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Quick Overview

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On behave of the project team

Courtesy of Ron T.

Fermilab NDGF Nordic DataGrid Facility DESY HELMHOLTZ ASSOCIATION Federal Ministry of Education and Research LSDMA

Content

- Funding
- People
- Distribution Channels
- H2020
- Activities
  - Development
  - Collaborations
- dCache strategy

Update: Funding and Partners

- Organizations:
  - FERMIlab
  - DESY
  - NDGF
  - HTW Berlin (through LSDMA)
- Projects:
  - LSDMA (Germany) completely replacing EMI

Update: People

- FERMIlab: Dmitry and Al
- NDGF: Gerd (Temporarily quite busy)
- THW Berlin (Students): Leonie, Jana and Tom
- DESY: Karsten, Christian, Paul, Tigran and Patrick (missing Antje)
- Support: Aachen (Oleg), KIT (Xavier), Munich (Christoph)
- Considering to join: Jülich (Bastian, André)

Consequence of no Antje

- Book updates are delayed.
- Tickets are delayed
- We'll have to reassign those tasks at the developers meeting next week.
- Volunteers are welcome…..

Software Distribution Channels

- Separate presentation on release policies by our Release Manager, Dr. Millar, later today.
- No EMI distribution any more
- Still distributing through EGI (UMD)
  - If you have strong opinions on that, we can discuss this during Pauls ‘release policy’ presentation.
- However, mostly from the dCache web pages.

New EC funding period (H2020)

- dCache/DESY involved in some initiatives which might result in one ore more H2020 proposals
  - HEP Software Collaboration
  - EU-T0 (Big data & Cloud)
  - DIRAC (possibly two proposals)
- In case you know about an upcoming proposal, where dCache would fit in, let me know. End of the day, you benefit. (e.g. as it was for EMI)

Industry Contact

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Activities (Deployments)

- FERMIlab deployments
  - Building up the CMS-T1 disk only system
  - Building a 2 Petabytes “Intensity Frontier” dCache system (Neutrino and Myon physics)
    - Evaluating NFS 4.1; helping us to fix issues.
    - Adding more dot-commands for operations like
      - Get location (CUSTODIAL, …)
      - Get Checksum
      - Plus actions
    - Evaluating “storage federations” using the CERN DM Http Federation System (we have a presentation on the dyn. Fed.)

Activities (Development,)

- Optimizing tape access for “Small Files”
  - Karstens presentation
- Cloud integration (Patricks presentation):
  - Integrating cloud semantics into dCache
  - Integrating cloud software (ownCloud) into dCache
- Fast data ingest, for DESY Photons Science
  - This is not about data rates but about “File create rates”
  - Tigran is working on this topic
  - As fast ‘file create’ often means small files, this is strongly related to the ‘Small Files for Tape’.

Activities (Development)

- Redesign of the “Resilient Mgr”
  - See Al’s presentation
- dCache plug-in mechanism extended to support the HSM interface.
  - Gerd
  - No mediate benefit. But makes it customizable (plug-ins)
- Possibly integrating SAML access to dCache.
  - Pauls presentation

Activities (with others)

- In the LSDMA, HTW Berlin student context:
  - Leonie investigates Cloud in dCache
  - Jana implements CDMI
  - Tom evaluates ‘end to end’ encrypted WebDAV client for mobile devices.
- With CERN DM and SLAC:
  - Improving xrootd support in dCache (meetings with SLAC and CERN xrootd people)
    - Small list of issues we solve step by step
    - Regular phone meetings with SLAC & CERN
  - Supporting Fabrizios storage federation with HTTP/ WebDAV.
    - Servers running at CERN and DESY (Fermilab)

Activities with others (cont)

- Keeping in touch with GlobusOnline folks
  - In Background: adding or fixing things you need when using GlobusOnline with dCache.
  - Let us know if you have particular issues with GO
- Involved in the EGI Federated Cloud Activities
  - Federated Identity Management
  - CMDI for Cloud Storage Access
- Federated Identity and Storage in LSDMA

Strategies

You might remember the master plan

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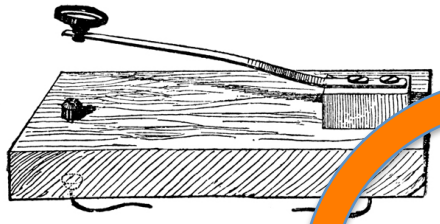

High Speed
Data Ingest

Resilient Mgr
Small Files

dCache

Fast Analysis
NFS 4.1/pNFS

Wide Area Transfers
(Globus Online, FTS)
by GridFTP

Sync & Share
by WebDAV

Summary

- Funding and number of people is ok.
- Development
  - Big Data, fast analysis
  - Cloud semantics
- Interesting new communities
  - Intensity frontier (FERMIlab)
  - Photon Science (here at DESY)
  - Human Brian people in Juelich
- Putting efforts to get H2020 funding
  - Would we really benefit ?

Enjoy the Workshop

further reading

www.dCache.org


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