report on application porting of HYP3D

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HYP3D gridification

- **The code compiles with the Gnu Fortran compiler exept TK**
  - Intel Fortran compiler not present on GILDA
  - options used : -O -fno-automatic -finit-local-zero
- **Libraries**
  - our local libraries compiled with minor problems
  - BLAS and LAPACK libraries not present on GILDA environment, so we had to download them and link statically with them.

HYP3D gridification

- **To submit TB, here is the JDL file tb6.jdl :**

```
Type = "Job";
JobType = "Normal";

Executable = "/bin/sh";
Arguments = "tb6.b";

StdOutput = "tb6.stdout";
StdError = "tb6.err";

InputSandbox = {"tb6.b","tb6.out","tb6.d", "system_info"};
OutputSandbox = {"tb6.err","tb6.stdout"};

RetryCount = 7;

Rank = other.GlueCEStateFreeCPUs;
```

HYP3D gridification

- **... and the script tb6.b :**

```
export LCG_CATALOG_TYPE=lfc
export LFC_HOST=lfc-gilda.ct.infn.it
export LCG_GFAL_VO=gilda
hostname
PATH=$PATH:.
chmod +x tb6.out system_info
# ------------------------------------------------------------
date
set -x
cat  tb6.d
# ------------------------------------------------------------
time tb6.out < tb6.d > OUTPUT
# ------------------------------------------------------------
cat  OUTPUT
lcg-cr --vo gilda file://$PWD/na3-ps.s221.o0.b8 \
    -l lfn:/grid/gilda/training/budapest/budapest24/na3-ps.s221.o0.b8
```

HYP3D gridification

- **Run & Results of TB :**
  - Then after changing some namelist values in the tb6.d input file, the job is submitted with : edg-job-submit tb6.jdl
  - The first run of TB didn't work, after a slight change in the the name of stdOutput, it worked
  - Preliminary checks shows correct results of the second run
- **Submission of TJ :**
  - The executable is bigger and can't pass on the Input Sandbox, so I had to put it on a Storage Element. I was running out of time, I was just able to submit the job.