



# Göttingen, March 16-18 Preparation Workshop

dCache German support

# Structure/Dates

- The entire workshop can be done in 3 Block, ½ day each.
  - Intro and Migration to the next Golden Release
  - Protocol session (NFS4.1/WebDav/xroot)
  - gPlazma, Migration Module, etc, future development.
- Dates (likely)
  - One full day : Wednesday, March 16
  - One morning : Thursday, March 17
  - Needs confirmation with Göttingen Colleagues.

# Agenda/Details

- **Block I**

- Introduction 30' (Doris, Göttingen people)
- Migrating to 1.9.12 (Paul)
  - Theory first : when to use the script and when not
  - Hands on with simple example + one exotic example  
e.g. setting java memory per domain (Oleg)
  - Demonstration covering more complex topics : maybe complex network topology.
    - Binding doors to particular interfaces.
    - Giving domain arbitrary names

# Agenda/Details

- **Block 2** : Protocol session
  - NFS 4.1 (patrick)
    - Theory
    - Demonstration
  - WebDav (Oleg)
    - Theory
    - Demonstration
  - xRoot (Sergey)
    - Theory
    - Demonstration with ROOT ?
  - ROOT demonstration : maybe providing a Smart script verifying all protocols.
  - Hands on protocols. And FAQ's

# Agenda/Details

- **Block 3 :**
  - gPlazma 1 - 1.5 hours (dCache.org: Karsten)
    - Theory
    - ARGUS integration 5' plus ARGUS itself 10'
    - Demonstration on possible change in policy (DN,uid,gid) 10
    - Stress advantage of improved user handling (legal issues)
    - ACL's and setacl, getacl
    - Demonstration on gPlazma 2 and ACL's (all protocols)
  - Migration Module 20' (Gerd)
    - Theory
    - Demonstration
  - Bits and Pieces 25' (Anton)
  - Optionally PIC report on migration to 1.9.10.
  - General questions
  - Future development

# Main Tracks

- Golden Upgrade (1.9.5 to 1.9.12)
- “New Technologies” Track
  - WebDAV
  - NFS 4.1 (Parallel NFS)
  - xRoot protocol
  - gPlazma-two
  - News on the Pool Migration Module
- Bits and Pieces

Details

# Golden upgrade 1.9.5 to 1.9.12

- Introduction of new configuration system.
- Demonstration
  - Upgrade with script.
  - Examples for medium complex upgrades
- Hands on
  - Easy script
  - Medium complex upgrade
- Demonstration of some very complex examples



# “New Technologies” Track I

- NFS 4.1 (pNFS)
  - Theoretical Background (Intro)
    - How does the p in pNFS works for dCache ?
    - How is NFS 4.1 integrated ?
      - Cost Calculation
      - ACL's
    - Authentication
      - How do I use Kerberos with dCache/NFS4.1
      - How is X509 Authentication handled.
  - Clients
    - Status of standards kernel
    - What do I need to run the pNFS Kernel with SL5

# “New Technologies” Track II

- WebDAV
  - What is WebDAV
  - Which Authentication methods are available
  - How are Space Tokens handled.
  - Redirection and clients.
  - Limitations (X509 Proxies, ACL's)
  - Details on Client OS and Software
  - Demonstration : Windows 7, Mac OS X, Linux clients

# “New Technologies” Track III

- xROOT protocol support in dCache
  - Supported functionality
    - X509/GSI Authentication
    - RM command ???
  - Improved
    - No connection close
    - Reuse of connections

# “New Technologies” Track (IV)

- gPlazma ‘too’
  - Benefits of the new gPlazma mechanism.
    - Pluggins
    - What is fixed (designwise, etc)
  - How to configure ‘new gPlazma’.
  - Planned migration.
- News On the Pool Migration Modules
  - New features (compared to 1.9.5)

# Bits and pieces I (Cont V)

- GLUE 2.0
  - Motivation; migration
  - How to configure in dCache ?
- JMS
  - Why should you switch to JMS ?
  - How to switch ?
  - How to scale out ?
- New Log system
  - Advantages
  - How to customize
- P2p transfers :
  - Jon's algorithm
  - Using tags to define larger p2p units.

# Bits and pieces II (Cont VI)

- SRM
  - Jetty instead of Tomcat
  - SSL instead of GSI
    - Why are we doing this ?
    - How to configure
    - What is missing
  - Synchronous getTURL
    - Advantages
    - How to configure
  - Improved performance
    - Slides from Dmitry
  - Space Manager
    - Multiple Link Groups

# Bits and pieces III (Cont VII)

- No NFS mount point needed anymore.
- How to run as Non-ROOT.
- Details on single port per protocol.
- Support of SSH version 2.
- Progress bar for dccp (-H option)
- Important fixes since 1.9.5
  - Pin Manager

# Deadlines

- Doris asking Goettingen about organizational details.
- User-forum DORIS e-mail till end of THIS week.
- Arranging for indico (Patrick) including registration. Patrick finds out about Credit card in indico. (Till end of next week)
- Asking PIC (Patrick, not before Jan 26)
- Asking EMI (Patrick) about support.
- Next Phone meeting : March 3, Thursday.