

dCache, Sharing, Sync`ing Big Data and Cloud Strategies

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Sharing data
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Patrick Fuhrmann





Work in progress

dCache Cloud and BIG DATA

How do people see “The Cloud” ?



- From the Web 2.0 experience:
 - Accessible from all kind of OS's and mobile devices and from anywhere.
 - Synchronizing folders with “The Cloud”
 - Very easy to share data with groups and/or individuals.
- From the Amazon, Google, etc experience:
 - Unlimited storage space
 - Indestructible data store , never loosing data
 - Fast immediate access versus slow archive
 - Pay per use

The dCache Cloud Service



Customers expect dCache to
become a cloud service

The dCache cloud (cont)

What does that mean for dCache ?

Big Data Part

- Unlimited storage space (scalability)
- Indestructible data store (resiliency)
- Fast immediate access versus slow archive
- Pay per use, (billing)



Web 2.0

- Accessible from all kind of OS's and mobile devices and from anywhere.
- Synchronizing folders with “The Cloud”
- Very easy to share data with groups and/or individuals.



dCache Cloud



Why not getting help from experts ?



This is what OwnCloud says what dCache.org OwnCloud is.

Your Data from **any storage ...**

... available on **all devices!**



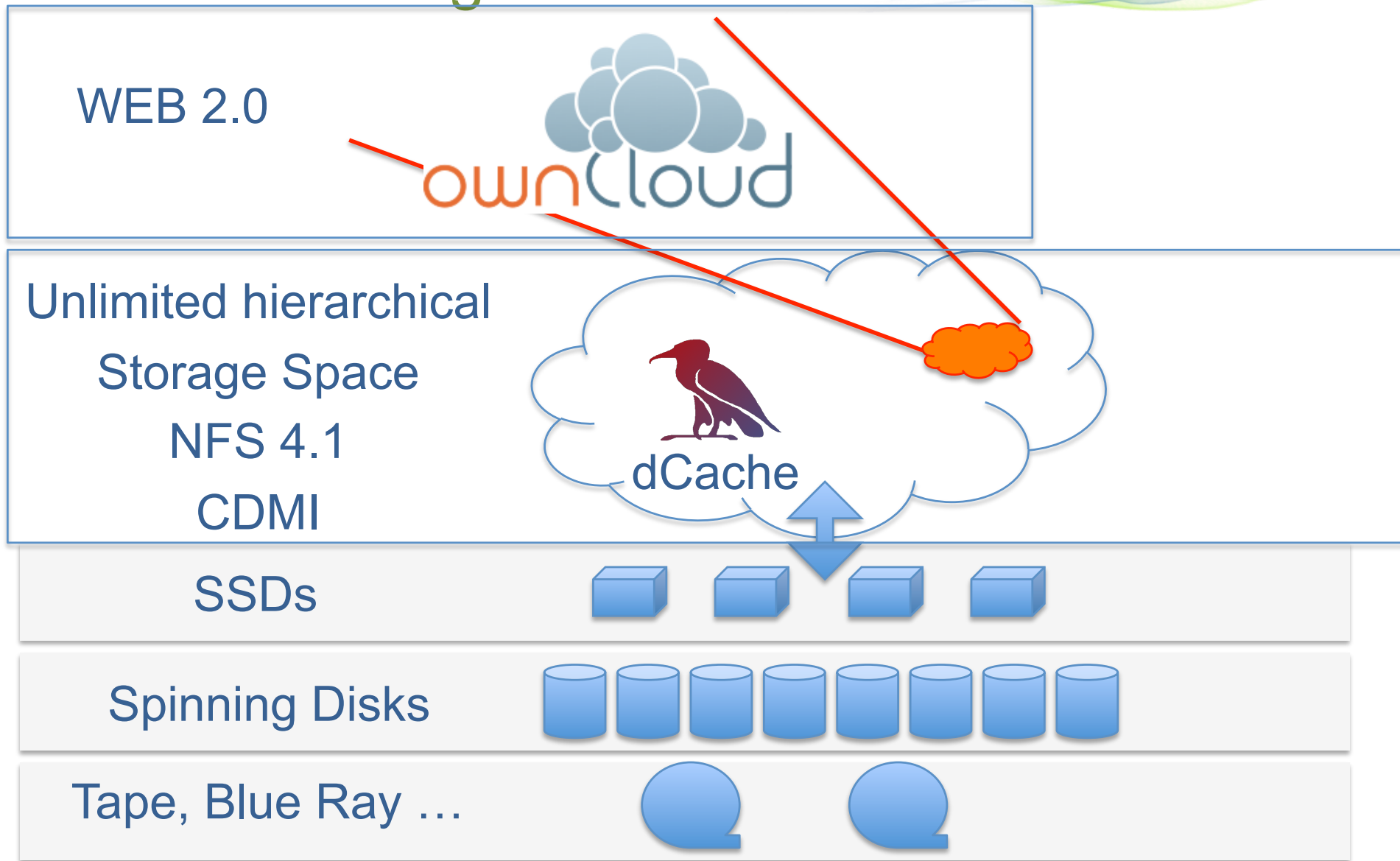
Without friendly Courtesy of OwnCloud ©

OC Features important for us..



- provides sync clients for all OS's
- provides upload/download clients for mobile devices
- allows simple sharing of data

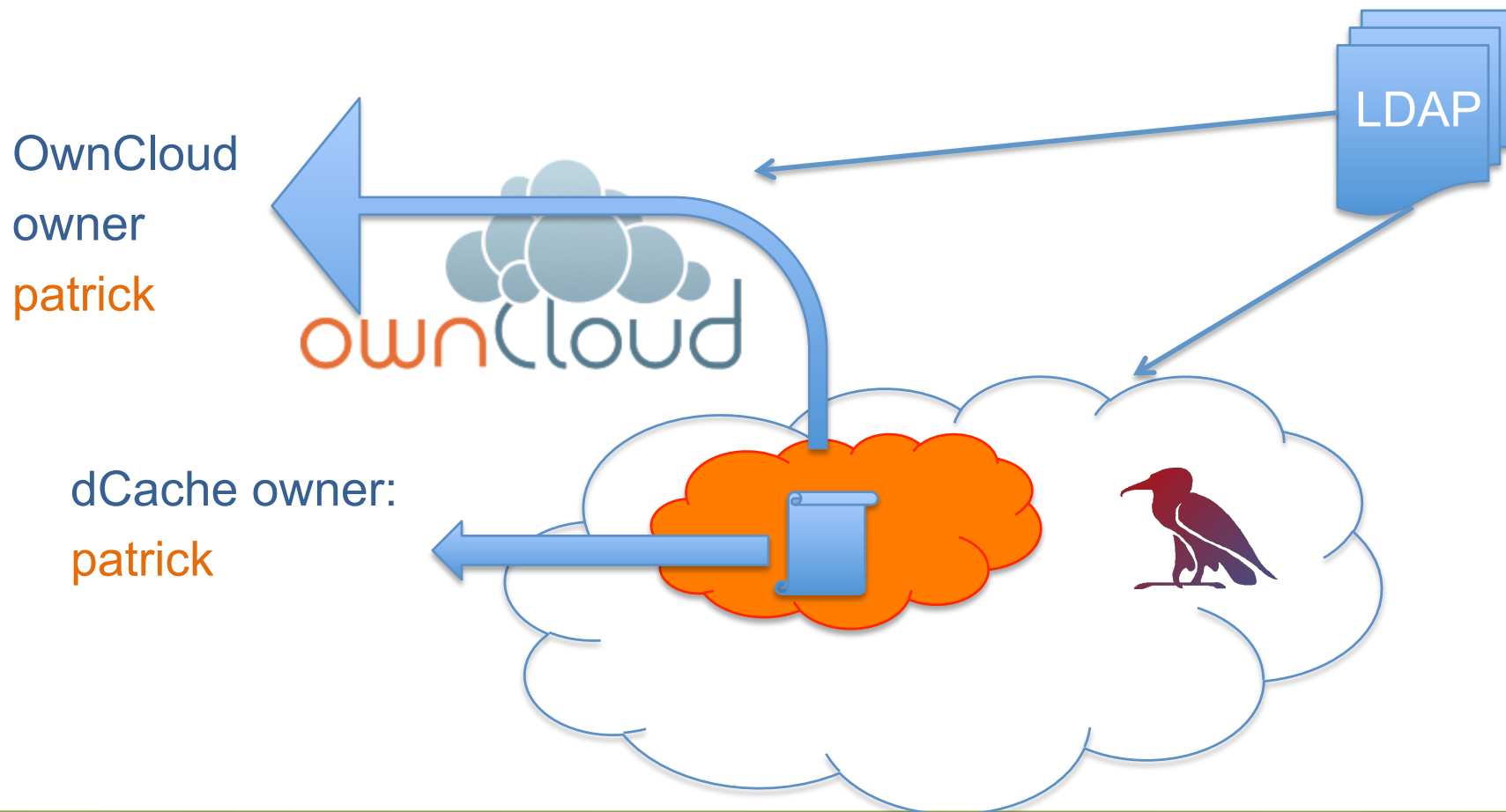
dCache – OwnCloud Data Management



- Simply running OwnCloud on dCache was the easy bit and works nicely.
- But how about
 - Ownership
 - Files owned by 'patrick' in OwnCloud are owned by apache/owncloud in dCache
 - That prevents us from using the same data with NFS4.1 or CDMI from dCache
 - dCache ACL's versus OwnCloud Sharing
 - Files shared in OwnCloud needs to have similar ACL in dCache.

Ownership issue

Tigran fixed the ownership issue
(Similar with authentication)



About paths

/base/patrick
/base/tigran
/base/<user>
/base/data/patrick
/base/data/tigran
/base/data/<users>

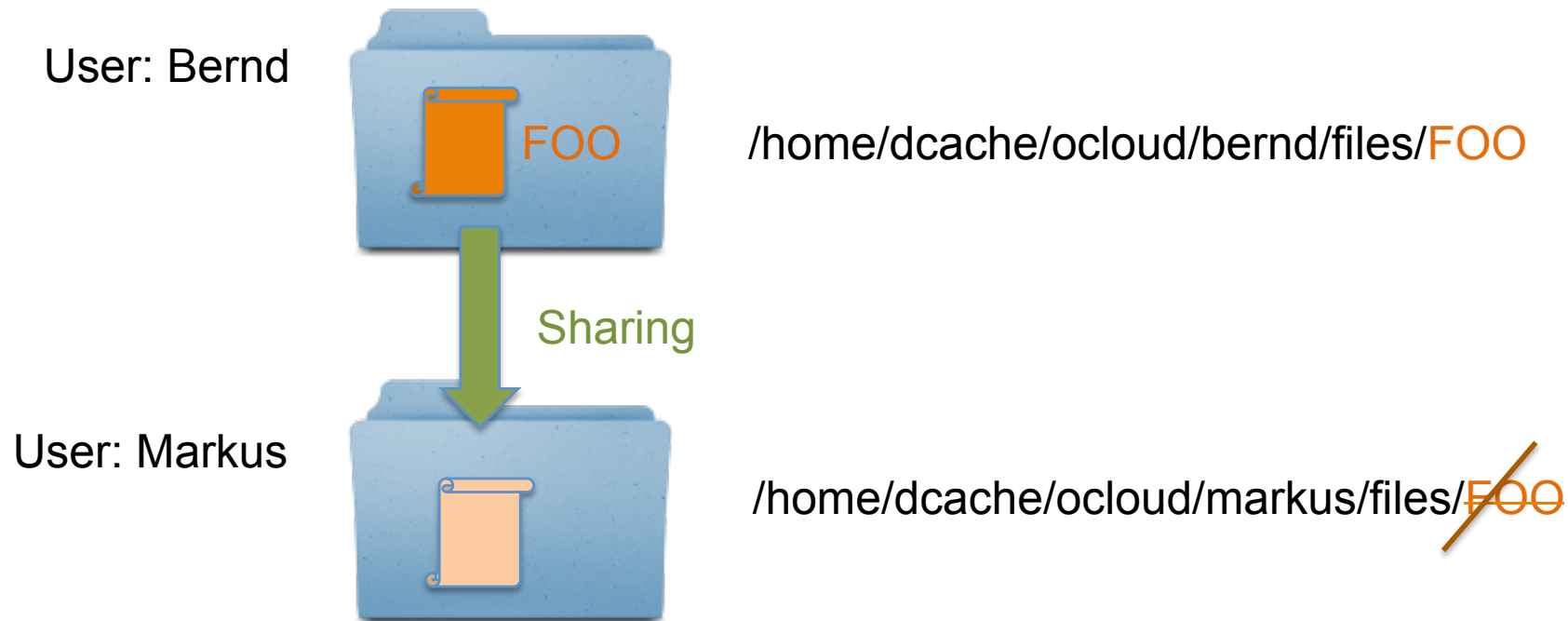
- Not much data.
- Can be anywhere, including dCache
- Might become r/m/w in the future

/dCache/cloud/patrick/OwnCloud
/dCache/cloud/trigran/OwnCloud
/dCache/cloud/<user>/OwnCloud
/dCache/cloud/<user>/OtherdCacheData

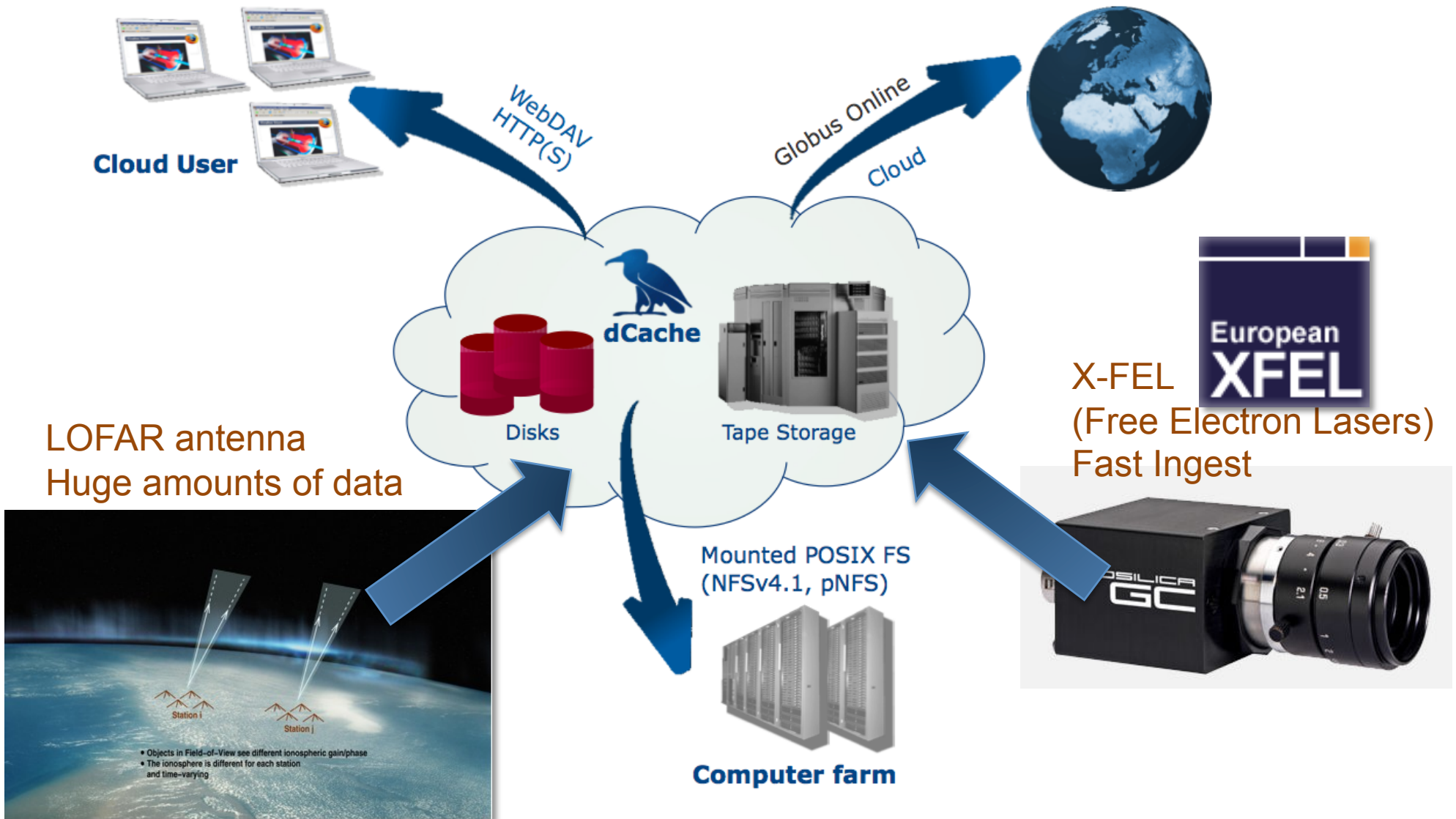
- Big data
- Immutable
- dCache

dCache versus OC sharing

The dCache OwnCloud sharing issue is not at all solved yet.



dCache Big Data Cloud



The End

further reading
www.dCache.org