

# Generic Applications Questionnaire

## Section A: Describe your community

- 1) Is your community scientific or industrial ? both  
SIMDAT – Data Grids for Process and Product Development using Numerical Simulation and Knowledge is a project of mostly industrial partners (only 3 universities of 27 partners)  
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- 2) Describe concisely the “added value” for your community to run your application(s) at an European-wide scale specifying in particular what could be done on the grid infrastructure and could not be done at a local scale (max 500 words).  
Simdat will leverage the development of third party Grid systems to produce an integrated Grid infrastructure for use by the application activities, and as a base for higher-level services, Emphasis will be on using existing components and providing the glue to work together, and on simplifying deployment and management of these components to achieve a Grid infrastructure appropriate for use in industrial settings.  
SIMDAT will evaluate the EGEE Middleware with applications they will define for this purpose. The benefit of EGEE is a Middleware running on a production grid.
- 3) In how many countries (N) in Europe is your community spread out ?
  - a.  $N < 5$
- 4) How many people (N) in your community will be using a grid infrastructure in the next year ?
  - $N > 100$
- 5) How many people (N) in your community will be using a grid infrastructure in the next two years ?
  - $N > 100$
- 6) From how many sites (N) in Europe will people belonging to your community connect to the grid infrastructure in the next year ?
  - a.  $N < 10$
  - b.  $10 < N < 50$
  - c.  $N > 50$unknown

- 7) From how many sites (N) in Europe will people belonging to your community connect to the grid infrastructure in the next two years ?
- N<10
  - 10<N<50
  - N>50

Unknown yet

- 8) Describe concisely (max 500 words) the security requirements of your community.

This will be part of discussion with the SIMDAT Project and the chosen examples.

Section B: Describe your application no. 1

- 9) Is your application no. 1 scientific or industrial ?  
industrial

- 10) Describe concisely your application no. 1 (max 500 words) from the point of view of its goals and algorithms.

Please see SIMDAT Proposal (contact Clemens Thole to get it)

- 11) Is your application no. 1:

- CPU intensive ?
- data intensive ?
- both ?

most of the applications are data intensive

- 12) Is your application no. 1 mainly intended for:

- interactive use ?
- batch use ?
- both ?

both

- 13) Quantitatively evaluate your application no. 1 in terms of:

- CPU power (SpecInt2000/SpecFp2000 per second per job);
- Memory consumption per job (Megabytes);
- Disk storage needs per job (Terabytes);
- Tape storage needs per job (Terabytes);
- Number of jobs per user per year;
- Number of users per year;
- Network bandwidth requirements (Megabit/sec).

this will part of discussions with SIMDAT and the chosen examples

- 14) Quantitatively evaluate which percentage of the data of your application no. 1 needs to be replicated in more than one site and the average number of copies per elementary replicated data set (e.g., file).

See 13)

- 15) Does your application no. 1 have a graphic or a command-line user interface ?  
see 13)

- 16) Can your application no. 1 be accessed/steered from within a web browser ?  
see 13)

- 17) Is your application no. 1 already interfaced to any grid middleware ?  
see 13)
- 18) If yes to question 17, to which middleware and in the context of which project ?
- 19) If yes to question 17, can you cite some references (less than 10) to related work ?
- 20) Did people of your community already attend any grid demos/tutorials ?  
yes
- 21) If yes to question 20, how many people per event ?  
unknown
- 21) If yes to question 20, how many events of each kind (demos, tutorials) ?  
unknown
- 22) Does your application no. 1 need third party commercial software to run ?  
part of discussions with the SIMDAT Project
- 23) If yes, which one(s) ?
- 24) Describe the license under which your application no. 1 can be distributed on the grid infrastructure (max 200 words).
- 25) Describe concisely (max 500 words) the security requirements of your application no. 1.  
Will be part of discussion with the SIMDAT project and the chosen examples
- 26) If yes to questions 17 and 20, describe concisely (max 500 words) what problems you foresee to successfully port your application no. 1 on a distributed computing environment like a European grid infrastructure.

### Section C: Describe your application no. 2

It will be part of a discussion with the SIMDAT project, which and how many application will be installed

- 27) Is your application no. 2 scientific or industrial ?
- 28) Describe concisely your application no. 2 (max 500 words) from the point of view of its goals and algorithms.
- 29) Is your application no. 2:
- a. CPU intensive ?
  - b. data intensive ?
  - c. both ?
- 30) Is your application no. 2 mainly intended for:
- interactive use ?

- batch use ?
- both ?

31) Quantitatively evaluate your application no. 2 in terms of:

- CPU power (SpecInt2000/SpecFp2000 per second per job);
- Memory consumption per job (Megabytes);
- Disk storage needs per job (Terabytes);
- Tape storage needs per job (Terabytes);
- Number of jobs per user per year;
- Number of users per year;
- Network bandwidth requirements (Megabit/sec).

32) Quantitatively evaluate which percentage of the data of your application no. 2 needs to be replicated in more than one site and the average number of copies per elementary replicated data set (e.g., file).

33) Does your application no. 2 have a graphic or a command-line user interface ?

34) Can your application no. 2 be accessed/steered from a web browser ?

35) Is your application no. 2 already interfaced to any grid middleware ?

36) If yes to question 35, to which middleware and in the context of which project ?

37) If yes to question 35, can you cite some references (less than 10) to related work ?

38) Did people of your community already attend any grid demos/tutorials ?

39) If yes to question 38, how many people per event ?

40) If yes to question 38, how many events of each kind (demos, tutorials) ?

41) Does your application no. 2 need third party commercial software to run ?

42) If yes, which one(s) ?

43) Describe the license under which your application no. 2 can be distributed on the grid infrastructure (max 200 words).

44) Describe concisely (max 500 words) the security requirements of your application no. 2.

45) If yes to questions 35 and 38, describe concisely (max 500 words) what problems you foresee to successfully port your application no. 2 on a distributed computing environment like an European grid infrastructure.

Section D: Describe your commitment

This also has to be discussed with the SIMDAT people

46) How many people/FTE's can your community dedicate in the next year to port your application(s) to the grid infrastructure in collaboration with grid experts ?

47) From how many sites and with what distribution among sites ?

48) How many people/FTE's can your community dedicate in the next two years to port your application(s) to the grid infrastructure in collaboration with grid experts ?

49) From how many sites and with what distribution among sites ?

50) How many people/FTE's can your community dedicate in the next year to support users to use your application(s) on the grid infrastructure ?

51) From how many sites and with what distribution among sites ?

52) How many people/FTE's can your community dedicate in the next two years to support users to use your application(s) on the grid infrastructure ?

53) From how many sites and with what distribution among sites ?

54) Which computing/storage resources can your community put as part of the grid infrastructure to run your application(s) in the next year ?

55) From how many sites and with what distribution among sites ?

56) Which computing/storage resources can your community put as part of the grid infrastructure to run your application(s) in the next two years ?

57) From how many sites and with what distribution among sites ?

58) Are those resources targeted for "exclusive use" by your community or can be shared with other applications running on the grid infrastructure ?

59) If yes to question 58, which is the percentage of use that can be allowed to other communities for their applications ?

60) How many people/FTE's can your community dedicate in the next year to install, upgrade and manage grid middleware on the sites of your community ?

61) From how many sites and with what distribution among sites ?

62) How many people/FTE's can your community dedicate in the next two years to install, upgrade and manage grid middleware on the sites of your community ?

63) From how many sites and with what distribution among sites ?