

Xrootd deployment task force

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WLCG Operations planning

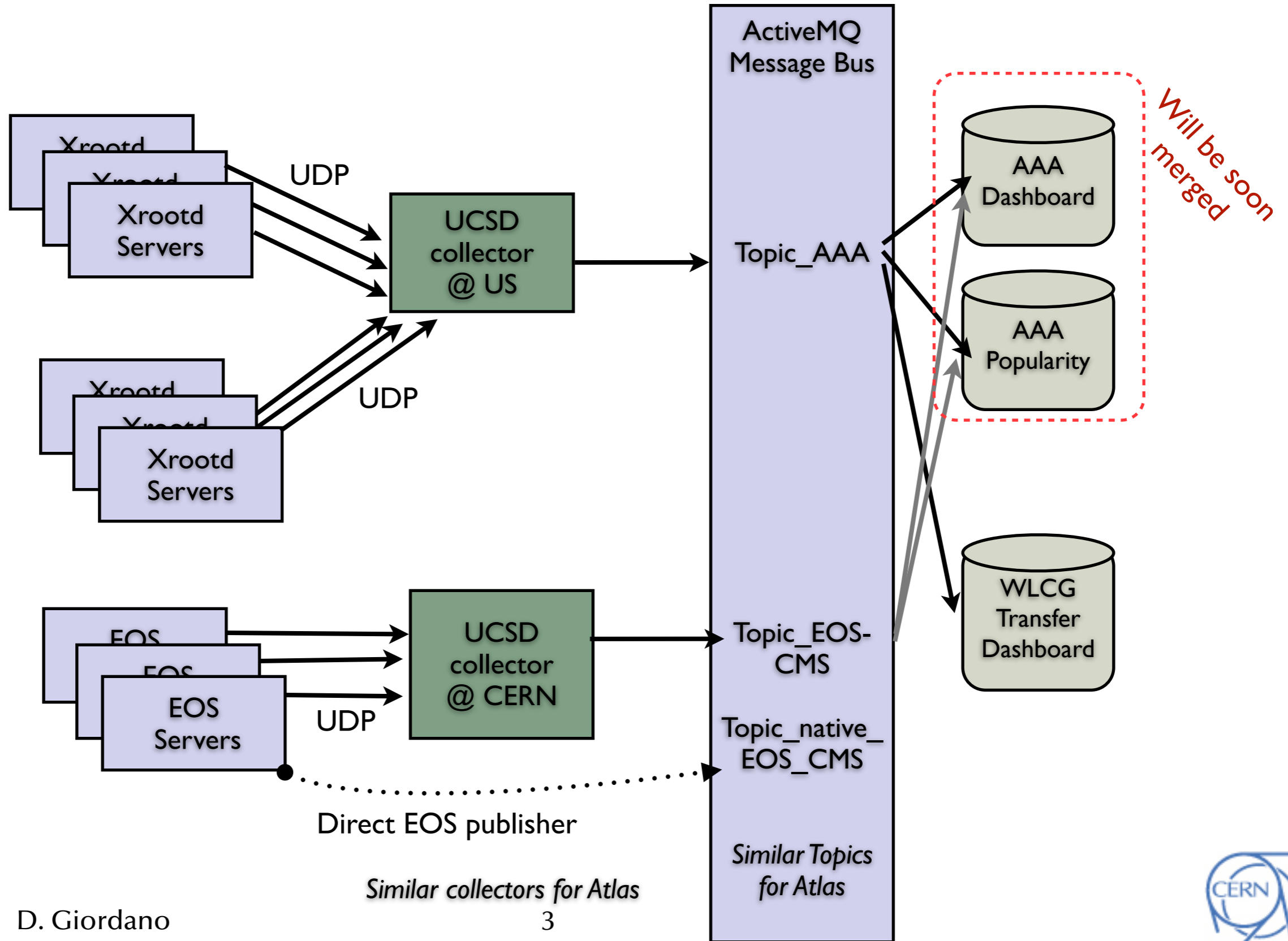
21/03/2013

Main goals are to

- ▶ Provide support to the deployment (driven internally by each project: AAA, FAX)
- ▶ Coordinate the monitoring efforts and monitoring requirements definition
- ▶ Identify common needs among CMS and ATLAS to be addressed uniformly

Current followed topics

- ▶ Homogeneity of instructions among AAA and FAX
 - Crucial for sites serving multiple VOs
 - * Going to start a survey among these sites to evaluate how they perceive instructions
- ▶ **Monitoring**
 - Detailed monitoring and collectors
 - Aspects of xrootd configuration for dCache sites, DPM sites
- ▶ Monitor the service availability at sites
 - Evaluating the needs of AAA and FAX



UDP Collectors are a key point of the monitoring workflow

- ▶ UCSD collector is providing aggregation of the detailed monitoring for the CMS Xrootd federation (AAA, FAX), EOS Atlas and EOS CMS
- ▶ Development done in the past months by Matevz T. to include new features
 - Publishing messages directly in ActiveMQ
 - Accepting other UDP streams from Xrootd disk servers (f-stream)

Some issue faced running the “UCSD” Collectors

- ▶ Instances running at CERN are generally stable
- ▶ Face periodically problems with the instances running in US
 - Nagios monitoring and alerts promptly notify the downtime
- ▶ Would help to consider the Collectors critical services to be available 24/7
 - Ongoing investigation if collectors will be maintained by OSG, by WLCG (at CERN) or having redundancy of collectors in US and EU

The monitoring systems and its complexity is growing

- ▶ Effort to unify the monitoring workflow for dashboard and data popularity
 - unify the database schemas and possibly the Web UI
 - guarantee the future maintenance of these two services by IT-ES group

Unification will take place in the next 2-3 weeks

dCache sites require a dedicated monitoring plugin to send d-stream or f-stream

- ▶ Currently developed in the Atlas-FAX context
- ▶ needs version of dCache: 1.9.12.21+
- ▶ Needs to be adopted also by CMS

Plugin still in development phase

- ▶ Provides most of the needed functionalities
- ▶ Digests d-stream & f-stream
- ▶ Lacks of user DN identification for f-stream (dummy DN received)

It is an external product to be installed in all pool nodes

- ▶ Would gain from being integrated in a dCache production version
- ▶ Guarantee of sw support and certification

CMS sites in monitoring

SERVER_DOMAIN	FIRSTDAY	LASTDAY
1 romal.infn.it	2012-10-18	2012-10-18
2 lcg.cscs.ch	2013-02-22	2013-02-22
3 pp.rl.ac.uk	2012-07-30	2013-03-05
4 gridpp.rl.ac.uk	2012-07-26	2013-03-14
5 ts.infn.it	2013-01-30	2013-03-18
6 cr.cnaf.infn.it	2013-02-11	2013-03-18
7 ifca.es	2013-02-25	2013-03-19
8 hep.kbfi.ee	2012-09-14	2013-03-19
9 ihepa.ufl.edu	2012-06-25	2013-03-19
10 ba.infn.it	2012-06-26	2013-03-19
11 rcac.purdue.edu	2012-06-25	2013-03-19
12 pi.infn.it	2012-09-28	2013-03-19
13 unl.edu	2012-06-25	2013-03-19
14 accre.vanderbilt.edu	2012-06-25	2013-03-19
15 hep.wisc.edu	2012-06-24	2013-03-19
16 in2p3.fr	2013-03-08	2013-03-19
17 cmsaf.mit.edu	2012-06-25	2013-03-19
18 t2.ucsd.edu	2012-06-25	2013-03-19
19 fnal.gov	2012-06-25	2013-03-19

DPM-Xrootd plugins currently do not discriminate user VOs

- ▶ Monitoring stream (UDP) cannot be directed to the proper VO
- ▶ Privacy Issues in case of sites serving multiple VOs

Inclusion of the new feature involves Xrootd and DPM teams

- ▶ Xrootd:
 - Provide the proper authentication library (libXrdSecgsiVOMS)
 - Allow to skim monitoring messages based on VO
- ▶ DPM:
 - Integrate the new features in a future DPM release

Continue to follow the deployment

- ▶ Many sites have still to join the federations in next months
- ▶ Survey on the site perception of instructions/tools
- ▶ Evaluate common efforts for SAM tests
- ▶ Collect feedback/requirements from current users/site admins to include new features in monitoring tools
- ▶ Follow the open issues for dCache, DPM sites