

FOOTPRINT on EGEE

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www.eu-egee.org

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Enabling Grids for E-sciencE

During the last 2 month, the ESR VO consumed more CPU time on EGEE than ever before. More than 350 000 normalized CPU hours are credited to the E.U. FP6 FOOTPRINT¹ project which aims at studying pesticide impact on the environment, involving 16 (academic) institutions from 9 european countries (De, Dk, Fr, Gr, It, PI, Se, SI, UK).

Workflow divided in scenarios, each one representing a conjunction of a climate, a soil, a crop and a pesticide; non-realistic scenarios are discarded, and the remaining have been sorted according to priority.

This first campaign concerns $8\,370$ K of these scenarios (more than $20\,000$ K).

¹http://www.eu-footprint.org

EXAMPLE 1 Enabling Grids for E-science

The FOOTPRINT computations are very basic ones: static executable (FORTRAN), small input data set, minimal output (small enough to be retrieved using OutputSandbox). Computations involve almost all Resource Centers providing support to the ESR VO.

Grid jobs group from 6 to 9 scenarios and usually take between 3 and 6 hours to complete. Taking off was pretty fast: less than 1 month.

Encountered middleware weaknesses:

- RB/WMProxy accepting jobs but not submitting them
- OutputSandbox downloading problems

However, success is already acknowledged:

- Computing rate higher than expected by project promoters
- Failure ratio under 3%
- Completion expected within 2 month.