Subject: Problem with submitting jobs on prometheus cluster
Posted by Klaus Götzen   on Mon, 14 Oct 2013 12:14:42 GMT
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Hi,

I have some strange problem, maybe somebody get's an idea about it.

I try to submit a bunch of PandaROOT simulation jobs (single track box generator) on the prometheus cluster at GSI, and that perfectly worked last week. Today I tried to do this again, but for almost all jobs (some run) no events are generated, and in the output I can spot the error message

...
[INFO   ] Simulation RunID: 1381751574
At line 44 of file gbase/gmail.F (unit = 10, file = 'gphysi.dat')
Fortran runtime error: Cannot write to file opened for READ
...

I don't know whether that is the key issue, but no events are generated afterwards. On the interactive machine this error does not appear. So I don't know at all, whether this is an error I produced by some misconfiguration, or being a problem of the cluster nodes.

Does somebody by chance know what's going on? Is it possible to switch off this file output to gphysi.dat, or is this an important file to be produced?

Best regards and thanks,
Klaus

Subject: Re: Problem with submitting jobs on prometheus cluster
Posted by Florian Uhlig on Mon, 14 Oct 2013 14:07:04 GMT
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Hi Klaus,

this is your fault.

OK, now I will try to give you a meaningful answer to your problem. If you don't specify a working directory GridEngine will execute the job in the default working directory. If I remember correctly this is /tmp.
If you run a Geant3 simulation the file gphys.dat is created in the working directory. If you don't clean up after you finished the simulation the file stays in this working directory. If you end up to run on a machine where this file was created by another user you can't overwrite the file and Geant3 will crash with the error message you have seen.

What I do in my GridEngine macros is to create a workdirectory and run the simulation there.

```
workdir=/tmp/$username/$JOB_ID.$SGE_TASK_ID
mkdir -p $workdir
cd $workdir
```

At the end of the script I remove the working directory after I have moved all output to the final destination.

Ciao

Florian

Subject: Re: Problem with submitting jobs on prometheus cluster
Posted by StefanoSpataro on Mon, 14 Oct 2013 14:31:06 GMT
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Is it possible to have some tutorial on how to submit properly jobs on that farm?

Subject: Re: Problem with submitting jobs on prometheus cluster
Posted by Klaus Götzen on Mon, 14 Oct 2013 16:08:20 GMT
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Hi Florian,

thanks a lot for your answer! After some investigations together with Ralf we also found the problem - it was exactly as you said.

Btw there exists already a unique TMPDIR, where I just changed into with 'cd $TMPDIR' right at the beginning. This seems to work as well.

Anyway, I now know about the issue.

Best,
Klaus