

# Distributed Data & Integration

## Breakout Session

- What are the major challenges?
  - Lack of a common ontology
  - Inefficiency of current grid solutions
  - Bandwidth
  - Security
- These issues are not specific to data mining – we should seek solutions from the grid and database communities.

# Ontologies

## ■ Problem:

- $\nexists$  a common ontology to make joins between distributed data feasible without hand-crafted solutions.

## ■ State of the art:

- Partial, bottom-up solutions such as UCDs

## ■ What should be done next?

- Work towards completing ontologies within each discipline
- Cross-discipline ontologies?

## ■ What can the SIG do to help?

- Establish groups to develop ontologies for those disciplines that lack them

# Efficiency and bandwidth

## ■ Problems:

- Lack of!
- Inefficiency of current grid solutions for federating data
- Inefficiency of XML databases

## ■ State of the art:

- BinX?

## ■ What can the SIG do to help?

- Access to higher bandwidth and related expertise - UKLight?

# Security

## ■ Problems:

- Current solutions not *seen as secure enough*
- *Adding security can degrade performance still further*

# Misc.

- What else can the SIG contribute?
  - Define standard tests/criteria for benchmarking software
  - Form a group to look at the data integration problem in detail
  - Raise a challenge to be met – an X-prize (beer, pint, one) for data integration?

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