I. 9:00 – 9:30 Fleet Management - Update (James Lewis)

II. 9:30 – 10:00 ServiceNow - Update (Susan Roy)

III. 10:00 – 10:30 Web Central Retirement – Update (Julienne VanDerZiel)
Fleet Management

AIC Briefing
Jun 10, 2016
James Lewis
Agenda

• Definitions
• Goals
• Challenges
• Fleet Management Tools
• Current Projects
  – Defining Standards
  – Compliance Reports
  – Fleet Compliance
• Timeline
• Statistics
• Questions?
Definitions

Fleet Management and Compliance

• Fleet – University-owned desktop and laptops (faculty, staff, classrooms, student labs, research labs), printers, mobile devices
• Management – tools and processes
• Compliance – best practices and standards to meet ISO, UT System, and other policy requirements

Lifecycle, Imaging and Deployment

• Lifecycle – acquisition, reassignment and retirement of IT devices
• Imaging – imaging and software package creation and delivery
• Deployment - provisioning/deprovisioning and delivery to end users
Goals

• Effective and efficient management of the fleet
• Turn policies into best practices
• Make best practices available to the UT IT community
• Develop and implement standard processes that can be applied in all units on campus
• Parity between Mac and Windows management and compliance
• Continuous improvement in the management and compliance of the fleet
Challenges

• Staff – recruitment and retention of qualified staff
• Fleet – age, lack of funding for replacement systems, individualization, “in scope” systems is a moving target
• Tools - limitations, cost, federation
• Policy Interpretation – multiple overlapping policies, some gray areas
• Lack of Mandate - different standards and rules defined for each group, non-standard systems, asset management practices
Fleet Management Tools

Systems Management

- System Center Configuration Manager (SCCM)
- Advanced Group Policy Management (AGPM)
- HEAT LANrev (formerly Absolute Manage)

Imaging and Deployment

- SCCM Operating System Deployment (OSD) – Windows imaging
- Microsoft Deployment Tool (MDT) – Windows imaging (legacy)
- Deploy Studio - Mac imaging

The investigation of other tools (JAMF Casper, etc) is currently on hold due to resource constraints and near term priorities. Recent improvements in the HEAT LANrev product, as well as knowledge of the vendor roadmap, are allowing for near parity of Mac management, to Windows management products.
Projects – Defining Standards

Minimum Security Profile for Supported Systems

IT Device Naming Convention
Minimum Computer Standards and Recommended Models
Operating System Standards
Encryption Standards
Account and Directory Standards
Security Policies
  University Warning Banner
  File Sharing and SSH
  Securing Unattended Devices (screensaver)
  Firewall Configuration
IT Staff Administrative Accounts
End User Administrative Accounts
OS and Application Patch Management
System Logs
System Management Tools
Remote Access
Virus and Malware Protection
Backups
Projects – Defining Standards

Security Profile for Printers

Standard Desktop Support Processes
- Encryption procedure
- UTBackup installation procedure
- End User Admin Account provisioning procedure

Imaging and Deployment
- Standardized processes for provisioning/deprovisioning users and systems
- Imaging assembly line
Projects – Compliance Reports

Architecture and Data

• New HEAT LANrev inventory server feeding data to Splunk
• Integrations with DEFINE (via CLAIM)
• Incomplete and conflicting data between LANrev and DEFINE
• Manual assignment of IT devices to support group

Fleet Compliance Reports

• CSU Compliance Report
• Compliance Report for Individual Systems
• Longitudinal Report on a CSU Compliance Posture
<table>
<thead>
<tr>
<th>Global: Fleet Compliance Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>UT Tag</td>
</tr>
<tr>
<td>ACTS-994329</td>
</tr>
<tr>
<td>Search Range</td>
</tr>
<tr>
<td>All time</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crashplan - Days since Last Activity</th>
<th>Crashplan - Days since Last Backup</th>
<th>Crashplan - Billable GB</th>
<th>Crashplan - Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Days</td>
<td>0 Days</td>
<td>223 GB</td>
<td>UTBackup</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sourcefire - Number of Detections Last 30d</th>
<th>Sourcefire - Days since Last Product Update</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Threats Detected</td>
<td>4 Days</td>
</tr>
</tbody>
</table>

2016-06-06 08:19:33

AbMan - Encryption Method

Mac OS X FileVault 2

AbMan - Encryption Status

Encrypted

AbMan - Current Logged In User

lewisjj

AbMan - Domain vs Local User

Domain

AbMan - User Is Admin

No

AbMan - Firewall Enabled

Yes

AbMan - Remote Login (OSX)

No

AbMan - Computer OU Path

austin.utexas.edu\Departments\LA\LA-Units\ITS\LA-ITS-Computers-Unmanaged
### Global Fleet Compliance Overview

**CSU Level Fleet Compliance**

#### Compliance Departments

<table>
<thead>
<tr>
<th>Department</th>
<th>Submit</th>
</tr>
</thead>
<tbody>
<tr>
<td>K: GOVT</td>
<td></td>
</tr>
</tbody>
</table>

#### Total Registered Clients

- **Total Registered Clients**: 122

#### Clients Checked In: Last 3 Days

- **Check In Rate**: 77.05%

#### Clients Checked In: 30+ Days Ago

- **Missing Clients**: 0

---

#### Compliance Report - Systems Assigned to Compliance Unit

<table>
<thead>
<tr>
<th>ComputerName</th>
<th>AD_MachineOUPath</th>
<th>ComputerOSVersion</th>
<th>ComputerManufacturer</th>
<th>ComputerModel</th>
<th>DiskEncryptionProductName</th>
<th>DiskEncryptionStatus</th>
<th>CurrentLoginUsername</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>LADLA84751MID</td>
<td>austin.utexas.edu/Departments/LA/LA-Units/OLA/LA-OLA-Computers-Unmanaged/OLA-OLA-Computers-Encrypted</td>
<td>CS X 10.9.5</td>
<td>Apple Inc.</td>
<td>iMac14,2</td>
<td>Mac OS X FileVault 2</td>
<td>Volumes fully encrypted and unlocked</td>
<td>N/A</td>
<td>Br</td>
</tr>
<tr>
<td>LAGOV95946M</td>
<td>N/A</td>
<td>CS X 10.11.5</td>
<td>Apple Inc.</td>
<td>MacBookAir4,1</td>
<td>Mac OS X FileVault 2</td>
<td>Volumes fully encrypted and unlocked</td>
<td>ttc897</td>
<td>Lc</td>
</tr>
<tr>
<td>LAGOV94662MID</td>
<td>N/A</td>
<td>CS X 10.9.5</td>
<td>Apple Inc.</td>
<td>iMac9,1</td>
<td>N/A</td>
<td>N/A</td>
<td>Guest</td>
<td>Br</td>
</tr>
<tr>
<td>GOVT894310</td>
<td>N/A</td>
<td>CS X 10.10.5</td>
<td>Apple Inc.</td>
<td>iMac14.2</td>
<td>Mac OS X FileVault 2</td>
<td>Volumes fully encrypted and unlocked</td>
<td>gji69</td>
<td>Lc</td>
</tr>
<tr>
<td>LAGOV98329M</td>
<td>N/A</td>
<td>CS X 10.9.5</td>
<td>Apple Inc.</td>
<td>MacBookAir6,1</td>
<td>Mac OS X FileVault 2</td>
<td>Volumes fully encrypted and unlocked</td>
<td>nv23825</td>
<td>Lc</td>
</tr>
<tr>
<td>GDVT871404</td>
<td>austin.utexas.edu/Departments/LA/LA-Units/OLA/LA-OLA-Computers-Unmanaged</td>
<td>Windows 8.1 64 Bit Enterprise</td>
<td>Dell Inc.</td>
<td>OptiPlex Q00</td>
<td>BitLocker Drive Encryption Driver</td>
<td>Drive=U; ProtectionStatus=The volume is fully encrypted and the encryption key for the volume is not available in the clear on the hard disk</td>
<td>N/A</td>
<td>Br</td>
</tr>
<tr>
<td>LADLA827267WN</td>
<td>austin.utexas.edu/Departments/LA/LA-Units/OLA/LA-OLA-Computers-Managed</td>
<td>Windows 7 64 Bit Enterprise</td>
<td>Dell Inc.</td>
<td>Latitude E5440</td>
<td>BitLocker Drive Encryption Driver</td>
<td>Drive=C; ProtectionStatus=The volume is fully encrypted and the encryption key for the volume is not available in the clear on the hard disk</td>
<td>AUSTINb0376</td>
<td>Lc</td>
</tr>
</tbody>
</table>
Projects - Fleet Compliance

Targeted Compliance: Old Operating Systems

Focus on upgrading the oldest operating systems, by targeting systems with old OSes by unit or group. Systems will be reimaged, re provisioned, and given the full compliance treatment.

Remediation will be performed by the Fleet Lifecycle assembly line.

Individual Remediation

Desktop Support Specialists will evaluate end user systems using fleet management tools whenever they are providing one-on-one support to an end user.

Non-impactful compliance tasks will be performed during the support session. Impactful compliance tasks will be referred to the Fleet Lifecycle assembly line for remediation.

Full Unit Remediation

The Fleet Remediation team with project management oversight, will target specific units and do a full evaluation of that unit’s systems using fleet management tools and on-site evaluations.

Systems will be recommended for replacement, remediated onsite, or referred to the Fleet Lifecycle assembly line.

Targeted Compliance: Non-Compliant Services

Focus on remediation of specific non-compliant or insecure services that affect multiple systems across the fleet. Examples include disabling SSH, or turning off file sharing.

Automated by Fleet Management team, with assistance by Desktop Support Specialists as required.

Maintain Compliance

Maintain fleet to approved current operating system and patch releases.

Automated by Fleet Management team, with assistance by Desktop Support Specialists when required.
Projects - Fleet Compliance

Automated Remediation

• Policy parity
  – Active Directory GPOs (Windows)
  – HEAT LANrev configuration profiles and compliance packages (Macs)

• OS version and core application patches
  – SCCM for Windows
  – HEAT LANrev for Windows/Macs

• Least privilege for desktop support staff
  – Active Directory restructure to reduce number of systems to which desktop support staff have access (approximately 1,000 per DSS)
  – Local Administrator Password Solution (LAPS) (Windows), HEAT LANrev regular scheduled change of IT support staff admin password (Mac)
Projects - Fleet Compliance

Onsite Remediation

• HEAT LANrev agent installation
• Operating System upgrades
• Encryption
• UTBackup Configuration
• End User Admin Account (provision or demotion)
# Timeline

<table>
<thead>
<tr>
<th>Project</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Security Profile for Supported Systems</td>
<td>75%</td>
</tr>
<tr>
<td>Printer Security Standards</td>
<td>15%</td>
</tr>
<tr>
<td>Desktop Support Processes</td>
<td>60%</td>
</tr>
<tr>
<td>Imaging and Deployment Processes (User Provisioning/Assembly Line)</td>
<td>50%</td>
</tr>
<tr>
<td>Compliance Reports</td>
<td>80%</td>
</tr>
<tr>
<td>Policy Parity (Active Directory GPOs/LANRev)</td>
<td>70%</td>
</tr>
<tr>
<td>Onsite Remediation Processes</td>
<td>70%</td>
</tr>
</tbody>
</table>

- Community feedback on standards and processes: Summer 2016
- Internal pilot testing (compliance reports/policy parity): Fall 2016
- Distributed pilot testing (compliance reports/policy parity): Spring 2017
## Statistics

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
</table>
| Staff                                                | 5 dedicated FTE positions (2 filled)  
3 partial FTE positions (3 filled)                     |
| Managed Systems (combined ATS/MITS fleet)            | ~9,000 systems               |
| Managed Systems (OS)                                 | ~4,000 Mac systems  
~5,000 Windows systems                               |
| Managed Printers (ATS/MITS fleet)                    | 800 printers/MFPs            |
Questions?
UT ServiceNow Update
Go-Live – CERN Approach

How: 1st Extend Wide, 2nd Drill Deep

- Phase 1: Cover a wide area fast with a simple unified ‘horizontal’ standard solution
- Phase 2: Add more sophistication and ‘vertical’ customizations

300 services

One single Req and Inc process

6/16/16
Go-Live Schedule

- ITS Service Desk live for knowledge June 6, 2016
- Early adopter for incident management June 20, 2016
  - Bob Gloyd’s team
  - Go/no-go decision on June 16
  - No email integration
  - Internal team use only
- July 19, 2016 first major go-live
- Backup date July 28, 2016
- HR and Facilities go-live TBD
What is Included in July

- **Self-Service**
  - Catalog, services, request items (simple and workflow)
  - Knowledge
  - Ticket status

- **Incident**

- **Configuration management for participating CSUs**

- **Reporting and metrics**

- **All emails, unconverted web forms and phone numbers remain the same**
What is not Included in July

• What it does not include
  • TRAC
    • Uncovering additional requirements
    • Not enough time to complete work
  • Surveys
    • Approximately 30-days after go-live
  • IT Change Management, Problem Management
  • All request items fully work-flowed
    • Project was scoped for 10 key items in each catalog
  • Every UT Service
Current Activities

• Meeting with Site Champions
  • Go-live readiness
  • Collecting feedback
  • Correlating results

• Reviewing service overviews with Service Owners

• Evaluating backlog
  • Ensuring no blockers
  • Evaluating remaining points and resources

• Training

• Coordinating announcements and Site Champion toolkit with ASMP
Migration
(Present – Go-Live)

- **May 16, 2016**: Finalize acceptance criteria for Footprints migrations.
- **May 25, 2016**: Incident ticket show me session for IT held in Avaya Auditorium (POB 2.302) at 1:00pm. All IT groups migrating to ServiceNow invited. Livestream link [here](#).
- **May 30-June 19, 2016**: Conduct individual Footprints migration acceptance meetings with each of the Footprints site champions. Conduct user acceptance testing for services. In progress.
- **May 31-June 30, 2016**: Attend training sessions. ServiceNow training sign-up is now live! Please visit the [ServiceNow Training Schedule](#) to view available training and links for registration.
- **June 12, 2016**: ServiceNow team will complete the service overviews and share with service owners to edit as needed.
- **June 16, 2016-July 18**: Code freeze and bug fixes.
- **July 19**: Go-live.
Migration
(Go-Live– 1 Year)

Go-live – 90 days: Close out Footprints tickets.
Approximate dates: July - October: Most Footprints groups are planned for the July window. We are still finalizing timelines with groups such as TRecs, Facilities Service Center, CBO and HR.
Not migrating ticket history or ticket data to ServiceNow.
During this 90-day period you have the opportunity to close out or manually transition tickets to ServiceNow (90-day period based upon last group moving from Footprints).

91 days – 1 year after Go-live: Footprints in read-only mode
Approximate dates: October 2016 - July 2017
Ensure that everyone has an archive and reporting strategy; data will not be migrated to ServiceNow.

One Year after Go-live: Power down Footprints.
Approximate date: September 2017
Training

**ServiceNow Fulfiller Basics Training**
**Audience:** Tier I-III central and departmental IT staff (Includes ITS Only training)
5/31, 6/1, 6/21, 6/27

**ServiceNow Fulfiller Basics Training for Service Desk**
**Audience:** UT Service Desk staff (formerly ITS Help Desk)
6/16, 6/24, 6/27

**ServiceNow Knowledge Deep Dive**
**Audience:** Knowledge Base Owners, Knowledge Managers, Service Owners
6/2, 6/17, 6/29

**ServiceNow Reporting Deep Dive**
**Audience:** Departmental Managers, Team Leads, Service Owners
6/15, 6/17, 6/30

**ServiceNow Service Catalog & Configuration Management Deep Dive**
**Audience:** Service Owners
6/20, 6/24, 6/29

Training details and registration is [here](#).