

The logo for IRAMOS, featuring the letters 'I', 'R', 'A', 'M', 'O', and 'S' in a stylized, blue, blocky font. The 'O' contains a white play button symbol. The letters are set against a background of overlapping, semi-transparent blue and grey shapes that resemble a hand or a network structure.

Interactive Realtime Multimedia Applications
on Service Oriented Infrastructures

ICT 2008

*Advanced Technologies for
Virtualized Systems and Platforms for
the Future Internet*

Service Level Agreements in Virtual Business Environments

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For what I will not talk about...

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on Service Oriented Infrastructures

- The “past” and the outcome of many projects
 - Distributed Systems & Platforms
 - SLA Management Frameworks
 - Reputation Systems
 - Algorithms for QoS Guarantees
 - ...

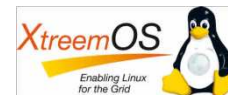


SIMDAT #

*Core***GRID**

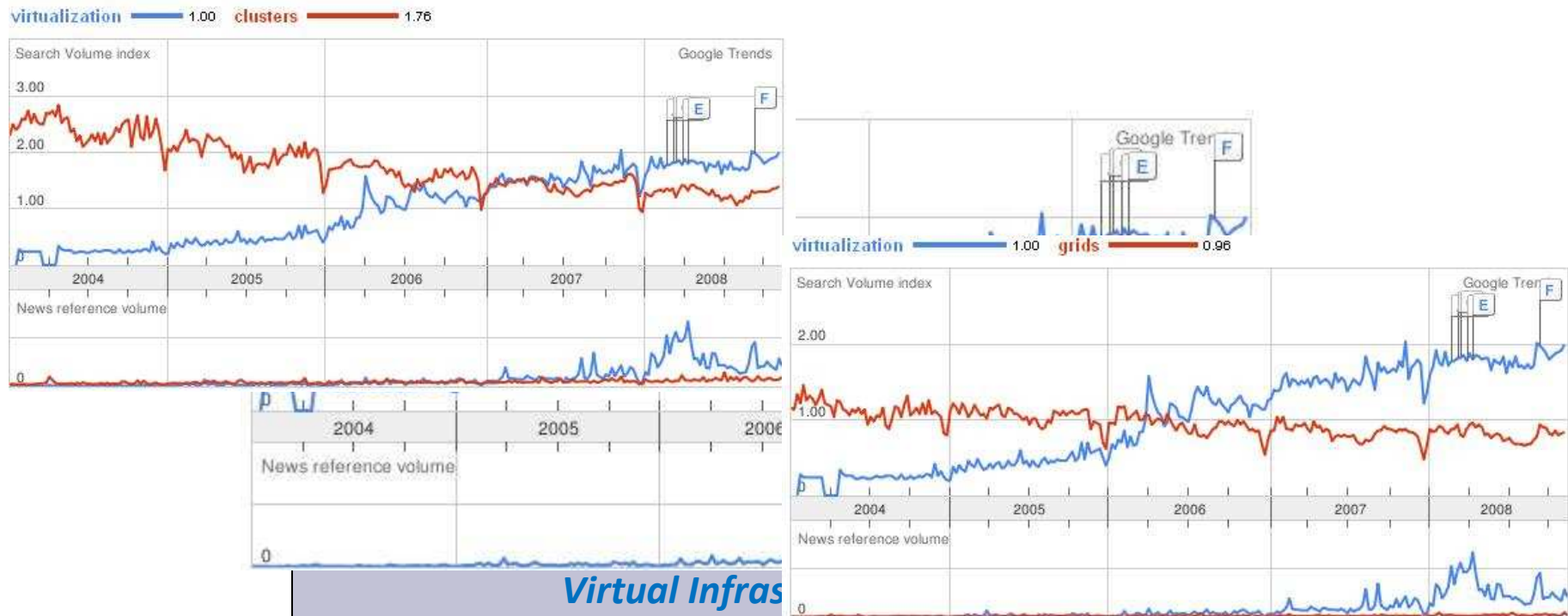


BREIN
Business objective driven **RE**liable
and **I**ntelligent grids for real **bu**siness



Current Research Efforts...

- Do they **contribute** to **Virtual Infrastructures** the **Business** objectives of different providers?



Virtual Business Environments

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- As in the real world, the main goal is to make profit by fulfilling the *customers'* requirements!
- What if the provider cannot achieve it?
 - Can Virtual Infrastructures consist / be extended with resources from different providers?
 - Isn't the aforementioned extension subject to the provider's partnerships and agreements with other providers?

Business “Network Game”

- Resource Management & Virtualization can be seen as a network game between providers:
 - Cooperating
 - non-Cooperating
 - Antagonistic
 - Cheating
 - Malicious.
- The offerings and policies are never published.
- In order to have stable resource offerings, avoid monopolies, cartels, starving, etc, one has to define and control the *equilibrium* point of this network game!

Challenges

- ❑ Quantitative **expression** of business relationships.
- ❑ Description of the **dependencies and tradeoffs** between providers.
- ❑ Adaptation of **policies** in the way the equilibrium points of the “network game” are developing.
- ❑ Identification of **trust** in such relationships.
- ❑ **Service Level Agreements**
 - Including cross-references to capture the interdependencies
 - Evolving following the changes of the business processes and policies.



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Thank you!

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Further Information

<http://www.irmosproject.eu>

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