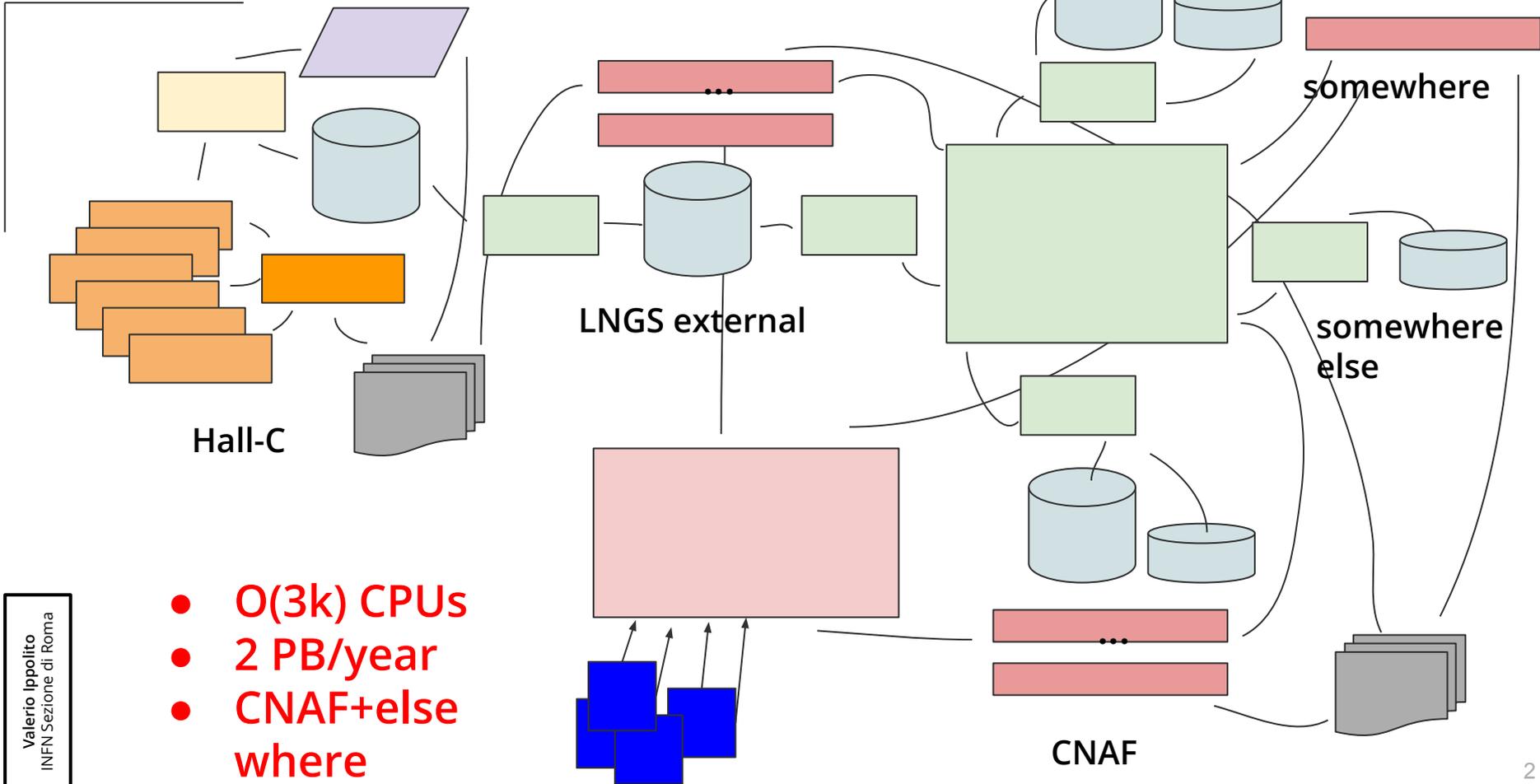




# PanDA and DarkSide

status of the workload management pilot for DarkSide-20k

# Architecture



- O(3k) CPUs
- 2 PB/year
- CNAF+else where

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# Identity, access and data management

- difference w.r.t. LHC: DarkSide has blind data
  - i.e. also read access must be restricted
- set up DarkSide Identity Access Management (IAM)
  - replaces the former [Virtual Organisation](#)
- permissions to disk and tape areas granted via tokens, based on IAM groups
  - storage.\*:/data, storage.\*:/mc, storage.\*:/blind, storage.\*:/user
  - compute.\*
- rucio pilot is working, two RSEs (CNAF+LNGS)
  - read-access restrictions for blind data currently applied at storage level, rather than at rucio level
  - performance testing started



Welcome to **vo.darkside.org**

Sign in with your vo.darkside.org  
credentials

 Username

 Password

Sign in

[Forgot your password?](#)

Or sign in with

Your X.509 certificate

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# Workload management: news

- after panda-DOMA demonstrator, moved to k8s deployment
  - panda-DOMA test successful with old VOMS, and POSIX access to storage (i.e. no rucio, no tokens yet)
- integration with DarkSide IAM instance successful for bigpanda
- ongoing: configuration of panda server
  - issues possibly related to authentication
- then: integrate with rucio
- documenting step-by-step beyond the panda-k8s [docs](#)
  - necessary for internal use in DarkSide, maybe useful for everyone?
- thanks a lot to Edward & Wen for their ongoing support

<https://panda-bigmon.131.154.98.54.myip.clo.ud.infn.it>

vo.darkside.org Panda Dash Tasks Jobs Errors Users Sites Harvester My BigPanDA

PanDA jobs, last 7 days limit=10000

0 jobs in this selection

No jobs matched the query. You can increase the time depth with a days=N parameter on the URL, but use judiciously, this is hard the jobs you're interested in, you can add these to the URL, and the search will not be time limited (because these IDs give the DE the time constraint) and it will be fast also.

**Job list help:**

The job attribute summary gives an overview of the parameters of the selected jobs and enables you to drill down to the jobs of interest. If there are know.

The job list itself is expensive to build (for the server, network and your browser) and so is limited by the `display_limit` parameter that is included be careful. The intent is that you drill down to a relatively small number of jobs (a few thousand at most), then you can list them if necessary.

Note that the number of records retrieved from each table of the database is limited for performance reasons. (Job data is spread across several tables; the search interval is 12 hours, you are probably not seeing all jobs from the last 12 hours, only the latest N from each table. As you drill down, narrow more jobs of interest to you. If you need to increase the limit, use `limit=N` in the URL. Similarly you can specify `days=N` on the URL, but use

If you know the `jobsetid=N` or `jobtaskid=N` of the jobs you're interested in, you can add these to the URL, and the search will not be time limited stressful on the DB to exclude the time constraint).

**Wildcards:** you can use wildcard search over different job descriptors, the most popular are `jobname`, `jobstatus`, `proddblock` and `computing`  
`hours=2&jobname=user.*mc16_13TeV.&computingsite=CERN*&jobstatus=finishedfailed`

**Time window modification:** you can include `hours=N` or `days=N` on the URL to specify the time depth. And you can use `earlierthan=Nhours`  
`date_from=2020-10-01&date_to=2020-10-03`

```
prun --exec "pwd; ls; echo 'Hello darkside world'; ls -l -ltr /storage/gpfs_ds50/darkside; ./pysonar_test.sh" --outDS user.vippolito.`uuidgen` --nJobs 1 --vo wlcg --site CNAF-DS-1 --prodSourceLabel test --workingGroup ${PANDA_AUTH_VO} --noBuild --noSeparateLog
```