

SA3

Enabling applications and users communities needs appropriate encapsulation layers and specific additional services. Ganga is an example of the former: it is widely used in HEP and proved its value also outside (~25% of the user base is from non-HEP communities) as a training, gridification and user tool. An example of the specific services is AMGA, widely adopted in particular by LS applications. Originally developed in the application area of EGEE, Ganga is part of the RESPECT programme and AMGA has been contributed to the EGEE gLite.

Further establishing well-accepted tools is essential to: keep up-to-date the tools used by our community (order of 1,000s active users); provide a toolkit for new high-visibility applications (e.g. International Telecommunication Union Frequency plan conference RRC06, Lattice QCD, Hydrology among others). In addition continuous integration effort is needed to maintain and adapt the experiment frameworks to new middleware components and implement optimisation layers. Among the most promising areas we single out: optimised usage of multi-core processors; integration with cloud computing and HPC infrastructures; integration with new solutions from other projects (EMI) and industry (especially in the area of data storage solutions).

The proposed breakdown of activities across partners is:

- GANGA evolution: CERN (1 FTE co-funded); IC (1 FTE co-funded); BHAM (1 FTE, co-funded); UIO (1 FTE, co-funded)
- Integration of LHC experiments frameworks : INFN (2 FTEs, co-funded), CERN (1 FTE, co-funded)
- Adoption of existing Grid components for user analysis (Ganga, AMGA) and integration of job submission and monitoring framework into the grid: DESY (1FTE co-funded)