



# A New HSM Agent

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# Existing Copytool

- Existing POSIX copytool not modular
- Adding new storage backend requires building a completely new copytool with duplicate HSM agent component
- Relies on FIDs to identify files in archive
- Different management interfaces

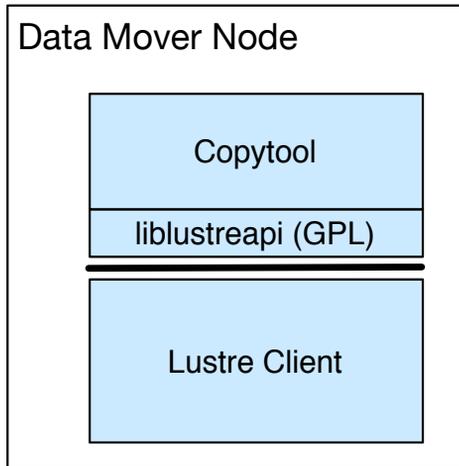
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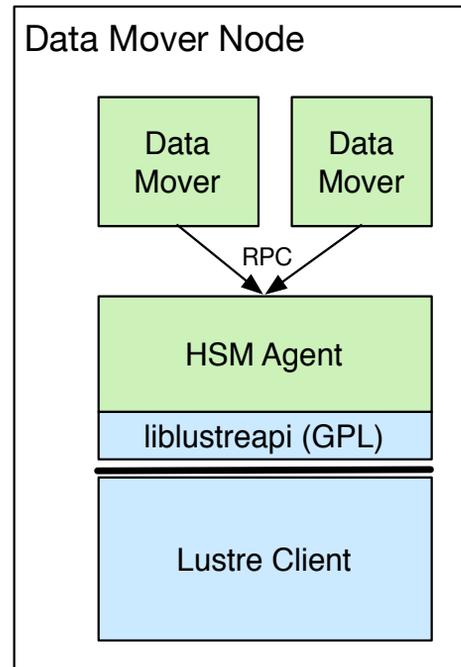


# Lustre\* Copytools to Data Movers

Current



New



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# New HSM Agent

- Provide RPC interface to standalone movers using gRPC
- Handles all communication with HSM coordinator
- Supports using arbitrary identifiers for files
  - The movers generates the ID, and agent stores it with file
- File striping on original file is copied to restored file
  - (Still need to support updating layouts on released files)
- HSM “Snapshot” feature supported
- Generates performance metrics
- Single agent per node supports multiple movers and archives
- Configuration files for agent and movers

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# New Data Movers

- Two new movers implemented so far
  - POSIX
  - S3
- Movers only copy the data – no shadow tree or layouts stored in archive
- Each file is copied by a single mover – not parallelized (yet)

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# Open Source

- Agent is GPLv2 (because of liblustreapi)
- Data Movers will also be open source, but not sure which license
- Intend to publish as a new project(s) on Github
- Welcome others to contribute or build own movers

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