

---

Subject: Re: GRID, PandaROOT, and static binaries

Posted by [Johan Messchendorp](#) on Wed, 13 Feb 2008 20:18:13 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Hi Dan and all others,

I am still a little bit puzzled about the usage static libraries and binaries. As I understand, one still needs to obtain them for the different hardware configurations and compilers, which means one has to compile and build them on various machines anyhow. In this respect, we might as well provide shared libraries within the packman software packages?!? Furthermore, if we would go for static binaries, does this mean we need to make one executable which archives ROOT and all Panda related stuff? This would be a major job, no? I certainly would like to keep the macro-oriented nature of the simulation and analysis, which would imply we require one static "(panda)root.exe" which includes all the objects of Pandaroot. I don't know, maybe it would be more efficient to limit the static stuff for some of the software components, such as eventgenerators and cernlib.

From my experience in installing the cbmsoft and pandaroot via packman on the Grid sites, I have to say that for most of the cases it works like a charm. In particular, since the configuration scripts of Florian and Mohammad are really excellent. Also pandaroot is not a problem at all to let it compile on the different sites automatically (thanks to the same persons and cmake). The only problems I encounter were related to cernlib and eventgenerator stuff (hence my comment above). Actually, once we have solved all the problems we find during the software installation on the sites (and there are not many left!), we surely have it easier next time we make an upgrade of the software. From this perspectives, to employ static binaries would be an extra overhead which might not be necessary. Maybe from the batch system point-of-view it might be advantageous, but that we have to quantify (where and what are the problems).

Concerning the number of dependencies etc: I would say lets indeed avoid to have many (sub)packages. Actually, only two packages are of relevance: cbmsoft (grid specific with geant4 data files included to avoid dependence on wget installation and maybe with static cernlib) and pandaroot. cmbsoft depends on "nothing" and pandaroot on "cbmsoft". That's it.

Johan.

---