

Harvard Medical School
Information Technology
Operating Plan
2011

Introduction

This document outlines the Harvard Medical School Information Technology 2011 Operating Plan.

We developed this Operating Plan based on discussions with our customers within HMS. We will use this plan throughout the year as a yardstick to evaluate our performance in meeting our goals. All levels of staff have contributed to the Operating Plan and are committed to seeing that these promises to the HMS community are fulfilled.

It is very important to us that the customers of Harvard Medical School are fully aware of our activities and plans. We will keep you informed about our progress on the Operating Plan throughout the year. We value your feedback and welcome any comments or questions on the initiatives described in this plan.

Sincerely,

John D. Halamka MD

Administrative Applications

Leader: Patricia Beckett

Strategy: Provide central management and support of administrative applications.

Office of Research Integrity

- * Develop and launch web-based training for COMS NIH compliance
- * Migrate legacy COMS access database to a more secure platform
- * Perform needs assessment for COMS system
- * Implement and rollout existing HMS Conflict of Interest system with new policy
- * Perform needs assessment for affiliate-wide Conflict of Interest integration
- * Implement workflow application for managing data use agreements

Office of Faculty Affairs and Services

- * Develop HR reports for BWH users
- * Reconcile BWH's FACTS data and Peopleview data
- * Implement faculty promotions system
- * Generate CVs using Profiles data

Financial Operations and Analysis

- * Port WebSpace to Oracle 11g
- * Implement enhancements to Medical Area Equipment System
- * Provide support for and enhance HUBS, OFA, eProcurement and BRIO reports
- * Port new space system data into the HMS Data Warehouse

Human Resources

- * Develop HR Reports

Office of the Dean

- * Implement Scribd to allow secure access to and searching of LCME documents
- * Complete RMAS assessment of HMS risks

Program in Medical Education

- * Provide data integration support for student processes - yearbook, graduating students,
- * MADRIS to Mycourses mapping, FAS Progress toward Degree, and Financial Aid

Communications and External Affairs

- * Implement new HMS Public website using a content management system

Infrastructure

- * Ensure integrity of HMS data by managing data feeds from Oracle Financials, Peoplesoft, GMAS, JUBS, IDMdb and CrimsonCash
- * Modify applications as driven by data source changes

HMS IT FY11 Operating Plan

- * Coordinate change with Cambridge upgrades
- * Enhance self-registration renewal applications
- * Enhance guest account management applications
- * Delete inactive Active Directory accounts
- * Identify and document existing account provision scripts and processes
- * Provide Tier 2 and 3 support for help desk
- * Rewrite SimpleSync
- * Manage new releases of Profiles
- * Provide project management services for Catalyst development projects
- * Integrate HMS Directory data and Catalyst

Staffing:

Executive Director (Patricia B)

Associate Director (Kellie L)

2 Application Analysts (Jeff R, George R)

Chief Technology Officer

Leader: Griffin Weber

Strategy: To provide innovative technology that supports the business needs of HMS stakeholders

- *Develop strategic plans for HMS administrative applications such as conflict of interest and faculty promotions which build upon the Harvard Catalyst Profiles website
- *Continue to expand Profiles into a Harvard-wide faculty research database combining different data sources across the University
- *Continue to expand Profiles to other institutions around the world, creating an international community of researchers in biomedicine and other disciplines
- *Provide ongoing software development and support for I2B2/SHRINE through Harvard Catalyst
- *Create team building tools within Profiles and use these to develop novel crowdsourcing approaches with Innocentive.com to solve problems in Type 1 Diabetes
- *Develop extensions to I2B2 to support the Harvard SHARP grant, a new platform to integrate electronic medical records, personal health records and clinical research repositories
- *Create a prototype I2B2 medication cell that can provide contextual information to providers to help them select among treatment options for epilepsy

Staffing:

- Web 2.0 Software Architect (Nick Benik)
- Web 2.0 Software Architect (Shashank Jain)
- Web Application Architect (James Norman)
- Web Application Architect (Paul Gomez)
- Database Architect (Ken Huling)
- Database Architect (Paul Cappelluzzo)
- User Interface Specialist (Marlon Violette)
- Software Engineer (Kevin Laitinen)
- Business Analyst (Steve Wimberg)

Client Services

Leader: Marcos Athanasoulis

Strategy: Provide centralized support and desktop management services with local departmental coordination for the administrative and research communities and for HMS students.

*Work with Operations to define the requirements for an anti-virus offering, pilot the product and collaboratively implement

*Pilot PGP Whole Disk Encryption for IT department and collaboratively implement across the all departments

*Pilot Desktop backup with Crashplan for those use cases (laptops, non-domain desktops) that would benefit from such an offering

*Migrate the IT website to the Drupal pilot platform

Staffing:

Director (Marcos A.)

Manager (Jason O.)

24 Client Services Representatives

Training coordinator (Lauren K.)

Help Desk supervisor (Aun E.)

Student Computing Manager (Lee H.)

2 Help Desk analysts

Educational Applications

Leader: Jason Alvarez

Strategy: Educational Technologies will create the tools necessary to offer content management, learning management and knowledge management to the HMS community. Administers computing resources and provides support for technical resources used by students and faculty as it relates to the HMS Curriculum.

Medical Education

- *Online Grading – Phase II (FOM /Advanced Electives)
- *Student Self Services – Phase II (add/drop, transcript requests)
- *Student Analysis Project
- *Curriculum Map – Phase II (Adoption/Reporting)
- *MyCourses Interface and Search redesign
- *Exchange Clerk Online registration roll-out
- *Advanced Elective Student to Student feedback/Course catalog changes
- *Course Revision Application Phase II roll-out
- *Anatomy Lab Application
- *Mobile course site Upgrades including mobile course resources

Database Services

- *HSDM AXIUM/Test Disaster recovery
- *Duplicate HMS reporting server/migrate to SQL 2008
- *Migrate 2005 servers to 2008(Community/HA/SA servers)
- *Blackberry / MOM SQL 2008 server environment
- *Expansion/Migration to Filemaker 11 – Transition level 1 support to Senior CSR
- *AXIUM Reporting Server

Web Services

- *Upgrade all production servers to IIS 7.5/Server 2008 R2
- *Enable Kerberos for TFS/SharePoint
- *Retire StudentWeb/Migrate PDF generation to VM
- *TFS 2010 – supports VS2010/Eclipse
- *OfficeWeb Apps Pilot
- *Listserv Upgrade

Media Services

- *Classroom Upgrades
- *5 Year Media Infrastructure Plan
- *Upgrade Classroom Capture system from Apreso to Echo360 infrastructure
- *Migrate RealServer to VM for legacy video support
- *Telepresence Pilot
- *Integrating 2xAV with h.264/retire Real

Other Applications/projects

*Change Control Rollout

*Authentication Service Review/migration

*OfficeWeb Apps Pilot – Integration with Collaborations/Online Storage

*CME Migration

*Invited user process changes (Scope in review)

Staffing: Director (Jason Alvarez)

5 Web Programmers: Ron Rouse, Michael Fournier, Rob Piscitello, Kevin Laitinen, Steven Tierney

1 Web Application Quality Assurance Specialist: Jim Buckley

Application Systems Analyst: David Bozzi

IIS Administrator: Melissa Kenny

Web Application Support Associate: TBA

2 Database Administrators: Joseph Eattimo, TBA

Media Services

Manager: Jim Mckenna

Line Supervisor: Jim Lowell

1 New Media Specialist : Bill Yotty

3 Media Techs: Frank D., Joe L., Jon M. & student assistants

Finance and Administration

Leader: Patricia Beckett

Strategy: Work closely with IT managers to create operating and capital budgets. Managers will meet monthly with Finance and Administration to review progress on budgets and will be held accountable for variances.

* Implement monthly variance reporting so that managers can more accurately manage their budgets

* Collaborate with FOA and Cambridge to develop capital budgets in support of networks, servers, desktops and storage

Staffing:

Executive Director (Patricia B.)

Business Manager (Patricia G.)

Administrative Assistant

Production Operations

Leader: Steve Martino

Strategy: Provide 24 hour a day, 7 days a week operational and technical support for the networks and cabling infrastructure, servers, storage and backup services required by the entire HMS community. Telecommunications also manages and maintains voice mail, call management systems, and billing systems.

Computer Operations

- * Design and Implement High Performance NAS (Isilon SSD) and integrate files.med.harvard.edu into the new solution
- * Deploy CommVault Simpana, retiring Veritas Netbackup
- * Provision High Performance Computing Data Space for RITG to accommodate the S10 grant and growth for the community at large
- * Fully document the Disaster Recovery plan
- * Design and Implement High Performance NAS for the Sorger Lab, leveraging centralized services
- * Research solutions for infinite retention storage archiving

Network Operations

- * Continue rollout of Layer 3 Redundant Network
- * Design and deploy redundant internet feeds
- * Collaborate with the Harvard School of Dental Medicine to develop a disaster recovery plan
- * Investigate and replace existing perimeter and interior firewall technology
- * Investigate and replace existing IDS/IPS systems
- * Collaboration with Client Services to deploy PGP Whole Disk Encryption
- * Pilot and implement Identity Finder
- * Continue to support the Global Password reset project
- * Continue to support the Security Camera project
- * Continue to support Engineering & Construction Projects and Renovations
- * Continue to rollout Airespace wireless
- * Continue to retire all Nortel hardware - TMEC, Countway, Vanderbilt

Telecommunications

- *Implement Category 6 upgrades for TMEC, Vanderbilt, Countway, HSPH Main Frame rebuild, Seely G. Mudd, Armenise, Dental School
- *Work with departments to consolidate phones

Windows Servers and Messaging

- *Lifecycle manage all servers to a 5 year lifespan
- *Test and deploy VMWare View (virtual desktops) for production
- *Test Active Directory 2008

- *Test and deploy VMware Site Recovery
- *Upgrade HP SIM and Deployment server for monitoring and inventory
- *Add additional VM Clusters to expand the existing virtual environment
- *Collaborate with Administrative Applications to delete inactive Active Directory accounts
- *Collaborate with Administrative Applications to rewrite SimpleSync
- *Test Forefront Security Gateway to upgrade ISA 2006
- *Implement Exchange 2010
- *Implement Blackberry Enterprise 5.0 with automatic failover and redundancy

Staffing:

Director (Steve Martino)

Manager, Network Operations (John Batista)

3 Network Analysts (Nick P., Lucas F., Sharif H.)

1 Security Officer (Joe Z.)

Manager, Computer Operations (Glenn Fuller)

2 Computer Operations Administrator (David B., John M.)

2 Storage Analysts (Paul W., Steven G.)

Manager, Windows Servers and Messaging (David Orlandella)

2 Windows System Administrators (Cal M., Eric O.)

2 Exchange Administrators (Jeffrey P., Birgit K.)

Manager, Telecommunications (Leanne Dunbar)

2 Telecommunications Technician (Brian K., Robert M.)

1 Telecommunications Analyst (Valerie K.)

1 Staff Assistant II (Christine B.)

Research Information Technology Group

Leader: Marcos Athanasoulis

Strategy: Research Information Technology will provide the necessary operational support to the research community. Research Information Technology will also serve an important liaison role, building bridges between the research community and core IT operations to foster the introduction of enterprise technologies into the research community and to retire departmental systems, where advantageous to do so

- *Upgrade Orchestra to the latest version of Platform LSF job scheduling software
- *Upgrade Orchestra to the latest Debian stable release
- *Move blade centers from Markley 4th floor to Markley 7th floor
- *Create a smaller scale but same architecture version of Orchestra for testing purposes
- *Survey and meet with IT stakeholders to identify and implement the changes needed in RT
- *Complete a pilot of using Drupal in a managed install configuration
- *Use collaborations as group folders for all Orchestra groups
- *Implement ARRA funded Orchestra expansion
- *Collaboration with Operations to introduce high performance Isilon SSD
- *Create a plan for billing affiliates for research computing services
- *Pilot federated authentication
- *Replace existing Orchestra monitoring software

Staffing:

Director (Marcos A.) Manager

Research IT Operations (Mark K.)

5 System administrators (Bret M., Andy B., Greg C., David H., Tristan N.)