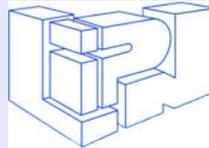


A Synthesis of Presentations and Topics Covered at SGS '08 Workshop

Christophe Cérin¹

¹Laboratoire LIPN , UMR 7030
CNRS, Université Paris 13



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Outlines

▶ Why?

- ▶ List main topics/problems covered
- ▶ Show coherency in the selected papers
- ▶ Find common interest, emerging project(?)
- ▶ Feedback for our publication process (advantage: not a one shot process)

▶ Authors TODO

- ▶ Add remarks from the reviewers and from our participants into the final version...deadline October 15. Provide 1 file with the final article + 1 file to explain how you have inserted remarks.

▶ Conclusion and perspectives

Topics covered during the workshop

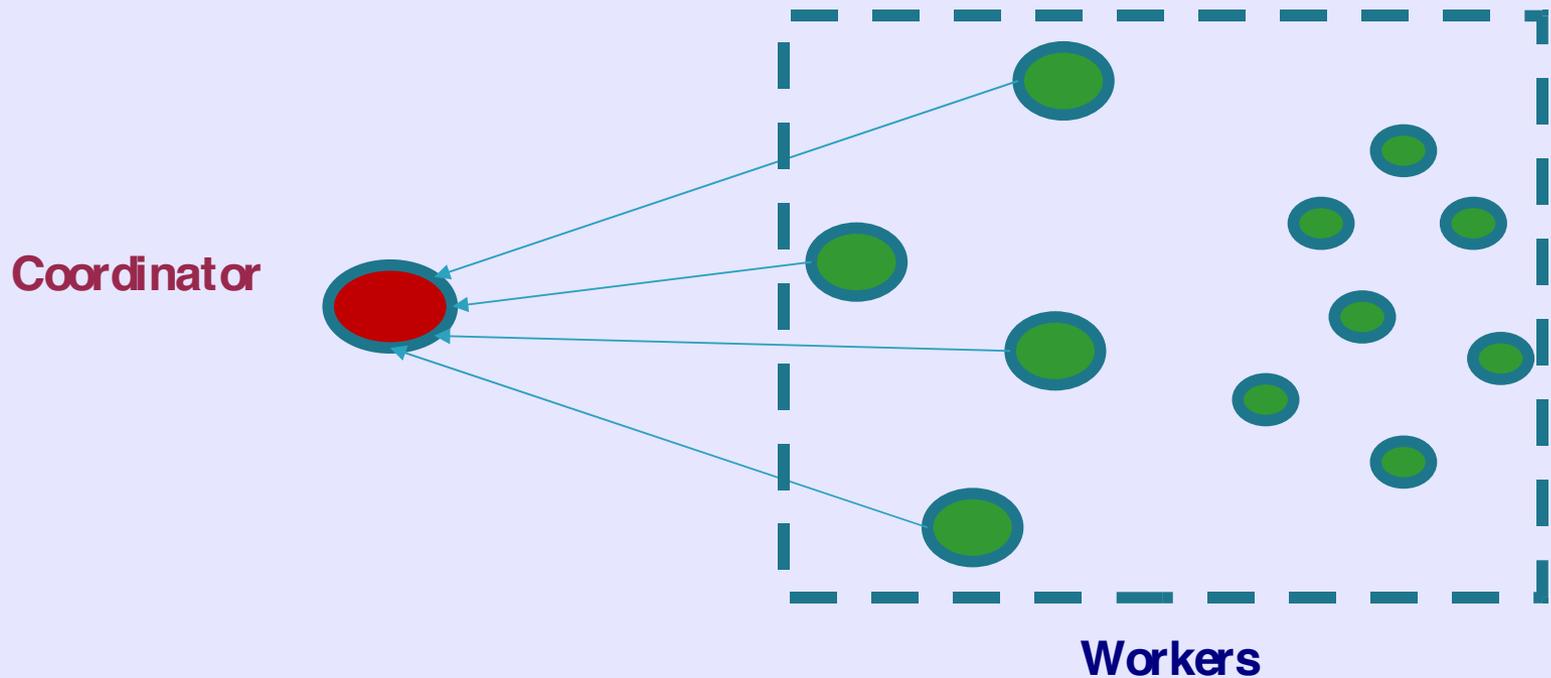
- ▶ Analysis of Publish/subscribe systems => build an institutional/community orchestration tool for DG
- ▶ Meta Brokering solutions => grid services more generic
- ▶ Techniques for secure resources and safe computations
- ▶ API for simulating and predicting => studying realistic grid heuristics scheduling algorithms
- ▶ Security model Internet Desktop Grid and Service Grids => coupling different grid instances on a secure mode

Proposal

- ▶ How to build a certification service for a DG:
 - Scalable
 - Decentralized (as much as possible)
 - Based on standards for cooperation, description
 - Based on proved Alg (certification side)
 - Performance
 - Interoperable with others grids flavours with a secure mode (delegating rights...)
 - With some part able to be simulated

Starting point (candidate)

BonjourGrid : Basic design (1 / 3)

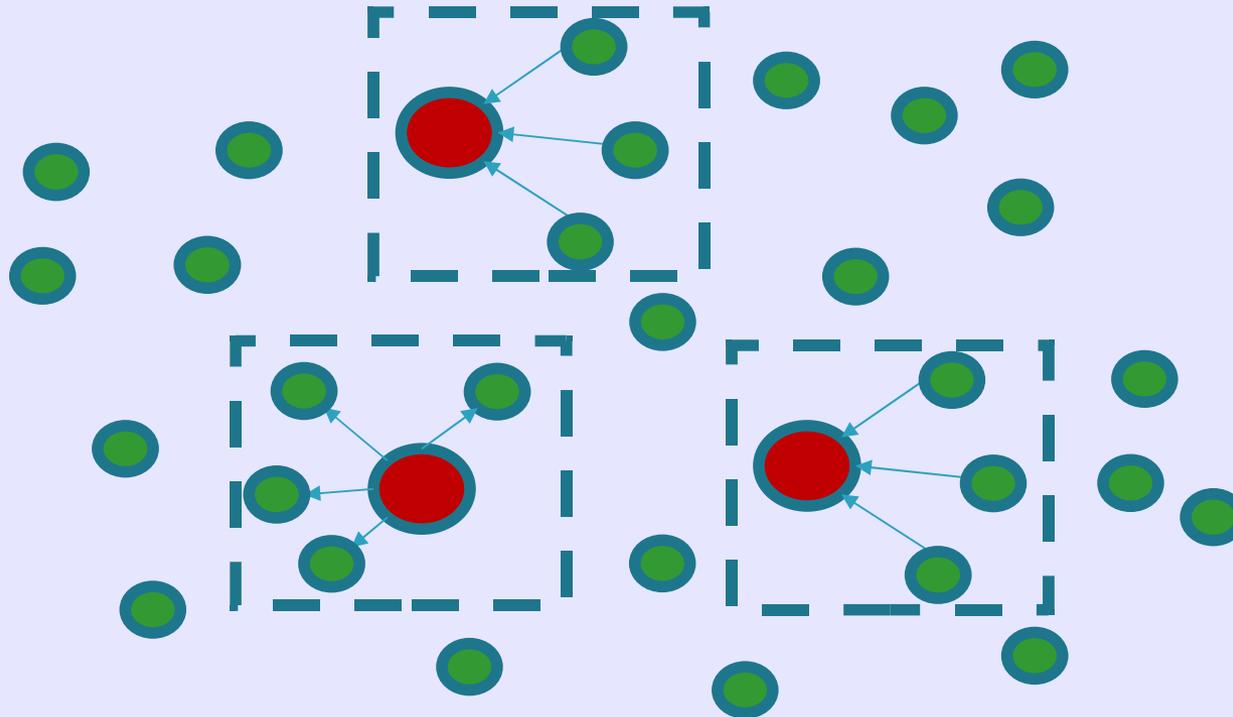


Computing Element (CE) = 1 Coordinator + N Workers

Starting point (2 / 3)

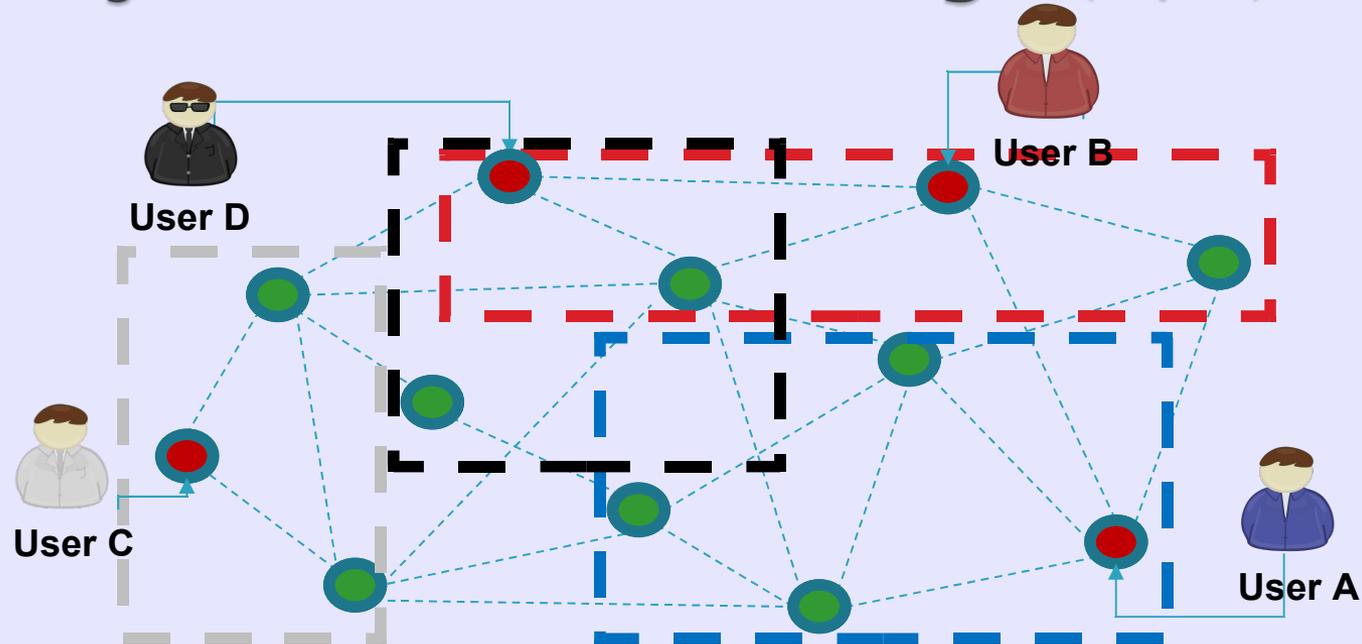
BonjourGrid : Basic design (2 / 3)

Control and **coordinate** multiple instances through Publish/Subscribe system



Starting Point (3/3)

BonjourGrid : Basic design (3/3)



- ➔ A computing element for each user
- ➔ No static coordinator

We need and we want...

- ▶ Techniques for certification
 - ▶ Replication (partial replication of random selected tasks)
 - ▶ List of reputation in order to minimize re-computation
 - ▶ Quiz
- ▶ Meta-Brokering strategies
 - ▶ The problem can be seen as some kind of scheduling problem(?)
 - ▶ Standards: Scheduling Description Language, Capability Description Language, Global Job Identifiers, Security Management
- ▶ Trust between grid flavours
 - ▶ User and access rights (selecting the certification/secure platform)
- ▶ Simulation and prediction mechanisms

Go left, go right, straight ahead?

- ▶ Which is the best institutional form/organization to continue on such emerging problem?
- ▶ How to extend/adapt SGS'09 topics?
- ▶ Yet another point to address before leaving?

