



EGEE-JRA1 IT/CZ meeting, Milan, December 14-15, 2004

Enabling Grids for
E-science in Europe

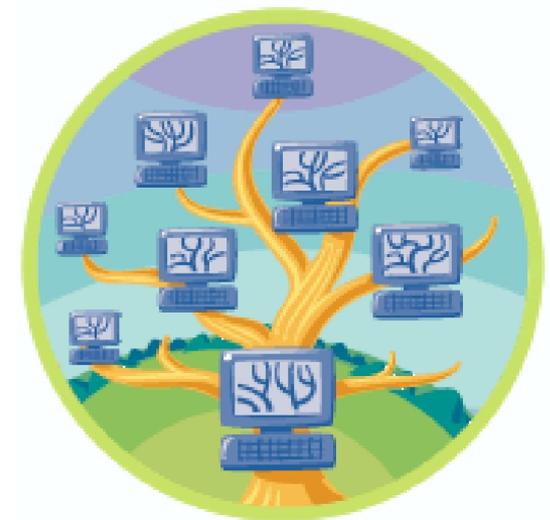
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LB rank function



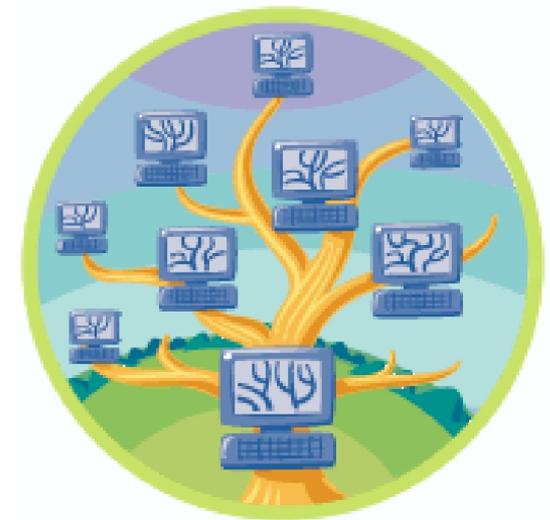
The LB 'hack' ranking function—summary

- Ready in both INFN and gLite CVS
- Serving only limited queries (CE and STATE conds.)
- Aim: very lightweight calls
 - server does not use the DB
 - data are stored in a file which is mapped into a memory
 - SSL connection is held as long as possible
- API and usage is similar to a standard LB query interface



The LB ranking function—recommended usage

- Better to keep only one context (connection)
- Share the context between threads (use locks/mutexes on it)
- More than one context could block all the bkserver slaves
- Do not close the connection explicitly



The LB ranking function—code example

```
extern edg_wll_Context lb_rank_log_ctx;
edg_wll_QueryRec *qr;

qr[0] = (edg_wll_QueryRec *)calloc(2, sizeof(edg_wll_QueryRec));
qr[0].attr = EDG_WLL_QUERY_ATTR_DESTINATION;
qr[0].op = EDG_WLL_QUERY_OP_EQUAL;
qr[0].value.c = strdup("My CE");

LockRateCtx(lb_rank_log_ctx);
edg_wll_StateRate(
    lb_rank_log_ctx,
    qr, /* only DESTINATION == Any is supported */
    EDG_WLL_JOB_DONE, /* this job stat counts */
    1, /* minor job state i.e. DONE_OK */
    &from, &to, /* input: requested time interval */
    /* output: where were the data available*/
    &computed_fraction, /* returned fraction */
    &rfrom, &rto); /* time resolution for the data */
UnlockRateCtx(lb_rank_log_ctx);
```