Project Title: Mobile Device Management.

Team: Pam Horne, Jolene King, Jim Lehman, Marcus Lill, Terry Schroeder, David Shaw

Purpose: To determine if we can establish a more holistic approach to managing and supporting mobile devices that access Purdue data and information.

Hypothesis: We anticipate there would be several advantages from providing a model of supporting mobile devices. These advantages would be in areas such as: customer service, security, efficiency, effectiveness, and financial gain.

Date: August 30, 2013

Summary
The original task for this team was to focus on a support model for departmentally owned mobile devices. The concern was around how we would be able to provide technical support, at what level and how that translates into personally owned devices that are used for business purposes. As we began to investigate the issue, it became apparent that any solution that did not consider both personally owned devices as well as those owned by the University would simply fall short.

In an effort to address the most pressing issue of how to support mobile devices the committee decided to recommend the adoption of the AITL Unified Level of Service as the ‘Minimum Level of Support for Mobile Devices’. While this addresses one issue around support, primarily connectivity, many other continue such as, application support, licensing, reimbursement and the management of University data. The mobile device management (MDM) and mobile application management (MAM) field has experienced a significant amount of growth and change over the past few years. Solutions are changing on a regular basis For this reason it is recommended that an official workgroup be established of stakeholders such as Customer Support, Security and AITL to look at solutions to address these additional areas.

While it is true that these devices can and do present some level of security risk, our evaluation and resulting recommendations are primarily focused on the University’s ability to manage and support the devices. The security risks these devices present will vary across campus depending upon how departments intend to use them. We do however recommend some basic protections that would be recommended for all mobile device users.

Recommendations
1) Our first recommendation is for a standard level of support. The Purdue University Academic IT Leader Forum Group put together a document that details what consistent levels of “support” to provide. They are calling this “Unified Level of Service” (See Attachment A). This support definition would include:
   • What levels of service would be provided for each area
   • How to appropriately connect to University resources
   • What are University supported applications
   • What are University supported devices
2) While a standard level of support will ease some of the issues around these devices, other issues remain and must be addressed. These other issues include managing applications on the devices, deploying applications to devices, enforcing minimum standards to protect University systems and data and the ability to share devices. These issues are not easily addressable without third-party tools commonly referred to as Mobile Device Management (MDM) or Mobile Application Management (MAM) solutions. Purdue has a current agreement with McAfee that includes a MDM product. Work has already begun to establish a pilot/evaluation of this product however it was intended for a limited audience. Several groups are now interested in participating, including Physical Facilities, ITSP and the Customer Service group within ITaP. Early indications are that this product is not flexible enough to handle a deployment that would empower different departments to effectively manage their own deployment of mobile devices so the committee recommends establishing a pilot project to look at the broader issue of mobile device management, develop requirements for solutions, evaluate current offerings in the field and recommend a path to move forward.

3) While the security of these devices was outside of the scope of our team, we felt strongly that a certain level of control was needed and have the following recommendations for basic control levels that would be for any device that would access Purdue University data whether University owned or personally owned. Our team feels that controls should be in two categories; standard and departmental. While both University owned and personally owned devices should be managed, we recommend the tighter controls on the University owned device to ensure appropriate use of the device as well as facilitate consistent support.

- **Standard controls** which would become the minimum standard for all devices: 4-digit pin, a wipe of the system after 10 attempts and jailbreak or root detection.

- **Departmental controls for personal devices** would be those enforced at the Departmental level which go beyond the minimum standard and might include: Stronger password requirements, timeout thresholds, blocking sync capabilities with iCloud and desktop backups.

Once an MDM product has been chosen. It is recommended that a team evaluate the granularity of controls to make further recommendations into a mobile device management standard.

Other areas to consider:
Our team has further determined that there are other important areas and impacts to consider when we think of mobile technology. Some of these may be addressed in a current effort by the University Comptroller to revise the mobile technology policy. We believe that the pilot-project going forward should work closely with the Comptroller to ensure consistency with policy.

- Management of applications in support of the business, especially those purchased with University funds
- How mobile devices will be used in teaching and classroom space
- Reimbursement for applications, service and or purchase of devices
Supporting Materials and References

Article:

Memo prepared by OVPIT leadership dated July 9, 2012, “Interested Parties Investigating Potential Support of Departmentally Owned Table Devices.” (Attached)

Technology allowance payments webpage:
http://www.itap.purdue.edu/telephone/services/staff/cellular.cfm

Electronic Device and Services Procedural Guidelines:
http://www.purdue.edu/business/payroll/Policies_Procedures/techallowance.html

Electronic Device and Services Policy:
http://www.purdue.edu/policies/informationtechnology/viia3.html

AIT Unified Level of Service - Minimum Level of Support for Mobile Devices v1.4.pdf
Unified Level of Service (“ULS”)
for a Minimum Level of Support for Mobile Devices
provided by Purdue University Academic IT
to Purdue University Faculty, Staff & Graduate Staff

Effective Date: March 1, 2013

Document Owner:  Purdue University Academic IT Leaders, WL Campus

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Approval

(The Academic IT Organizations listed below have agreed to this Unified Level of Service.)

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1. Unified Level of Service Overview

This document represents a Unified Level of Service ("ULS") provided by Purdue Academic IT to Purdue Faculty, Staff and Graduate Staff for:

**Minimum Level of Support for Mobile Devices**

For the purposes of this document, a *mobile device* is defined as a portable computer that connects to Purdue wireless networks and/or email servers.

This Unified Level of Service remains valid until superseded by a revised level of service mutually endorsed by the Purdue Academic IT Leaders.

This document outlines the parameters of the unified service as it is mutually understood by the Purdue Academic IT Leaders. This unified service level does not supersede current processes and procedures unless explicitly stated herein.

2. Goals & Objectives

The purpose of this Unified Level of Service is to ensure that the proper elements and commitments are in place for Purdue Academic IT areas to provide consistent IT service support and delivery to faculty and graduate staff in their respective Colleges and Schools.

The goal of this Unified Level of Service is to obtain mutual agreement for a unified level of IT support throughout all Purdue Academic IT areas.

The objectives of this agreement are to:

- Provide clear reference to service ownership, accountability, roles and/or responsibilities.
- Present a clear, concise and measurable description of service provision to the customer.
- Match perceptions of expected service provision with actual service support & delivery.

3. Stakeholders

The following Service Provider(s) and Customer(s) will be used as the basis for this Unified Level of Service and represent the primary stakeholders associated with it:

**Service Provider(s):** Purdue Academic IT (“Provider”)

**Customer(s):** Purdue Faculty and Graduate Staff associated with a respective College or School where support is offered by Academic IT (“Customer”)

Unified Level of Service - Purdue University Academic IT
4. Periodic Review

This Unified Level of Service is valid from the Effective Date outlined herein and is valid until further notice. This Unified Level of Service should be reviewed at a minimum once per fiscal year; however, in lieu of a review during any period specified, the current Unified Level of Service will remain in effect.

The Academic IT Leaders (“Document Owner”) are responsible for facilitating ongoing reviews of this document. Contents of this document may be amended as required, provided mutual agreement is obtained from the primary stakeholders and communicated to all affected parties. The Document Owner will incorporate all subsequent revisions and obtain mutual agreements / approvals as required.

5. Unified Service Level Detail

The following detailed service parameters are the responsibility of Academic IT in the ongoing support of this Unified Level of Service:

5.1. Service Scope

The following Services are covered by this Unified Level of Service:

- **Configure Purdue Network settings** for mobile devices used by actively affiliated Purdue Faculty, Staff and Graduate Staff.
  - Personal consultation with IT staff to configure Purdue Wi-Fi (PAL)
  - Knowledgebase referral if the user does not desire a consultation.

- **Configure Purdue Email settings** for mobile devices used by actively affiliated Purdue Faculty, Staff and Graduate Staff.
  - Personal consultation with IT staff to configure Purdue Email.
  - Knowledgebase referral if the user does not desire a consultation.

- **Provide Purdue Career Account troubleshooting** for mobile devices used by actively affiliated Purdue Faculty, Staff and Graduate Staff.
  - Personal consultation with IT staff to troubleshoot career account problems.
  - Knowledgebase referral if the user does not desire a consultation.

- **Provide Hardware Support** and/or troubleshooting for Purdue-owned mobile devices that are currently covered under a warranty.
  - For hardware support, users should first check with their local IT staff for a personal consultation to troubleshoot Purdue-owned mobile device hardware. IT staff may contact the vendor for hardware support or recommend that the user contact the vendor directly for warranty service.
5.2. Customer Requirements

Customer responsibilities and/or requirements in support of this Unified Level of Service include:

- The owner of a personally owned mobile device must be present at all times during consultations and must agree that IT staff members are not liable for damages or problems that may arise from the consultation. Academic IT staff will not “take possession” of a personally owned mobile device, but will hold and interact with the device for purposes of configuration.
- Customers understand that if local IT staff are unable to make a connection after reasonable attempts, customers may be referred to other areas, or to the vendor or manufacturer, for additional assistance.
- In some cases, hardware troubleshooting for Purdue-owned mobile devices must be directly handled by the vendor working with the user.
- All shipping costs will be the responsibility of the device owner.

5.3. Service Provider Requirements

Service Provider responsibilities and/or requirements in support of this Unified Level of Service include:

- Academic IT staff will make reasonable attempts to research and identify configuration settings for a given mobile device. Successful configuration of every mobile device make and model cannot be guaranteed.
- Academic IT staff will offer to schedule to meet with customers to reasonably attempt to configure the Purdue wireless network and Purdue email accounts.
- During a consultation, Academic IT staff must clearly communicate to the customer what changes they are making to the device.
- Academic IT staff will assist with account modifications, lockouts and password resets.

5.4. Service Assumptions

Assumptions related to in-scope services and/or components include:

- Changes to services will be communicated and documented to all stakeholders.
6. Service Management

Effective support of in-scope services is a result of maintaining consistent service levels. The following section provides relevant details on service availability and/or related components.

6.1. Service Availability

General coverage parameters specific to the service(s) covered in this Unified Level of Service are as follows:

- In-Person Support: 8:00 A.M. to 5:00 P.M. Monday – Friday. Location will be specified by the local Academic IT group.
  - NOTE: Times and locations may vary according to the operational hours, physical facilities and policies of the local Academic IT area. Users should contact their local Academic IT area for more information about specific locations where support can be obtained.
- Telephone Support: 8:00 A.M. to 5:00 P.M. Monday – Friday
  - NOTE: Times may vary according to operational hours of the local Academic IT area.
- Email Support: Monitored 8:00 A.M. to 5:00 P.M. Monday – Friday
  - NOTE: Emails received outside of office hours will be collected, however no action can be guaranteed until the next working day.