraSharp™ 1908FPW Widescreen, Adjustable Stand, VGA/DVI
- Video Card: 256MB ATI Radeon 2400 XT, Dual Monitor DVI or VGA (TV-out), low profile
- Hard Drive: 160GB High Reliability SATA 3.0Gb/s and 8MB DataBurst Cache™
- No Floppy Drive
- Mouse: Dell USB 5-Button Premium Mouse
- Removable Media Storage Device: 24X Slimline CDRW/DVD Combo
- Speakers: Dell AX510 Sound Bar for all UltraSharp Flat Panel Displays
- Hardware Support Services: 4 Year Basic Limited Warranty and 4 Year NBD Onsite Service

**Comment [RS1]:** To be revised when this years standards are finalized

#### Laptop Computer

- Standard size: Dell Latitude E5400
- CPU: Intel® Core™ 2 Duo P8600 (2.40GHz, 3M L2 Cache, 1066MHz FSB)
- Operating System: Ordered with Windows Vista Home Basic, loaded with Windows XP SP3
- Memory: 2.0GB, DDR2-800 SDRAM, 2 DIMMS
- Graphics: Mobile Intel® Graphics Media Accelerator 4500MHD With Express Card
- LCD: 14.1" Widescreen WXGA (1280x800) LED Display - Brush Metal Black
- Primary Storage: 80GB Hard Drive, 7200RPM with Free Fall Sensor
- Bluetooth: Dell Wireless® 370 Bluetooth Module
- No Fingerprint Reader
- No Modem
- AC Adapter: 90W A/C Adapter (3-pin)
- Optical Device: 24X CDRW/DVD with Cyberlink PowerDVD™
- Wireless LAN (802.11): Intel® WiFi Link 5300 802.11a/g/n Draft Mini Card
- Primary Battery: 6 Cell Battery
- Carrying Cases: 14.1" Neoprene Sleeve
- Hardware Support Services: 4 Year Basic Limited Warranty and 4 Year NBD Onsite Service

**Comment [RS2]:** To be revised when this years standards are finalized

#### Ultra-Light Laptop

- Dell Latitude E4300
- CPU: Intel® Core™ 2 Duo SP9400 (2.40GHz) w/Latitude ON™ ready
- Operating System: Ordered with Windows Vista Home Basic, loaded with Windows XP SP3
- Memory: 2.0GB, DDR3-1066 SDRAM, 2 DIMMS
- Graphics: Mobile Intel® Graphics Media Accelerator 4500MHD
- Primary Storage: 80GB Hard Drive, 7200RPM with Free Fall Sensor
- LCD: 13.3" Wide Screen WXGA WLED Panel for Latitude ON™
- Bluetooth: Dell Wireless® 365 Bluetooth Module
- No Fingerprint Reader
- AC Adapter: 65W A/C Adapter (3-pin)

**Comment [RS3]:** To be revised when this years standards are finalized

- Optical Device: 8X DVD+/-RW w/Roxio and Cyberlink PowerDVD™
- Wireless LAN (802.11): Intel® WiFi Link 5300 802.11a/g/n Draft Mini Card
- Primary Battery: 6 Cell Battery (56WHr)
- Carrying Case: 13.3" Neoprene Sleeve
- Hardware Support Services: 4 Year Basic Limited Warranty and 4 Year NBD Onsite Service
- Distance Learning

DRAFT



## **Distance Learning**

### **Overview**

Distance Learning course offerings have stabilized over the past year. Over 155 instructors have completed CMS and online pedagogy training to offer Distance Learning courses. In order to support the increasing demand for distance learning courses the District and College provide access and support to the officially adopted Course Management System, synchronous voice tools, training rooms and equipment, and instructor and student support desks.

The Alternative Delivery subcommittee of EdCAP meets regularly to discuss strategic direction of distance learning and how to support it.

### **Course Management System - Hosting**

The District successfully implemented the Desire 2 Learn (D2L) solution to go live with Spring 10. Success of its adoption has prompted an expansion of its licensing to an unlimited use across the district. With a support partnership from the vendor the District hosts D2L in-house.

### **Synchronous Meeting Technology**

#### ***Wimba***

Wimba is a live virtual classroom environment, which features audio, video, application sharing, and content display. The College provides the license for Wimba Live Classroom and Wimba Voice tools. These tools are integrated with our current implementation of Desire2Learn, so it can be accessed by faculty who have completed the appropriate training and are using Desire2Learn to web-enhance their courses. The integration is not yet complete, requiring instructors to use a non-integrated method for some features. Due to the acquisition of Wimba by Blackboard Collaborate, we will investigate other options to Wimba.

#### ***Required Hardware for Wimba***

In order to use this synchronous meeting technology to its full capability, the following hardware should be available to demonstrate these features in the training workshops that are offered to faculty. Approximately four workshops are offered each semester. Between workshops, this equipment should be available for use in the Staff Resource Center.

#### ***USB WebCam***

Synchronous Meeting Technology allows the capability for participants to broadcast video via a webcam.

#### ***USB Tablet with pen and mouse.***

These pen tablets allow the presenters/instructors to use the pen-mouse to write just as they would on a whiteboard or chalkboard in a traditional classroom.

#### ***Headset & Boom Mic***

These headsets are essential to the Synchronous Meeting Technology training, as the audio sharing capability is the minimum requirement for an effective virtual classroom environment.

### **CCC Confer**

The CCC Confer project is located at Palomar College in San Marcos, California and now uses the Elluminate web conferencing technology, which is supported by [CCC Confer Client Services](#). CCC Confer was designed to allow communication and collaboration, using the latest Web conferencing technology, for all staff, faculty and administrators in the California Community Colleges system. This service is available for free to any faculty member, and can be accessed outside of the Course Management System.

### **Plagiarism Prevention Services**

#### **Turnitin.com**

The College provides the license for Turnitin.com Plagiarism Prevention, which allows instructors to check students' work for improper citation or potential plagiarism by comparing it against a continually updated database. Desire2Learn provides integration with Turnitin.

### **INTELECOM Online Resources Network**

The College is a member of the INTELECOM Consortia, a provider of televideo course materials. INTELECOM has started to transition its DVD and VHS resources to the online environment in the form of online video clips..

### **Respondus**

This is a tool used alongside Desire2Learn to make quizzes and question banks. This will make the assessment feature in Desire2Learn more user friendly. We anticipate starting a subscription July 1, 2011.

### **Training Rooms**

The training room is LLR 121. Larger rooms are scheduled as needed.

### **Camtasia Studio**

Camtasia Studio is screen recorder software that allows instructors to "create professional-looking videos that clearly demonstrate a process, a product, or an idea." The College has two licenses available for use in LLR-121 and to be relocated this summer to the Staff Resources Center.

# Technology Infrastructure and Network

## Overview

The network infrastructure at Moorpark College enables data and voice communications connecting all facilities on campus, plus connections to the other district locations and the Internet.

The District Information Technology Department has primary responsibility over network design, implementation, maintenance, and troubleshooting. The local ITS group is responsible for local connections of desktop or server devices, and works with District IT on resolving network problems.

### Cabling Infrastructure

The district has adopted cabling standards that conform to industry standards, including TIA/EIA, ANSI, IEEE, and BICSI. All new facilities conform to these standards. Existing facilities have been retrofitted to the standards, as budget has permitted.

Cabling inside buildings conforms to TIA/EIA standards.

### Local Area Network Topology and Infrastructure

The local area network (LAN) is comprised of mostly Hewlett-Packard ProCurve equipment, both at the core and the edge. The current network core is powered by HP 5406 switches, which provide high scalability and performance, and redundancy at the core for greater uptime.

The edge network devices are also Hewlett-Packard ProCurve equipment. During the 2011-2012 Academic Year, the District will continue its replacement cycle for aging HP edge switches with devices that have greater speeds and functionality. The District will also expand deployment of Power-over-Ethernet (PoE) capable switches (see earlier reference with projects for detail). These devices will provide network connectivity and power to newer generation network-enabled devices, including wireless access points, video surveillance cameras, and IP phones.

The network has multiple segments segregated by virtual networks (VLANs). Instructional and administrative network traffic is separated on different network segments, providing security for information systems on the administrative network. Over the next 18 months IT will examine its current IP/VLAN deployment strategies to assess potential of additional segmentation to support the growing population of smart devices and VOIP.

### Wide Area Network

The primary wide-area network (WAN) connectivity to the other district sites is via OC-3 (155 Mbps) circuits running through an RF microwave network. The District owns and maintains the network. The connection from Moorpark College to the microwave WAN is via South Mountain in Santa Paula. The County of Ventura owns the South Mountain facility.

The wide area network (WAN) uses HP 9304 switch/routers for connecting to other sites over the microwave links.

AT&T is the provider of telecommunications circuits, including voice trunks, T1 voice circuits, and Internet circuits (CENIC). The circuits are all provided on the state CalNet 2 contract at substantial discounts over

commercial rates. The District also participates in the California Teleconnect Fund, which reduces some circuit costs by up to 50 percent.

#### **Internet Connectivity**

Internet connectivity is provided by the Corporation for Education Network Initiatives in California (CENIC). From their website, “CENIC designs, implements, and operates CalREN, the California Research and Education Network, a high-bandwidth, high-capacity Internet network specially designed to meet the unique requirements of these communities, and to which the vast majority of the state's K-20 educational institutions are connected”.

Moorpark College has a gigabit primary Internet connection and a 45 Mbps backup.

#### **Wireless**

The district uses equipment from Aruba Networks as standard wireless network for all locations. The Aruba solution is easy to manage, is secure, and very scalable. Enhancement and expansion of the wireless network is part of IT's operational standard.

Access to the student wireless networks currently requires a generic id and password for authentication. Authentication for access to the staff wireless went active in the Summer of 2010. Authentication using unique user id and password for the student wireless will be rolled out during the 2010/11 academic year.

#### **Voice Communications**

District IT maintains the voice network infrastructure. A Nortel Option 61C PBX is installed with a capacity of a capacity for up to 1,500 phones. This system supports analog, digital, and IP phones on campus. With the planned Avaya's planned obsoleting of the Nortel line, the District will over the next next 36 months begin movement to the next generation of phone services for the colleges. This will involve some hybrid combination of Avaya bridging technology to allow a seamless migration from the aging infrastructure to a VOIP architecture that effectively leverages Microsoft's Unified Messaging services.

There is currently connectivity to the other campuses and the DAC via dedicated T1/PRI lines for voice traffic. AT&T provides local voice circuits. The long distance carrier is AT&T.

## Information Security

### Overview

The District makes every effort to comply with all federal, state, and local security rules and regulations, including the Family Educational Rights and Privacy Act (FERPA). Best industry practices are used to secure the information assets at all facilities.

### Firewall

District IT provides firewall protection for the administrative and instructional networks. Upgrade of the firewall infrastructure to Juniper devices will continue through the Summer 2011 semester. This upgrade will allow for greater growth and support higher speeds, provide better uptime, support a web driven SSL VPN capacity for secure access to enterprise services.

District IT maintains an anti-virus site license. Sophos remains the District's standard for antivirus protection. The software provides a more comprehensive and easier to manage system, at a lower cost.

Moorpark College hosts the District's Disaster Recovery data center. This site contains backup systems for critical applications such as Banner, the portal, Desire2Learn, and email.

### Funding

Funding for network infrastructure projects is currently provided by funds from Bond Measure S. The District set aside \$5,000,000 of Bond funds for IT related infrastructure projects. All current scheduled network projects will be paid for with the Bond funds.

Upgrades to the network not paid for by bond projects are funded by a variety of sources, including the operational budget.

## Appendix A. IT Department Budget

Title	Acct	FY 12
Managers - Classified	2010	30,767.75
Classified Regular	2121	246,651.47
Classified - Overtime	2322	5,000.00
Student Hourly-Non-Instructi	2530	35,000.00
Supervisors	2610	80,622.00
Supervisors - Overtime	2622	2,000.00
PERS - Managers	3200	3,445.99
PERS - Classified	3235	27,624.96
PERS - Supervisors	3260	9,029.66
OASDI - Managers	3300	1,655.50
Medicare - Managers	3305	446.13
OASDI - Classified	3335	15,602.40
Medicare - Classified	3365	3,648.95
OASDI - Supervisors	3368	5,122.26
Medicare - Supervisors	3369	1,198.02
H/W - Managers	3400	3,565.50
H/W - Supervisors	3426	15,347.24
H/W - Classified	3435	53,142.70
LCA - Classified	3465	332.14
LCA - Supervisors	3466	94.00
LCA - Managers	3469	23.50
Retiree Health Liab-Managers	3491	4,922.84
Retiree Health Liab-Classifi	3494	39,464.23
Retiree Health Liab-Supervis	3495	12,899.52
SUI - Managers	3500	289.22
SUI - Classified	3535	2,318.52
SUI - Supervisors	3560	776.65
WC - Managers	3600	501.52
WC - Classified	3635	4,020.42
WC - Students	3650	570.50
WC - Supervisors	3660	1,346.74
Computer Software and Suppli	4300	3,000.00
General Supplies & Materials	4800	14,500.00
Training And Instruction	5140	2,500.00
Employee Travel	5211	3,000.00
Rent/Lease-Other	5619	1,000.00
Maint/Repair-Equipment	5622	4,800.00
Software Maintenance & Licen	5641	4,008.00
Hardware Maintenance & Licen	5642	4,000.00
Licenses And Fees	5822	2,000.00
Equip-Instruc Equip-\$1000+	6443	5,500.00
Equip-Non Inst Computers-\$1000	6451	15,000.00
IT Operations		666,738.33

This budget reflection consolidation of media services into the IT budget, such as projector bulbs....

## Appendix B. Software Inventory

Vendor	Type	Comments
<a href="#">TechSmith</a>	<a href="#">Camtasia and Snagit</a>	<a href="#">In LLR SRC</a>
Foundation California Community Colleges	Fusion Annual Science Fee	
<u>Campus-wide software</u>	Annual Renew of SARS GRID Support	Counseling Department Software
Computerland of Silicon Valley	Microsoft <a href="#">and Adobe</a> License Agreement	Campus-wide agreement
XAP Corporation	BOG Fee Waiver Application	Yearly expense
Autodesk Design Institute	ADI Media-Class Pack Licenses	Autocad software (drafting)
Wire One		
Governet	Software for tracking and developing curriculum MC	
Intelecom-Intelligent Telecommunications	08-09 XSP Enrollment Fees/XSP FTAS Assessment Fees	
Ventura Business Services	Maintenance-Library release station	Student printing (LLR)
<a href="#">Wimba</a>	<a href="#">Blackboard Collaborate Wimba Live Classroom and Wimba Voice.</a>	Distance education
Wimba	License Fee <a href="#">Dates Needed</a>	Distance education
<a href="#">Sophos</a>	<a href="#">Antivirus</a>	<a href="#">Campus wide</a>
<u>Departmental software</u>		
Vendor	Type	Comments
<a href="#">GenevaLogic</a>	<a href="#">Vision</a>	<a href="#">LLR 210 – classroom management</a>

**Comment [i4]:** Camtasia – Snagit. In LLR.

**Comment [i5]:** Update these two rows

**Deleted:** Wiimda Classroom ASP Software Version-5.1 6/15/08to 6/14/09

**Deleted:** Oct.1-08 to June 14-2009

**Comment [i6]:** Lisa Putnam? 3 years over

**Deleted:** CCSSE-Community College Survey of Student Engagement

**Deleted:** 3 Years Membership fee /Faculty Survey fee for Moorpark College

**Comment [i7]:** Geneve Logic. LLR 210.

**Deleted:**

Plato software	Writing skills tools	LLR building 3rd floor
Sanico Forum 1000	Language Lab software	LLR building 3rd floor
Accessafire	Accessibility software tracking	Access building
CI Solutions	Tracking software	Positive Attendance (various depts.)
Turnitin	Plagiarism Detection software	Various depts.
SPSS	Learning tools	Various depts.
Adobe CS4 and 5	Graphic tool software	Various depts.
File maker pro	applications software	Various depts.
MedPro	Nursing software	Health Center
Track-It!	Help desk software	ITS department
Voyager Software	Library database	LLR

**Comment [i8]:** Replaced with CI Track? Check fit lab.

**Deleted:** Red Canyon

**Deleted:** Tracking software

**Deleted:** Fitness lab