

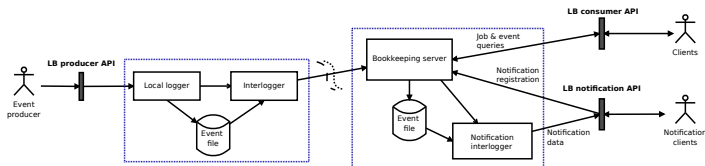
Use of messaging in L&B

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L&B architecture overview

- L&B service in production since 2003.
- current features:
 - reliability, security, fault-tolerance, high performance
 - lightweight, no configuration required
 - message size 100B – 10MB, rate 500 events/sec
- producers push information to L&B server,
- consumers query server directly or subscribe for notifications (see L&B User's Guide, <http://egee.cesnet.cz/cvsweb/LB/LBUG.pdf>).

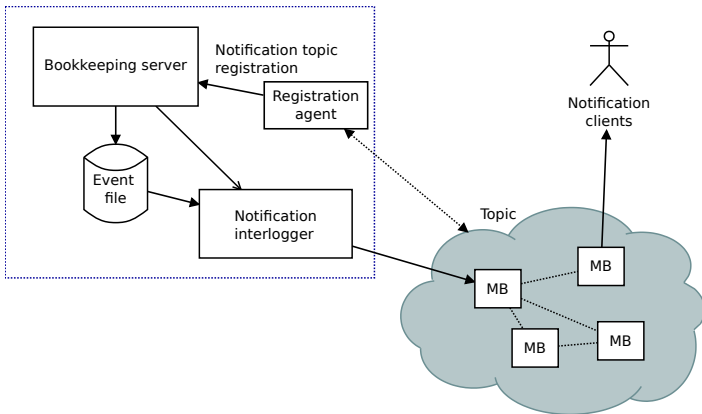


Goals:

- make L&B service neutral with respect to used event delivery mechanism:
 - support both legacy and MSG producers and consumers
 - offer more alternatives for accessing the L&B services to sw developers
 - allow for better interoperability of components from different software stacks
- enhance the spectrum of events L&B service processes:
 - tap into more event flows
 - support broader range of tracked entities (WMS jobs, CE's: PBS, Condor, CREAM jobs, file transfers, application specific, ...)
- ease component access to messaging infrastructure:
 - make use L&B message transfer for sending/publishing to the MSG

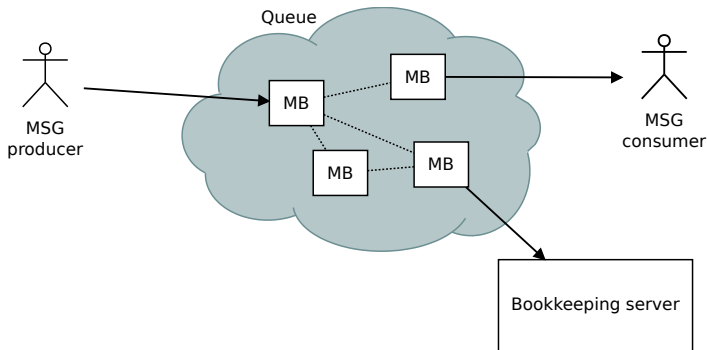
Use case 1: notification delivery

- Clients wish to be notified using messaging infrastructure, not by L&B delivery mechanism:
 - registration agent checks topic, registers for notification delivery,
 - L&B server generates notifications about job status change,
 - notification interlogger publishes notifications to topic.



Use case 2: event delivery

- Allow for event collection from nodes connected to messaging infrastructure and use that infrastructure instead of L&B transfer (eg. non-gLite stacks):
 - producers send messages to brokers on the LAN,
 - messages are delivered to L&B server.



Use case 3: MSG tunneling through L&B

- Take advantage of L&B ubiquity (IL already deployed) on grid nodes to access messaging infrastructure:
 - producers compose and send messages using the standard L&B producer API and protocol,
 - L&B loggers deliver the message to broker infrastructure,
- Enables current L&B producers to communicate to MSG seamlessly.

