Google ROADEF/EURO Challenge
2011-2012
Qualification and final results
Emmanuel Guéré
- 82 registered teams
- 48 teams sent a program for qualification
- 30 qualified teams
- 27 teams sent a program for final

Machine reassignment
Random solution generator

- Generate resources
- Generate processes
  - Generate machines
    - Assignment
    - Add slack
    - Safety capacity (turndown?)
  - Generate locations
  - Generate services
    - Select processes
    - Choose SpreadMin
  - Generate neighborhoods
  - Generate dependencies
  - Generate costs
- Obfuscate quantities, resources...
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# Machine reassignment

## Datasets A1 & A2

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Machine reassignment

Evaluation:

- **On LIP6 machines**  (Laboratoire d'Informatique de Paris)
  64bits Core2duo E8500 3.16GHz, 4Go,
  Debian or windows

- 5 minutes per instance
  - only one run
  - seed for A1 & A2 evaluation: 795
  - seed for B & X evaluation: 186

- **Score**
  - Score(instance) = (cost(instance) - cost(best)) / cost(reference)
  - Score(team) = sum(instance)
And the qualified were:

Qualified teams

Qualification threshold
(30 best teams)
Machine reassignment

Datasets B & X

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### Machine reassignment

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</table>
And the winners are:

**J12** Jaskowski et al.
*Poznan University of Technology, Poland*

**J25** Brandt et al.
*Karlsruhe Institute of Technology, Germany*

**J33** Sansottera et al.
*Politecnico di Milano, Italy*
And the winners are:

**S41 Buljabasic et al.**

*University of Sarajevo, Bosnia*
And the winners are:

**S41 Buljabasic et al.**

*University of Sarajevo, Bosnia*
And the winners are:

- **Juniors:**
  - 1st: **J12** Jaskowski et al.
    - Poznan University of Technology, Poland
  - 2nd: **J25** Brandt et al.
    - Karlsruhe Institute of Technology, Germany
  - 3rd: **J33** Sansottera et al.
    - Politecnico di Milano, Italy

- **Senior:**
  - 1st: **S41** Buljabasic et al.
    - University of Sarajevo, Bosnia

- **Open-source:**
  - 1st: **S41** Buljabasic et al.
    - University of Sarajevo, Bosnia