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Sync & Share on the INFN Corporate Cloud

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INFN Corporate Cloud (INFN-CC) is a geographically distributed private cloud infrastructure, based on Open-Stack, that has recently been deployed in three of the major INFN data centres in Italy. INFN-CC has a twofold purpose: on one hand, its fully redundant architecture and resiliency make it the perfect environment for providing critical network services for the INFN community; on the other hand, the fact that it is hosted in modern and large data centres makes it the platform of choice for a number of scientific computing use cases.

Sync and share services on INFN-CC exploit the geo-distributed OpenStack Swift setup, the cross-domain DNS load balancing, and remote data synchronization technologies for resilient installations that can span across multiple sites.

Also, templates for deploying natively encrypted sync & share services are available for immediate use for scientific collaborations and communities.

We present the INFN-CC hardware and software architecture, the challenges and advantages of this solution, together with the first sync & share use cases that we have already implemented.

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