

Interactive Computing E-Infrastructure
Public Information Event



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R&D topic: SWIFT improvements, S3 and Tape
Support

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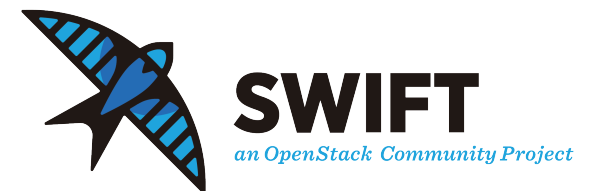


Improve S3 API support in SWIFT

- S3 has a Wide User Base
- Swift has Federation Concept
- Both are Object Storage/Cloud Oriented
- SwiftStack S3 API support already provides Amazon S3 API compatibility (it needs extension).

Goal of this R&D:

- Extend S3 API support on top of SWIFT
- 1st in the list: S3fs-fuse

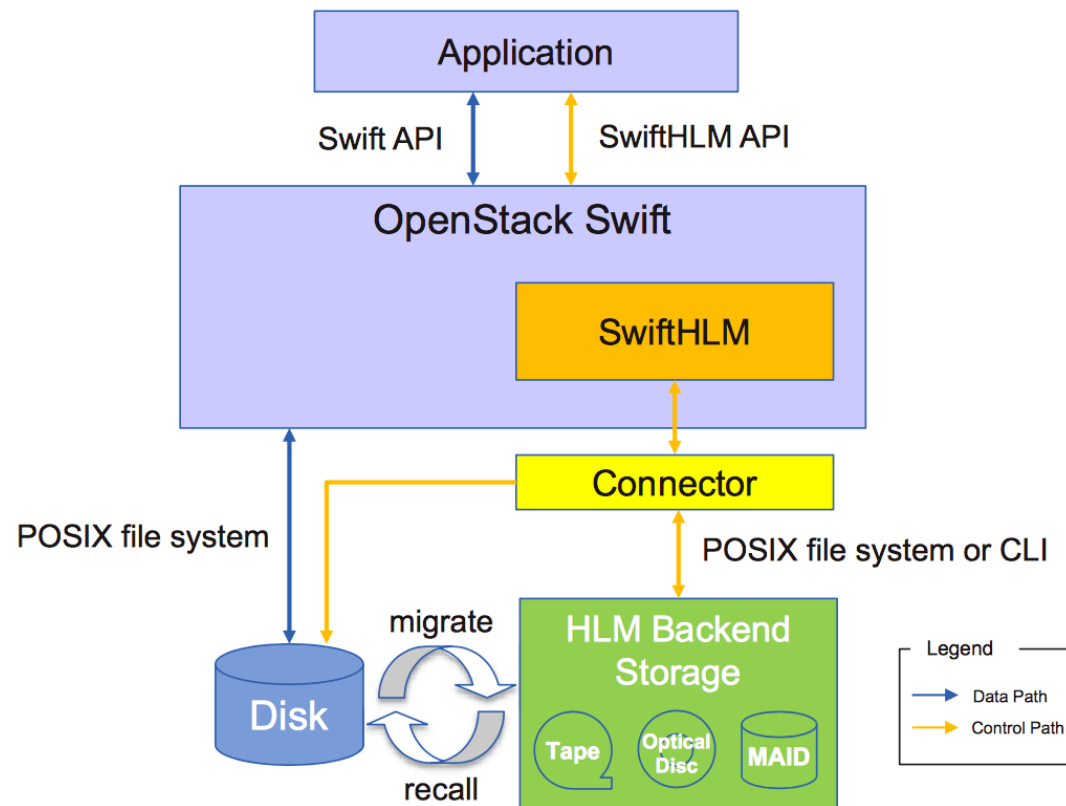


Improve Tape usage on top of SWIFT

- Backup concept is completely missing in SWIFT
- Archive concept is completely missing in SWIFT
- HSM concept is kind of present (User Driven)
- SWIFT has a concept of Data Versioning
- SWIFT Data safety is fully based on multi site replica as it is expected in Cloud.

Improve Tape usage on top of SWIFT

SWIFTHLM is the kind of User driven HSM feature present into the SWIFT/Openstack community:



This is the flow described in the RedBook you can find at this link:

<https://www.redbooks.ibm.com/redpapers/pdfs/redp5430.pdf>

Improve Tape usage on top of SWIFT

We would like to expand use of Tape to enable Backup/Archive/HSM concept for SWIFT making the safety concept of the Object Data to a more standard idea where:

- Single Object can be restored in case of any inconvenience
- **Objects can be restored without invoking a multisite replica restore (at least not when this is not a disaster recovery situation)**
- Daily (possibly incremental) Backup can be performed to secure the new data injection





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