

Delegation and SRM

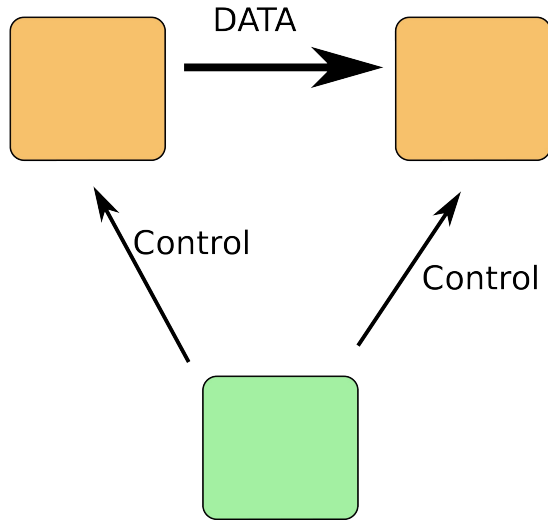
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Overview

- Introduction
- Current status
- Future

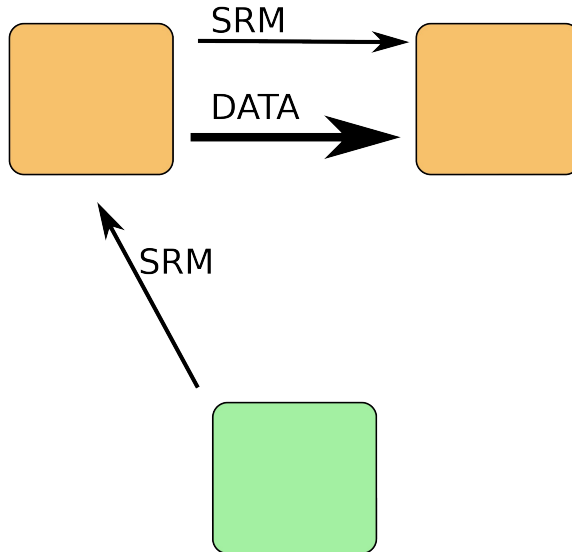
Introduction

FTP: 3rd party copy



- Hide the **scary monsters**
 - Standard API, irrespective of storage technology
 - **Smooths out differences** in implementation's features.
- Does **NOT** transfer data
 - Allows user to **coordinate** data transfers
 - SRM provides support for 3rd party transfers
 - *Useful if storage system's doesn't support a protocol that can do 3rd party transfer.*

SRM: 3rd party copy



- Allow a remote agent to **pretend to be you** for a short period
 - “Act on my behalf”
- Lots of options how to do it...
 - GSI, GridSite Delegation, MyProxy, IVOA, ...
 - **GSI** is how SRM does it now
- Delegation is used by:
 - SRM, FTS, Execution service, MyProxy, ...
- GSI is **incompatible** with SSL

Current Status

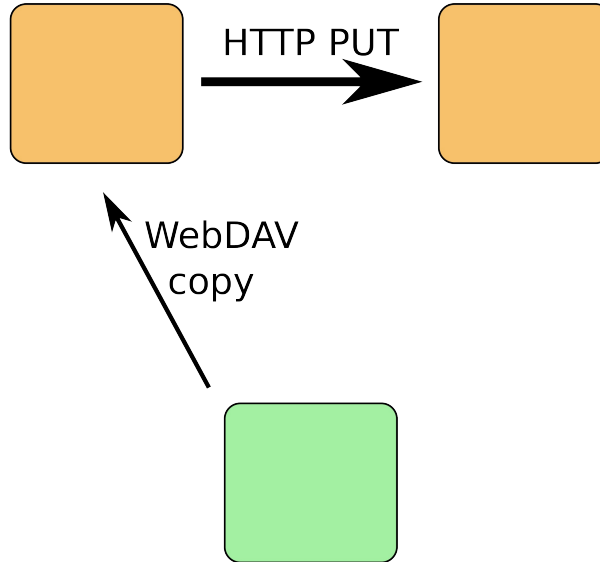
- Agreement that PTs will use **GridSite Delegation** (GSD) for X509 delegation.
- Available **libraries** will be supported through EMI
- Some work needed to tidy up documentation

- OGF 34: 12-15 March 2012 in Oxford
- Meeting of security area formed new group: **IDEL** (**ID**entity **DEL**igation).
- Interest from:
 - European Middleware Initiative Project (**EMI**),
 - the Initiative for Globus in Europe (**IGE**),
 - eXtreme Science and Engineering Discovery Environment (**XSEDE**),
 - European Desktop Grid Initiative (**EDGI**).

What about SRM?

- **International agreement** on how to do SRM-over-SSL.
- WLCG TEG: WAN protocol **must** do 3rd party transfers.
- **dCache** & **DPM** ~support SRM-over-SSL with EMI-2.
- GSI-SSL incompatibility means must run **mixed mode** (SRM-over-GSI and SRM-over-SSL) during switch-over.
- Due to **external problems**, we now see no end to running in mixed mode.
- With additional workload, and reduced benefit, we have now suspended activity on this topic.

WebDAV: 3rd party copy



- Needed for WLCG to accept HTTP as **replacement** for GridFTP.
- Initial prototype work done at CERN's **GT group**, with **DPM**
- Requires delegation
 - Uses GridSite Delegation, naturally.

Future

- Not completely dead:
 - Support (without delegation) becomes **available** as sites roll out **EMI-2**.
 - If srmCopy is completely phased out then clients (e.g., FTS) can investigate switching over to using SRM-over-SSL.

- **Initial** focus is on collecting descriptions of existing implementations
 - EMI/GridPP's **GridSite Delegation** will be part of this
- Base on this work, come up with a OGF **standard** mechanism for achieving delegation.

Thanks for listening