Name of Proposal: University-wide Information Technology Directory Service

Academic Division/Area: Provost / Information Technology Services

Priority # 1

Overview – An Information Technology Directory Service is the central and foundational piece to providing secure technology services. A Directory is the first technology “step” to granting a user access to University technology services that require a login or authentication of some type and is the authoritative directory database identifying the role a person at URI has and what type of service and data access is allowed. Services such as Wireless, Sakai, e-Mail, e-Campus and many other systems or services in use today at URI, all require a Directory to authenticate if a user can have access and other secure information to grant that access.

Having an accurate, central authentication Directory Service with daily automatic up-to-date information while continuing to provide distributed IT staff the authority to assign roles and permissions to those they support will increase efficiencies for faculty, staff and students. More importantly, this will help to better secure IT services to the University’s data and its constituents, whether the service be with “cloud” companies or systems supported by University staff.

1. A. Please briefly describe the process and timeline as to how these new funding priorities were developed or derived?

For various reasons, the University has developed multiple Directory Service databases both within Information Technology Services (ITS) and outside of ITS. One of the recommendations of the IT Assessment conducted by BerryDunn was to improve technology services through updating central services that allow for faster and better integration of IT services. Between the three Directory Services provided by ITS, there are an additional 9 or maintained by both Academic and Administrative departments outside of ITS.

This project also supports and/or complete Action Items in the IT Strategic Plan within Goals 1, 2, 4, 5 and 6.
B. What processes or incentives have been considered to encourage reallocation from within the division/unit?

The request is to fund Phase 1 of a 3-phase 5 year project. The first phase is critical to best identify cost, time and service efficiency options for URI by engaging an outside consultant to review all University IT directory services and all associated licensing options. The outcome of this project is to propose the most cost effective and efficient single consolidated structure for all of URI, with consideration for our Academic and IT Strategic Plans. The resulting Directory Service structure is expected to properly leverage licensing agreement(s) to maximize Vendor support and service options for all University members.

This first phase project is also intended to be sure that the University is upholding its licensing obligations to both software vendors and Federal or State regulations (such as HIPAA), so that any inconsistencies can be addressed pro-actively rather than through legal action against the University.

In addition, from initial analysis, two issues have been uncovered. First, there is an opportunity for University-wide cost savings by properly licensing a service that is available to all University members rather than individual departments doing the same or a version of it multiple times. In many cases, centralizing authentication services also gives opportunity to save on the cost of some desktop software (which will require some internal process changes to make use of this savings). Secondly, URI may not have been properly licensed for some of our IT Directory services and access. We expect that annual licensing costs will increase to bring us in compliance with software agreements. This increase will also bring the benefits explained above as well as IT staff being able to obtain a fuller range of service support from our Directory vendor.

2. Please identify what is being requested, associated costs, possibility of alternative (partial) funding source(s) and/or any match funding, and the rationale for each requested item. Use as much space as needed. Please indicate also any possibility of alternative or match funding.

ITS is requesting $500,000 for the first phase of this 5 year project. The steps will include the following:

- Phase 1 - Engage Consultant to review Microsoft Licensing / Current Directory Structure and to provide recommendation as to single authentication directory.
  - Identify and map current Directories, required services and the applications supported by these services.
  - Provide outline and plan for additional services, such as reduced-cost purchasing of desktop and laptop operating systems, Microsoft Office, or other products through consolidated servicing.
  - Determine licensing costs, pricing options and requirements for re-engineered internal processes needed to utilize benefits for faculty, researchers, staff, and students.
  - Outline options for single logon, single sign-on and other centralization goals.
- Determine IT Security modification requirements.
- Phase 2 - Consolidate ITS Supported Services to single authentication directory and setup re-engineered processes.
  - Implement IT Security enhancements in support of consolidated services.
- Phase 3 - Implement one login / one password to supported services
  - This will not be Single Sign-On initially, but instead single login id with one password
    - Single-sign on requires additional software to automatically log an individual into multiple applications with one entry of a userid/password.
  - Roll out to additional colleges and administrative areas as the benefits are realized and budgets are available.

In addition, this project will allow URI to deliver additional capabilities such as increased security through Identity Access Management (IAM). It will also provide the ability to implement Single Sign-On (SSO) and Portal access, items that have been identified as requirements in the IT Strategic Plan and the CITICCN surveys. Internally to ITS, it will reduce the largest component of calls to the ITS Service Desk (formerly known as Help Desk). These additional services, IAM, SSO and Portal, will require additional expenditures and will be proposed after a single directory structure is in place.

3. Is this request strategic and how does the request support or relate to URI’s Strategic Academic Plan?

Yes, this strategic request supports both the Academic and IT Strategic Plans by positioning technology services, both ITS and outside ITS. Some examples are:
  - Increase efficiencies of delivery of IT services both centrally and locally
    - Currently, departments outside of ITS are manually maintaining multiple versions of directory databases to facilitate services for their faculty and staff. In each case, these databases are manually maintained outside of the automatic data-feed processes established through a central directory service for all departments.
  - Improve secure access to University IT applications and data.
  - Simplify the on-boarding process of new IT services.
  - Simplify the on-boarding process of new faculty, researchers, staff and students to the University.
  - Improve options for new products and services, particularly cloud-services, which require accurate central directory services.
    - Currently some new services requested by faculty or students, such as with Sakai add-ons, are not available because of the complex labyrinth of directories at URI.
    - Will foster innovation of IT services by eliminating a fundamental barrier to baseline and best-of-breed technologies.
4. **How does the request provide additional benefit to URI? (Enrollment, student services, condition of campus, fundraising/development, public relations, etc.)**

In surveys conducted by Faculty Senates CITICCN committee, BerryDunn during the IT Assessment, and the Administration Management Review Committee, all constituents feel burdened and frustrated by maintaining multiple userids and passwords to multiple applications. An accurate, timely and central Directory Service allows the University IT group to provide single authentication (userid/password) and the possibility of a single-signon facility.

5. **Please provide any data (including benchmark data) relative to the request OR a statement as to why no benchmark data is available.**

   - URI’s acquisition of DataSpark includes health care data that requires URI meet HIPAA guidelines for securing this data. The University of Massachusetts at Amherst was recently fined $650,000 by the US Government for failing to meet HIPAA security standards after a breach of data.
     - It appears the amount of health care records obtained through the DataSpark acquisition exceeds the number of records UMass had, meaning URI has a greater risk.
   - Currently we know of at least 9 additional “private” directories across URI. Each represents a duplication of services that could be obtained from a central source.
   - Of all the calls to the ITS Help Desk, 72.3% are for password resets because the University’s faculty, staff and students have multiple accounts to create and remember.

6. **Please complete and enclose the cost summary excel document from the Budget Office.**