



University of California Curation Center



University of New Mexico University Libraries

**Memorandum of Understanding:
UC3/UNM University Library Hosting for
*ONEShare***

This agreement is made between **University of California Curation Center (UC3)** and **University of New Mexico University Libraries (UL)**.

This Memorandum of Understanding (MOU) covers the provisioning and operation of servers and data storage on the UL's server and storage infrastructure.

This agreement is one of several partnerships that UL is developing with Academic Affairs to better support the academic and research mission of UNM, including its external collaborations.

The agreement remains valid beginning November 1, 2012 until October 31, 2014. The agreement will be reviewed annually in October of every year. This document may evolve significantly during the agreement period and should be considered a 'living document.' Changes will be incorporated within this document, provided they are mutually endorsed by the two parties and managed through the change management process defined in this document.

Name

Title

Signature

Date

Name

Title

Signature

Date

Service Description

ONEShare is a public repository for sharing tabular research data.

ONEShare contributors use the DataUp Excel add-in or web application (hosted on Microsoft Azure) to prepare curated spreadsheets, which are then submitted to the UC3 Merritt repository, operating on UC3 servers in Oakland, CA. Merritt recognizes content associated with ONEShare, sends it to a Merritt storage node, and registers it with a DataONE member node. The Merritt storage node and DataONE member node are both installed and operating on UL virtual servers. External DataONE coordinating nodes will periodically harvest metadata about newly acquired content from the UL member node. Content consumers discover content of interest using the coordinating node ONEMercury interface. Result sets include actionable links that resolve to content served up by the UL member node.

Access to the ONEShare servers at UNM therefore falls into one of three categories:

1. New content is submitted to ONEShare only from the UC3 Merritt system, running on a known set of IP addresses at the UC3 data center in Oakland.
2. Content metadata is periodically harvested by external DataONE coordinating nodes, running on a known set of IP addresses, currently at UNM, UC Santa Barbara, and Oak Ridge National Laboratory.
3. Content consumers retrieve content using external web clients, with arbitrary IP addresses.

Non-administrative access to the UL virtual servers is via standard HTTP and HTTPS protocols on ports 80 and 443.

Scope of Agreement

This agreement is limited to the provisioning and operation of server and storage resources by the UL as specified in this document.

Service Hours

- This service is expected to be available continually (24/7/365) during normal operations.
- An established maintenance window on Wednesday mornings between the hours of 5:30am to 7:30am MT is used by the UL for routine system maintenance as required. UC3 will be notified **two weeks in advance** if they may be impacted during the maintenance window.

Functionality

UC3 will be provided:

- Three virtual servers corresponding to production, integration testing, and development instances of ONEShare.
- Network access to the virtual servers via http, https, ftp, ftps, ssh, **icmp**, and other protocols as required for ONEShare operations within reasonable security considerations.

- The production virtual server will be provisioned with 1 TB of storage; the testing and development servers will be provisioned with 100 GB of storage respectively.
- Shell accounts for designated UC3 staff to all three servers, with access via SSH.

Service Availability

- The UL is expected to maintain a minimum of 99.9% uptime and availability outside of the established UL maintenance window for all components that are controlled by and the responsibility of the UL.
- The UL and UC3 do not have control over the networking environment of the University of New Mexico. Issues regarding the network or related authentication and authorization problems are outside this MOU, and should be dealt with by contacting the UNM IT helpdesk at +1 (505) 277-5757.

Reliability

- During the service period of any given year, unplanned outages that are the responsibility of the UL to resolve will not exceed a total of 8.75 hours.
- UL will configure the underlying VMware hypervisor for the ONEShare virtual servers to monitor target operating system availability and trigger automatic reprovisioning if necessary.
- UC3 may install application level monitors on the virtual servers to trigger automatic restart of the ONEShare application if necessary.
- UC3 may implement HTTP-based monitoring of the ONEShare application from external servers.

Service Performance

- The UL will respond within 24 hours to UC3 administrative service requests received during normal UNM business hours, Monday through Friday, 8:00am to 5:00pm MT.
- The UL will make “best efforts” to respond as soon as practical to afterhours DataONE administrative service requests.

Service Continuity

- The UL will provide necessary backup and recovery services at the VMware ESX level and at the ONEShare application level as directed by UC3.

Security

- The UL will provide VMware ESX security.
- All hardware supporting this service requires a level of a high level of security. Hardware level access and support will be restricted to designated UL employees.
- ONEShare is a publicly available service and freely accessible.

- UC3 takes responsibility for all security beyond the baseline VMware ESX level of systems security.

Customer Support

- Administration of services will be performed during normal UNM business hours, Monday through Friday between 8:00am to 5:00pm MT.
- Special administrative service hours may be negotiated by mutual agreement.
- During normal UNM business hours, UC3 will channel all support requests through Basecamp, <http://www.basecamp.com/>.
- In the case Basecamp is not available, not appropriate, or there is a more urgent response needed, DataONE will email a message to unmlit@unm.edu.
- In the case this is inappropriate, UC3 will contact the UL Virtual Service Desk (VSD) at +1 (505) 277-9100.
- For issues related to the UNM network or UNM authentication and authorization, DataONE will contact the UNM IT helpdesk at +1 (505) 277-5757.

Contact Points and Escalation

The UC3 contacts are:

- Patricia Cruse, UC3 director, Patricia.Cruse@ucop.edu
- John Kunze, UC3 associate director, John.Kunze@ucop.edu
- Stephen Abrams, UC3 associate director, Stephen.Abrams@ucop.edu
- Carly Strasser, ONEShare service manager, Carly.Strasser@ucop.edu
- David Loy, senior developer (Merritt storage node), David.Loy@ucop.edu
- Mark Reyes, developer (DataONE member node), Mark.Reyes@ucop.edu

The UL contacts are:

- Dale Hendrickson, Director LIT, UL
- Jamin Ragle, Systems Administrator, UL

Change Management

Changes to this service and this document will be reviewed and approved by each organization.

Responsibilities

The UL will be responsible for:

- Hardware maintenance for physical servers and storage systems
- Underlying storage systems management and maintenance
- Configuration, administration and otherwise managing VMware vSphere Infrastructure to facilitate the use of UC3 virtual machines by UC3 staff.

UC3 will be responsible for:

- Installation of ONEShare-specific software.
- Monitoring of key system resources, primarily storage utilization.
- Systems security at the ONEShare *application* level.

Responsibilities of UNM IT (outside the control of UC3 and the UL):

- Implementation and management of firewall hardware.
- Network connectivity, management, and security.
- Identity management of UNM-specific accounts (NetID/AD).

Charging (if applicable)

- The UL will not require payment from UC3 for the hosting service.

Service Reporting and Reviewing

Additional meetings will be scheduled as required.

Glossary

Amendments