

LLAP Monitor

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Motivation

For the improvement of performance of LLAP, it is necessary to collect metrics of each query. LLAP Monitor collects these metrics from all LLAP Daemon and provides web interface to look into this information. And also this service is run on YARN container through Slider.

Design

- **LlapMonitorDaemon** is a daemon which run on YARN container like *LlapDaemon*. This class provides web interface at the same port to *LlapDaemon*.
- **LlapMetricsCollectServer** collects jmx metrics from all *LlapDaemon* periodically. The target list of *LlapDaemon* are extracted from zookeeper server which launched in the cluster. The each host of *LlapDaemon* is registered in zookeeper node.
- **LlapWebServices** provides web service inside *LlapMonitorDaemon*. This class is also used by *LlapDaemon* for exporting jmx metrics. *LlapWebServices* should also provide the service which shows the metrics collected from all *LlapDaemons*.
- *LlapMonitorDaemon* should be launched as a component of Slider package. This configurations can be written in *resources.json*, *appConfig.json*, *metainfo.xml*. These configurations are embedded into *templates.py*.

