

# NAF Status

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# Scheduler news: Late Materialization

- Limit of jobs on the scheduler
  - Enabled since some month on CMS scheduler to solve the following problem:
  - Users are submitting many (>>1000) jobs at once (single or array jobs).
  - Scheduler is overloaded, and does not work for other users too
  - Users get an error if (currently) more than 5000 jobs are submitted
- We know that this hits some users ... but not enabling would also hit users
- New work-around implemented (or call it feature): Late Materialization
  - Only works with array jobs
  - Submit as many jobs as you want, only a small number show up as “idle” and are presented to the scheduler. If a job goes into the state running, another “hidden” job is promoted to “idle”
  - `max_materialize = 100`  
`queue 10000`
- - zwei anmeldungen fuer tutorial (zuwenig)

# Singularity news:

- singularity options now active, and added to documentation
- Add to your submit file:

```
+MySingularityImage = "/path/to:image"  
+MySingularityArgs = "--my-args"
```

- Thanks to Hartmut for testing!
- The following is done on HTCondor worker node under the hood

```
singularity exec --contain --bind /afs:/afs --bind /nfs:/nfs --bind /pnfs:/pnfs --  
bind /cvmfs:/cvmfs --bind /var/lib/condor:/var/lib/condor --pwd  
/working/directory/of/job<--your-singularity-args> </path/singularity:image> <your  
executable and args>
```

# Other news, observations:

- High load of CMS WGS has been reported. We repeat, that we usually do not kill user processes.
  - Experiment support should contact users to clean up
  - We have an automated cronjob telling users ... once per day, and ignored most of the time
- CMS scheduler overloaded due to automatized and high-frequency condor\_q requests
  - 5 users were found
- CMS sched ueberlast durch automatisierte 'condor\_q' requests
  - 1 user with a special tool doing “condor\_q -l “ every 20 seconds
  - Other users doing “watch condor\_q”
  - Just don't ☺
- Power outage in one computing room last Thursday at 8:00am.
  - Lost some batch jobs
  - dCache instances were affected. CMS instance only fixed during Friday
- DUST quota information from outside (AMFORA not working): Asking the experts

# Migration to EL7

- New WN and new WGS for small groups (virtualized) → EL7:
  - Hardware has arrived partially... Hopefully for next NUC, everything is ready
- WGS
  - CMS user request for two more EL7 nodes. Waiting for „go“ from CMS support

# Upcoming events:

- CMS HTCondor tutorial: Only two – four applicants, too little feedback, waiting for more
- Preparing for the „Terascale Intro-Schule am 16.-20.3.“, held on the NAF
- 1.4.2020: CMS dCache
- 1.4.2020: Short interruption because of network change of login servers (to be announced separately)
- 18.3.2020: PRC preparation meeting
- 8&9.4.2020: PRC (with IT contribution at least in closed session)