

In WLCG we face the need to introduce in production-like conditions several testing and commissioning exercises, which could operationally destabilize the regular computing activities. Some examples of where this is necessary include:

- The WLCG Operations Middleware Readiness working group foresees to utilize the experiments' testing and commissioning frameworks (such as HammerCloud) to validate new middleware releases installed at dedicated endpoints at volunteering sites;
- Some sites (not necessarily the same ones as above) would upgrade their production instances before this is done in the rest of the infrastructure, in order to provide essential early feedback of new versions;
- The production deployment of IPv6 in WLCG would benefit from sites volunteering to move their production infrastructure from IPv4-only to dual stack services.

The need for such activities is essential for the long term evolution of the infrastructure, but it is understood that taking part in such initiatives could reduce efficiency and reliability of the sites during the exercise. Thus we aim to find a reasonable compromise in order to perform them without impacting too much the experiment operations and to avoid sites being penalized for a somewhat lower apparent availability/reliability.

With the current note we would like to get an agreement from all parties about the necessity of such activities and define a possible common understanding:

- The LHC experiments should be ready to accept some instability at various sites, given that this does not represent a large fraction of the resources. What is an acceptable level of instability should be discussed at the management board and could vary case by case, also depending on the role of the site in the experiments' computing activities.
- Sites are welcome to volunteer to take part in the testing initiatives. Candidates should get the agreement of the WLCG management board before being considered officially part of the exercise. The list of sites will be reviewed regularly by the management board, based on experiments', sites' and WLCG Operations coordination team inputs.
- The various initiatives will be carried on such that the impact on production is minimized as much as possible. For example the Middleware Readiness initiative will rely on a separate set of resources at the sites and not on the production services.
- The list of sites involved in each exercise will be advertised in the reports to the C-RRB as well as in the WLCG quarterly reports
- Funding agencies are invited to consider that the effort of those volunteer sites in testing is essential for the longer term, and more than offsets the occasional consequent reduction in measured availability or reliability of the site.