DSS Release 1.0

General Availability: 2018-02-01

Overview

LRZ Data Science Storage (DSS) and the DSSWeb Self Service Portal 1.0 is the result of 6 months of hard work and dedication of a small software development and systems engineering team at LRZ, supported by many of the great teams from all over LRZ. We are very proud of all the functions we've already managed to put into DSS in this short time. However, we know that this is just the beginning and are already excited to substantially enhance and improve it in future releases.

New Features

DSS System Layer

- TUM DSS system (1PB) ready for operation
- GridFTP/Globus gateway ready for operation
- NFS gateways ready for operation
- Direct integration on SuperMUC Login Nodes
- Direct integration on MPP2 Login Nodes
- Direct integration on MPP3 Login and Compute Nodes

DSSWeb Self Service Portal

- Container Management
  - Show Containers using the API or CLI
  - Create Containers using the API or CLI
  - Automated Backup or Archive of Containers
- Access Management
  - Show Containers using the API or CLI
  - Create Container Access Invitations using the API or CLI
  - Change Container Access Invitations using the API or CLI
  - Remove Container Access Invitations using the API or CLI
  - Optional Intra-Container User Quotas
- NFS Exports
  - Show Container NFS Exports using the API or CLI
- GridFTP/Globus
  - “One click” solution for setting up DSS GridFTP/Globus usage with LRZ/TUM/LMU account
  - Unified Shibboleth login to Globus and DSS GridFTP endpoint using LRZ/TUM/LMU account

Resolved Issues

None.

Known Issues and Limitations

- Create/Update/Delete of container NFS Exports is currently only possible via a service request on the LRZ Servicedesk.
- Restore of backedup/archived data is currently only possible via a service request on the LRZ Servicedesk.
- Globus Sharing (world wide sharing of DSS data with arbitrary people) is currently only possible via a service request on the LRZ Servicedesk.

Credits

We'd like to send out special thanks to:

- Our first DSS customers from TUM for sharing the DSS vision so very early in the project and placing their trust in us, that we are able to pull this whole thing off.
- The LRZ Identity Management Team for always being so open-minded and for developing all the fancy new features in LRZ SIM on which DSSWeb is based.
• The LRZ Network Team for the countless hours of mind puzzling discussions on how to route DSS traffic through our data center in an optimal way and how to design the future LRZ HPC core network layer.
• The LRZ Backup- and Archive Team for giving shelter to the PB's of backup and archive data, generated by DSS in the future.
• The LRZ Distributed Resource Team for setting up our GridFTP/Globus gateway.
• The LRZ HPC Infrastructure Teams for integrating DSS on their systems.
• And last but not least, the LRZ Management for providing us the freedom, trust and resources to work on our vision for the LRZ Data Science Storage.