Q1 & Q2 FY12
Operational Summary
Information Services & Technology (IS&T)

January 19, 2012
Executive Summary

Technology is embedded in our daily lives. It has become the cornerstone of how we operate, work collaboratively and share information and data which influences our interactions and decision making. A critical role for IS&T is to facilitate connections across the Institute.

In our efforts to support our students, faculty, researchers and staff, the key focus has been in the areas of customer service, increasing self-service, mobility, digitization and simplification, data, and reduction of risk.

The IS&T Operational Summary outlines how in partnership with sponsors and customers, we focused on advancing MIT’s mission and delivered services and projects that simplified processing and reduced costs for MIT. The summary covers July-December 2011 and outlines accomplishments, goals, workforce updates, issues and trends, production and operational outages/problems and metrics for IS&T’s Administrative Systems, Education Systems, Data Management, Systems Engineering, Customer Support, Operations & Infrastructure, and Administration.

IT Governance Committee

IS&T worked closely with the IT Governance Committee and has been meeting monthly since mid-summer. One major focus has been on a series of IT Roadmaps to help pave the way for continued improvements for the Institute in Administrative Systems, Customer Support, Data Management, Education Systems, Mobile Development, and Network Security.

Below is a list of the roadmaps and updates that have been reviewed and approved by the committee.

- Education Systems Roadmap (2011-2014) – Reviewed on September 29, 2010
  - FY12 Education Systems Roadmap Update - Reviewed on October 5, 2011
  - Data Roadmap Update - Reviewed on January 17, 2012
  - Mobile Computing Roadmap Update - Reviewed on December 16, 2011
- Operations & Infrastructure Roadmaps

In addition to the roadmaps, the IT Governance committee has approved the allocation of software development funding and approval of Digital MIT project and funding.

More information about the IT Governance committee, topics of discussion, and meeting minutes can be found at http://web.mit.edu/itgc/.
Administrative Systems

Accomplishments from Q1 and Q2:
- Completed
  - Request for Payment 1.1.
  - Hourly Student Appointment prototype.
  - Pension Administration Outsourcing.
  - Enterprise Learning Phase 2a (New Portal, Learner & Administrator).
  - Global Initiatives (document attachment, asset management, CitiBank, summary stmt, DTR, financial tables).
  - Open Enrollment 2012.
  - Year-end support pack - 2 weeks faster than prior years.
  - Systems and process documentation for Administrative Systems.
- Closed 796 Support/Enhancement requests and received 664 new requests.
- Started
  - Support / Enhancement initiative.

Goals for Q3 and Q4:
- Complete Key Process Discovery.
- Complete Mobile for Facilities Phase 1.
- Complete Global Initiatives Short term (workflow).
- Complete Enterprise Learning Phase 2b (Convert eLearning content, EHS Training Needs Identification).
- Complete Hourly Student Appointment.
- Complete Appointment Process Redesign 2.0.
- Complete New Hire Pension.
- Complete Total Compensation Statement.
- Support & Enhancement – reduce backlog by target defined in 1/2012; implement process improvements; recommend ongoing staffing model.
- Day-to-Day Operations – complete UC4 pilot; upgrade Solution Manager; complete implementation plan.

Workforce Update:
- Lisa Jones-Brinkley, Doug Walsh, Kristen Hann and Jim Fragala hired.
- Shridhar Kulkarni and Sabina McLaughlin resigned.
- Created resource-planning model for all Administrative Systems work.
- Engaged EPIUse Application Management Services

Issues/Trends for Q1 and Q2:
- Increased competition for IT skills, especially SAP and Java.
- Increased demand for projects, enhancements, support work

Production & Operational Outages/Problems for Q1 and Q2:
- 11/8/2011 ECAT / SciQuest 2hr 40min due to SciQuest upgrade
• **Metrics from Q1 and Q2:**
  • Electronic Requests for Payment
    o 22,787 Requests
    o 19,686 paid via direct deposit
  • Vendor invoices
    o 116,490
  • Support & Enhancement Requests
    o 796 Completed / Closed
    o 664 New requests
  • Paychecks / Direct deposits
    o 211,627
  • Individuals who accessed SAP
    o 17,000
  • Changes (transports) to production SAP
    o 1,343

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**Education Systems**

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**Accomplishments from Q1 and Q2:**
  • Retired WebLogic from Admissions environment
  • Successfully completed Expanded Online Registration Fall Pilot
  • Successfully completed expanded Online Grading Summer and Fall Pilot
  • Completed Electronic Transcripts project
  • Completed pilot of LMS Gradebook module
  • Completed Java 6 upgrade project
  • Completed Scheduling requirements
  • Completed Forms Digitization Analysis

**Goals for Q3 and Q4:**
  • Full Rollout of Online Registration in Spring
  • Online Financial Aid Award letters available to freshmen along with their online decision
  • Initial pilot of LMS Attendance module
  • Complete IAP replacement project
  • Start Online Reg Phase 2 analysis
  • Implement PFAIDS recommendations
  • Complete initial phase of Graduate Admissions improvements
  • Complete WARP development

• **Workforce Update:**
  • N/A

**Issues/Trends for Q1 and Q2:**
  • Increased support demands as new applications rollout
  • Full rollout of applications happening faster than anticipated
Production & Operational Outages/Problems for Q1 and Q2:

- **2012-01-07 Electronic Transcripts Problem**
  - After moving the Production Mitsis environment to Virtual Servers we identified a problem receiving Electronic Transcripts from the vendor AVOW. The change in IP’s on our side caused a caching problem on the AVOW side which was resolved with a restart of the AVOW web service.

- **2012-01-07 PE Registration communication with Stellar Problem**
  - After moving the Production Mitsis environment to Virtual Servers we identified a problem with PE Registration communication to Stellar-Gradebook. This was resolved with an F5 configuration change.

- **2011-10-01 Online Registration Outage 22.5 hours**
  - 403 Forbidden when accessing online Registration Low, however impact low because occurred at end of registration period. Identified incorrect date configuration in the Reg Period table for the Fall 2013 end date, which had a Oct 01, 2011 date. Updated code to prevent entry of incorrect dates moving forward

- **2011-09-05 Undergrad Admissions my.mit.edu Outage 7 hours and 8 minutes**
  - my.mit.edu did not restart after the weekly automated restart procedure because of a memory constraint on the node. Changed the application startup order and added this application to the nagios monitoring.

- **2011-09-01 Student-Websis access problems 10:15am 15 minute outage**
  - This was an osso-student corruption issue that prevented access to Student.mit.edu on sky-app-1. Access to student.mit.edu on sky-app-2, sky-app-3 and sky-app-4 was not impacted.

- **2011-09-01 Student-Websis access problems 1:15pm 10 minute outage**
  - This was an osso-student corruption issue that prevented access to Student.mit.edu on sky-app-2. Access to student.mit.edu on sky-app-1, sky-app-3 and sky-app-4 was not impacted.

- **2011-09-01 PE-Registration problem 8:30am**
  - Database connection limit was reached. Increased the number of database connections.

- **2011-08-22 Stargate Web and StargateBatchWeb - 2 hours and 45 min of downtime**
  - The client certificate associated with access to the Roles Web Service expired and had to be recreated and applied.

- **2011-07-21 Online Registration - 1Hour and 45 Minutes Outage**
  - Identified a problem with database grants allocated to the Online registration data source user id.

Metrics from Q1 and Q2:

- 1% increase in Admissions applications
- 23.3% of final grades were submitted off hours
- 32% of registrations submitted off hours

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**Data Management**

Accomplishments from Q1 and Q2:

- Reporting projects completed
  - Textbook project(TIP) including TIP School Demos
  - Online Subject Evaluation completed
  - Concur travel Reporting

Last Updated: 2/6/2012
• Kicked off three data focus groups: Financial, EHS and HR
  o Built 25 draft production reports in COGNOS
  o Built 15 packages (COGNOS models)
• Worked with Sponsored Accounting to create a WBS Closeout report
  o This includes automated notification to the pilot group.
• COGNOS production and development environment created and deployed
• Created COGNOS design conventions
• Created Data Warehouse structures and reports in support of the Singapore Alliance
• Created a repeatable process for COGNOS model & report creation
• RAFT Phase II:
  o Development and rollout of forecasting component
  o Includes extending enterprise data with local knowledge
  o Includes links with Cognos for reporting
• AAUDE
  o Designed, developed and rolled out new subject areas for:
    - Enrollment by CIP/RE
    - NSF R&D data
    - NSF GSS restructuring data
• Space Economy
  o Worked with Steering Committee to document business requirements
  o Completed initial design and estimate of work
• MITSIS database: IDD production, development, and test databases migrated to 11.2.0.3
• Alumni Advance production, development, and test databases migrated to 11.2.0.3
• Oracle Gateway built and deployed: aids in data access. Makes it possible for Oracle applications to integrate with non Oracle systems (IBM, DBZ, MS SQL, Excel, message Querying, websphere)
• Completed Phase 1 assessment of energy conservation measures for the W91 data center with Facilities, the Department of Energy & Lawrence Berkeley National Lab
• Completed Evaluation of Document management Systems from EMC, IBM & OpenText.
• Prepared DRAFT report on MGHPC operating cost allocation and chargeback models.
• Started installation of Synapsense Thermal and Pressure Sensing array in W91 data center
• Upgraded the SAP production and non-production systems with SAP Support and Enhancement Packages, to version EHP5 for ERP 6.0, in support of the HR Payroll Year-End Support Package project
• Upgraded the SAP Payroll Tax Server landscape from version 8.0 to version 9.0
• Upgraded the SAP Portal landscape from version 7.01 to version 7.3 in support of the E-Learning August 2011 production implementation
• Eliminated SAP transaction authorization ranges to provide more specificity in reporting user access controls
• Provided technical support to RFP 1.1, Pension Administration, and E-Learning II production implementations
• Coordinated with the Software release team to make current MacOs and Windows SAPgui installers available to the MIT community

Goals for Q3 and Q4:
• Kickoff central reporting focus group(s) including Student Focus Groups
• Begin development of Space Economy System
• Rollout COGNOS basic training
• Stop building Community reports in Brio
• Finalize RAFT Phase 3 requirements
• Begin iterative development cycles for RAFT Phase 3
• Develop reports to support current initiatives
  o Hourly Student
  o Enterprise Learning
• Complete MGHPC report on cost allocations and chargeback
• Complete Synapse Thermal Sensing array installation in W91 data Center
• Participate in Campus Energy Task Force Graceful Living sub Group with Prof. Peter Fisher (Physics) & John DiFava – facilities
• Database Migration Work - 9i to 11G and Solaris to Linux VM
  o Servers
    - LDAP
    - Noid – users that are using LDAP to resolve connection strings are directed home
  o Database Migration Work - 9i to 11G
    - Nimbus - Budget Office Nimbus
    - Technology Licensing Office
    - LFM
• Build out of the new MITSIS test environment (3 new databases) and the new Scheduling environment.
• Cross-training:
  o R3-Admin resource to an SAP Portal Administration Class in March 2012
• Complete application of Support Packages to the SAP Portal system landscape and to support the E-Learning production implementation in March 2012
• Apply SAP security enhancements (SAP notes and logon user exit updates) to the SAP ERP system landscape
• Upgrade the SAP Adobe Document Services (ADS) server landscape to the current version of SAP NetWeaver (version 7.3).

Workforce Update:
• Qian Kang joined SAP Administration as a Senior SAP Basis/System Administrator
• Robert Campanella joined Data Admin & Warehousing as a Technical Architect
• 3 open positions: Project Manager, Java front end developer, DW Developer (Jr)

Issues/Trends for Q1 and Q2:
• Concur and Coop – outside vendors require more time and resources, not in our control
• Staffing resources

Production & Operational Outages/Problems for Q1 and Q2:
• There were no unplanned outages of the SAP production ERP system, the Data Warehouse or the Roles Database during the weekday 8AM to 6PM Primetime Window.

Metrics from Q1 and Q2:
• 280 community reporting requests
• Roles activity
  o 3 new Departments added
  o 2 reorganizations completed
18,517 authorizations (terminations/additions/updates) centrally
- Approximately 150 new fund centers added
- Data Warehouse
  - 1,712 average number of user sessions per day

**Systems Engineering**

**Accomplishments from Q1 and Q2:**
- Selected and acquired job scheduling tool
- Implemented software release and de-release process
- Accelerated automated QA testing
- Implemented mobile module for Facilities
- Implemented mobile module for Libraries
- Developed user experience and accessibility principles for SAP WD4
- Implemented extended DCAD development capacity
- QA completed writing 224 automated tests
- Released and supported Mac OS 10.7
- Released and supported Windows 7 SP1
- De-supported Office 2003 for Windows and Office 2004 for Mac

**Goals for Q3 and Q4:**
- Complete IS&T web site redesign and service catalog
- Implement mobile Campus Preview Weekend
- Implement advanced mobile maps
- Launch Drupal as a Service pilot
- Implement Knowledge Base improvements
- Develop online training catalog
- Automate an additional 260 QA tests
- Windows 7 64 bit release
- De-support Mac OS 10.5
- Kerberos for Windows release and support
- Reimplementation of downloads.mit.edu
- Add Web and Database Consultant to DCAD

**Workforce Update:**
- Sara Davis has joined Training
- Kate Fontanella has joined Training
- Julia Tutko has joined Web Services
- Michael Rossetti has joined Web Services
- Peggy Conant joined DCAD
- John Jarvis has joined Web Services
- David Tanner has left Systems Engineering and joined Education Systems
- Robert Basch has left Systems Engineering and joined Operations and Infrastructure

**Issues/Trends for Q1 and Q2:**
• Continuing difficulty in acquiring top technical talent
• Expansion in use of native mobile applications
• Phasing out of PSB increased DCADs customer queue

Production & Operational Outages/Problems for Q1 and Q2:
• Brief misconfiguration of Lynda.com
• Brief outage of downloads.mit.edu due to disk capacity

Metrics from Q1 and Q2:
• 52,544 modules of instruction delivered via Lynda.com in first year
• 543 attendees to 70 in-person training classes.
• DCAD started 30 new projects and completed 32 existing projects
• QA completed writing 224 automated tests.
• 30,700 active users of MIT Mobile native app for iPhone, a 50% increase
• 3,400 active users of MIT Mobile app for Android, a 300% increase
• Page views on MIT Mobile web declined by 14% to 684,000
• Released nine new or updated versions of software, including one full OS release
• De-supported six applications, including two major software suites
• DCAD revenue was $261,295, a 23% increase over Q1 and 2, 2011

Customer Support

Accomplishments from Q1 and 2:

Improved the Customer Experience
• Relocated walk-in help area to E17 making it more accessible to more people.
• “Laptop spaces” created in a couple of clusters have proven to be very successful.
• Pharos printing rollout has led to a dramatic drop in Athena printing support tickets.
• BookScanStation public scanner was installed in W20 to augment similar scanning service available in the Libraries. 355 usages from Oct. 12 – Dec. 12, 23% of usage occurring outside of Barker/Hayden operating hours.
• Conducted 74 Usability and 46 Accessibility consultations in support of 34 community projects. Examples include: GetFit, TechTV, CSAIL course on Principles & Practices of Assistive Technology, Leader to Leader, Online Course Registration, RAFT.

Assisted with New/Changed Service Roll-out
• Participated weekly meetings, helped draft communications, coordinated with OI and with customer groups, updated KB articles to facilitate support for Exchange 2007 to 2010 migration.
• Identified customer experience challenges for Secure Wireless roll-out and proposed alternative roll-out plan that minimizes customer impact.

Reached out to the Community
• Back to School 2011 was a successful event mostly repeating things we have done in the past. Updated and distributed popular Computing at MIT maps.
• Assisted 50 individuals who stopped by satellite help desk in Lobby 7 with a variety of questions.
• Participated on IS&T Website Redesign Core team, and as co-sponsor. Worked with copywriter, as well as designers at a detailed level. Updated Help Desk Request form to be more helpful.
• Accessibility and Usability clarified and communicated about their services, presenting 8 overviews to different audiences. Increased awareness that involving us earlier in the development process, leads to better design and development and less remediation.
• Saw positive results of video captioning outreach: MIT News, Blossoms, JPAL will all be captioning video going forward.

Implemented Foundational Improvements
• Built prototype in Drupal for service portfolio and began populating with data.
• A cross-organizational team drafted a proposed plan and process for managing the software lifecycle.
• Help Desk making effective use of structured escalation templates, agreements, and processes to better manage business help, email/calendaring, networking incidents.
• Improved communications across customer facing teams about emerging, non-urgent trends through making more effective use of standard RT capabilities.
• Facilitated cross-directorate knowledge management team which has begun drafting guiding principles and recommended directions.
• Tried new staffing solutions. A not too successful attempt at employing a Year-Up student and a very successful attempt at employing 3 non-MIT students.
• Increased front-line support for Educational Systems to bring it closer to levels provided for Administrative Systems help.
• Worked with the EOC on MIT Alert/Emergency website. Created MITAlert Notify email lists. Added all MIT corporate cell phones to alert. Documented how it works. Added support to allow registering for MITAlert directly from cell phones by texting “mitalert”.

Worked on Planning/Visioning
• Worked on the MIT 2030 strategic planning for teaching and learning spaces. The announcement of MITx redirected some of the conversation.
• Prepared and presented first version of Customer Support Roadmap to ITGC.

Goals for Q3 and 4:

Improve Customer Experience
• Explore site-licensing software for ASA student groups.
• Add a few more laptop spaces to public clusters.
• Facilitate IS&T Student Town Meeting over IAP.
• Shift to “soft” quota for students, relaxing quota limitations. Explore students “spending” some of their quota at CopyTech for course readers.
• Rollout use of web app and iPads for intake of walkins customers and for checkin/checkout of student loaner laptops

Assist with New/Changed Service Roll-out
• Conduct series of satellite Help clinics in locations around campus to assist in roll-out of secure wireless
• Assist with completing Exchange 2007 to 2010 migration; once complete develop plan to address users still on Cyrus infrastructure

Reach Out to the Community
• Get feedback from key knowledgebase contributors outside of IS&T on planned directions for Hermes.
• Accessibility and Usability to continue with communication and outreach.
• Explore adding more Town Meetings, customer focus groups and other outreach efforts to better understand needs of particular segments of the community.

Implement Foundational Improvements
• Clean up and add to data in the service portfolio incorporating updates from Sr. Staff discussions of services.
• Refine the software lifecycle plan, socialize it and incorporate input from others
• Improve usability and increase use of the structured escalation templates. Attempt to get a measure of success, even if anecdotal.
• Use cross-directorate knowledge management team to assist with Hermes design and direction
• Expand channels for recruiting non-MIT students into our help desk roles.
• Look at redesign of Matlab overall business process
• Explore more automation, performance improvements and ability to quickly add capacity to MITAlert.
• Explore separating EOC dashboard from MITAlert. Re-work main emergency.mit.edu to make use of responsive web design.
• Define extended hours experiment and get approval for resources

Work on Planning/Visioning
• Contribute to MIT 2030 teaching and learning spaces report.
• Revise Customer Support Roadmap to incorporate the Computing Experience (DITR) as well as directions for knowledge management

Workforce Update:
• 1 open funded support staff level position (Nancy Harney's) currently being filled by a temp. Plans are to post and hire soon.
• 1 open unfunded support staff level position being held (Diane Catalano's)
• 2 upcoming medical leaves, starting in March. One in Ed Systems Support on Steve Landry's team, the other in headquarters.
• Exploring additional part-time staff to augment ATIC and Accessibility to keep up with demand.

Issues/Trends for Q1 and 2:
• Demand and use of Educational Video Services growing. Unclear what groups are doing what, and how we might collaborate more.
• Increase in emerging technologies that will need our expertise to keep MIT in compliance with ADA and Section 504.
• Still finding it difficult to recruit enough MIT students to sufficiently staff front line services

Production & Operational Outages/Problems for Q1 and 2:
• RequestTracker – 12/29 – users not able to take or release tickets; Apache restart fixed the problem
• Hermes – 12/15 – search results were mangled; restart and flush of cache fixed the problem
• Hermes – 12/20 – general slowness, fixed by restart.

Metrics from Q1 and 2:
• Help Desk handled 19,324 new tickets, 69% resolved within the same day. 58% initiated by email; 37% initiated by phone.
• Overall customer satisfaction rating for the first half of the year was 4.51 out of 5. (This rating is a composite of scores across the dimensions of Professionalism, Expertise, Timeliness, Resolution, Communication and Availability.)
• Visited by 2926 walk-in customers. 40% of them came in for technical consulting, 22% for repair services, 18% for Athena and Accounts help.
• 132 Assistive technology consultations to MIT persons with disabilities or temporary injuries.
• 46 tactile/Braille graphics developed for Biology 7.012 and Physics 8.01L

Operations and Infrastructure

Accomplishments from Q1 and Q2:
• Stellar redundancy design and deployment
  o Completed in August; added capacity and redundancy to the production Stellar environment at both the web and app server tier, allowing the system to go through registration week and finals week with no significant outages to the main application.
• E40 F5/legacy MITSIS backend network retirement
  o Completed in December; eliminated 8 year old equipment and greatly reduced the risk of outages to the development, test, and QA environments for MITSIS, Undergraduate Admissions, and the IDD apps (EHS/Events/SAPweb).
• Network migration/virtualization of production IDD environment (EHS/Events/SAPweb)
  o Completed in August; virtualized all three tiers (dev/test/production) of the IDD environment, giving them additional redundancy/capacity, as well as modernizing their OS platform and eliminating a total of 6 physical servers and bringing this application environment's network configuration into compliance with our current best practices.
• Network migration/virtualization of production Undergraduate Admissions Environment
  o Completed in November; virtualized all three tiers (dev/test/production) of the IDD environment, giving them additional redundancy/capacity, as well as modernizing their OS platform and eliminating a total of 6 physical servers and bringing this application environment's network configuration into compliance with our current best practices.
• Retirement of W91 CX-700 SAN array
  o Completed in September; retired our oldest SAN array (reduced risk from hardware failure) and completed migration of all production enterprise storage out of W91, freeing up space for AT&T equipment for improved in-building cellular service.
• Hardware/OS upgrade of all TSM servers
  o Completed in October; eliminated 10 Sun SPARC/Solaris systems in favor of Linux/Intel equipment, relocated TSM environment from W91 to OC11, freeing up additional space, and updated applications to TSM 6 (improved performance and scalability)
• Relocation of W91 Director switches
  o Completed in December; freed up space in W91-189 for building construction and AT&T equipment.
• Hypervisor upgrade to vSphere 5
  o Completed in December; brought virtualization environments to current supported vendor level, and introduced several new features, including higher resource limits for individual VMs and support for automated storage migrations in response to high latency (storage DRS).
• 3Par to EMC SAN migration
- Completed migration of W92 and OC11 hypervisors from 3PAR storage array to new EMC Clariion arrays.
- Completed migration of Mailman storage from 3PAR to EMC Clariion
- Completed migration of Windows DFS home directories from 3PAR to EMC
- Completed migration of all iSCSI systems to Fiber Channel.

- **IPTV**
  - Completed rollout of IPTV set top box service to new Massee Hall dormitory (w1) to provide Comcast video TV services to the student residents.
  - Worked with Comcast on development of a new IPTV service offering, based entirely on soft clients and streaming IP video.

- **Exchange 2010 upgrade**
  - Completed installation of Exchange 2010 server environment and provisioned SAN storage for Exchange 2010 mailboxes
  - Completed CAS cutover from Exchange 2007 CAS servers to Exchange 2010 CAS servers as part of the final phase of Exchange 2010 infrastructure upgrade preparations
  - Completed migration of IS&T, Resource Development, Students and several other DLCs from Exchange 2007 to Exchange 2010

- **Physical Security**
  - Completed installation of Genetec Video Surveillance system in partnership with SEMO, and migrated IP video surveillance cameras from three legacy platforms onto the Genetec platform.
  - Worked with SEMO to complete the upgrade of IS&T’s CCURE 800 system to CCURE 9000 system, as the first phase of the overall migration of all MIT’s CCURE systems to CCURE 9000.
  - Worked with SEMO and Facilities in a trial deployment and evaluation of Assa Abloy’s wireless locks and proxy cards, as potential solution for securing IS&T TDCRs.

- **Communications**
  - Completed integration of Unity voicemail system with MIT 5ess.
  - Completed integration of Unity with Exchange system to provide unified inbox functionality.
  - Completed evaluation of E911 solutions and selected Conexeon’s 911 Enable product for enabling the MIT telephone system to provide accurate location information to the Cambridge PSAP.
  - Completed migration of 5ess long distance and international calls to IP based SIP trunking.

- **In-building Cellular**
  - Completed the installation of in-building DAS wiring, antennas and equipment in 50 MIT buildings
  - Completed re-location of servers and equipment within W91-189 data center space to provide space for AT&T cellular head end.

- **Certificates**
  - Completed the annual certificate renewal process
  - Added support for obtaining client certificates on iOS 5 devices.

- **Network construction/renovations/upgrades**
  - Completed network installation in OC11 data center expansion space
  - Completed network installation in Massee Hall (w1)
  - Completed network upgrade of building 9

- **Wireless**
  - Began migration to next generation cisco wireless controllers (WiSM 2)

- **Data Center**
- Completed replacement of UPS batteries in building 24 and w92 machine room facilities
- Completed installation of monitoring and modeling system in W91 as part of DOE study

**Optical Network**
- Completed installation of optical node at Chicopee to support initial network connectivity to Holyoke
- Completed second phase of expansion of MIT’s metro optical network supporting additional connectivity and capacity to OC11 in support of our data center expansion space.
- Migrated Haystack Laboratory to MITnet via optical network connectivity at 300 Bent Street.

**IT Security**
- Completed installation of splunk analytics system to streamline and automate existing lengthy and manual processes.
- Prepared for migration to secure wireless, being postponed till summer as a result of the number of potentially impacted users.
- Secured inbound connections to MITnet VPN addresses to only allow incoming connections from MITnet IP addresses.

**Managed Computing**
- Completed upgrade of Citrix environment to the latest version, enabling support for remote application access on mobile devices.
- Completed upgrade of Altiris system to support remote management of Windows computer systems.
- Completed installation of Casper system for remote management of Macs and iOS mobile devices.
- Completed setup of automated monitoring and notifications of Athena public workstations through nagios.

**Change Management**
- Completed remote VPN connectivity between cloud remedy system and MIT, completed configuration to allow remedy system to send and receive MIT email.
- Completed process mapping with Doreen Evans for a variety of routine change processes in server operations and network operations that will form the basis for codifying those processes in the remedy system.
- Completed integration with MIT touchstone system for single sign-on to remedy web application.

**Workforce Update:**
- Noel Atkins – Desktop System Engineer
- David Blum – System Administrator / Programmer II

**Metrics from Q1 and Q2:**
- Approximately 1TB total in disk storage
- Approximately 2TB in total tape backup storage.
- Approximately 40,000 end user devices (computers, laptops, mobile devices, etc) total devices connected to the MIT network (20,000 wired and 20,000 wireless) spread across approximately 150 buildings.
- Average of 810k email messages daily (approximately 450k are internal and 360k external)
• Worked with Doreen Evans and Associates to perform an assessment of the Finance and Procurement organizations as well as document current processes
• Partnered with operational staff to facilitate the purchasing of Unitime, UC4, and EPIUse query tool.
• Implemented various Financial and Procurement process improvement including:
  o Analyzed all IS&T internal Chargebacks
  o Eliminate purchasing and consulting approval forms
  o Worked with Central Procurement to standardize the requisition/PO creation process
  o Created IS&T Procurement Card Issuance Guidelines
  o Created standard Software Development Budgeting Guidelines
  o Reviewed all IS&T procard and spend and commit authorizations
• Worked with Varin Ang (MIT Facilities), Architect from Hallor Assoc., and an Engineer from F.J. Linehan & Associates to develop plans and costs to renovate W91 to provide approx. 20 addition seats as part of FY2011 in-cycle CRSP project request.
• Working with EHS to develop an Emergency Preparedness Plan for IS&T.
  o Published an updated Emergency Evacuation Plan (http://ist.mit.edu/for_ist_staff)
• IS&T Service Portfolio: Began agile development of working prototype
• Library of Procedures: Drafted distributed software life cycle and corresponding processes per phase
• PMBA Working Group: Initiated Community of Practice
  ▪ Coaches/mentors
  ▪ Roll out of tools and templates
• Marketing and Outreach – Provider Fair (Sept 2011); Event Fair (November 2011); Essentials of Managing Resource Presentation (November 2011); Project Communications and Roadmaps (Admin Systems Roadmap – Open Enrollment Comm; Education Systems Roadmap – multiple communications and meetings; IS&T Website Comm Plan and begin outreach; Exchange 2010; Network Security Roadmap - Secure Wireless; Mobile Roadmap Comm); StopTagging sessions; Back-to-School events
• News and Editorial – 6 monthly HTML Newsletters; 6 spotlight articles; 39 headline articles; 14 stories repurposed to Campus News; over 200 items posted to Facebook and Twitter
• Internal Communication – biweekly email for Marilyn; Digital signage; Inside IS&T newsletter; Quarterly Department meeting (October); Infinite Mile Award Committee
• Reports – FY2012 Strategic Plan and Overview; President’s Report
• Other/Outside MIT – NERCOMP – Hosted Board meeting at MIT (October) and Chair of the Annual Conference (planning/proposals solicitation/lead efforts to get speakers/select and write theme/preconference sessions/etc); IT/Libraries Communications Group/Boston Consortium (quarterly meeting/planning spring Security Conference); Surveys (Educause Core Data Survey; Princeton Survey); Wrote (3) award nominations (2) for Excellence Awards and (1) for Infinite Mile; Facilitated Educause Online for MIT attendees; Coordinated (3) University Visits; Participated in Vogt Alumni Event (Boston Consortium)
• “Vendor Management” training delivered by Ouellette & Associates in October, 2011. Participants were a mix of IS&T and Procurement staff.
• “IT Service and Outreach” Training delivered by Ouellette & Associates in December. Participants included one staff from VPF; remainder from IS&T.
• Compensation Analysis completed in December 2011
• PA Form: automated, shortened version completed in December 2011.
• Recruiting
15 openings filled in Q1 and Q2.

Goals for Q3 and Q4:

- Implement recommendations from Doreen Evans and Associates Finance and Procurement assessment
- Participate in MGHPCCC business model and financing discussions
- Create FY13 IS&T Financial Budget
- Continue work on the W91 CRSP project request
- Coordinate the IT Leaders, Libraries Staff, Lincoln Lab ISD Staff, Operational Review and IT Governance meetings
- IS&T Service Portfolio: Demo prototype and make final technology decision
- Library of Procedures: Finalize product and service retirement process
- Remedy implementation: Build tasks, groups and change templates for Server Ops
- Marketing and Outreach – EVP Communicators group (coordinating sessions to bring together all communication professionals in the EVP areas); Project Plans and Roadmaps – continue with all Roadmap communications; IS&T Website Launch communications (responsive design leader); Secure Wireless (ads/clinics/signage/articles etc.); IPTV Trial – comm plan; In-Building Cellular Comm Plan; Customer Sat Survey (Brainstorm/collaborate with Customer Support to develop and plan timeline
- News and Editorial – HTML Newsletter; Facebook; Twitter; review and adapt News pages to after new website redesign launch
- Internal Communications – Quarterly Dept Meetings (January and March); biweekly messages from Marilyn; Digital signage (biweekly updates)
- Reports – FY2012 Mid-Year Update for IS&T; IS&T Facts Page
- Other/Outside MIT – NERCOMP – finalize planning for annual conference and host in March (12, 13 and 14); Boston Consortium (participate in planning and conference on Security); Surveys
- 2012 Management Skills Development Series beginning in January with monthly workshops through May 2012
- Finalization of PM and BA training curriculum with implementation of first workshop in Q3/Q4
- Off-cycle promo and equities provided in January payroll
- Support Staff and Admin Staff Assessments to be completed with new, automated PA form

Workforce Update:

- Hired an intern from Bunker Hill Community college to work with Communications team from September-December 2011 focus on video production. Plan to hire another in next term (based on availability).
- Ed Dolan resigned. Last day was 12/16/11.

Issues/Trends for Q1 and Q2:

- Resource constraints
  - Knowledge transfer from consultants not always successful (WD4A)
  - Services have no funding or dedicated resources for long term support
  - Same resources are tapped over and over – time constraints and over commitment limits our ability to deliver on time
- Flash Cut Upgrades: Rare for us in the past, but we are starting to perform them more often
  - Exchange 2010
  - Network Security Controls
  - Unity Transition
- Usability and accessibility
Issues around web dynpro and other commercial products that do not meet MIT's requirements

- We should look at making “product families” look similar and behave similarly for the audience
  - Resource constraints
  - Capacity on machines – video files take up a lot of memory/space and require continued upgrading

**Production & Operational Outages/Problems for Q1 and Q2:**

- None

**Metrics from Q1 and Q2:**

- **Facebook (launched in February 2011)**
  - Target one post per day
  - 128 people like this page
  - 10 groups at MIT connected to IS&T’s Facebook Page

- **Twitter (launched in January 2010)**
  - Target at least one tweet per day
  - 656 Individual Followers and 46 lists following as of January 2012
  - 701 tweets since January 2010

- **Electronic Newsletter (launched in May 2011)**
  - 408 subscribers as of January 2012