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# Partial downtimes management

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WLCG T1 Service Coordination Meeting

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## Use case



- On October 25th, a scheduled downtime was put on dCache SE for 2 hours.
  - ATLAS, CMS and LHCb both impacted
  - ALICE not impacted because is using xrootd
- Our VO-dedicated contacts informed the VOs
  - We understood that this SD was enough to make CCIN2P3 ban soon enough by impacted VOs
  - A WARNING downtime was anyway put on our CEs
- But during the SD we had to kill many jobs
  - A VO complained, see [GGUS #75703](#)
  - Apologies for that loss of CPU time.



## Problem description



- How to deal with downtimes of services that are not used by all the VOs ?
- How a site could make the possible collateral damages clear enough for VOs
- Who is supposed to anticipate the collateral damages (by draining or stopping job submissions soon enough) ?

Resources / VOs	ALICE	ATLAS	CMS	LHCb
dCache SE		✓	✓	✓
Xrootd SE	✓			
CVMFS		✓		✓
LFC-LHCb-RO				✓
LFC-Atlas		✓		
Oracle cluster		✓		✓



# Partial downtime options



1. By also closing the CEs (**Site**)
  - This is what we did some time ago
  - Unfair for not impacted VOs
2. By draining job submissions of impacted VOs (**Site**)
  - Do we have to block submission or to held new jobs in queue ?
  - How long before ?
    - Ex.: by taking the time of the longest job from the last x days
  - How to announce/remind it to the impacted VOs?
    - Ex: WARNING downtime on the CEs from draining start time.
3. By leaving the VOs to ban the site (**VO**)
  - Does any VO manage correctly the dependency between its jobs and the services ?
  - Is any VO able to conclude what to do from a service downtime ?
  - Does the VO need additional information ?
4. By requesting to EGI/WLCG some improvements in the downtime declaration
  - By making possible to declare a downtime by VOs
    - Ex: CE in downtime for ATLAS, CMS and LHCb but not for ALICE
  - But probably not a short-term solution.
  - Option to address to WLCG TEG “Operations” (?)



## Conclusion



- Each VO is using a site in its own way
  - A site is not a common infrastructure for all the VOs
    - A service hosted by a site may be not shared by all the VOs
  - A service outage may not impact all the VOs
- A site cannot unfortunately put a downtime by VO
- In order to avoid misunderstanding between VOs and sites
  - We must find a common way to deal with partial downtimes
  - Suggestions are welcome
- Until a clear statement, we'll adopt option "2"
  - By holding jobs in queue x hours before the SD
  - By putting a WARNING downtime on the CEs from draining start time