



# CMS future use cases for the information system

Stefano Belforte  
Brian Bockelman  
Diego Gomes  
Stephan Lammel  
Andrea Sciaba`  
Christoph Wissing



# General requirements

- Easily add VO-specific attributes
- Easily allow sites to publish info from custom info providers
- Well defined and validated information from WLCG
- Allow to manually override data
- Integrate data from multiple sources



# Service discovery

- Storage services
  - Not needed
- Compute services
  - All needed to configure pilot factories
    - Resource endpoint and contact details (queue name, etc.)
    - Resource requirements (what types of pilots may access the resource?)
    - Resource size (for workflow planning)
    - Resource runtime environment (cores, slots, CPU/wallclock time limits, memory limits, HS06 rating, ...)

# Downtimes

- Nothing special here, just provide a comprehensive Google calendar (or equivalent) with all downtimes at all CMS sites



# Pledges

- Required by site, not by federation
- Used for long term planning
- Large discrepancies need to be tracked, but not required from WLCG
  - Can be internally managed by CMS



# Installed capacities

- No change since the statement made in July
- Nice to have but not essential
- Storage
  - Total available space may be used if available
- Compute
  - CPU capacity may be used for troubleshooting if available
  - Otherwise can be estimated from historical utilisation levels



# Information aggregators

- Experiment-level (like AGIS)
  - Strongly desirable, use cases are those typically covered by AGIS
- WLCG-level (like GSR)
  - Convenient but not required
  - WLCG can just provide ways to directly retrieve all information from their native sources

# Summary

- Flexible, customizable information system framework
- Service discovery for compute resources
- Dynamic information for compute resources
- Pledges by site
- Installed capacities not requested
- Experiment-level aggregator strongly desired