Global Computing Initiative

Clustering of projects and joint activities

Summary:

The characteristics of the projects selected in the Global Computing initiative cover the research foci that were requested in the call for proposals. Three clusters and one special interest topic have been identified that group with a certain overlap the 13 GC projects. Actions intra-cluster are expected to give coherence to the efforts carried out in a particular research area from different projects. However, a GC-level interaction is needed if we want the proactive initiative to be more than the sum of its parts. This actions should be aimed at defining a clear picture of where the initiative is going. The expected result is twofold: to identify new interesting areas that build on the strengths of different research strands across projects, and to detect “gaps” in GC areas that should be covered either by individual projects or by a more co-ordinated effort. The former is specially important when considering that knowledge of those future opportunities might influence the progress of the projects themselves.

1. Thematic clustering and interdependencies

The GC initiative comprises 13 RTD projects covering all the main areas discussed in the call. Projects can be naturally grouped into 3 broad thematic clusters and one special interest topic. The 4 (3+1) thematic areas are:

- Languages and programming environments
- Foundations of networks and large distributed environments
- Analysis of systems, especially through type-theoretic calculi
- Security and resource management (special interest topic included in the cluster “Analysis of systems”)

Figure 1 depicts links between projects that were specifically picked out by project coordinators. The links may indicate an overlap or similarity of topic, or complementarities where the results of one project could add to the scope of another. Each direct link indicates a mutual interest between the projects as expressed in the section 10 (clustering) of the respective Technical Annex.
Figure 1

Figure 2 depicts projects clustered according to the 3+1 thematic groups just mentioned. Solid lines depict the core of the cluster, small dotted lines other potentially interested partners. Both pictures are provisional and likely to change and develop in the course of the initiative according to the interest of the projects and the evolution of the initiative.
2. Joint activities

2.a Cluster level:

Annual workshop: Each of the sub-clusters has the critical mass to sustain an annual joint workshop on its specific topic. The workshop would involve the full presence of core projects\(^1\) that would be responsible for its organisation, operation and production of common conclusions, plus a selective participation of 'guest' projects\(^2\) from the initiative whenever their work is of relevance to the cluster, and if necessary invited outside speakers. These workshops could be very focussed and deal at length with substantial results obtained from the projects in that year. Their main objectives would be to strengthen collaboration, determine areas where joint efforts could be necessary and possibly identify new lines of research. An ideal forum would be that of a 'retreat', ie. a 3-4 day event in the Dagstuhl style in an accessible but self-contained country location.

We expect that proposals for possible organisers/locations and the final decision will be taken by internal cluster consensus. Country spread of coverage should be taken into account at GC level, but Brussels can always be considered as the default option. Ideally, the four cluster workshops should take place at the same time and place.

Yearly review: Joint yearly reviews of the projects will be done at cluster level, co-locating them with the annual joint workshops (around months 12-14). Eventually, the final review could be done in conjunction with a final open workshop organised at GC level.

2.b GC initiative level

In addition to the above there will be yearly general events involving all projects during the life of the initiative, ideally in conjunction with an existing major European conference. The main aims of this would be

- to present the GC initiative to a larger community
- strengthen interrelations between all GC projects
- help planning of future clustering activities, joint workshops etc.

It might also allow expert advisors to assess whether FETs should consider future initiatives in the area, either of a kind to top-up or complement GC, or even as a follow-up to GC.

Three GC events could be envisaged: the first at ICALP, a mid-course around month 18 (date and place to be discussed) and a final event. The final event could be co-located with ETAPS 2005 (March 14-18). If the projects agree on this, a no-cost extension of three months for all the projects could be envisaged to accommodate the expenses associated to the final event in the contract.

\(^1\) On a yearly basis, projects appearing in two clusters as “core” could choose in which cluster workshop they want to participate as “core” (and therefore be reviewed there) or participate as guest.

\(^2\) The participation of guest projects would be limited to the partner(s) or person(s) of the project whose work is of direct relevance to the inviting cluster.