

# Introduction

## DOMA Access-caching subgroup

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Tuesday 2nd October

- Currently 15 projects (some with subprojects)
  - 3 main topics
    - Deploy new setup and measure performances within experiment workflow
    - Study and measure workflow to estimate gain with new setup
    - Development of generic tools for bandwidth management and caching simulations
  - A lot of useful informations
    - Interests of computing teams
    - Links to presentations (CHEP18,...)
  - Make sure that existing results are known by everybody

- Reorganise current googledoc according to subjects
  - Group per activities (some overlap identified)
    - Have a look at this googledoc and comment :

[https://docs.google.com/document/d/1Sk5wtFLdHDCjyc\\_VmTwJY4qzk\\_ErKidBs7GLhTnN4xo](https://docs.google.com/document/d/1Sk5wtFLdHDCjyc_VmTwJY4qzk_ErKidBs7GLhTnN4xo)

- Request : Add contact name(s) + link to any relevant information
- Propose short presentations over coming meetings
  - 10' + 5'
  - Dates to be scheduled

# Sorted google doc

[https://docs.google.com/document/d/1Sk5wtFLdHDCjyc\\_VmTwJY4qzk\\_ErKidBs7GLhTnN4xo](https://docs.google.com/document/d/1Sk5wtFLdHDCjyc_VmTwJY4qzk_ErKidBs7GLhTnN4xo)

## 1) Generic developments

[Rucio](#)

[The XDC Project](#)

[Compute / performance measurements](#)

## 2) Study performances

[CERN UP Team Data Access related Activities](#)

[Estimating Cache hit rates based on Data Popularity data \(CERN UP Team Data Access related Activities\)](#)

[Measurement of the impact of an xrootd based cache on throughput of the experiments' standard workloads as they have been provided for the HSF/WLCG Performance and Cost Modeling Working group \(CERN UP Team Data Access related Activities\)](#)

[Measuring the sensitivity of arbitrary workloads on latency and bandwidth limitations \(CERN UP Team Data Access related Activities\)](#)

[French initiative: evaluation by French computing community of performances and cost of remote access and future distributed storage services](#)

## 3) Network

[SENSE: SDN for End-to-end Networked Science at the Exascale \(added by hbn\)](#)

[SANDIE: SDN Assisted Named Data Networking \(NDN\) for Data Intensive Experiments](#)

[The SANDIE System](#)

## 4) Data pattern access

[R&D on data access patterns @ CMS](#)

[R&D on data access patterns @ ATLAS](#)

## 5) Deploying cache mechanism

a) Xrootd

[Production Xrootd Cache across Southern California \(UCSD/Caltech\);](#)

[Production StashCache \(Xrootd & CVMFS combo\) open for all of science in OSG;](#)

[Production XRootD Proxy Cache in Edinburgh for ATLAS](#)

b) Dpm

[R&D in the context Belle II -HTTP Data Federation eco-system with caching functionality using DPM Volatile Pool + Dynafed - \(added by S. Pardi, D. Michelino, B. Spisso\)](#)

c) Dcache

[Distributed dCache deployment with caching enabled](#)

[ATLAS with xcache](#)

d) Eos

[EOS Smart Caching - XrdPss + XCache prototype \(part of the XDC project\)](#)

e) Independent of Storage technology

[Italian XCache Deployment for CMS:](#)

[National geo distributed federation and automated setup for Dynamic showcases \(INFN\)](#)

[Prototype and R&D on Coordinating Caches for Opportunistic Data Locality \(KIT\)](#)

[US ATLAS Activities](#)

# Présentation

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- General DOMA meeting – Tomorrow
  - Very quick status report based on these slides