Functional Area: Client Support Services

CSS Mission:
Client Support Services partners with the entire MIT community of faculty, students and staff to maximize their effective use of IT services and technology in fulfillment of MIT’s mission of education and research. As members of this community, we embrace the Institute’s commitment to technological innovation and creativity in how we do our work, and bring our expertise to bear in serving and supporting our customers, internal and external.

A. Strategic Goal: Ensure that the availability of support services determines the schedule for delivering IS&T products and services to the MIT community

- Develop a support process to manage the increasing number of applications being released out of ISDA & SAIS
- Participate on project teams early in the planning stage to offer CSS expertise and resources.

B. Strategic Goal: Assess and ensure that the support services and processes underlying all IS&T services and systems are also current, reliable, scalable, sustainable and secure

- Ascertain the Oracle server upgrade timeline in an effort to work on new versions of current products that are outdated and dependent on an upgrade
- Evaluate departmental software billing through RT, considering reliability, scalability, etc.
- Design and provide support for IS&T systems that is are current, reliable, scalable, sustainable, and secure
- Keep client computer equipment, hardware and software up to date
- Enhance and upgrade email and calendaring systems (on-going)
- Work with content managers for the IS&T web site to implement new content management web site
- Support and maintain physical classrooms and equipment used for IS&T training
- Provide contractual maintenance and upkeep services to support DLCs in keeping their web and database sites, applications, and infrastructure current
- Serve customers as upper tier support, participate on software release and other teams, perform systems maintenance and testing as necessary
- Create an MIT identity management process for non-community members

C. Strategic Goal: Improve the way we deliver support, software and consulting services to all members of the MIT community.

- Activity 13: Continue to provide, enhance, and improve the broad spectrum Help Services to all members of MIT community via walk-in, telephone, and on-line mechanisms
- Improve tools to enhance delivery of support services (e.g. eOn implementation, Request Tracker enhancements, remote troubleshooting tools)
- Continue to support clients as they integrate mobile technologies into their existing computing environment
- Smart routing of questions in a wiki-based knowledge base
- Revitalize the N42 Walk-in Area (from lo tech to high tech look & feel)
- Enhance SDLS and provide additional software titles through it
- Continue to provide and expand 1st and 2nd tier support for telephony, inc. VoIP
- Participate in transitioning from traditional to VoIP telephone
- Ensure IS&T web sites, training modules, and services are usable and accessible to all
- Ascertain remote connectivity tools that exist in today’s market for evaluation, recommendation and delivery
- Provide personalized, on-site computing support
- Manage and facilitate IS&T projects that benefit the MIT community
- Reinvent the way we deliver services
- Provide high-quality IT repair service
- Provide a great customer experience for people seeking help via phone, internet or walk-in
- Provide quality end-user documentation to the MIT Community (for supported hardware and software, projects, stock answers, etc.)
- Provide maintenance and production support for the IS&T website
- Maintain and deliver up-to-date adaptive technology devices demonstration and loaner program for MIT community
- Provide quality end-user training to the MIT Community for supported hardware and software products
- Release all new versions of software as part of the current supported suite for all platforms
- Create, release, and support third-party applications for new mobile device platforms, ie. iPhone, Blackberry
- Provide initial project assessments at no charge to encourage customers to utilize internal MIT businesses to fulfill their needs
- Develop web and database products for DLCs that achieve their business goals and both support and demonstrate innovation
- Promote our own usability service to IS&T
- Provide Usability services to ensure that websites and applications developed by MIT DLCs (including IS&T) are intuitive
D. Strategic Goal: Provide consultative guidance and expanded software access for MIT research initiatives

- Continue to engage in and consult on key research projects that have a strong IT component or may have an IT impact in later phases
- Expand portfolio of research software available to students and faculty (align with academic portfolio where possible)
- Incorporate knowledge relevant to research activities into standard knowledge bases/open to peer contributions

E. Strategic Goal: Align all aspects of IT support to help accomplish MIT’s business and strategic goals

- Continue to develop IS&T policy in support of MIT use of information technology resources
- Provide more comprehensive management information to support the decision-making of IS&T managers about their clients, processes and staffing
- Publish guidelines and standards for accessible web sites and new media production
- Ensure MIT is in compliance with respect to US Copyright Law (DMCA, takedowns) and MIT disciplinary processes
- Provide assistance as needed to MIT Office of General Counsel on identification, evidence and follow-through when members of MIT community are being sued by copyright owners/agents.
- Sustain and expand the Stopit program to support both MIT and non-MIT individuals resolve complaints of unethical behavior or violations of MITnet Rules and Athena Rules of Use

F. Strategic Goal: Promote good computing practices in the MIT community to ensure recoverability and continuity in times of service interruptions

- Plan and document procedures for maintaining call center services during periods of IT service or infrastructure outages
- Focus on services impacted by multi-day outages and test/develop continuity models
- Promote good computing practices in the MIT community
- Cross-unit IS&T readiness plan for emergency and disaster scenarios
- Provide traditional IT Security incident detection, response and recovery (detect, disable, format, re-install, enable process)

G. Strategic Goal: Reach out to the MIT community to provide information, determine their needs, and increase feedback to improve our services

- Through training and outreach, provide counsel on how IT can help community members do their jobs
- Continue to hold community forums and other public outreach activities (e.g., participation in MIT-wide vendor and travel fairs) to encourage open dialogue
- Produce communication materials to support IS&T services and resources
- Gather faculty and student requirements for future computing needs
- Through diverse outreach approach, raise awareness throughout MIT of all IT security, compliance and ethical behavior issues; expand focus of outreach to sensitive MIT data protection, and sensitive individual data protection, including response to data disclosure incidents

H. Strategic Goal: Expand and provide comprehensive support for MIT business applications and products

- Expand support & training for business applications
- Leverage new tools and technology to deliver remote assistance to customers
- Provide exceptional customer support in the area of business application authorizations and hierarchy updates

I. Strategic Goal: Promote practices and products to reduce energy consumption in MIT's computing environment

- Develop smart tool to apply recommended Energy Saving settings that does not hinder scheduled backups for Windows, Mac and Unix
- Reconfigure Athena to leverage power savings settings including display sleep instead of screensaver
- Set green standard for new IS&T facilities (public and back-office) and renovated/upgraded facilities (I.e. If we upgrade a learning space we will...)
- Provide IT innovation support to students and faculty engaged in energy projects
J. **Strategic Goal**: Expand and provide comprehensive support for the academic software portfolio, particularly in support of changes to the GIRs (General Institute Requirements)

- Expand the student laptop loaner program
- Update recommendations provided to content providers (OCW, Stellar) for accessibility practices as they apply to new and evolving teaching and learning technologies (i.e., transcripts for podcasts; captions for video, etc.)
- Expand the portfolio of academic software available to students on personal machines and align with GIR recommendations
- Deliver support & training for academic software products, Mathematica, Maple, MATLAB
- Engage in small but innovative technology experiments with strong student participation
- Partner with DUE to develop a strategy for IS&T learning and hybrid teaching & learning spaces on campus; begin implementation
- Operate and maintain computing cluster with specialized equipment for students with disabilities, updating equipment provided according to current student needs and IS&T recommendations
- Coordinate alternative text production for students with disabilities

K. **Strategic Goal**: Review and refine Fall Readiness activities for new and returning students

- Continue to participate in Fall Readiness activities for new and returning students
- Upgrade network infrastructure in dorms (ongoing)

L. **Strategic Goal**: Incorporate project management practices into project work undertaken in CSS, including the use of the PMM framework and cross-IS&T project tracking tool

- Incorporate professional project management practices into project work undertaken in CSS, including use of the cross-IS&T project tracking tool
- Promote the IS&T Project Management Methodologies when leading or participating on project teams
- Help DLCs define project requirements that support their business activities while adhering to best practices and Institute standards

M. **Strategic Goal**: Base business decision-making and process improvement on comprehensive management metrics

- Gather and supply metrics to better define the staffing required to support products & services, both at implementation and ongoing

N. **Strategic Goal**: Align all aspects of IT billing venues to help accomplish IS&T's business and financial goals

- Continue to support and enhance TNSC billing system
- Perform functions of IS&T training registrar, including entering classes into the database, managing enrollments, and prepping materials for classes
- Distribute and bill for software
- Acquire and negotiate software licenses with attention to Institute priorities and sound financial management.
O. Strategic Goal: Deliver a plan to provide service and support to essential personnel and front line emergency responders

- Continue ACD efforts and expand to other groups to allow seamless use across emergencies, develop emergency routing models

P. Strategic Goal: Ensure that CSS is actively engaged in student-focused initiatives such as the Campaign for Students

- Convert Athena Clusters to new more adaptive uses
- Explore student billing options for software --- e.g. bursar, TechCash
- Continue engagement with DSL and AILG-IT to develop joint IT strategy for MIT student residences
- Broaden use of RCCs in dorms to play a structured role in application, academic, and student life/learning support

Q. Strategic Goal: Contribute towards cross functional support activities to improve international initiatives and programs

- Continue support of international programs through laptop loaner program
- Provide specialized training for international students, both through existing agreements and new initiatives
- Expand use of web-based/Web 2.0 application
- Continue to develop, measure, and expand self-help and self-service tools available to the MIT community
- Expand support for mobile devices by MIT applications

R. Strategic Goal: Promote higher-level or cross-functional work to grow staff capability both in depth and scope

- Continue to expand upon work begun with documenting and sharing process for communicating during unplanned service outages. Extend beyond OIS/CSS into other parts of IS&T
- Establish a new process where IS&T staff can participate as subject matter experts in training events offered by IS&T to the community
- Offer training expertise to IS&T HR team to be able to offer performance management "training" electronically
- Learn and test new technology to develop training, including curriculum, software, hardware
- Participate on cross-departmental teams, initiatives and activities

S. Strategic Goal: Contact new members of the MIT community to introduce them to IT services

- Provide IT orientation to new members of the community
- Assist individuals with disabilities with the application of adaptive technologies
**T. Strategic Goal:** Establish regular interactions between CSS staff and their counterparts in the IT community to promote knowledge sharing

- Establish regular information exchanges between CSS and the IT service groups
- Provide IT colleagues in DLCs with "Partner Report Cards" that outline metrics on central IT help desk requests generated by their department
- Allow for easy routing of requests and work across departmental boundaries
- Broaden outreach for product recommendations process beyond IS&T, Procurement, Sloan, ResDev, DUE
- Expand functional uses of ACCORDiacs to provide consistent views into educational technology services for faculty

**U. Strategic Goal:** Establish career development goals for staff that leverage a variety of internal and external resources

- Encourage and coach staff to manage small projects
- Encourage more participation in events hosted by NerCOMP and EDUCAUSE; especially highlight opportunities for staff to showcase the great work done here
- Continue to send staff to Disney Quality Service, Interaction Associates Leadership, and other proven, high-quality professional development opportunities. Implement practice of leading brainstorming sessions with peers upon return to maximize the investment and lead to improvements
- Invite and engage more IS&T colleagues in sharing knowledge internally through low-investment solutions such as our current Help Desk wiki
- Participate in professional development activities, whether formal training, on the job learning or other means

**V. Strategic Goal:** Guide and manage staff

- Provide attentive and thorough team management and supervision, including the integration of operating plan goals into performance goals at quarterly reviews, and succession planning with relevant training
Functional Area: Operations and Infrastructure Services

**OIS MISSION**

- OIS provides the MIT community with fundamental IT services, including:
  - Telephony, MITnet, and network based applications such as e-mail, calendar, and VOIP
  - Co-location and server operations services for IS&T and DLCs including database administration, SAN storage, and backup and recovery
  - Data center planning

- OIS also supports the MIT community with long term and strategic planning for these services.

- These services support the full range of academic, research, and administrative activities.

- The OIS teams work collaboratively with all other IS&T teams to ensure the highest level of support and service to MIT’s students, faculty, and staff.

**OIS Strategic Goal 1**

- Provide a next generation optical infrastructure to support MIT’s computational research, distance education and disaster recovery initiatives.

**IS&T Strategies Supported**

- Support student living and learning initiatives.
- Support research activities of faculty and students
- Ensure that IS&T’s enterprise systems are current, reliable, scalable, sustainable, and secure
- Ensure effective processes for disaster recovery and business continuity
- Demonstrate support for MIT’s emergency preparedness efforts
- Achieve and maintain industry standards for IT infrastructure at MIT

**FY09 Outcome – “SMART” Goal(s)**

- Evaluation and trial of 40g optical transport using Ethernet and SONET technologies completed by 12/2008.

**OIS Strategic Goal 2**

- Provide and continue to offer the network speeds necessary to support MIT’s leading edge computational research.

**IS&T Strategies Supported**

- Support research activities of faculty and students
- Ensure that IS&T’s enterprise systems are current, reliable, scalable, sustainable, and secure

**FY09 Outcomes – “SMART” Goal(s)**

- MIT regional optical network between New York City and Boston established by 12/2008, providing high-speed connectivity to the LHCnet for CMS Tier II, The Esnet network and National Lambda Rail.

**OIS Strategic Goal 3**

- Provide a robust, feature rich communications infrastructure supporting MIT’s research, education and administration, built upon an eclectic set of messaging, voice and video technologies.

**IS&T Strategies Supported**

- Support research activities of faculty and students
- Support student living and learning initiatives
- Achieve and maintain industry standards for IT infrastructure at MIT

**FY09 Outcomes – “SMART” Goal(s)**

- Deployment of new e-mail infrastructure based on evaluation completed in FY08
- 5000 users transitioned to VOIP by 6/2009
- Next generation campus video service implemented by 7/2009
- New email system roll out completed by end of FY09
**OIS Strategic Goal 4**
- Ensure that all campus buildings (including residences), existing and new construction, have the necessary infrastructure so that the next network technology upgrade for the Institute will have minimal impact on the community including wiring upgrades, wireless upgrades, TDCR renovations and upgrades, network equipment for buildings.

**IS&T Strategies Supported**
- Support research activities of faculty and students
- Support student living and learning initiatives
- Achieve and maintain industry standards for IT infrastructure at MIT

**FY09 Outcomes – “SMART” Goal(s)**
- Campus-wide assessment of existing TDCR infrastructure and environments compared to the Western Telecommunications Study (WTC) study of 2003 completed by 3/2009

**OIS Strategic Goal 5**
- Continue to provide consulting support for the IT infrastructure at the Abu Dhabi technology institute and other as yet unidentified partnering opportunities

**IS&T Strategies Supported**
- Support international initiatives

**FY09 Outcomes – “SMART” Goal(s)**
- One per quarter workshops/symposium events for the MIT community and external partners/collaborators completed by 7/2009

**OIS Strategic Goal 6**
- Develop and foster relationships to share and exchange infrastructure technology knowledge with similar institutions.

**IS&T Strategies Supported**
- Achieve and maintain industry standards for IT infrastructure at MIT

**FY09 Outcomes – “SMART” Goal(s)**
- Participation in a minimum of one per quarter discussions, conferences, & tradeshows with peers and counterparts
- Active participation maintained in key organizations (e.g. IVY+, CSG, ACUTA, etc.)

**OIS Strategic Goal 7**
- Maintain and operate MIT’s data center facilities, providing a robust and stable environment for hosting MIT’s research, academic, administrative and infrastructure applications.

**IS&T Strategies Supported**
- Ensure that IS&T’s enterprise systems are current, reliable, scalable, sustainable, and secure

**FY09 Outcomes – “SMART” Goal(s)**
- Migration of administrative and academic servers to new data center infrastructure completed by 12/2008.
- Mainframe retired by 6/2009
- Bates data center online by 12/2008
- Assessment of current server redundancy with improvement plan completed by 7/2009.
- Consistent and repeatable methodology for measuring server uptime aimed at delivering 99.9% availability developed and implemented by 7/2009.

**OIS Strategic Goal 8**
- Maintain and operate the MIT Network and infrastructure services, ensuring the highest levels of availability and performance for the MIT community.

**IS&T Strategies Supported**
- Support research activities of faculty and students
- Support student living and learning initiatives
- Ensure that IS&T’s enterprise systems are current, reliable, scalable, sustainable, and secure

**FY09 Outcomes – “SMART” Goal(s)**
- Analysis of MIT Network topology and infrastructure services ensuring key components have necessary hardware
Implementation of a diverse set of technologies including server clustering, server virtualization and data replication completed by 7/2009.
At least 2 new virtualization candidates implemented during FY09.

**OIS Strategic Goal 9**
- Ensure reliable web, email, calendaring, VoIP, and other infrastructure services are available “anywhere, any time.”

**IS&T Strategies Supported**
- Support research activities of faculty and students
- Support student living and learning initiatives
- Ensure that IS&T's enterprise systems are current, reliable, scalable, sustainable, and secure
- Ensure effective processes for disaster recovery and business continuity
- Demonstrate support for MIT's emergency preparedness efforts
- Achieve and maintain industry standards for IT infrastructure at MIT

**FY09 Outcomes – “SMART” Goal(s)**
- Support services for web, email, calendaring, VoIP and other infrastructure items maintained at 99.9% availability
- Average unscheduled down time for infrastructure services less than 3 hours per outage.

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**OIS Strategic Goal 10**
- Monitor Institute needs for network storage

**IS&T Strategies Supported**
- Ensure that IS&T's enterprise systems are current, reliable, scalable, sustainable, and secure
- Ensure effective processes for disaster recovery and business continuity

**FY09 Outcomes – “SMART” Goal(s)**
- Comprehensive storage strategy analysis completed by 12/2008, including review of high end storage requirements
- Upgrades/implementation of network storage defined in strategy implemented by end of FY09.
- Stellar migrated to SAN disk by 8/31/2008

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**OIS Strategic Goal 11**
- Continuously evaluate emerging and updated technologies to support network storage options

**IS&T Strategies Supported**
- Ensure that IS&T's enterprise systems are current, reliable, scalable, sustainable, and secure
- Ensure effective processes for disaster recovery and business continuity

**FY09 Outcomes – “SMART” Goal(s)**
- Upgrades/implementation of recommended storage and backup technologies completed by end of FY09.

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**OIS Strategic Goal 12**
- Develop and maintain MIT’s connections to key Internet exchange points in the North Eastern United States located in New York City and Boston.

**IS&T Strategies Supported**
- Ensure that IS&T’s enterprise systems are current, reliable, scalable, sustainable, and secure
- Ensure effective processes for disaster recovery and business continuity

**FY09 Outcomes – “SMART” Goal(s)**
- Extend connectivity and peering between the MIT Regional Optical Network and collaborators, researchers and peer Optical Networks to include one by 6/2009.

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**OIS Strategic Goal 13**
- Continue to evolve remote business continuity strategies

**IS&T Strategies Supported**
- Ensure effective processes for disaster recovery and business continuity
FY09 Outcomes – “SMART” Goal(s)
  o Implementation of SRDF for SAP and DW completed by 10/2008.
  o Successful DR tests for SAP and the ALUMNI servers completed by 12/2008
  o SAS/SSIT remote failover testing for MITSIS & UA completed by 12/2008

OIS Strategic Goal 14
  o Continue to evolve service offerings in off campus locations

IS&T Strategies Supported
  o Ensure effective processes for disaster recovery and business continuity

FY09 Outcomes – “SMART” Goal(s)
  o Demonstrated ability to leverage the optical network to provide recovery operations from remote locations in Baltimore and New York City by 3/2009

OIS Strategic Goal 15
  o Continue to recommend environmentally friendly solutions

IS&T Strategies Supported
  o Encompass the goals of MIT’s Energy Imitative across all aspects of IS&T’s initiatives

FY09 Outcomes – “SMART” Goal(s)
  o Assessment of power utilization within the data center that includes potential opportunities for power savings completed by 3/2009.
  o 65% of hardware purchased from vendors demonstrating environmentally friendly processes for hardware manufacturing and disposal.

OIS Strategic Goal 16
  o Develop and implement a set of emergency communications services, processes and procedures as members of MIT’s Emergency Operations Center.

IS&T Strategies Supported
  o Demonstrate support for MIT’s emergency preparedness efforts

FY09 Outcomes – “SMART” Goal(s)
  o Need specific, measurable MIR3 goal.
  o At least one new capabilities and methods of communicating during an emergency (e.g. broadcast via emergency phone amplifiers, rerouting of web pages, etc.) demonstrated by 12/2008
  o A minimum of 2 emergency communications drills completed with documentation of proposed improvements delivered at the end of the drills.
  o Active participation in working groups related to emergency communications.

OIS Strategic Goal 17
  o Design and evolve robust operational support for new MIT administrative systems.

IS&T Strategies Supported
  o Ensure that IS&T’s enterprise systems are current, reliable, scalable, sustainable, and secure
  o Improve IS&T’s internal collaboration and communication

FY09 Outcomes – “SMART” Goal(s)
  o Expansion of monitoring capabilities provided through Nagios to encompass a more comprehensive set of performance metrics to include customer performance portals completed by 3/2009.
  o Development of a collaborative framework (portal) for sharing best practices, experiences and knowledge base around support for MIT’s administrative systems completed by 3/2009.

OIS Strategic Goal 18
  o Ensure that Service Level Agreements are developed and managed for new MIT systems.

IS&T Strategies Supported
  o Ensure that IS&T’s enterprise systems are current, reliable, scalable, sustainable, and secure
Make it easier for the MIT community to get the IS&T services and assistance it needs, when it needs them
Ensure excellent communications and collaboration between IS&T and the many IT service groups at MIT
Improve IS&T's internal collaboration and communication

**FY09 Outcomes – “SMART” Goal(s)**
- Comprehensive service level agreements (SLA’s) for all new MIT administrative systems implemented when they become operational.
- Demonstrate achievement of 98% of all SLA goals for all managed MIT administrative systems.
- SLA tracking solution implemented by end of FY09

**OIS Strategic Goal 19**
- Provide infrastructure planning support for new MIT systems.

**IS&T Strategies Supported**
- Ensure that IS&T’s enterprise systems are current, reliable, scalable, sustainable, and secure
- Improve IS&T’s internal collaboration and communication

**FY09 Outcomes – “SMART” Goal(s)**
- New Oracle features deployed to the existing DW based on mutual agreement.
- Business intelligence solution (for example, Hyperion) deployed in collaboration with ISDA.
- "Customer Satisfaction" survey completed demonstrating that internal IS&T “customers” are satisfied with infrastructure planning services provided by OIS.

**OIS Strategic Goal 20**
- Maintain state-of-the-art network technology across the Institute with minimal disruption due to power failures or other unforeseen events.

**IS&T Strategies Supported**
- Ensure that IS&T’s enterprise systems are current, reliable, scalable, sustainable, and secure
- Ensure effective processes for disaster recovery and business continuity
- Achieve and maintain industry standards for IT infrastructure at MIT

**FY09 Outcomes – “SMART” Goal(s)**
- Assessment of the network technologies used to deliver MITnet to the MIT community completed by 3/2009.
- Feasible MITnet recommendations implemented by the end of FY09.

**OIS Strategic Goal 21**
- Continue to evolve critical integrated IP services: servers for network applications, voice related equipment and software

**IS&T Strategies Supported**
- Achieve and maintain industry standards for IT infrastructure at MIT

**FY09 Outcomes – “SMART” Goal(s)**
- Measurable goal for ACD System enhancements.
- IVR system enhanced with improved voice recognition software by 6/2009.
- Demonstrate utilization of new technologies for communication improvements (e.g. IP Peering) during FY09.

**OIS Strategic Goal 22**
- Continue to evolve MITnet to support the ever expanding MIT requirements including on and off campus fiber and related equipment

**IS&T Strategies Supported**
- Ensure that IS&T’s enterprise systems are current, reliable, scalable, sustainable, and secure

**FY09 Outcomes – “SMART” Goal(s)**
- Dark fiber network connecting the MIT Cambridge campus and the Bates Linear Accelerator located in Middleton, MA completed by 6/2009
OIS Strategic Goal 23
- Smoothly transition MIT's telephony infrastructure to VoIP.

IS&T Strategies Supported
- Make it easier for the MIT community to get the IS&T services and assistance it needs, when it needs them
- Achieve and maintain industry standards for IT infrastructure at MIT

FY09 Outcomes – “SMART” Goal (s)
- Minimum of 500 5ESS & Octel users per month migrated to Sylantro/Iperia
- Approximately 700 changes and repairs in 5ESS & Octel services implemented per month
- Customer satisfaction surveys demonstrate no significant disruptions or complications with transition to VoIP

OIS Strategic Goal 24
- Continuously evaluate data center needs and facility options to ensure optimal cost and service delivery for Institute computing needs.

IS&T Strategies Supported
- Achieve and maintain industry standards for IT infrastructure at MIT

FY09 Outcomes – “SMART” Goal (s)
- Implementation of an MIT data center presence at One Summer St completed by 9/2009.
- Migration of key administrative and infrastructure services to the new data center location completed by 6/2009
- Plan documented/updated reflecting changes to data center needs completed throughout FY09.

OIS Strategic Goal 25
- Continuously monitor strategic and emerging technologies that might have an impact on the operational infrastructure for MIT.
- Ensure that MIT is prepared to advance the technology infrastructure curve by taking advantage of opportunities to partner with vendors and other technology leaders to "live the future" of technology infrastructure for collaboration and computing.

IS&T Strategies Supported
- Achieve and maintain industry standards for IT infrastructure at MIT

FY09 Outcomes – “SMART” Goal (s)
- Participation in at least 4 key technical user conferences such as AFCOM, EMC World, LISA, Storage Decisions and other vendor fairs during FY09 with key learning’s published on IS&T intranet.
- Evaluation (including assistance for MIT Oracle RAC deployments) completed for Oracle RAC completed by 3/2009.
- Evaluation of databases currently offered, with a view to supporting open source databases, completed by 12/2008.
- Annual strategic and emerging infrastructure technologies evaluation report completed by 3/2009 (includes "watch list" for upcoming fiscal year).
Functional Area: Student and Administrative Information Systems

SAIS Mission:
The mission of the SAIS is to sustain, improve and grow the student and administrative systems of MIT in support of the student, faculty, administration and their business and operational requirements; to promote and encourage business process improvement; to bridge technology and business expertise.

Strategic Objectives:
• Provide technology solutions planning to support to strategic academic and administrative initiatives
• Serve as a voice for IS&T to Institute leadership discussions for enterprise systems and information technology, as well as planning, budgeting, and solutions topics
• Partner with administrative and academic stakeholders to develop technology solutions that increase user efficiency, and provide a more holistic view of the business challenge or student need
• Identify and communicate technically-based opportunities for IS&T customers that make possible process innovations not previously feasible.

SAIS Programs:
1. Support & Build Administrative Enterprise Systems
2. Improve IT User Experience
3. Support the Research
4. Support Student Living & Learning
5. Create Next Generation Student Services Systems
6. Support Data Security and Recovery

Program 1: Support & Build Administrative Enterprise Systems

IS&T Strategies:
• Facilitate the administration of MIT through the provision of IT services, including attention to the goals of the Research Administration Improvement Initiative
• Ensure that all of IS&T’s services and systems are current, reliable, scalable, sustainable, and secure
• Provide support and counsel to the MIT community on how IT can improve their ability to do their jobs
• Use consistent and standard methodologies and best practices to enable successful achievement of IS&T goals
• Ensure excellent communications and collaboration between IS&T and the many IT service groups at MIT
• Achieve and maintain industry standards for IT infrastructure at MIT

SAIS Goals:
• Sustain and improve IS&T enterprise systems, which provide MIT with its core administrative business functions
• Actively engage and promote best practices within IS&T and other constituents, such as ASPCC, SSSC, ITAG-TRB, and project-specific governance boards, including advisory boards and user groups
• Negotiate Service Level Agreements for all supported applications and services
• Ensure all projects use an effective and proven project management methodology

Service/Activity/Project:
• Increase the SAIS HR/Payroll team capacity 50% over budgeted FY08 levels to sustain stable HR/Payroll operations and deliver longer term improvements to processes and systems.
• Deliver a centrally-supported forecasting and modeling tool to assist departmental administrators and faculty/PIs in managing their research awards.
• Correct problems and enhance the SAP functional areas such as Human Resources, Payroll, Financial, Logistics, and EHS, and other enterprise applications such as Parking & T-Pass, and Merchant Services.
• Support and enhance the SAP infrastructure and system administration including GUI support and interfaces.
• Update systems to remain current with technology (e.g., SAP support packs, DB updates, ITS Migration to J2EE)
• Complete FY2009 project and enhancement initiatives as directed by the Administrative Systems and Policies Coordinating Council (ASPPCC).
• Work with business owners to develop long-range plans for IT investment.
• Partner with the MIT community on process improvement and simplification, and to develop best practices.

Program 2: Improve IT User Experience

IS&T Strategies:
• Make it easier for the MIT community to get the IS&T services and assistance it needs, when it needs them
• Promote good IT governance

SAIS Goals:
• Establish a consistent QA process to assure quality, integration, and system performance.

Service/Activity/Project:
• Provide SQA Services, including Change & Configuration Management, Release Management, and Test Management, and end-to-end software development deliverables input.

Program 3: Support the Research

IS&T Strategies:
• Facilitate the research activities of MIT’s faculty, staff, and students via the provision of IT services
• Provide technology services to advance MIT’s international initiatives

SAIS Goals:
• To deliver and maintain systems that will decrease the administrative and management burden on faculty and research staff.

Service/Activity/Project:
• Support and enhance the SAP EHS functional areas including EHSweb and the SAP Product Lifecycle Management (PLM) for the Broad Institute.
• Support administrative business systems needs for Singapore-MIT Alliance for Research and Technology (SMART), and other international alliances.
• Plan and execute projects under the direction of ASPCC to support enterprise-wide research administrative processes.
• Support and enhance the Undergraduate Research Opportunities Program (UROP) application in accordance with community needs.

Program 4: Support Student Living & Learning

IS&T Strategies:
• Enable MIT’s teaching and learning initiatives through expanded and innovative use of technology, with focus on the goals of the Educational Commons Task Force
• Enable the Institute’s student living and learning initiatives through expanded and innovative use of technology
• Ensure that all of IS&T’s services and systems are current, reliable, scalable, sustainable, and secure
• Provide support and counsel to the MIT community on how IT can improve their ability to do their jobs
• Use consistent and standard methodologies and best practices to enable successful achievement of IS&T goals
• Ensure excellent communications and collaboration between IS&T and the many IT service groups at MIT
• Achieve and maintain industry standards for IT infrastructure at MIT

SAIS Goals:
• Sustain and improve IS&T enterprise systems, which provide MIT with its core student business functions.
• Improve the student system environment to increase system availability and reduce time to introduce fixes to production.
• Continue IT services that will facilitate the creation and deployment of the student living and learning IT initiatives.
• Work toward integrating Division for Student Life, Dean for Undergraduate Education, and Graduate Students Office enterprise systems.
• Engage stakeholders early to identify key audiences impacted and develop rules of engagement to influence decisions before initiating work.
• Actively engage and promote best practices within IS&T and other constituents, such as ASPCC, SSSC, ITAG-TRB, and project-specific governance boards, including advisory boards and user groups.
• Negotiate Service Level Agreements for all supported applications and services.
• Ensure all projects use an effective and proven project management methodology.

Service/Activity/Project
• Complete FY2009 project and enhancement initiatives as directed by the Student Systems Steering Committee (SSSC).
• Improve the SSSC Project Prioritization Process to streamline decision making.
• Complete Phase 3 of the Online Subject Evaluation project.
• Implement Double Majors project, per the recommendation of the Task Force on the Undergraduate Educational Commons (allowing students to earn dual majors within a single degree). Project involves significant modifications to MITSIS.
• Partner with DUE to identify new Educational Commons Task Force initiatives. Make functional changes to the existing SIS based on the Educational Commons, ensuring proper alignment between changes to MITSIS and new development in the VISION.
• Implement a revised software release process to provide additional review of production changes.
• Evaluate community student applications for the purposes of transferring support and development to SIS. Assume financial responsibility and contractual oversight PowerFaids, SISTIM, and Hyperion Performance Suite maintenance contracts.
• Migrate UA Phase 1 application from Weblogic to Oracle Application Server.
• Perform software and hardware upgrades to SIS applications to remain current with IS&T supported operating systems, web browsers, and database levels.
• Commit a minimum of 20% team resources to performing community-requested enhancements.

Program 5: Create Next Generation Student Services Systems

IS&T Strategies:
• Enable MIT’s teaching and learning initiatives through expanded and innovative use of technology, with focus on the goals of the Educational Commons Task Force
• Enable the Institute’s student living and learning initiatives through expanded and innovative use of technology
• Achieve and maintain industry standards for IT infrastructure at MIT

The Student System VISION Study, currently under way, has identified a number of critical shortcomings of the enterprise student system. Now nearly twenty years old, it pre-dates the web and is complex and difficult to learn and use for administrative tasks. It serves about 45,000 people and encompasses 115 distinct applications — over 85% of which rely on soon-to-be obsolete technologies that must be replaced before they lose vendor support. A recent MITSIS hardware upgrade extended its technology life for 4-5 years while the replacement strategy is developed.

At the same time, new business needs have emerged that would be costly and difficult to meet in the existing system. Moreover, the original system was designed to serve selected groups within central administration, and provides little support for academic departments and outlying administrative offices. These groups have built many freestanding systems which are themselves becoming obsolete, or are poorly integrated with the central student system. Finally, a system is needed that reduces advisors’ administrative overhead and is more “student-centric”; faculty also expect a system that is sufficiently flexible — the old system is not — to implement changes in faculty policy, such as those emanating from the Educational Commons Taskforce.

These growing business needs and risks can be addressed through technical solutions that replace components of the existing student system over a number of years. We propose a two-pronged strategy to address them. First, there are near-term projects that can address pressing business needs, and we will begin those in FY 2009. Second, there are larger issues that require replacing several enterprise application components of the existing system; it is critical to begin foundational work starting in FY 2009 that leads to major replacement projects in FY 2010 and later.

Goals:
• Design and implement student systems that increase the frequency and richness of student and faculty interactions.
• Develop a next-generation student enterprise services system to: enhance the student experience at MIT; to support the evolving needs of faculty and staff; and enhance the individual efficiency of, and collaboration between, central and departmental administrative units.
• Create an enterprise system that has the flexibility and robustness to accommodate potentially major near-term (Task Force on the Educational Commons) and longer term changes in the structure of undergraduate education.
• Replace systems that are failing or obsolete before they pose unacceptable costs and business risk to the Institute.

Program 6: Support Data Security and Recovery

IS&T Strategies:
• Ensure effective processes for disaster recovery and business continuity
• Ensure that all of IS&T’s services and systems are current, reliable, scalable, sustainable, and secure

Goals:
• Promote projects that secure sensitive data and meet regulatory and compliance requirements.
• Maintain high levels of data and system integrity.

Service/Activity/Project:
• Analyze existing applications for Social Security Number content and provide additional measures to limit access and display of the information.
• Transition the Merchant Services project to support.
• Review data file transfer and encryption procedures in SAP Dropbox and SIS Datafeed Engine.
• Review account management of all systems, removing users who no longer need access.
• Partner with IS&T colleagues and key stakeholders to develop a 3-5 year roadmap for effective disaster recovery / business continuity (DR/BC) plans for mission-critical applications.
Functional Area: Infrastructure Software Development and Architecture

ISDA Mission:

- To create, maintain and promote a best class of flexible infrastructure software framework with interfaces that are easily usable by software developers across MIT.
- To promote simple, flexible and efficient collaboration services among faculty, researchers and students at MIT by engaging with our customers and responding directly to their needs.
- To ensure technology decisions are guided by a desire to promote alignment and interoperability, allowing our community to innovate with us.
- Conceptualize and define MIT’s IT Architecture in partnership with ITAG, MITCET, ACCORD, IT-Leads, ISTAB and other key MIT community forums.
- Maintain an appropriate balance between engaging in development for MIT and the world-at-large.

Strategy: Support teaching and learning initiatives through expanded and innovative use of technology, with focus on the goals of the Educational Commons Task Force

Strategic Goal: Ensure technology decisions are guided by a desire to promote alignment and interoperability, allowing our community to innovate with us

- Implement new software framework which supports a more flexible and easily managed site structure, builds on MAP (MIT Application Platform), MIT Touchstone, ISDA Identity and central group management, and is designed to easily connect to or incorporate third-party tools from a variety of sources.
- Expand the use of interactive image management technology for learning purposes.
- Expand use of Stellar Course Management System to 90% of all eligible courses.

Strategy: Support research activities of our faculty and students

Strategic Goal: Promote simple, flexible and efficient collaboration services among faculty, researchers and students at MIT by engaging with our customers and responding directly to their needs

- Work with the major labs to provide financial and people forecasting so that PI's can plan resources and see the affect to the bottom line quickly and easily.
- Expand use of Stellar for research collaboration.
- Introduce new services for collaboration and communication to meet community demand.

Strategy: Support the administration of MIT through expanded and innovative use of technology, including attention to the goals of the Research Administration Improvement Initiative

Strategic Goal: Create, maintain and promote a best class of flexible infrastructure software framework with interfaces that are easily usable by software developers across MIT

- Allow administrators within the research community to quickly model labor, expense, and revenue data for PI's when planning how to allocate funds, retain research staff, and attract new staff quickly and efficiently.
- Envision and implement a rich set of infrastructure services using emerging service-related architecture.
- Design and develop the next generation of software architecture.
- Provide enterprise-quality tools that departments can use to share content and publishing material on the web.

Strategy: Support student living and learning initiatives

Strategic Goal: Promote simple, flexible and efficient collaboration services among faculty, researchers and students at MIT by engaging with our customers and responding directly to their needs

- Improve Stellar tools based on student feedback and support requests.

Strategy: Support international initiatives

Strategic Goal: Ensure technology decisions are guided by a desire to promote alignment and interoperability, allowing our community to innovate with us, maintain an appropriate balance between engaging in development for MIT and the world-at-large

- Promote and develop Kerberos as the security technology both at MIT and the world at large.
- Work with members of the MIT community to add new data in support of international endeavors, such as Singapore MIT Alliance, MIT India Trust, MIT Portugal and Al-Masdar.

Strategy: Ensure that IS&T's enterprise services and systems are current, reliable, scalable, sustainable, and secure

Strategic Goal: Create, maintain and promote a best class of flexible infrastructure software framework with interfaces that are easily usable by software developers across MIT.
• Improve Service Levels while reducing data center footprint. (Virtualization)
• Expand service oriented infrastructure, enhancing development efforts within and outside of IS&T.
• Reduce maintenance costs of Athena OS, while expanding key Athena services to be accessible regardless of platform, reducing the need for clusters or OS-specific dependencies.
• Expand content service platforms, in order to support a wide variety of applications such as Thalia, QuickPages and Web Content Management.
• Develop new interfaces and integration with directory and group management to facilitate the development of applications using real-time services, moving away from batch data feeds to a more advanced architecture.
• Increase integration of Kerberos into MIT applications and infrastructure.
• Envision and implement a person service, a real-time interface to data about people at MIT for new teaching and learning applications using emerging service-related architecture.
• Continue to ensure the accuracy, consistency, integrity and completeness (scope and depth), security, and availability of the data in the Data Warehouse, Roles, LDAP and MIT ID.
• Ensure all ISDA applications are in alignment with IS&T standards for hardware and software.
• Implement new software framework which supports a more flexible and easily managed site structure, builds on MAP (MIT Application Platform), MIT Touchstone, ISDA Identity and central group management, and is designed to easily connect to or incorporate third-party tools from a variety of sources.
• Migrate Stellar's existing infrastructure into an enterprise class infrastructure.
• Continue to advance the state of enterprise content management tools to aid in both learning and administrative applications.

Strategy: Make it easier for the MIT community to get the IS&T services and assistance it needs, when it needs them

Strategic Goal: Create, maintain and promote a best class of flexible infrastructure software framework with interfaces that are easily usable by software developers across MIT, promote simple, flexible and efficient collaboration services among faculty, researchers and students at MIT by engaging with our customers and responding directly to their needs

• Expand service oriented infrastructure, enhancing development efforts within and outside of IS&T.
• Have a single, consolidated interface for administrators in DLC's to maintain authorizations for their departmental resources (enhancements to the Roles Database to facilitate broader adoption).
• Research and deliver a richer web interfaces for the Data Warehouse that is robust and easy for DLC's to use.
• Provide a centralized service that would allow DLC's to store their data in a central location. This service will provide enterprise class data reporting services with the ability to update their data and join it with other data from central Institute systems.

Strategy: Ensure excellent communications and collaboration between IS&T and the many IT service groups at MIT

Strategic Goal: Ensure technology decisions are guided by a desire to promote alignment and interoperability, allowing our community to innovate with us, conceptualize and define MIT’s IT Architecture in partnership with ITAG, MITCET, ACCORD, IT-Leads, ISTAB and other key MIT community forums

• Provide transparency and consistent communication to various constituents such as ITAG, TRB, IT Leaders, and other key MIT community stakeholders.
• Participate and promote public, collaborative design and feedback.
• Engage other IT groups in contributing to services such as MAP (providing tools to other IT groups).

Strategy: Provide support and counsel to the community on how IT can improve their ability to do their jobs

Strategic Goal: Promote simple, flexible and efficient collaboration services among faculty, researchers and students at MIT by engaging with our customers and responding directly to their needs, ensure technology decisions are guided by a desire to promote alignment and interoperability, allowing our community to innovate with us

• Provide IT architecture and consulting for software developers and business partners across MIT, engaging and innovating with the community.
• Improve Stellar tools based on user feedback and support requests.

Strategy: Incorporate MIT institutional drivers and technology trends into IS&T’s planning efforts

Strategic Goal: Conceptualize and define MIT’s IT Architecture in partnership with ITAG, MITCET, ACCORD, IT-Leads, ISTAB and other key MIT community forums, maintain an appropriate balance between engaging in development for MIT and the world-at-large

• Promote and develop Kerberos as the security technology both at MIT and the world at large.
• Continue developing MIT Business Intelligence - a joint effort between all of the major labs and IS&T with each DLC playing a key role in building a product that will ultimately serve the entire Institute.
• Adoption of virtualization, multi-database strategies and external engagement with Institute peers and industry.

Strategy: Achieve and maintain industry standards for IT infrastructure at MIT
Strategic Goal: Create, maintain and promote a best class of flexible infrastructure software framework with interfaces that are easily usable by software developers across MIT, conceptualize and define MIT’s IT Architecture in partnership with ITAG, MITCET, ACCORD, IT-Leads, ISTAB and other key MIT community forums

- Expand service oriented infrastructure, enhancing development efforts within and outside of IS&T using industry standards such as .xml, Kerberos, SOAP and REST.
- Change server hardware, operating system, and storage system to bring Stellar into alignment with other ISDA servers, improve reliability and failure recovery with new SAN system.
- Promote good software development and life cycle management practices.

Strategy: Promote good IT governance
Strategic Goal: Ensure technology decisions are guided by a desire to promote alignment and interoperability, allowing our community to innovate with us

- Promote project and service alignment with IS&T and Institute policies.
- Actively engage and promote best practices within IS&T and other constituents such as ITAG and IT Partners.

Strategy: Use consistent and standard methodologies and best practices to enable successful achievement of IS&T goals
Strategic Goal: Ensure technology decisions are guided by a desire to promote alignment and interoperability, allowing our community to innovate with us, conceptualize and define MIT’s IT Architecture in partnership with ITAG, MITCET, ACCORD, IT-Leads, ISTAB and other key MIT community forums

- Ensure all projects and development efforts use standard methodologies such as the IS&T Project Tool Kit.
- Envision, promote and implement standard tools for developers, such as source repository, build tools, and QA and testing tools.