# AGENDA FOR FEBRUARY 2008

<table>
<thead>
<tr>
<th>Updates &amp; Announcements</th>
<th>Karen Jenkins</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxford Website</td>
<td>Seth Tepfer &amp; Mahbuba Ferdousi</td>
</tr>
<tr>
<td>Server Virtualization</td>
<td>Steve Siegelman</td>
</tr>
<tr>
<td>CISO Introduction</td>
<td>Brett Coryell</td>
</tr>
<tr>
<td></td>
<td>Brad Sanford</td>
</tr>
</tbody>
</table>
WEB HOSTING MIGRATION
• All testing of currently migrated sites must be complete NLT 3/26!!

ENTERPRISE CONTENT MANAGEMENT
• Selected Cascade Server from Hannon Hill!
• Huge higher ed presence (over 50 universities including Duke, Clemson, Cornell, Carnegie Mellon)
• Great reference checks with CMU, Texas A&M Health Sciences Center, and the Medical College of Georgia – outstanding support and responsiveness!
• Healthcare presence as well (although not as large a vertical – about a dozen)
• Easy to use interface
• Standards based XML templates

SERVICE MANAGEMENT TEAM (REMEDY & LANDESK)
• Very limited resources over the next few weeks!
OXFORD WEBSITE REDESIGN

Mahbuba Ferdousi
Seth Tepfer
oxford website redesign

APPROACH

• SEND RFP
• VENDOR SELECTION COMMITTEE
• INVITE 3 VENDORS
• UNANIMOUSLY CHOSE DOT MARKETING
• SOLD THE CMS
• UNIVERSITY DID NOT HAVE PLANS FOR CMS
• TALKED WITH JOHN MILLS AND ITPC
• EDUCATION CUSTOMER BASE
• SURVEYS OF HIGH SCHOOL STUDENTS
• VISUAL APPEAL OF DESIGNS IN PORTFOLIO
• METHODOLOGIES WELL THOUGHT OUT
• THEIR CMS
THEIR CMS

- Written in Java
- Db independent (Oracle, MySQL, SQL Server, etc)
- Runs on Linux and Windows
- LDAP Authentication
- R25 interface experience
- Open Source Product
• EASE OF END-USER DEVELOPMENT
• BUILT IN GROUPS/ROLES BASED PERMISSIONS
• DYNAMIC DATA
• DESIGN CONTROL
• WORKFLOW PROCESS
• ABILITY TO ROLL-BACK TO PREVIOUS VERSIONS
oxford website redesign

CMS ADVANTAGES (CONT)

• EDIT/PREVIEW/LIVE MODES
• LEFT MENU NAVIGATION AND BREADCRUMBS
• PHOTO/VIDEO GALLERY
• STREAMING .MP3 PLAYER
• FORM HANDLING
• WEBDAV
• PROSPECT-ORIENTED PHILOSOPHY
• MULTIPLE NAVIGATION METHODS
• NEWS
• EVENTS/CALENDAR
• CMS
oxford website redesign

WHAT WE LEARNED

• WE HAVE A LOT OF CONTENT
• NEED MORE ROBUST SEARCH THAN BUILT-IN
• EARLY ADOPTER OF LOAD BALANCER FOR THIS VENDOR
• VENDOR HAS BEEN RESPONSIVE AND STAYED WITH US
QUESTIONS

MAHBUBA FERDOUSI

- 770-784-4570
- usmf@emory.edu

SETH TEPFER

- 770-784-8487
- seth.tepfer@emory.edu
SERVER VIRTUALIZATION

Steve Siegelman
WHY VIRTUALIZE

• SERVER CONSOLIDATION
• COST REDUCTION ON PHYSICAL INFRASTRUCTURE
• HARDWARE BUDGET CUTS
• PROVIDE FAILOVER AND HIGH AVAILABILITY
• PROVIDES MORE OPPORTUNITY FOR SERVER MAINTENANCE DURING NORMAL WORKING HOURS.
• PROVEN, MATURE TECHNOLOGY
“For any new initiative, it is the direction of UTS to Virtualize first before deploying physical hardware.”

• VM Candidates:
  • Occasionally used development servers
  • Underutilized servers
  • Servers that have seasonal use
  • Application software that the vendor will support running in a VM

• Not VM Candidates:
  • IO intensive applications such as Oracle or SQL Server databases
  • Application software that is unsupported by the vendor in a VM infrastructure
server virtualization

VMWARE VI3

• VMWARE VI3 – SUITE OF PRODUCTS
  • VMWARE ESX SERVER
  • VMWARE VMFS
  • VMWARE HIGH AVAILABILITY (HA)
  • VMWARE DRS
  • VMWARE VMOTION
server virtualization

VMWARE ESX SERVER

* Source – VMware Website
server virtualization

VMWARE VMFS

* Source – VWare Website
server virtualization

VMWARE HIGH AVAILABILITY (HA)

* Source – VWware Website
server virtualization
VMWARE VMOTION

* Source – VWware Website
server virtualization
VMWARE DRS

* Source – VVware Website
server virtualization

HARDWARE PLATFORM

HP c-Class Blades
PHASE ONE

- TWO VMWARE CLUSTERS
  - 3 NODE CLUSTER – DMZ
  - 3 NODE CLUSTER – ADMIN CORE

TARGETED VMS

- 39 VMS – DMZ
- 23 VMS – ADMIN CORE
- OSS: WINDOWS 2003, REDHAT LINUX, SOLARIS 10 X86, SLES LINUX
• ACADEMIC CORE CLUSTER BUILD OUT
  • 3 NODE CLUSTER – ACADEMIC CORE

• GROW OUT DMZ & ADMIN CORE CLUSTERS AS NEEDED

• CAMPUS WIDE HOSTING OFFERING
Questions
Introduction and Observations from My First 50 Days

Brad Sanford, CISSP, GSEC, GCIH
Chief Information Security Officer (CISO), Emory
brad.sanford@emory.edu
PERSONAL BIO

- Kentucky
- Interest in Computers and Security
- Education

WORK BIO

- Humana through HCA
- Vanderbilt
- HCA (Security Assurance & Architecture)
Brad Sanford
Chief Information Security Officer, Emory University and Healthcare

Richard Mendola
Vice President for Information Technology & CIO

Mike Mandl
Executive Vice President for Finance and Administration

Fred Sanfilippo
Executive Vice President for Health Affairs and CEO, Woodruff Health Sciences Center

Earl Lewis
Provost and Executive Vice President for Academic Affairs

Dee Cantrell
CIO Emory Healthcare Information Services

Brad Sanford
Chief Information Security Officer, Emory University and Healthcare

Marc Overcash
Deputy CIO, University Technology Services

Linda Erhard
IT Governance

John Connerat
CIO Emory Information Services

Brett Coryell
Deputy CIO, University Technology Services

Earl Lewis
Provost and Executive Vice President for Academic Affairs

Dee Cantrell
CIO Emory Healthcare Information Services

Brad Sanford
Chief Information Security Officer, Emory University and Healthcare

Marc Overcash
Deputy CIO, University Technology Services

Linda Erhard
IT Governance

John Connerat
CIO Emory Information Services
THE CHIEF INFORMATION SECURITY OFFICER IS RESPONSIBLE FOR COORDINATING AND LEADING INFORMATION SECURITY ACTIVITIES ACROSS EMORY UNIVERSITY AND EMORY HEALTHCARE

PRIMARY AREAS OF ACCOUNTABILITY

- Security Policy and Strategy
- Security Awareness
- Security Architecture
- IT Risk Management
  - Security Incident Response
  - Vulnerability Management
INITIAL OBSERVATIONS

WILLINGNESS TO “DO THE RIGHT THING” IS HIGH
- Awareness is low
- Expectations are unclear

OUR KNOWLEDGE IS LIMITED
- Where does sensitive data resides and how is it protected
  - But we do know we have a data protection problem
- What vulnerabilities are putting us at risk and how do we address them
- Who is responsible
- How should we respond to security incidents

DUPICATION OF EFFORTS ACROSS SCHOOLS AND DEPARTMENTS IS HIGH
- Active Directory
- Virtualization
- Many Others

MANY SECURITY CONTROLS AND OPERATIONAL PROCESSES ARE IMMATURE
- Ad-Hoc
- Limited in Scope / Coverage
- Limited Effectiveness
ONGOING

- Information Gathering
- Security Gap Analysis
- Security Policy Review
- Full Disk and Removable Media Encryption
- Trusted Zone
- Trusted Storage
- Security Strategy
FUTURE

- Security Policy Overhaul
  - Data focused
- Security Awareness Program
- Mobile Device Protection (PDAs, Smartphones, etc.)
- IT Risk Management Program
  - Vulnerability management
  - Expanded HIPAA Risk Assessment
  - PCI Data Security Standard Compliance
- Evolution of Operational Security Capabilities
- Integrate Security Controls into Existing Processes
  - Contracts
  - New-Hire Process
  - IRB
Questions