

## UITS Strategic Plan

### Annual Review and Progress Report

October 2015

University Information Technology Services (UITS) finalized and made widely available our five year strategic plan in October 2014. In this plan, we list five high level goals that establish how our organization will support the institutional mission and the evolving needs of our constituents. These goals also guide identification, development, and implementation of initiatives that collectively, will result in execution of our strategic plan. Below are our five goals and related initiatives that UITS completed this year.

#### GOAL 1

Pursue IT solutions that empower members of our community to successfully, productively, and securely engage in all of their institutional roles as individuals.

- **Office 365:** UITS, in cooperation with the IT Partners Governance Group, successfully migrated 10,000 mailboxes from the central Exchange service to Office 365. Our community now has access to the integrated suite of services and software, including Exchange 2013, Skype for Business, SharePoint 2013, OneDrive, and Office Online. This enhanced set of communication and collaboration tools is well aligned towards individuals and their ability to personally leverage technology.
- **Web conferencing solutions:** Aware that individuals leverage web conferencing and online collaboration to support their many roles and activities, UITS provided two distinct web conferencing solutions for our community:
  - [Cisco WebEX](#) is available as part of an expanded classroom support contract funded by the Center for Excellence in Teaching and Learning, School of Business, School of Engineering, Stamford campus, and UITS.
  - [Skype for Business](#) (formerly Lync) is available as part of the University enterprise agreement with Microsoft that provides a Skype/Lync environment with the Microsoft Office 365 suite of tools.
- **Mobile applications:** UITS launched a revamped version of the University's mobile application myUConn. The new myUConn app, powered by Kurogo, focuses on enhancing the mobile experience. In addition to many of the popular features of the original app, this iteration includes a new maintenance module that enables the community to notify University Facilities of maintenance and repair issues in dorms and around campus.

- **IT Support:** UITS restructured the Help Center in the fall 2014 semester to include a mix of HuskyTech student employees and full-time staff. This was done so that all members of our community, regardless of affiliation, would have consistent support options and, more importantly, a high-quality customer experience. We are also able to contribute to the University's educational mission by providing the HuskyTech student employees with the opportunity to work alongside full-time staff and gain real-world experience that will contribute to their career development.

## GOAL 2

Pursue IT solutions under the guidance of our academic partners that facilitate effective research, enrich teaching and learning, and enhance institutional competitiveness for extramural funding.

### Research

- **High Performance Computing:** With funding provided by the Academic Plan, grant funds, Technology Park funds, and UITS operating funds (total investment to date \$1.7M), UITS deployed a centrally managed High Performance Computing (HPC) infrastructure for institutional researchers. This involved installing 1,872 CPU cores of HPC with high bandwidth Infiniband connectivity and both solid state node based and traditional cluster based storage. The resources became operable in September and represent more than a 60% increase compared to the capacity of the existing Hornet cluster.
- **100G Connection:** CEN/UConn turned up the 100G circuit to Internet2 in Hartford. UCHC is also connected to CEN at 100G and able to use the Internet2 circuit. This high-speed connection will facilitate research and collaboration and the pursuit of extramural funding.

### Teaching and learning

- **Hi-tech classroom lifecycle plan:** The AudioVisual Technology group developed a fully defined, resourced, and applied multi-year life cycle for hi-tech classrooms. By creating a standard for equipment and resources in the room, we provide the predictable, high-quality experience that instructors and students require and expect.
- **New configuration for hi-tech classroom computers:** Based on feedback from our community, UITS developed a new computer image that will allow instructors to login with their NetID and password and to securely access personal file storage as well as key virtual and desktop applications.
- **New web conferencing and collaboration tool for instructors:** [Blackboard Collaborate](#) tightly integrates with our learning management system, HuskyCT. In addition to

enabling instructors to initiate, record, archive, and play back session, it also includes capabilities that better simulate a face-to-face class experience.

- **Computer Programming Desktops:** UITS worked with School of Engineering faculty to provide virtual desktops for students taking the newly-designed class CSE4095: System Programming. This resource provides students with the platforms necessary to safely perform advanced hands-on programming techniques in a sandbox environment, an important component to the learning process.
- **Textbook Adoption Program (Hero):** UITS, in conjunction with the UConn Bookstore and a third party vendor, laid the groundwork for a low-cost communication platform for educational content. The technology Hero gives faculty access to previous materials used at UConn, and eventually, the service will be expanded to provide access to other institutions' materials as well as available open source materials.

### GOAL 3

Pursue IT solutions in concert with functional partners that support the business of the University and increase operational effectiveness.

- **Workflow services, IBM Forms Experience Builder (FEB):** UITS expanded its enterprise workflow services by offering web form development with IBM Forms Experience Builder (FEB), a tool designed specifically to develop and deploy data-centric web form applications. With FEB, the Applications and Technology Solutions (ATS) group can expedite the development process. FEB enabled UITS to partner with other campus units and produce:
  - New Travel Workflow
  - HR GA Benefit Selection
  - ISSS Registration and Payment
  - Non-degree and First Summer Registration Systems
- **Web-based application:** UITS worked closely with UConn Recreation to develop HuskyTime, a streamlined web-based application that facilitates student timesheet entry and the approval process.
- **Student Administration:** In partnership with our community and in response to their feedback, UITS created new user interfaces and added self-service capabilities, such as plan of study workflow, that improve the user experience by enhancing functionality and efficiency.
- **Recruiting Solutions:** To assist university partners with the hiring and position management process, UITS collaborated with UConn Police and the Department of Mathematics to create custom system interfaces that streamline the hiring process and

with the Human Resources, Payroll, and the Budget offices to provide better options for efficient and accurate reporting.

#### GOAL 4

Pursue IT solutions that assist technical partners at all UConn locations to successfully provide for the specific needs of their respective communities.

- **Relationship models:** UITS provides our technical partners with the specific support and resources they need through either a Business-to-Business (B2B) or Business-to-Customer (B2C) relationship.
  - **B2B:** To cost effectively contribute to institutional best practices, UITS gives our partners access to the technology resources and tools that we use.
    - SDLC tools: UITS adopted the Atlassian product suite to facilitate our development and operations lifecycle and comply with the industry standard process that ensures the robust and efficient delivery of technology solutions.
    - Microsoft System Center Configuration Manager (SCCM): This tool provides a central place for IT professionals to deploy new software, make configuration changes, and automate security patches, ensuring that computers remain up-to-date, consistent, and secure.
    - Active Directory Delegation: UITS has made Active Directory for authentication and management of services and computers available. This method of delegating access provides standardization and consistency across units, which improves security and availability of services.
  - **B2C:** UITS provides customers with services that can be delivered centrally, such as file services, web server hosting, and Active Directory, which enables local IT to focus on school-specific services. Fine Arts, as a B2C customer, migrated central services to UITS this year.

#### GOAL 5

Pursue IT solutions that can best be provided centrally and deliver them securely, efficiently, and robustly at scale.

- **Services:** UITS performed updates and upgrades to the following systems and services to ensure secure and efficient performance:
  - Aurora Web Content Management
  - HuskyCT
  - Hyperion
  - Quali Financial
  - Student Administration
  - Recruiting Solutions

- **High availability:** UITS has made progress on establishing its HA architecture:
  - UITS has made data center and network improvements to enable HA capabilities from our secondary data site in HBL and has deployed a second instances of HuskyCT and university authentication systems at this alternate location. If an outage occurs at the MSB data center, UITS can now quickly restore the learning management system and core infrastructure systems.
  - An updated and upgraded Virtual Private Network (VPN) service was deployed that is fully supported, consistent with contemporary approaches, configured for high-availability, and re-architected to double its network bandwidth.
  - UITS diversified its infrastructure by extending the University's authentication and email routing systems into the cloud. Cloud hosting provides the University with service resiliency such that localized outages do not prevent availability of these critical university services.
- **Disaster recovery:** UITS has established an external contract to provide infrastructure and operating resources for key university applications. We recently conducted a successful test of all disaster recovery supported applications at the IBM facility in Sterling Forest, NY, that validated our ability to restore and operate key university operations for this location in the event of a campus emergency.
- **Mainframe relocation:** The University's mainframe system continues to provide service for important university administrative processes. UITS relocated the applications that run on the mainframe to a hosted service provider, who provides service resiliency and disaster recovery. The result of this work is the elimination of the risk of critical university processes running solely on a single system.
- **Storage upgrades:** UITS made significant investments in the University's data storage infrastructure, providing a refresh to the Storage Area Network (SAN) and its ancillary systems. These key systems provide the redundancy and performance required to host the University's most important institutional data.
- **Active Directory migrations:** UITS worked with departmental IT professionals to migrate the computers of Center for Undergraduate Education, Facilities Operations and Building Services, Fine Arts, and Purchasing to the University's centrally-supported Active Directory. These moves consolidate institutional resources and allow for a consistent approach to management and security.