April 15, 2010

Agenda

- ESB Overview
- General Security Update
- SMCC Update
- Infrastructure Updates
- Academic Software Upgrades

- Kevin Chen
- Brad Judy
- Tiffany Kady
- Paul Petersen
- Alan Cattier
Enterprise Service Bus (ESB)

Kevin Chen
“An ESB is a standard-based integration platform that combines messaging, web services, data transformation, and intelligent routing to reliably connect and coordinate the interaction of significant numbers of diverse applications across extended enterprises with transactional integrity.”

- David Chappell, author of “Enterprise Service Bus: Theory in Practice”
Enterprise Service Bus

Characteristics

• Standards-based integration
• Core integration services such as routing, transformation logging
• Event-driven SOA
• Near real-time
• Management console for configuration
Enterprise Service Bus

Why?

- Reduce Point-to-Point Integration
- Increase Re-use
- Increase Speed of Integration
- Improve Flexibility

Business implications
- Poor multichannel offering
- Incomplete view of risk
- Lack of flexibility
- Low degree of automation
- Time to market too long
- High cost

- Elimination of process discontinuities
- Harmonization of front ends
- Process standardization
- Reuse of functions across business units
- Easier integration
Enterprise Service Bus

Project Overview

• **Charter**
  – Build DEV/QA/PROD environments for ESB and Java Server
  – Deploy JBoss
  – Deploy OpenEAI ESB & components
  – Develop and deploy ESB connectors

• **Team**
  – **PM:** Felicia Bianchi
  – **OIT Architecture Team:** Steve, Thomas, Susan
  – **Integration Development Team:** Kelly, Mark, Julia, Elizabeth, Kevin
  – **Integration Middleware Team:** John Wang, Gerry Hall
  – **Infrastructure System Admin & DBA Team:** Mike Lewis, Mark Parten
Enterprise Service Bus

Infrastructure

- OpenEAI 4.0
- Java 1.5
- SonicMQ 7.6 (Clustered Env)
- Oracle 10g (RAC)
- Zabbix 1.6
- VMWare ESX 3.5
- Other open source frameworks such as Tomcat, Log4j, JDOM, Hibernate, etc.
Configuration Items

Host Server: HP Blaze
VM: ESX 3.5
Memory: 10G
CPU: 2

Console access is through VPN
Console login is over SSL
LDAP is used to authenticate console users
Enterprise Service Bus

ESB In Production

Messages from the Sciquest E-procurement System are sent via HTTPS to the Sciquest Connector. They are transformed into OpenEAI PO and Invoice messages and published to the ESB.

Sciquest Integration

260,935 POs and Invoices processed
Enterprise Service Bus

ESB In Production

Conflict of Interest Integration

- EsdConnector
  - Publishes synchronization messages for Person from ESD, using a baseline store

- EirbConnector
  - Publishes IrbProposal Sync messages from eIRB extract table, using a baseline store

- EcoiDbConnector
  - Consumes Sync messages, inserting data into eCOI database

Message Transport
- Transformation
- Logging
- Proxy
- Routing

31,311 messages processed
Enterprise Service Bus

What’s in QA/Dev

- Identity Service
  - Person
  - Employee
  - Student
  - Sponsored Person
  - Network Identity

- ServiceNow Gateway
What’s in QA/Dev

- SipX Auto Provisioning
  - SipXOrder
Enterprise Service Bus

What’s in QA/Dev

- Blackboard Mobile
  - School
  - Subject
  - BasicCourse
  - Course
Enterprise Service Bus

What’s Next

• Blackboard Opus Integration
  - Automate course site provision & site enrollment
  - PeopleSoft SA, ESD, self-service Course Merge Tool

• Service Availability
  - Zabbix checks data to Data Warehouse

• ESD Feed using ESB

• ERS Integration

• HIPPA assessment
Enterprise Service Bus

What’s Next

[Diagram of Enterprise Service Bus and Center For Health Discovery, showing connections between CHD ESB, Message Transport, CHD Portal, and various devices and services such as Endo-PAT2000, Vascular Reactivity, Tanita Body Composition, and IDXA Scanner, with Emory ESB for Transformation, Logging, Proxy, and Routing.]
ESB & You

- Think ESB when you have the need to integrate with another application

- Think ESB when you need a near real-time data feed

- More info on wiki:
  - https://wiki.service.emory.edu/display/integration/ESB+Infrastructure+Environments
  - Enterprise Application Integration & Service Oriented Architecture

- Contact Integration Group & BRM
  - John Ellis, Director
  - Kevin Chen, Manager
  - Tina Crum, BRM
Questions
Security Update

Brad Judy
PGP is ready

- Contact security via Remedy or securityteam-l@listserv for training, setup, etc
- Info at http://it.emory.edu/showdoc.cfm?docid=12829
Security Update

Compromised Accounts

Sending Spam

• **59** accounts in the last month
• WAY higher than normal
Questions
Service Management Competency Center (SMCC)
Tiffany Kady
Enid Britton
Agenda

• Roadmap
• Phase II Project Updates
  – Incident Management
  – Knowledge Management
• Communication
SMCC Update

IT Service Management: Road Map – April 2010

Q4 2009 - Foundations
Q1 2010 - Categorization
Q1 2010 - Change Mgmt
Q2 2010 - Configuration Mgmt
Q2 2010 - Discovery
Q3 2010 - Request Fulfillment
Q4 2010 - Problem Mgmt
Q1 2011 - Incident Mgmt
Q1 2011 - Knowledge Mgmt
Q1 2011 - Request Mgmt 'Lite'
SMCC Update

Incident Management Update

• Working Group Members
  - Darwin Diocares – Emory College
  - Jean Robert Mathador – SOM
  - William Bryant – UTS
  - Karla Fields – Oxford College
  - Robin Horton – UTS
  - Sharon Gregory – UTS
  - Farah Remtulla – UTS
  - Tiffany Kady – SMCC Facilitator
Incident Management Update

- Reviewed 57 ‘worst practices’ often identified in most organizations
  - The Top 10 ‘worst practices’ identified that were found most relevant to Emory:
    1. Not capturing the right knowledge for reuse
    2. Them and US culture – opposing and competing forces
    3. The SILO mentality
    4. A tool solves all problems
    5. No understanding of business impact & priority
    6. The help desk technoid…Hello Helpless Desk, what do you want now?
    7. Not my responsibility
    8. Internally Focused
    9. Everything has the highest priority…according to the Users
    10. Too little business involvement in requirements specifications & testing
Incident Management Update

- How are we tackling these perceptions and challenges in the development of the Incident Management module?

1. Creating strong linkages between Incident and Knowledge Management
2. Developing standardized IM roles across departments and schools
3. Clearly defining service management terminology
4. Developing centralized policies, processes, and procedures
5. Providing performance measures and key performance indicators (KPI)
6. Creating a uniformed platform for support groups to use with agreed upon service level guidelines
Incident Management Update

• Incident
  – is defined as an “Unplanned interruption to an IT Service or a reduction in the quality of an IT Service.”

• Impact of an Incident:
  – When we have an incident, we’re not just impacting a student or a staff or faculty member, but we are impacting the ability for Emory to provide its Vital Business Function (VBF).
    • Education to Students
    • Critical Research
    • Healthcare to a Patient
Incident Management Update

• How do we validate and accomplish developing an enterprise Incident Management Tool?

WITH YOUR HELP

• Schedule Focus Groups
  – April 29th and 30th: Review of proposed policy and high-level process document
  – Future Focus Groups: Reporting, Metrics, Role and Responsibilities, Self-Service Tool

• Want to participate? – email: smcc@emory.edu
Incident Management Update

...here are the procedures we produced for you....

Throwing solutions over the wall and Hoping people will use them
Knowledge Management Update

• Working Group Members
  – Laura Pokalsky – Emory College
  – Sidney McKenzie – SPH
  – Shea Jarman – UTS
  – Terry Markert – UTS
  – Mark Henderson – SOM
  – Chase Lovellette – UTS
  – Norman Hulme – UTS
  – Enid Britton – SMCC Facilitator
Knowledge Management Update

- Initiation phase complete
- Planning phase complete.
- High Level Process Flow complete
- Scope, Goals, Benefits, Roles and Policies documented and submitted to SMCC for approval
Knowledge Management Update

• **Design Phase**
  – Create knowledge article style guide
  – Define system requirements
  – Define KM roles within Service-now

• **Document Procedures**

• **Schedule Focus Groups**
  – First week of May
  – Want to participate? – email: smcc@emory.edu

• **Expected go-live is mid-May**
Communication

- Website smcc.emory.edu under construction in partnership with SOM Resource
- Blackboard site LIVE
- Road Show Presentation Review
## SMCC Update

### Communication

- **Scheduled Road Shows**

<table>
<thead>
<tr>
<th>SMCC members</th>
<th>Assigned business units</th>
<th>Presentation Date</th>
<th>Status</th>
<th>2nd SMCC Member</th>
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<tbody>
<tr>
<td>Dana</td>
<td>RHIS (Marc Overcash)</td>
<td>4/26/2010 12:00pm</td>
<td>Scheduled</td>
<td>Weiming</td>
</tr>
<tr>
<td></td>
<td>UTS—Enterprise Applications</td>
<td>4/15/2010 1:30 pm</td>
<td>Scheduled</td>
<td></td>
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<tr>
<td></td>
<td>UTS—Integration</td>
<td>4/23/2010 2:00pm</td>
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<td></td>
<td>DAR IT</td>
<td>3/19/2010 10:30am</td>
<td>Complete</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HR IT</td>
<td></td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td>Joel</td>
<td>SOM IT</td>
<td>4/22/2010 2:00pm</td>
<td>Scheduled</td>
<td>Weiming</td>
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<tr>
<td></td>
<td>UTS—Academic Technologies</td>
<td>4/06/2010 3:30pm</td>
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<td>Weiming</td>
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<tr>
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<td>Negotiating-vmail</td>
<td>Waiting</td>
<td>Billy (?)</td>
</tr>
<tr>
<td></td>
<td>Oxford IT</td>
<td>Negotiating</td>
<td>Waiting</td>
<td>ENID (?)</td>
</tr>
<tr>
<td>Weiming</td>
<td>Carter Center IT</td>
<td>4/15 2pm</td>
<td>Waiting</td>
<td>JOEL</td>
</tr>
<tr>
<td></td>
<td>Emory College IT</td>
<td>4/6 10am</td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Law School IT</td>
<td>date not confirmed</td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FMD IT</td>
<td>4/12 2pm</td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Library IT</td>
<td></td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td>Tiffany</td>
<td>Winship IT</td>
<td>4/20/2010 10am</td>
<td>Waiting</td>
<td>Dana (depending on date)</td>
</tr>
<tr>
<td></td>
<td>Nursing IT</td>
<td></td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPH IT</td>
<td></td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yerkes IT</td>
<td></td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DeskNet</td>
<td></td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Campus Life IT</td>
<td></td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td>Mary</td>
<td>UTS—Enterprise Services</td>
<td>4/21/2010 11:00</td>
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<td>Desktop Support</td>
<td>4/19/2010 10:00</td>
<td>Scheduled</td>
<td>Weiming</td>
</tr>
<tr>
<td></td>
<td>TOC</td>
<td>Out of Office</td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Field Services</td>
<td>4/21/2010 2:30pm</td>
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<tr>
<td></td>
<td>Coordinator Services</td>
<td>Out of Office</td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data Center</td>
<td></td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td>Luc</td>
<td>UTS—IT Service Management</td>
<td>04/13/2010 10am</td>
<td>Scheduled</td>
<td>Weiming</td>
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<tr>
<td></td>
<td>Business School IT</td>
<td>Negotiating</td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Theology IT</td>
<td>04/19/2010 2pm</td>
<td>Scheduled</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Finance &amp; Administration IT</td>
<td>Out of Office</td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td>Enid</td>
<td>UTS—Call center</td>
<td>04/27 4/28 1pm</td>
<td>Waiting</td>
<td>Scheduled</td>
</tr>
<tr>
<td></td>
<td>UTS—Infrastructure (Architecture)</td>
<td></td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UTS—Infrastructure (voice data)</td>
<td></td>
<td>Waiting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>UTS—Infrastructure (Messaging)</td>
<td>5/3/10 9am</td>
<td>Waiting</td>
<td></td>
</tr>
</tbody>
</table>
Contact us:

– To participate in a Focus Groups please let us know:

  • Incident Management
  • Knowledge Management
  • Configuration Management

– Please email us at smcc@emory.edu
Questions

smcc@emory.edu
Various Updates from Infrastructure

Paul Petersen
Lesson Learned:

It is good to be here, but let me tell you how this came to be…
Non-Agenda Items

- New Edge Switches
- Data Center Redesign
- Migration to White Street
- New Border Architecture
- IPS, SEM, and VPN Evaluations
- Single Voice Platform
- Enterprise NAT
- New EMC VMAX Storage Array
- Avaya MM vs. Microsoft UM
- Avaya CM Upgrade

- SIPX
- Hosted Paging
- New SAN Directors
- Core Router Code Upgrade
- New HP Blade Architecture
- Move to Vmware 4
- Server and Storage Refresh
- Amcom Partnership Agreement
- Data Center Inter-connectivity
- Load-Balancer Evaluation
Infrastructure Update

Agenda

- Zabbix & Service Availability
- White Street & VM Offering
- Exchange 2010
- Distributed Antenna System (DAS)
- Wireless 802.11n
Infrastructure Update

Zabbix – Open Source Monitoring Tool

Visible
# Infrastructure Update

## Zabbix & Service Availability

### Zabbix

<table>
<thead>
<tr>
<th>Service</th>
<th>Status</th>
<th>Reason</th>
<th>SLA (Last 7 days)</th>
<th>SLA</th>
<th>Graph</th>
</tr>
</thead>
<tbody>
<tr>
<td>root</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PeopleSoft HR [PeopleSoft HR Down]</td>
<td>OK</td>
<td>-</td>
<td>0.05</td>
<td>99.05/99.95</td>
<td>Show</td>
</tr>
<tr>
<td>Blackboard [Blackboard Web is down]</td>
<td>OK</td>
<td>-</td>
<td>1.36</td>
<td>99.00/98.64</td>
<td>Show</td>
</tr>
<tr>
<td>ESB QA</td>
<td>OK</td>
<td>-</td>
<td>0.02</td>
<td>99.05/99.98</td>
<td>Show</td>
</tr>
<tr>
<td>UTS Web Hosting [<a href="http://www.emory.edu">www.emory.edu</a> is not responding]</td>
<td>OK</td>
<td>-</td>
<td>0.00</td>
<td>99.05/100.00</td>
<td>Show</td>
</tr>
<tr>
<td>OWA Webmail [OWA login failed]</td>
<td>OK</td>
<td>-</td>
<td>0.06</td>
<td>99.05/99.94</td>
<td>Show</td>
</tr>
<tr>
<td>PeopleSoft SA [PeopleSoft SA Down]</td>
<td>OK</td>
<td>-</td>
<td>0.26</td>
<td>99.05/99.74</td>
<td>Show</td>
</tr>
<tr>
<td>LDAP</td>
<td>OK</td>
<td>-</td>
<td>0.00</td>
<td>99.50/100.00</td>
<td>Show</td>
</tr>
<tr>
<td>Internet</td>
<td>OK</td>
<td>-</td>
<td>0.00</td>
<td>99.50/100.00</td>
<td>Show</td>
</tr>
<tr>
<td>DNS Emory</td>
<td>OK</td>
<td>-</td>
<td>0.00</td>
<td>99.50/100.00</td>
<td>Show</td>
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<tr>
<td>DNS Public</td>
<td>OK</td>
<td>-</td>
<td>0.00</td>
<td>99.50/100.00</td>
<td>Show</td>
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</tbody>
</table>
## Infrastructure Update

### Web Dashboard

<table>
<thead>
<tr>
<th>Service Name</th>
<th>Current State</th>
<th>Weekly View</th>
<th>YTD View</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service 1</td>
<td><img src="image" alt="Green Circle" /></td>
<td><img src="image" alt="Weekly View" /></td>
<td><img src="image" alt="YTD View" /></td>
</tr>
<tr>
<td>Service 2</td>
<td><img src="image" alt="Yellow Circle" /></td>
<td><img src="image" alt="Weekly View" /></td>
<td><img src="image" alt="YTD View" /></td>
</tr>
<tr>
<td>Service 3</td>
<td><img src="image" alt="Red Circle" /></td>
<td><img src="image" alt="Weekly View" /></td>
<td><img src="image" alt="YTD View" /></td>
</tr>
</tbody>
</table>
Infrastructure Update

White Street & VM Offering
Infrastructure Update

White Street & VM Offering
White Street & VM Offering

- Base Price: $780/year
- Submit a New Support Request at [http://help.emory.edu](http://help.emory.edu)
  - Summary -> Infrastructure -> VM Type
Exchange 2010 Status Update

- Officially approved
- Released by UTS PMO
- Equipment has been ordered
Exchange 2010

What are some of the new features provided by this upgrade?
Wireless 802.11n

- New Controllers Purchased
- Code Upgraded – Spring Break
- ResNet operating on new M3 controllers
- 802.11n - Few/Evans, WRC, and the Complex
- Ramping up for a big push over Summer
DAS

• What is a distributed antenna system?
• What is the status of this project?
• How will it impact you?
Modem Pool

Decommissioned: April 5, 2010
Academic Technology Upgrades: 2010

Alan Cattier
BlackBoard

- Upgrade Scheduled Between May 8th and May 14th
- Upgrade will see Emory move from BlackBoard 7.1 to BlackBoard 9.0.3
- READ-ONLY Environment will be available the majority of the time, to limit customer impact
- BlackBoard 9.0.x has been running all year
BlackBoard Features

- Customizable Desktop for End Users
- Customizable Portals for Schools
- Improved Gradebook
- Vastly improved Peer Review
- Easier Access to Control Panels
- Faster Access to Frequently Used Features
- Access on Mobile Devices
LearnLink

- Upgrade Scheduled during May Maintenance Window
- Upgrade will see Emory move from FirstClass 9 to FirstClass 10
- In addition, Open Text Social Media tool will be introduced for Development
- LearnLink 10 will go live immediately; OTSM will be made visible to users gradually
Open Text Social Media

- Introduces “Communities” to LearnLink
- Communities are web accessible, and can be visited by non-Emory collaborators
- Blog, wiki, and document repository
- Easy to manage interface
- Access on Mobile Devices
- Movement of Community on to the Web
Insight

• Upgrade Scheduled during May, but after Commencement
• Upgrade will see Emory move from Insight 5.0 to Insight 6.0
• Initial impact will only be in Emory College
• Long term impact will extend beyond the College and will be a collaboration between UTS and the Libraries
Insight Features

- No more client!
- Web Accessible
- 115,000 images local to Emory
- Connection to other collections
- Searchable with extensive Metadata
- Exportable to PowerPoint
- Really high resolution images!
Pharos

- Pharos Uniprint currently at version 7.2 Will upgrade to version 8.1 the week of Commencement
- Support for Windows 7 and Windows 64 bit clients, as well as Windows Server 2008 (Standard and R2)
- Upgrade provides more stability across the board
Training

• Classes have been offered on BlackBoard 9 since September
• Classes on Learnlink are currently scheduled and being offered through ECIT
• Insight training will be offered this summer
• If your School or Department has special needs for training, just ask
• For Pharos, contact Kim Braxton
Questions
Thank you for coming!