



Lemon Tutorial

LRF

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Components

Lemonmrd – pre-processing of data in python to RRD files:

- OraMon and FlatMon data backends
- Redefinition of RRD files (metrics)
- Cluster/grouping metric processing (average, aggregate)
- Primary key constraint selection (1 value)
- Added tools for history data upload
- Dynamic cluster definition via plugins (VO utilization)
- Warning: use rrdtool v 1.0.49 (aka RRD version 0001 only)



Components II

Status pages

- Data source both OraMon and FlatMon
- Written in PHP, using JpGraph for direct graphs from data from Oracle and rrdtools for RRD graphs
- Includes LAS (needed version 5 of PHP) in installation
- Allows defining groupings of clusters, virtual clusters, racks, HW models, ...
- Added support for Oracle Databases
- Synoptic view of the Computer Center
- For integration with CDB – template and XML profile viewer integrated



Setup

Fast overview:

- Rpm installation (lrf)
- Setting up clusters - /etc/lemon/lrf/clusters.conf
- Starting lemonmrd, checking log file (/var/log/lemonmrd.log)
- Verifying PHP settings
- Adding rack config file
- Setting up Synoptic display
- Viewing the data on status pages, fast overview
- Changing the setup to work with Oracle XE:
 - Modification of config files (/etc/lemon/lemonmrd.conf and /var/www/html/lrf/config.php)
 - Setting up /etc/init.d/lemonmrd with Oracle XE
- <http://lemon.web.cern.ch/lemon/doc/components/lrf/index.html>