



IDA Storage Service

CSC – IT Center for Science Ltd

Background

- Finnish National Research Data initiative 2011-2014 set by the Ministry of Education and Culture
 - Development of research data process: building a culture
 - Facilitating availability and re-use of research data
 - Advancing research data preservation
 - Example outcomes:
 - IDA data storage service – in production
 - Kata metadata catalogue – in limited beta

IDA Storage Service

- Storage service for Finnish HE institutions and Academy of Finland projects
- Intended for storing research data that has value also after the research project has ended.
- Free of charge
- Secure and user-friendly storage service for data and the associated metadata.
- The integrity of the data to be stored is secured by managing copies and their integrity.
- Service owner is the Ministry of Education and Culture.

Storage Space

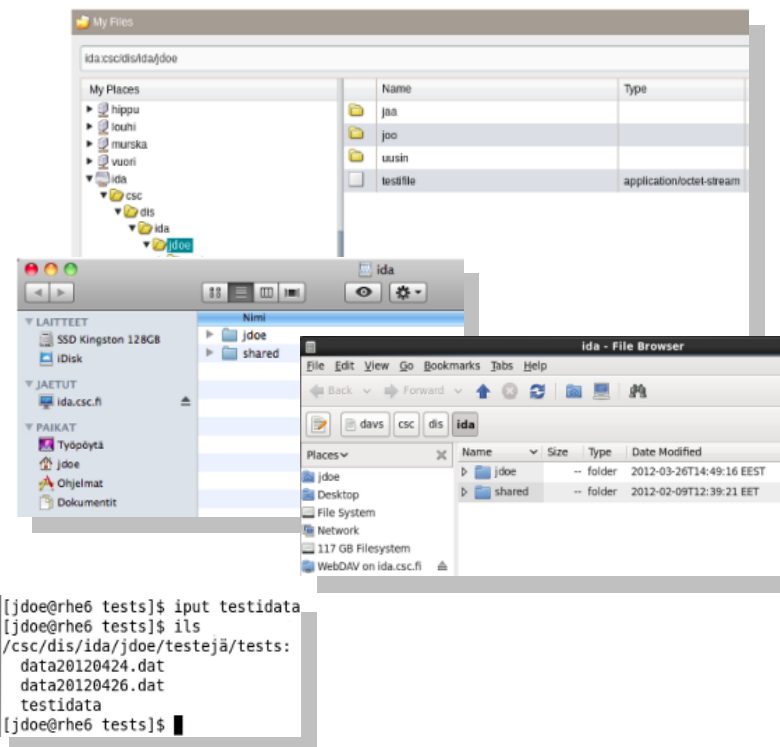
- Storage quotas for universities, some examples:
 - Aalto University 480 TB
 - Helsinki University 1260 TB
 - University of Eastern Finland 240 TB
 - University of Jyväskylä 210 TB
- The universities decide themselves, to which projects they allocate the quotas.
- More information about getting quota for your project at:
 - <https://www.tdata.fi/idan-kayttajaksi>

Policies

- Facilitating availability and re-use of research data:
 - Users are obligated to describe their data
 - Rights, licensing etc
 - PIDs generated automatically
 - Users shall provide the metadata for completed data to the open metadata catalogue, Kata
- Metadata is visible in open catalogue but the project itself decides if the data is open or not


User Interfaces


- Browser
- Network directory
- Command line
















```
[jdoe@rhe6 tests]$ iput testdata
[jdoe@rhe6 tests]$ ils
/csc/dis/ida/jdoe/testejä/tests:
data20120424.dat
data20120426.dat
testdata
[jdoe@rhe6 tests]$
```

Browser







 Advanced Search

My Places	Name	Type	Size
▶  hippu	<input type="checkbox"/> data-1.dat	application/octet-stream	213.00 kB
▶  vuori	<input type="checkbox"/> data-2.dat	application/octet-stream	652.00 kB
▶  sisu	<input type="checkbox"/> data-3.dat	application/octet-stream	133.00 kB
▶  taito			
▼  ida			
▼  ida			
▼  csc			
▼  projectx			
▼  irsynctest			
▶  koe			
▶  published			
▼  saved			

Browser


<https://sui.csc.fi/my-files/ida/ida/csc/projectx/saved>

My Places

- hippu
- vuori
- sisu
- taito
- ida
 - ida
 - csc
 - projectx
 - irsyncstest
 - koe
 - published
 - saved

Name
<input type="checkbox"/> data-1.dat
<input type="checkbox"/> data-2.dat
<input checked="" type="checkbox"/> data-3.dat

Download

Pack

Unpack

Copy

Cut

Clear Selection

Select All

Delete

Rename

Copy Metadata

Manage Metadata

Paste Metadata

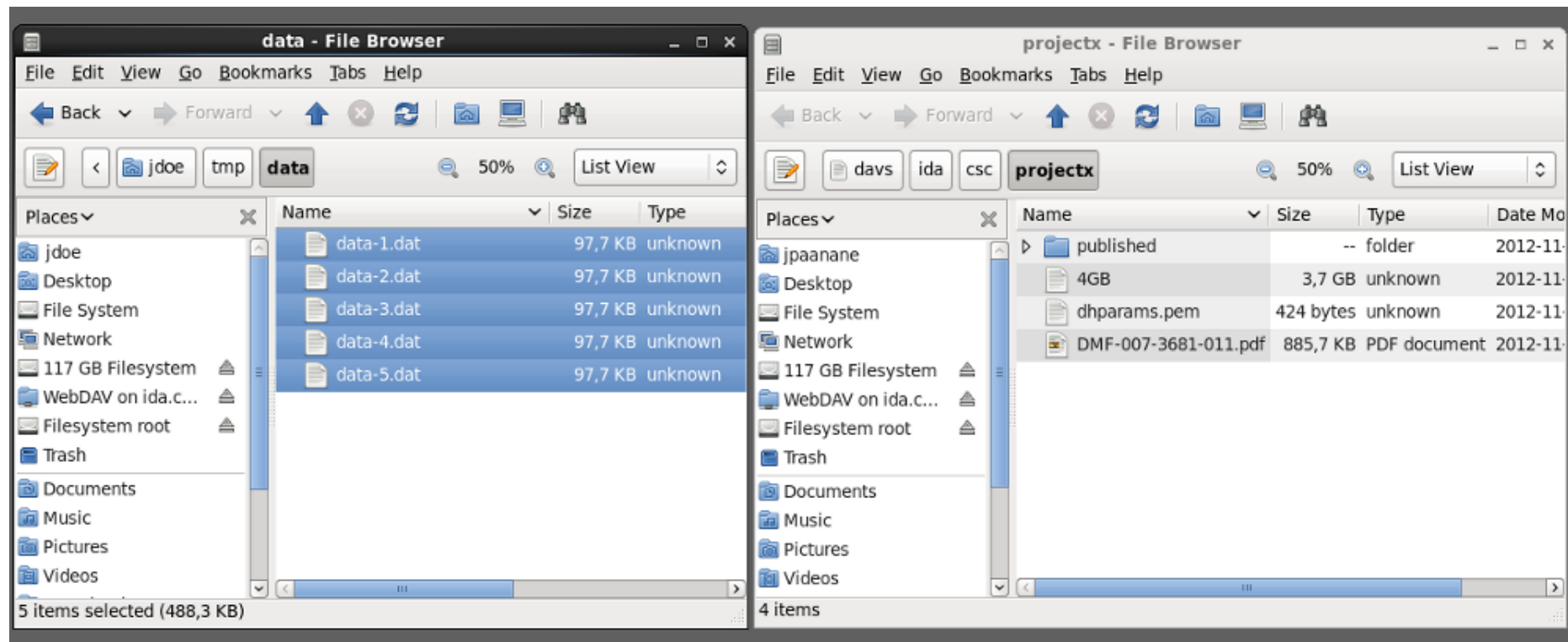
Properties

Search for...

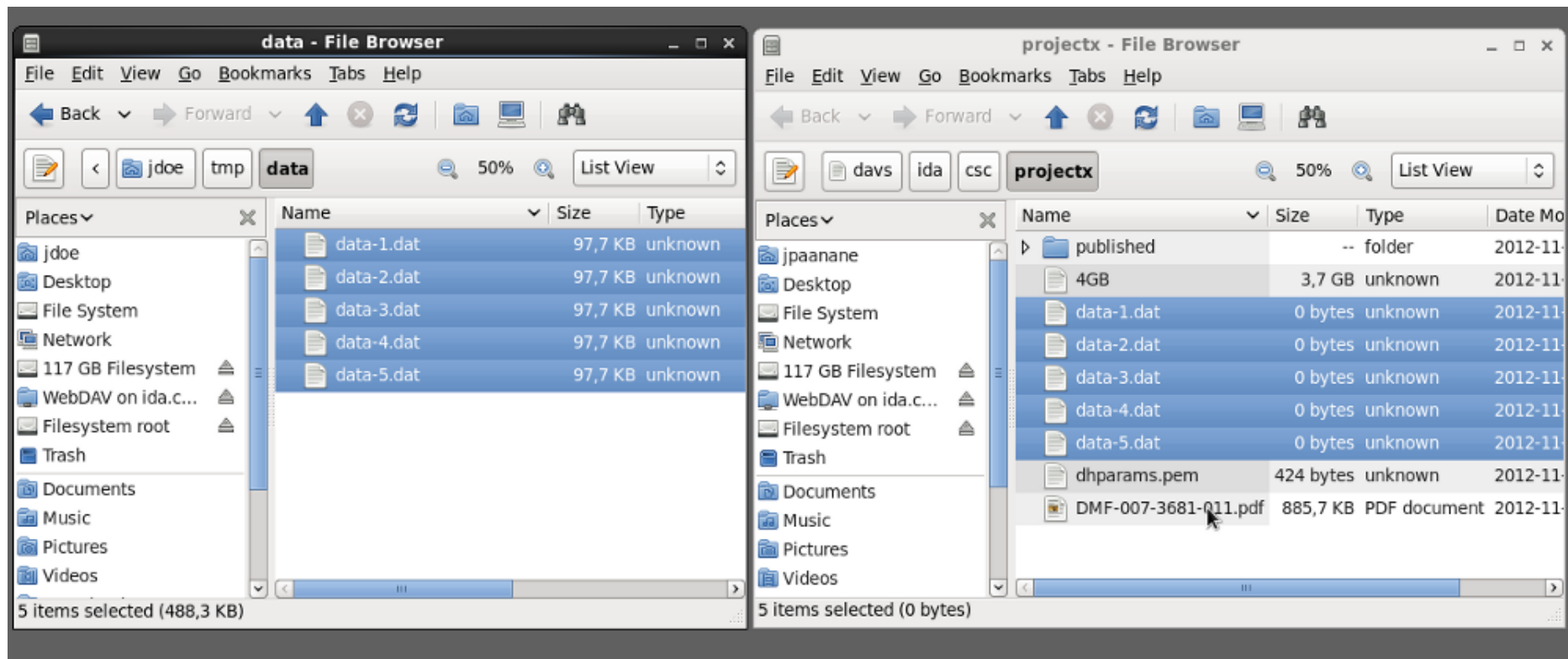
Advanced Search

	Size
/octet-stream	213.00 kB
/octet-stream	652.00 kB
/octet-stream	133.00 kB

Network Directory



Network Directory



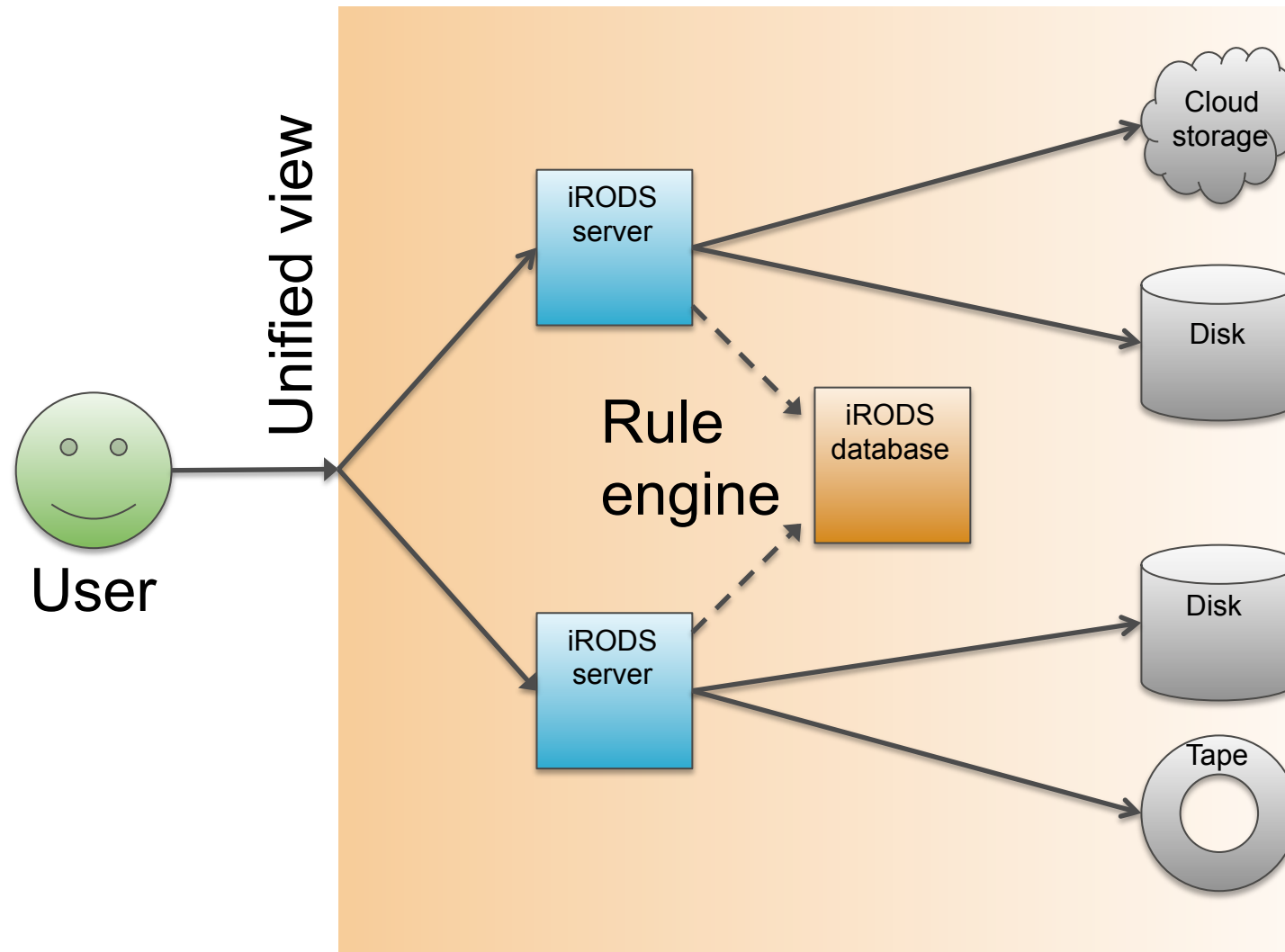
IDA Building Blocks

- iRODS
 - <http://irods.org/>
 - Open source data management software
- SUI
 - CSC's Service Portal
- Davis
 - <https://code.google.com/p/webdavis/>
 - WebDAV (RFC4918) interface for iRODS

iRODS

- Open source data grid middleware
 - Data virtualization
 - Distributed storage systems under a unified namespace
 - Automation of data operations
 - Metadata
 - Policy enforcement

iRODS



IDA Building Blocks Performance

- iRODS
 - Command line
- SUI
 - Browser
- Davis
 - Network directory



Transfer
speed



Features



Ease
of use

Thank You

More information at

<https://www.tdata.fi/>

<https://www.tdata.fi/ida>

