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## How to use less known features of LB

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Logging and Bookkeeping (L&B) is a gLite subsystem responsible for tracking jobs on the grid. Normally, users interact with it through gLite UI commands. This article presents other L&B usage patterns available with recent L&B versions, which are not widely known but are still useful (HTML or plain-text query interface, and notifications).

### Impact

All interfaces described above provide users with alternative ways to access job-related information conveniently. The HTML interface gives a brief job status overview, still allowing users to use their full-featured gLite UI installations for more specific queries. The text interface returns information in a well defined machine readable format suitable for further processing with user scripts. Notifications allow users to avoid repeated queries to detect job status changes. All of these features improve productivity by removing unnecessary repetitions of certain queries and allowing users to check up on the states of their jobs from additional locations. Productivity can be further increased by reflecting the computing element reputability in the JDL rank expression, relying on a specific ClassAd function to penalize unreliable computing elements during the job matching process being carried out by the gLite WMS.

### URL for further information

<http://egee.cesnet.cz/en/JRA1/LB>

### Conclusions and Future Work

L&B features discussed in the text are not new but they have been fully re-engineered and extended with respect to user feedback we have been receiving. The scope of their use is now broader, making them applicable to a wider range of problems. We are going to give practical examples of their respective uses, including live demonstrations.

### Keywords

Logging and Bookkeeping, simple interface, notifications, CE reputability

### Justification for delivering demo and technical requirements (ONLY for demonstrations)

We don't request demo booth explicitly, as the work we present is not visually attractive too much. However, we assume to show live examples during the poster session.

### Detailed analysis

L&B querying capabilities are provided through a legacy API and web service interface. These full-featured interfaces are rather difficult to use. Therefore, we provide a lightweight HTML and a text interface as well. This allows users to load their grid credentials into a web browser and point the browser to the appropriate

L&B server endpoint, displaying a list of the given user's active jobs. Pasting a jobid into the browser displays an overview of the job's status. The plain text interface works similarly (by appending the '?text' modifier), displaying the information in a key=value format.

The notification interface allows users to subscribe for messages to be sent out once a job enters a particular state.

Information gathered by the L&B service can serve, for example, as evidence of computing element reliability, especially when trying to identify 'black holes' where jobs get accepted quickly only to fail immediately.

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