I. 8:00-8:15 Bandwidth Allocation - Update (William Green)

II. 8:15-8:30 Network Report Card - Update (William Green)

IV. 8:30-8:45 WebSpace Retirement Communication Plan - Update (Dave Moss)

V. 8:45-9:15 Shared Services Update and Input (Achim Welter, Heather Hanna)
Bandwidth (Update)

Summary

• Overall consumption increased 26% (spring 2012 to spring 2013)
• Wireless exceeded wired consumption for the first time
• External connectivity was upgraded (equipment/circuits) to keep pace
• Additional information in the Campus Network Report
  https://utexas.box.com/s/pj962e2l842w2toec2vv
• Progress on ISP strategy for student provisioning:
  o 50% of students have additional bandwidth (purchased or allocated by role)
  o 33% of students have purchased a tier this semester, 62% increase YTD

2013 Bandwidth Allocations

• Default allocation received:

<table>
<thead>
<tr>
<th>Role</th>
<th>Allocation/Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>500 MB</td>
</tr>
<tr>
<td>Faculty</td>
<td>150 GB</td>
</tr>
<tr>
<td>Staff (full time)</td>
<td>25 GB</td>
</tr>
<tr>
<td>Affiliates, Fellowships, Visitors</td>
<td>25 GB</td>
</tr>
<tr>
<td>Staff (part time)</td>
<td>5 GB</td>
</tr>
</tbody>
</table>

• Purchase options:

<table>
<thead>
<tr>
<th>Options</th>
<th>Allocation/Week</th>
<th>Cost/Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>5GB</td>
<td>$4.25</td>
</tr>
<tr>
<td>Tier 2</td>
<td>25GB</td>
<td>$7.25</td>
</tr>
<tr>
<td>Tier 3</td>
<td>75GB</td>
<td>$10.50</td>
</tr>
<tr>
<td>Tier 4</td>
<td>150GB</td>
<td>$13.00</td>
</tr>
</tbody>
</table>

Future

• Potential to end default student allocation (little feedback from student leadership)
• High Speed Roadmap approved by AIC and headed for OIT/SITAB:
  o Research network connectivity to 100Gbps over the next 5 years
  o Addition of “Science DMZ”
<table>
<thead>
<tr>
<th>Row Labels</th>
<th>Average Consumption Weekly (weighted)</th>
<th>St Dev</th>
<th>Average Allocation Weekly</th>
<th>Total Consumed by Class</th>
<th>% Consumed by Class</th>
<th>% of Total</th>
<th>In Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faculty</td>
<td>613</td>
<td>645</td>
<td>98,272</td>
<td>30,293,377</td>
<td>1%</td>
<td>5%</td>
<td>2,986</td>
</tr>
<tr>
<td>Other</td>
<td>626</td>
<td>383</td>
<td>2,140</td>
<td>9,389,000</td>
<td>0%</td>
<td>3%</td>
<td>1,899</td>
</tr>
<tr>
<td>Resnet Students</td>
<td>18,487</td>
<td>9,379</td>
<td>41,404</td>
<td>2,293,149,343</td>
<td>74%</td>
<td>12%</td>
<td>7,511</td>
</tr>
<tr>
<td>Staff</td>
<td>682</td>
<td>643</td>
<td>4,709</td>
<td>79,296,720</td>
<td>3%</td>
<td>11%</td>
<td>6,951</td>
</tr>
<tr>
<td>Students (Non Resnet)</td>
<td>1,020</td>
<td>901</td>
<td>6,415</td>
<td>673,909,066</td>
<td>22%</td>
<td>68%</td>
<td>41,925</td>
</tr>
<tr>
<td>Graduate/Professional</td>
<td>1,189</td>
<td>1,036</td>
<td>6,091</td>
<td>216,932,674</td>
<td>7%</td>
<td>18%</td>
<td>11,181</td>
</tr>
<tr>
<td>Default Allocation</td>
<td>953</td>
<td>829</td>
<td>5,686</td>
<td>86,826,846</td>
<td>3%</td>
<td>10%</td>
<td>6,091</td>
</tr>
<tr>
<td>No Purchase</td>
<td>466</td>
<td>432</td>
<td>500</td>
<td>29,713,622</td>
<td>1%</td>
<td>7%</td>
<td>4,370</td>
</tr>
<tr>
<td>Tier 1</td>
<td>1,399</td>
<td>1,159</td>
<td>5,500</td>
<td>21,403,820</td>
<td>1%</td>
<td>2%</td>
<td>928</td>
</tr>
<tr>
<td>Tier 2</td>
<td>2,617</td>
<td>2,328</td>
<td>25,500</td>
<td>26,588,560</td>
<td>1%</td>
<td>1%</td>
<td>616</td>
</tr>
<tr>
<td>Tier 3</td>
<td>2,835</td>
<td>3,128</td>
<td>50,500</td>
<td>5,796,463</td>
<td>0%</td>
<td>0%</td>
<td>123</td>
</tr>
<tr>
<td>Tier 4</td>
<td>3,774</td>
<td>4,205</td>
<td>100,500</td>
<td>3,324,382</td>
<td>0%</td>
<td>0%</td>
<td>54</td>
</tr>
<tr>
<td>Other Allocation</td>
<td>1,448</td>
<td>1,282</td>
<td>6,575</td>
<td>130,105,828</td>
<td>4%</td>
<td>8%</td>
<td>5,090</td>
</tr>
<tr>
<td>No Purchase</td>
<td>1,180</td>
<td>1,055</td>
<td>5,121</td>
<td>97,935,401</td>
<td>3%</td>
<td>8%</td>
<td>4,680</td>
</tr>
<tr>
<td>Tier 1</td>
<td>3,067</td>
<td>2,439</td>
<td>8,804</td>
<td>10,983,465</td>
<td>0%</td>
<td>0%</td>
<td>199</td>
</tr>
<tr>
<td>Tier 2</td>
<td>5,487</td>
<td>4,925</td>
<td>29,565</td>
<td>17,353,822</td>
<td>1%</td>
<td>0%</td>
<td>176</td>
</tr>
<tr>
<td>Tier 3</td>
<td>7,336</td>
<td>7,246</td>
<td>53,727</td>
<td>2,800,852</td>
<td>0%</td>
<td>0%</td>
<td>22</td>
</tr>
<tr>
<td>Tier 4</td>
<td>4,350</td>
<td>5,346</td>
<td>104,731</td>
<td>1,032,288</td>
<td>0%</td>
<td>0%</td>
<td>13</td>
</tr>
<tr>
<td>Undergraduate</td>
<td>964</td>
<td>857</td>
<td>6,581</td>
<td>455,831,779</td>
<td>15%</td>
<td>50%</td>
<td>30,472</td>
</tr>
<tr>
<td>Default Allocation</td>
<td>930</td>
<td>832</td>
<td>6,655</td>
<td>393,042,464</td>
<td>13%</td>
<td>45%</td>
<td>27,519</td>
</tr>
<tr>
<td>No Purchase</td>
<td>472</td>
<td>448</td>
<td>500</td>
<td>133,337,591</td>
<td>4%</td>
<td>31%</td>
<td>18,857</td>
</tr>
<tr>
<td>Tier 1</td>
<td>1,432</td>
<td>1,228</td>
<td>5,500</td>
<td>97,884,522</td>
<td>3%</td>
<td>7%</td>
<td>4,208</td>
</tr>
<tr>
<td>Tier 2</td>
<td>2,222</td>
<td>2,010</td>
<td>25,500</td>
<td>126,585,043</td>
<td>4%</td>
<td>6%</td>
<td>3,496</td>
</tr>
<tr>
<td>Tier 3</td>
<td>2,342</td>
<td>2,203</td>
<td>50,500</td>
<td>26,196,206</td>
<td>1%</td>
<td>1%</td>
<td>697</td>
</tr>
<tr>
<td>Tier 4</td>
<td>2,175</td>
<td>2,432</td>
<td>100,500</td>
<td>90,093,903</td>
<td>0%</td>
<td>0%</td>
<td>261</td>
</tr>
<tr>
<td>Other Allocation</td>
<td>1,275</td>
<td>1,085</td>
<td>5,891</td>
<td>62,789,315</td>
<td>2%</td>
<td>5%</td>
<td>2,953</td>
</tr>
<tr>
<td>No Purchase</td>
<td>902</td>
<td>797</td>
<td>2,067</td>
<td>35,401,300</td>
<td>1%</td>
<td>4%</td>
<td>2,352</td>
</tr>
<tr>
<td>Tier 1</td>
<td>1,871</td>
<td>1,534</td>
<td>6,596</td>
<td>9,249,188</td>
<td>0%</td>
<td>0%</td>
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</tr>
<tr>
<td>Tier 2</td>
<td>3,244</td>
<td>2,483</td>
<td>26,655</td>
<td>13,755,559</td>
<td>0%</td>
<td>0%</td>
<td>248</td>
</tr>
<tr>
<td>Tier 3</td>
<td>4,364</td>
<td>3,839</td>
<td>51,659</td>
<td>3,259,783</td>
<td>0%</td>
<td>0%</td>
<td>44</td>
</tr>
<tr>
<td>Tier 4</td>
<td>3,881</td>
<td>5,509</td>
<td>101,500</td>
<td>1,123,486</td>
<td>0%</td>
<td>0%</td>
<td>17</td>
</tr>
<tr>
<td>Unknown Status</td>
<td>370</td>
<td>304</td>
<td>1,051</td>
<td>1,144,613</td>
<td>0%</td>
<td>0%</td>
<td>272</td>
</tr>
<tr>
<td>Grand Total</td>
<td>3,315</td>
<td>1,899</td>
<td>14,918</td>
<td>3,086,037,506</td>
<td>100%</td>
<td>100%</td>
<td>61,272</td>
</tr>
</tbody>
</table>
Building Network Report

Background
ITS developed the building network report card to provide objective metrics to IT Governance on the federated operations of the university’s networks, and to enable units to plan and budget for their equipment lifecycles.

Overall
• The weighted average grade across all buildings is 78 (C+).
• 94% of user devices are in buildings with overall passing grades (large buildings doing better).
• Equipment investments recommended:
  - Uplink: $1,700,000
  - Wired: $2,800,000
  - Wireless: $1,200,000
  - Total: $5.7M

• Annualized lifecycle projections (not being met):
  - Uplink: $2,000,000
  - Wired: $1,200,000
  - Wireless: $910,000
  - Total: $4.1M
Component Overview

- **Building uplinks:**
  - Cost to meet requirements/recommendations: $1.7M
  - Buildings not meeting minimum standards are generally small or auxiliary units.
  - 166 devices connect buildings to the campus network. Minimums require dual uplinks, at least 1G in speed, and routing. Recommended age is less than 8 years.

  ![Building Uplinks Chart]

- **Building wired:**
  - Cost to meet requirements/recommendations: $2.8M
  - Minimum performance needs are being met.
  - Equipment is functioning past anticipated lifecycles, but may be limiting performance of higher bandwidth applications and lacks security and automation features.
  - 3,400 network devices connect faculty, student and staff wired equipment. Note: devices not meeting recommendations typically only impact occupants so may continue to be used. 100M is the minimum speed for existing equipment, 1G for new equipment.

  ![Wired Equipment Chart]
• **Building wireless:**
  o Cost to meet requirements/recommendations: $1.2M
  o Most units have not been budgeting for wireless equipment lifecycles. 25% of the equipment will cease to function next year, although ITS continues to work with the vendor to increase support lifespan. Annualized lifecycle unit costs are estimated at $910K presently (growing with AP count). Total annualized unit and central costs are $2.3M.
  o 61% of the equipment needed to meet desired coverage/density/quality levels has been deployed. An additional $6.3M is projected to meet goals.
  o 6,000 wireless access points connect faculty, student and staff wireless devices to building networks. Note: Unlike traditional wired equipment, once a wireless access point is not supported by the vendor it ceases to operate.

![Wireless End Of Support](image)

More on the Tool
• Unit technical support personnel believe the tool has been a valuable for planning and securing funds to upgrade their infrastructure to meet minimums standards. However, many managers are still unaware of its capabilities.
• The tool has reduced the consulting load on ITS Networking engineers.
• Fixes to the tool and its scoring prevented trending comparisons with previous years.
Executive Summary

Information Technology Services (ITS), in conjunction with the Information Security Office (ISO), plan to retire WebSpace, a legacy online file storage and sharing service with less than 1,000 active users (and the top 100 users accounting for 98% of traffic), in May 2014. Retiring WebSpace will include a comprehensive communication plan as well as working directly with users to migrate content to alternatives solutions such as UTBox or Google Drive/Sites. This proposal was endorsed by the IT Architecture & Infrastructure Committee at the October 11, 2013 meeting.

Business Need/Background

Over the past year, several security vulnerabilities were discovered in the application platform used by WebSpace, which were not addressed by the vendor in a timely manner. This required drastic measures by ITS and ISO to protect the university’s sensitive data, causing great inconvenience to users. Confidence is low that when new vulnerabilities are discovered that they will be addressed satisfactorily by the vendor, so moving away from WebSpace helps the university avoid future data loss and further service disruption to users.

Alternatives to WebSpace

Under the auspices of campus IT governance, ITS is asked to re-evaluate major service offerings and look for better solutions. Because of the risks associated with WebSpace, more robust and secure alternatives are now available.

- File Sharing
  - Current faculty and staff are eligible to use the new UTBox cloud based file sharing service for business use. UTBox is approved secure by ISO and offers 25 GB (gigabyte) of storage. Students can use Google Drive (a feature of UTmail accounts) for file sharing, collaboration and storage, which also offers 25 GB of storage.

- Web Publishing Options
  - Account holders using WebSpace for web publishing can use Google Drive and Google Sites associated with UTmail accounts to host web pages. The University Blog Service also provides web publishing using the WordPress platform.

- Green Output
  - Austin Disk is the new default destination for Green Output beginning October 14, 2013.

Communication Plan

- Update on WebSpace service page and no new accounts provisioned.
- Update and “countdown clock” on WebSpace login page.
- Periodic email messages and reminders to all WebSpace account holders regarding the impending retirement and migration plan.
- Comprehensive “how to” documentation and “high touch” support available to WebSpace customers who need assistance with content migration.
- “FYI” session will be scheduled.

For More Information

- Full draft communication plan: https://utexas.box.com/s/yclh1kqyuz6lma92hmf
- UTBox service page: http://www.utexas.edu/its/cloudstorage/
- UTmail service page: http://www.utexas.edu/its/email/
UT Shared Services Plan

October 2013

DRAFT
for Campus Discussion
Implementing shared services and an ERP (Enterprise Resource Planning) solution at UT Austin for Human Resources (HR), Finance, Procurement, and Information Technology (IT) will increase efficiency, create new opportunities for staff, ensure compliance, and yield $30-40M in annual savings.

• New budget reality
  – President Powers’ call for UT to operate more efficiently
  – Opportunity to return focus, resources, and dollars to the core mission

• Current state:
  – Total administrative headcount: ≈ 12,000 employees (≈ 8,500 full-time equivalents (FTEs))
  – Total administrative headcount doing HR, Finance, Procurement, and IT: ≈ 4,500 employees (≈ 2,500 FTEs)
  – Highly decentralized operations with manual processes and administrative systems at end-of-life

• Savings of $30M - $40M annually ($280M – $320M over 10 years) can be realized from a shared services implementation for HR, Finance, Procurement, and IT:
  – Improves operational efficiency with improved quality and consistent service delivery
  – Improves career paths and opportunities for administrative staff
  – Ensures compliance with state and federal regulations (e.g., I-9 processing and other onboarding procedures)

• Realizing the benefits requires investment of $160M – $180M over 10 years:
  – Build new service and reporting capabilities
  – Redesign processes, jobs, and the administrative organization
  – Technology enablement (e.g., ERP, document management, case management, configuration management)
  – Workforce transition (e.g., training)

• The shared services and ERP implementation is expected to pay back in Year 6 and accrue $120M – $140M in net benefits by Year 10.
  – Capture savings and share benefits with Colleges, Schools and Units (CSUs) early in the deployment
Recommendation: Implement shared services over a four year period, beginning in spring 2014.

• Implementation Approach:
  − Launch shared services infrastructure and some services for IT, HR, Finance to prove the concept for the future Shared Services Organization (SSO)
  − Expand Finance, Procurement, and HR/Payroll services concurrent with the new ERP

• Organization and Culture Change:
  − Build a single administrative organization focused on service and performance
  − Nurture and grow a culture of service excellence for administrative activities focused on performance, problem solving and continuous improvement

• Enabling Technology:
  − Replace *DEFINE with a cloud-based ERP solution (Workday)
  − Implement other enabling technologies (e.g., document management, case management, configuration management)

• Governance and Leadership:
  − Establish framework for clear communication, decision-making and issue management
  − Hold shared services accountable for performance to the campus

• Workforce Impact:
  − Total number of reduced positions ≈ 500 (≈4% of the total administrative workforce of ≈ 12,000 or ≈11% of the total administrative workforce of the HR, Finance, Procurement and IT workforce of ≈ 4,500) over 4 years
  − Attrition is expected to account for a significant percentage of the reductions
  − Consider hiring controls to increase opportunity for internal transfer positions
  − Create new career path options

• Funding/Participation:
  − After successful proof of concept, requires full campus participation to achieve maximum benefit
  − Capture savings and share benefits with Colleges, Schools, and Units (CSUs) early in the deployment
  − Use a ‘public good’ funding/chargeback model that requires all to pay (e.g., public school funding model)
  − In defining the funding/chargeback model, fringe benefits will be carefully considered so as to fairly allocate costs and eliminate any double-counting
The shared services and ERP implementation is expected to payback in Year 6 and accrue net benefits of $120M – $140M by Year 10.
In addition to financial benefits, a shared services organization will also bring benefits to UT Austin through reduced risk, increased compliance, measurable service outcomes, and improved staff opportunities.

1. **Campus Community Benefits**
   - Improved quality
   - Faster transaction execution time
   - Continuity and consistency of service
   - Responsiveness

2. **Employee Opportunities**
   - Expanded potential for career development
   - More autonomy
   - High-performance, metrics-driven culture
   - Balance workload to cover peaks

3. **Risk Reduction and Compliance Benefits**
   - Greater transparency
   - Clear accountability
   - Simplified audits
   - Increased policy enforcement and visibility
Savings Capture and Reallocation Model

1. Central Investment
2. Increased Productivity
3. Lower Operating Cost
4. Captured Savings Pool
5. Reallocation of Benefits
6. Repay Investment

Shared Services and ERP

Chargeback/Transfer

President / Provost

Colleges, Schools, & Units

Shared Services Organization
We recommend that the administrative effort retained in the Colleges, Schools, and Units (CSUs) be consolidated under a CSU administration group to promote consistent, high quality service and achieve greater efficiency.

Shifting Roles driving the Organizational Change

- Day-to-day transaction-specific issues are processed through workflow and the contact center
- Ongoing issues escalated to the CSU business officer will be handled by the assigned customer relationship manager in the SSO
- Both the department administrators and the CSU administrators will interact with self-service capabilities, the SSO and central functions
- The department administrators will provide local level departmental support
## IT Service Definitions

The following are the definitions for the IT Services in scope for Shared Services.

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>End User Services</strong></td>
<td>End user services (EUS) provide end-users with the necessary equipment and technical support to perform their duties and access UT Austin information resources.</td>
</tr>
<tr>
<td><strong>Software as a Service</strong></td>
<td>Software as a Service (SaaS) provides UT community members with managed applications that can be used to perform their day to day activities.</td>
</tr>
<tr>
<td><strong>Application Management</strong></td>
<td>Application Management provides the development, maintenance, patching, and upgrade of customer applications within the UT environment.</td>
</tr>
<tr>
<td><strong>Platform as a Service</strong></td>
<td>Platform as a service (PaaS) provides virtualized development and run time platforms in a private or public cloud setting including the underlying infrastructure services.</td>
</tr>
<tr>
<td><strong>Infrastructure as a Service</strong></td>
<td>Infrastructure as a Service (IaaS) provides physical (server, storage, backup) and/or virtual infrastructure (CPU, memory, storage, network) available on an as-needed basis.</td>
</tr>
<tr>
<td><strong>Data Center</strong></td>
<td>Data center services provide physical facilities and services (e.g., cooling) for servers and optional management and administration of physical servers.</td>
</tr>
<tr>
<td><strong>Network</strong></td>
<td>Network data services provide users with wired and wireless connectivity to resources and between facilities throughout campus and over the internet in accordance to policy.</td>
</tr>
<tr>
<td><strong>Voice</strong></td>
<td>Network voice services provide users with voice-related services on and beyond the campus by leveraging the network and voice infrastructure on campus.</td>
</tr>
</tbody>
</table>
### IT Services for inclusion in the Service Catalog for Shared Services

<table>
<thead>
<tr>
<th>IT</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>End User Services</td>
<td>End User Services</td>
<td></td>
</tr>
<tr>
<td>Application Management</td>
<td>Software as a Service</td>
<td>Application Management</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>Platform as a Service</td>
<td>Infrastructure as a Service</td>
</tr>
<tr>
<td>Data Center</td>
<td>Network</td>
<td>Voice</td>
</tr>
</tbody>
</table>

- **Application Management** will be provided for the following types of applications
  - Selected Academic Applications
  - Administrative Applications (to be considered after ERP is implemented)
  - Limited Research Applications
The following scenarios provide examples of decision paths taken for investment of different sizes.

### Investment Below Advisory Council Threshold:

1. **SS IT Functional Committee**
   - Discuss, review, and propose enhancement to the DRUPAL platform with expected investment below threshold

2. **Central IT**
   - Ensure policy compliance of proposed enhancement

3. **SS Advisory Council**
   - Approve enhancement

### Investment Above Advisory Council Threshold:

1. **SS IT Functional Committee**
   - Discuss, review, and propose major upgrade of DRUPAL platform with expected investment above threshold

2. **Central IT**
   - Ensure policy compliance of proposed enhancement

3. **SS Advisory Council**
   - Discuss and propose enhancement

4. **Joint Steering Committee**
   - Discuss and propose enhancement

5. **SITAB**
   - Approve enhancement

---

**Proposal: Enhancement to the DRUPAL platform**

**DRAFT for Campus Discussion**
The Campus Dialogue is designed to solicit UT Austin feedback and perspectives in response to recommendations resulting from the Shared Services Planning phase.

- The Shared Services Project Team will conduct a series of forums or "dialogue sessions" across the UT Austin campus community.
- The themes that emerge during the campus dialogue phase will be reflected in the recommendations and become part of the final Shared Services report.
- The final recommendations will be shared with President Powers for his review and consideration.

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- The themes that emerge during the campus dialogue phase will be reflected in the recommendations and become part of the final Shared Services report.
- The final recommendations will be shared with President Powers for his review and consideration.
This scenario depicts the activities of the SSO, supplier, and staff member in a typical Accounts Payable process with a Purchase Order (PO).

1. Staff member in a CSU or department makes a purchase.
2. Staff member receives a good or service from supplier and records receipt in finance system.
3. Supplier sends invoice directly to SSO.
4. SSO receives, scans, tags and verifies supplier invoice.
5. SSO uses invoice to create voucher in the finance system.
6. SSO matches voucher, receipt, and PO in finance system.
7. SSO resolves issues or exceptions directly with staff member or CSU admin.
8. SSO schedules payment and pays voucher in finance system.

This scenario depicts the activities of the SSO, supplier, and staff member in a typical Accounts Payable process with a Purchase Order (PO).