## CS3 2018 - Workshop on Cloud Storage Synchronization and Sharing Services



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## **Fault tolerant Cloud infrastructure**

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Over two years Data-Cloud team at DESY provides a reliable ownCloud instance for a selected set of users. While service is still officially in a pilot phase, it's has the same support and priority level as any other production services provided by the IT group. However, before removing it's "beta" status some extra actions have to be taken: the instance must be fault tolerant and allow software and hardware updates without any downtime. Moreover, an extra disaster recovery plan have to be defined to make users data to be safe, even if data centre becomes unavailable - the end-users store the most precious data - the documents!

To achieve this ambitious goal, all involved components have to provide the same level of stability and data protection. In this presentation we will share our deployment setup, including HA-dCache installation, which is used as the storage backend, database replication with automatic fail-over configuration, load-balanced set of ownCloud servers and data offloading to an external location for disaster recovery. The sites, which still planning deployment with a similar level of availability, can make use of our experience to build and provide fault tolerant service to their customers.

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