

ELECTRONIC FILE STORAGE

Project Information

Project Team Leads: Laurie Hafner Dahms
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Project Manager: David Bronder

TeamDynamix Project Number: 241112

Project Overview

Centralize standard electronic file storage services. Design a robust, sustainable, and ubiquitous model for central file storage services to accommodate greater demand and meet the diverse needs of the campus. Migrate all files and relevant data from duplicative services to the central service; retire or repurpose redundant services.

This project will review and revise existing and planned central storage solutions for maximum campus impact for these services already in the pipeline. The project will next examine current data and storage services and requirements on campus in a broader sense, identify what is working well and where there are service gaps, and design and evaluate consolidated, best-fit storage services to meet most campus data needs while improving efficiency, collaboration and integration with other services.

Project Purpose and Benefits to Campus

Data is the IT lifeblood of campus. The ever-growing quantity of data, the need to provide reliable and protected storage of that data and the need for appropriate levels of access to much of that data via multiple platforms and interfaces present continuously increasing challenges in providing storage services to meet those needs. Historically, some of those challenges have been met by uncoordinated point solutions, resulting in duplicated efforts and inefficient use of campus resources, while creating isolated service islands and leaving some storage needs not adequately met or shoehorned into other services.

Successful execution of this project should provide ubiquitous storage services to meet most of the campus storage needs in a more efficient and reliable way, while still allowing for point solutions and alternate storage management models where appropriate. This may include expansion and enhancement of existing services, design and deployment of new services or retirement of some

existing services. The availability and capabilities of the resulting portfolio of services would be well-defined and documented to facilitate customer understanding and access to those services.

Project Scope Statement

- Individual file (Home Drives) storage
 - Shared departmental storage
 - Instructional storage needs
 - High-performance storage for video, imaging, and related
 - Research Data Storage, including but not limited to RDSS
 - OneDrive – individual/shared cloud storage
 - Backup and archive services, including desktop backups
 - In a second phase, perform a high-level Inventory of existing data storage services and requirements and classifications of data on campus, in conjunction with the inventory efforts of the Data Centers and Servers and the HPC projects
 - Adopt and revise existing storage cost models and communicate to campus advantages of using a consistent model for cost and price for storage services
 - Assess current central and distributed file storage services and determine how best to:
 - Accommodate all campus-wide storage needs, from commodity to edge.
 - Identify opportunities for lowering overall service delivery costs.
 - Develop tiers of service with appropriate cost recovery, and central funding as necessary.
 - Promote service adoption and provide end user consultation for choosing a storage service
 - Propose guidelines and policy to match storage consumers with appropriate storage services
 - Create a priority and schedule for migrating files/data to central storage services
 - Develop use cases to capture unique storage needs
 - Identify data that should be excluded from the project scope due to specific requirements that cannot be assured by a common service
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High-Level Requirements

- Buy-in from campus constituents and political will from campus administration
- Address data stewardship
- Funding for common storage services defined by the project
- Successful inventory of campus data needs, storage services and service gaps

High-Level Risks

- No expected cost savings (operational savings will be consumed by capital expenditures or accounted for under the Data Centers and Servers project; focus will be on efficiencies and service adoption)
- Lack of buy-in and resistance to cultural change from campus constituents
- Unpredictable growth of data
- Ability to use grant funding toward storage services (including lifecycle of data) instead of toward capital assets (storage hardware)

Assumptions and Constraints

- No redundant basic file services on campus (e.g. Home drives, student workspace, etc.)
- Consumers of storage services will see improvements to existing services
- Disruptions will be kept to a minimum and be well communicated to campus
- Looking for 80% solutions with a clear policy for exceptions and point solutions
- Ongoing availability of capital funds for implementation, continuous growth and support
- Successful marketing of the services to campus constituents
- Leveraging infrastructure resources expected as an outcome of the Data Centers and Servers project
- Unix UID/GID project completion
- Dependencies on critical technology infrastructure such as the campus data network, identity management, active directory, and data center consolidation will be sufficiently addressed. Some investment in infrastructure will be necessary.
- Time commitment to complete a high-level storage inventory as part of the second phase of the project

Project Governance

In addition to any governance structures provided by the Steering Committee and Program Office, the following committee will be established:

A Service Definition Advisory Committee will provide input on definition of new services and revision/evaluation of existing services based on results from the inventory process and their own insights. The committee will include representatives from the following areas:

- System administrators and storage service providers
- Storage service consumers

Anticipated Cost Savings Categories

While no substantial net cost savings are expected overall, there may be some per-unit savings in moving to common storage services in the categories of asset retirement, staffing and licensing. Benefits to campus are anticipated from efficiencies and shared service models.

Sub Projects

Evaluate and revise existing and “in the pipe” central storage service offerings to better align them with campus storage needs. These services include:

- Departmental/Unit Shared Drives (Files@Iowa)
- Home Drives
- OneDrive for Business (Office 365)
- Low Cost File Service
- Research Data Storage Service (RDSS)
- Large Scale Storage (LSS)

Inventory (in conjunction with the Data Centers and Servers and the HPC projects) covering these areas:

- Equipment
- Services
- End-user/consumer interviews

Service-specific sub-projects to be determined based on inventory results, possibly including:

- File services
- Backups / long-term archives
- Data center storage
- High-capacity/high-performance (e.g. HPC, research, video editing)

Communications and service marketing:

- Web site update
- Uniform descriptions of services

OneIT@Iowa

Project Charter



Preliminary Milestones

Milestone	Due Date
Outline communications plan	June 30, 2015
Provide feedback to existing and "in the pipe" central storage solutions	August 31, 2015
Revision of existing storage services	September 30, 2015
Completion of inventory (equipment, services)	November 30, 2015
Completion of inventory (end-user/consumer interviews)	December 31, 2015
Develop use cases and identify gaps	December 31, 2015
Design new storage services to fill gaps and perform at the 80% campus level	August 1, 2016
Implementation of new storage services	December 31, 2016

Project Team

Laurie Hafner Dahms, Project Lead

Mark Wilson, Project Lead

David Bronder, Project Manager

Joe Hetrick, Project Team

Mark Weber, Project Team

Multiple staff identified in Stakeholder Registry, Advisory Team, Sub-project Team as needed

Stakeholders

Refer to Stakeholder Registry

Potential Implementation Cost

To Be Determined during project planning

Key Dates

Target Start Date: June 1, 2015

Target Close-Out Date TBD at project plan

Charter Ratification Date 06/01/2015