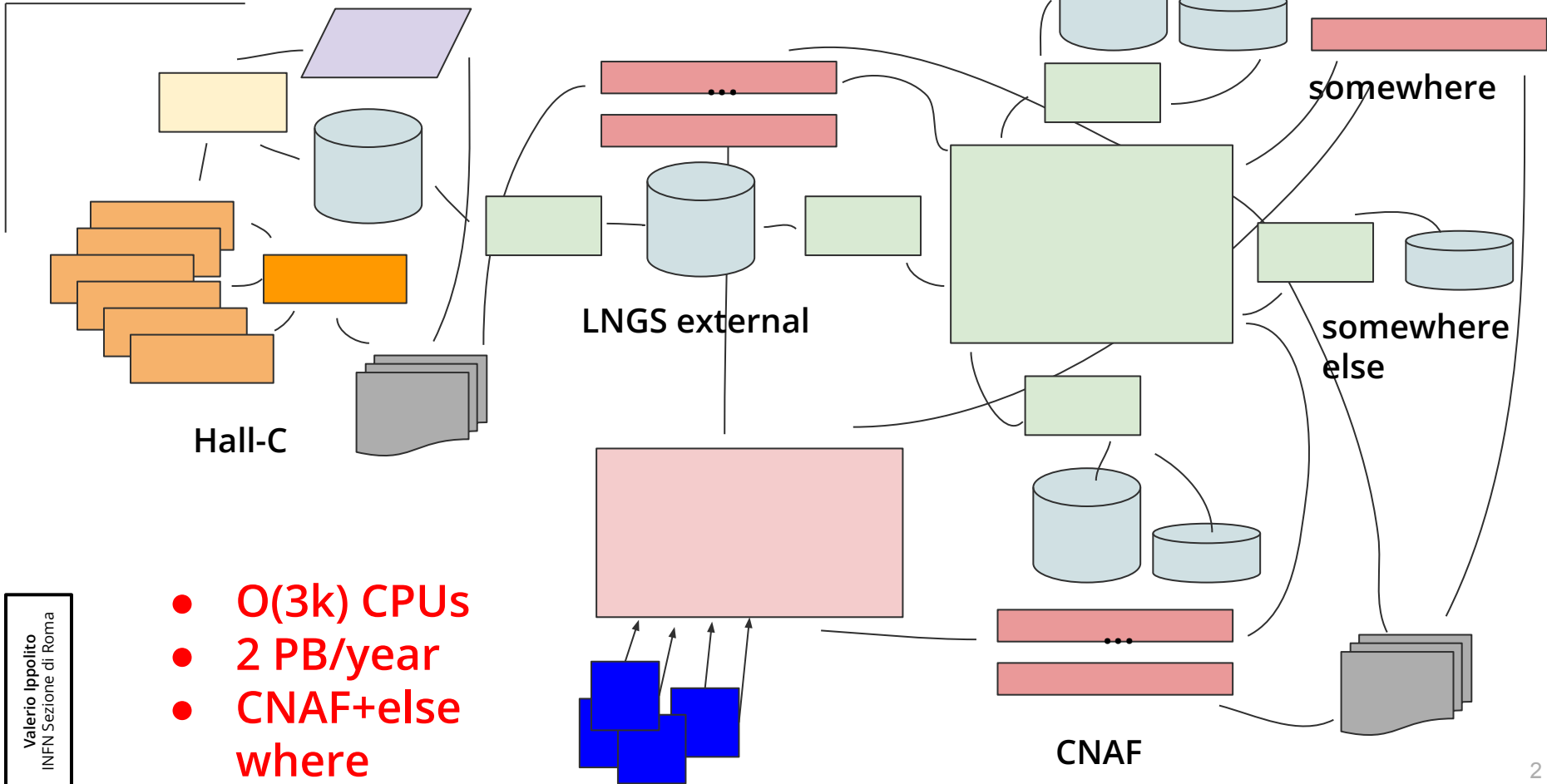




# PanDA and DarkSide

status of the workload management pilot for DarkSide-20k

# Architecture



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

# 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 set up, in testing phase
  - read-access restrictions for blind data currently applied at storage level, rather than at rucio level



Welcome to **vo.darkside.org**

Sign in with your vo.darkside.org  
credentials

Sign in

[Forgot your password?](#)

Or sign in with

Your X.509 certificate

 eduGAIN

 INFN  
CCR - AAI

# Workload management: news

[https://panda-doma.cern.ch/jobs/?display\\_limit=100&days=30](https://panda-doma.cern.ch/jobs/?display_limit=100&days=30)

- job submission with panda-DOMA demonstrator successful!
  - ran DS-Proto reconstruction (small demonstrator of large detector, taking data in these weeks) on data at CNAF
- tested with old VOMS, and POSIX access to storage
  - i.e. no rucio, no tokens yet
  - command-line submission from laptop
  - web monitoring interface

## next steps: integrate with IAM and data management

- and later on with release distribution
- deploy k8s cluster on CNAF Cloud for installation soon

PanDA ID	Attempt	Owner / VO Group	Request Task ID	Transformation	Status	Created	Time to start d:h:m:s	Duration d:h:m:s	Mod	Site	Priority	N input events (N input files)	Max PSS/core, GB	Job info
13715	Attempt 1	Valerio Ippolito darkside / wlcg	17	runGen-00-00-02	finished	2024-11-07 07:21:20	0:0:01:47	0:0:02:09	2024-11-07 07:25:24	CNAF-DS-1 online	1000	0 (0)	8.64	
Job name: user.vippolit.CDEA0114-39AD-4F5B-87AD-150001EE5584/13715 #1														
Datasets: -														
13714	Attempt 1	Valerio Ippolito darkside / wlcg	16	runGen-00-00-02	finished	2024-11-07 06:57:16	0:0:01:39	0:0:01:05	2024-11-07 07:00:53	CNAF-DS-1 online	1000	0 (0)	0.01	
Job name: user.vippolit.6CF7FD2A-8E91-4247-8471-B1EAAE51543F/13714 #1														
Datasets: -														
13713	Attempt 1	Valerio Ippolito darkside / wlcg	15	runGen-00-00-02	finished	2024-11-07 06:50:06	0:0:01:45	0:0:00:05	2024-11-07 06:52:19	CNAF-DS-1 online	1000	0 (0)	0.01	
Job name: user.vippolit.41FC698F-C00D-42FC-AFB3-549D98AEB695/13713 #1														
Datasets: -														

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

(current challenge: IAM vs WLCG JWT profiles)