Platform for Resources Allocation Problem
Specifications of our platform
Toward an adaptable model

Platform for
Multiagent Resource Allocation

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Platform for Resource Allocation by Negotiation (1)

- Why?
  - to validate the theoretical results
  - to induce new results
  - Quality of the solution :
    - when we found optimal solution
      - $\Rightarrow$ how many deals?
      - $\Rightarrow$ how long?
    - when we can't found optimal solution
      - $\Rightarrow$ how many deals?
      - $\Rightarrow$ distance between solution and optimum?
      - $\Rightarrow$ Do we still manage optimal solution?

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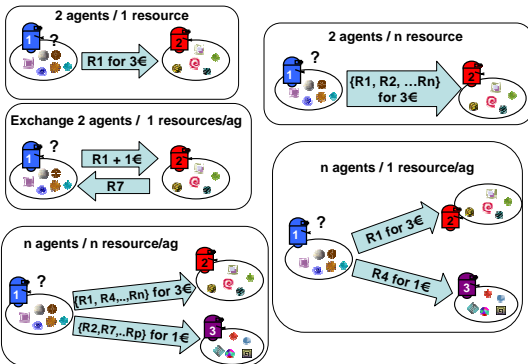Toward an adaptable model

Platform for Resources Allocation by Negotiation (2)

- Platform
  - flexible and open-source
  - allows to show the dynamic of the allocation
    - SW evolution with time
    - SW evolution with little change of parameters
    - test of non-appropriate protocol parameters
  - accepts easily external agent

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Specifications of our platform (1)

- Possibility to change parameters like
    - deal type
    - with or without side payment

For each deal with or without side Payment

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Specifications of our platform (2)

- Possibility to change algorithm on agent
- accept all the Social Welfare
    - egalitarian
    - utilitarian
    - pareto ...
- accept all agents type
    - cooperative
    - self-interested
    - individually rational...

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Toward an adaptable model (1)

- Our expectations (1)
    - possibility of testing all the negotiation parameters with logs
    - existence of an agent system like mediator which controls
      negotiations (deal type, respect of protocols, ...)
    - acceptation of external agents
    - system agent which controls negotiation