

# DUNE Workflow / Workload Status

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# Workflow/load in DUNE

- Thursday meetings (8am CT) running since March
- Status and Gaps document worked on there
  - Aims to list what we have, what is missing, and slot it all into an overall plan, including interface to Data Management
- Main areas
  - **Pilot Factories** send pilot jobs out to sites to get a slot - we get these “off the shelf” from OSG
  - **Workload** get our jobs into the right pilot job slot at sites. GlideinWMS and HTCondor pool, including our own pool now.
  - **Workflow** transform request to do some processing into a series of jobs to do it. At the design stage in DUNE.
  - **Client tools** - mostly off the shelf - move to jobsub lite?

# Workload

- Expect to continue with GlideinWMS and glidein pilot jobs
  - Familiar, well-understood system
  - Code and some services shared with OSG, FIFE, and CMS
- Dedicated DUNE global pool has been created
  - This allows us to have DUNE-specific HTCondor configuration which can match jobs to sites in a relevant way
  - Will also make it easier to prioritise jobs between different categories (eg users vs production vs working groups)
  - Successfully sending jobs offsite; logins available for testing
- We need to track the move of OSG sites to token only submission and make sure sites we use don't have “surprises”

# Workflow

- Workflow system is at the design stage
  - Closely connected to Data Management
  - DM has very late binding: job asks the Data Dispatcher which file it should work on
- Proposal to push selection of jobs to the very last minute too
  - Generic job will ask which project (production) to work on
  - Then ask for the next file to process in that project
- This would allow very late optimisation of what projects to process depending on the site, memory of the job slot, I/O, processor features etc etc
  - So can match on “what is best *now*” rather than minimum requirements
  - But would do something simple (round robin?) to get started

# Backup

# Future system?

