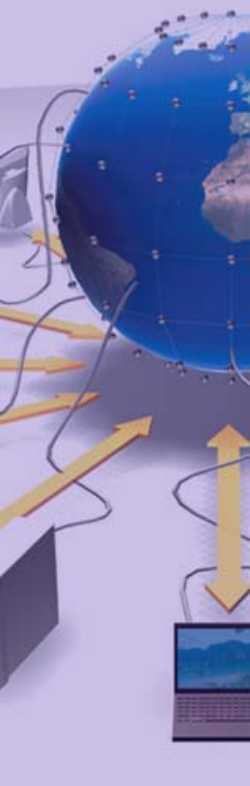
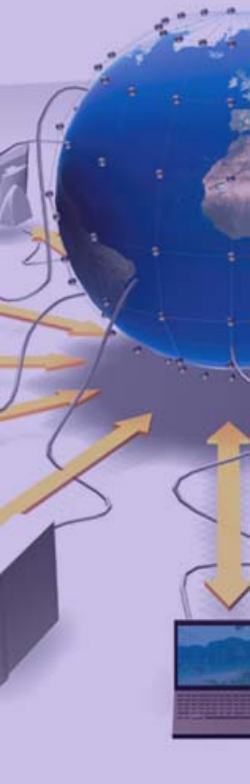


# Update on MSG Messaging System for the Grid

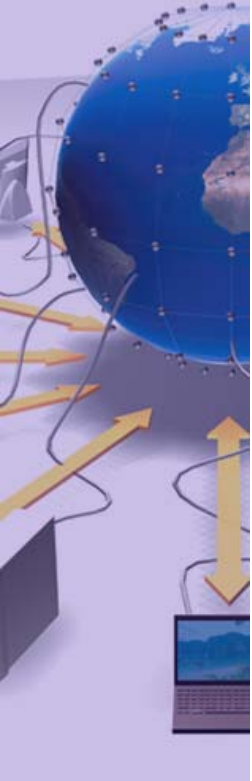
Daniel Rodrigues



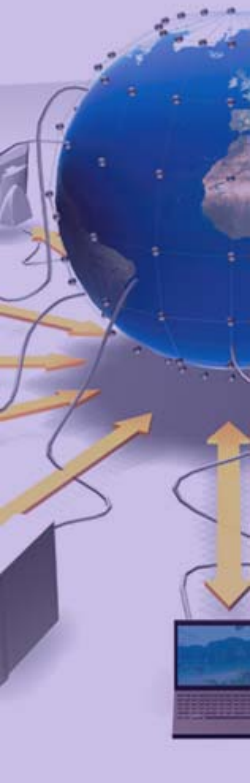
- Flashback
- Current status
- Conclusion



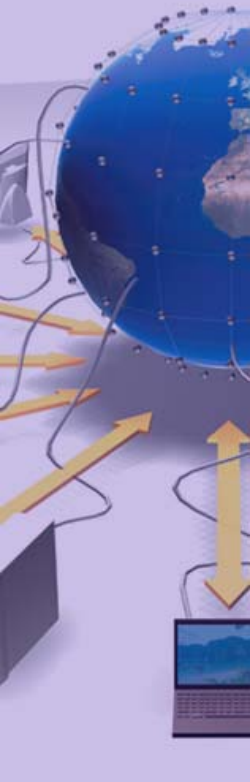
- MSG (Messaging System for the Grid)
  - A novel approach to exchanging information
    - Asynchronous
    - Reliable
    - Scalable
    - Based on MOM (Messaging Oriented Middleware)
  - Suitable for the monitoring environment
  - Promising results from testing
- Proposing Apache ActiveMQ as broker
- Many possible clients
  - Stomp (Python, Perl)
  - JMS / OpenWire (Java)



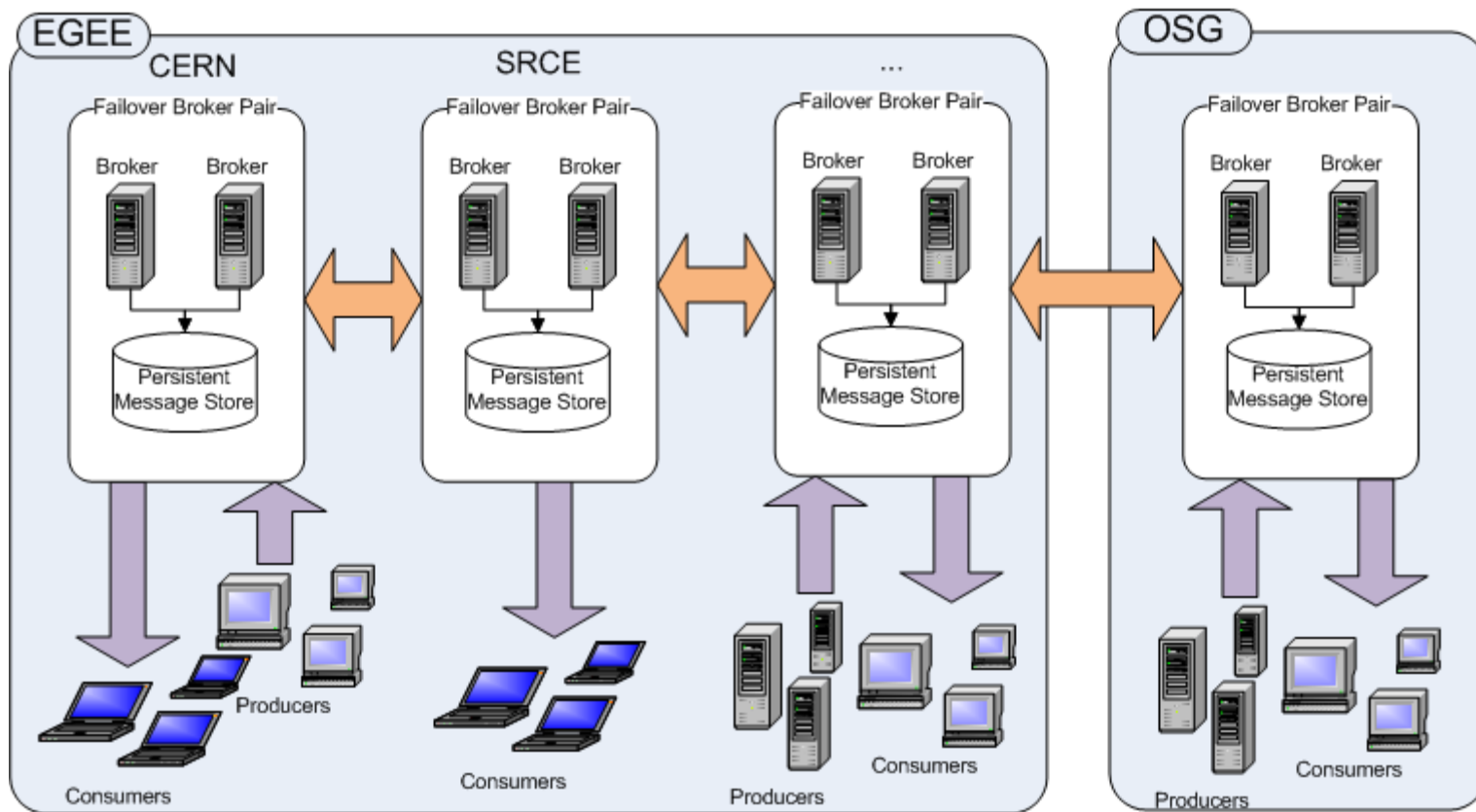
- R & D phase is finishing
  - Many evolutions since last year
  - Stable service within expectations
  - Prototype validated by different users with different requirements
  - Some work to be done on the SSL layer
- Changing focus to operations
  - Getting cleaner deployment
  - Extend the user base
  - Respond to further requests
  - Enhance System Management Bus
  - 60 sites on the Operations Automation → 250 sites



- Ready for productive use:
  - ActiveMQ v5.2
    - Running for 3 months
    - File Based Persistence for reliable delivery
    - Failover pair
    - Solving previous memory management issues
  - Clients
    - Python
    - Java
    - Perl
  - Nagios bridges under development



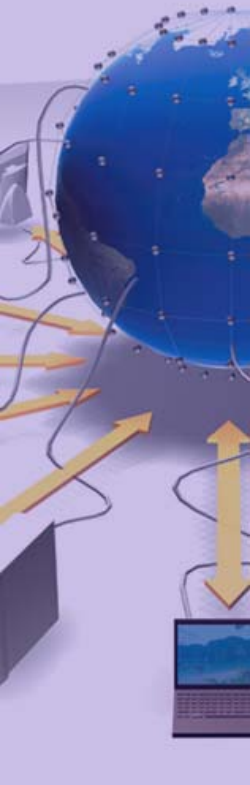
Cross-grid messaging backbone consisting of reliable broker clusters



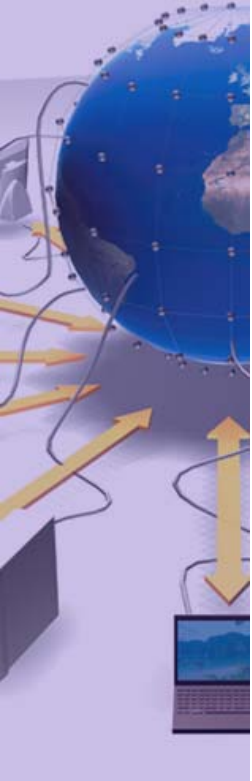
Version 1.0, 19<sup>th</sup> November, 2008

- Operations Automation in deployment
  - Using network of brokers

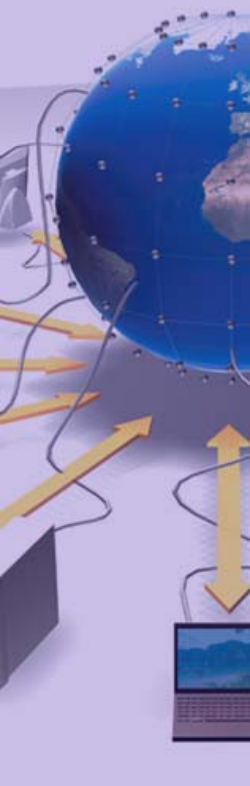
- Presentations on conferences
  - EGEE conference
    - “Grid Messaging Systems in the WLCG monitoring context”
  - CHEP
    - “MSG as a core part of the new WLCG monitoring infrastructure”
    - “Monitoring the efficiency of user jobs”
  - OGF/EGEE User Forum
    - “Using MSG for monitoring job efficiency”



- R&D successful
  - MSG proved suitable for Grid Monitoring
  - Flexible, Reliable, Scalable.
- Prototyping evolved to near production
  - Used by several applications already
  - Current version stabilized and tested
- Moving into production mode
  - Major role on Operations Automation
  - Increasing user base
- Challenges ahead
  - Run a bigger infrastructure smoothly
  - Finish work on Security







Thank you for your attention.

