



Distributed computing monitoring activities for SuperB

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The rationale

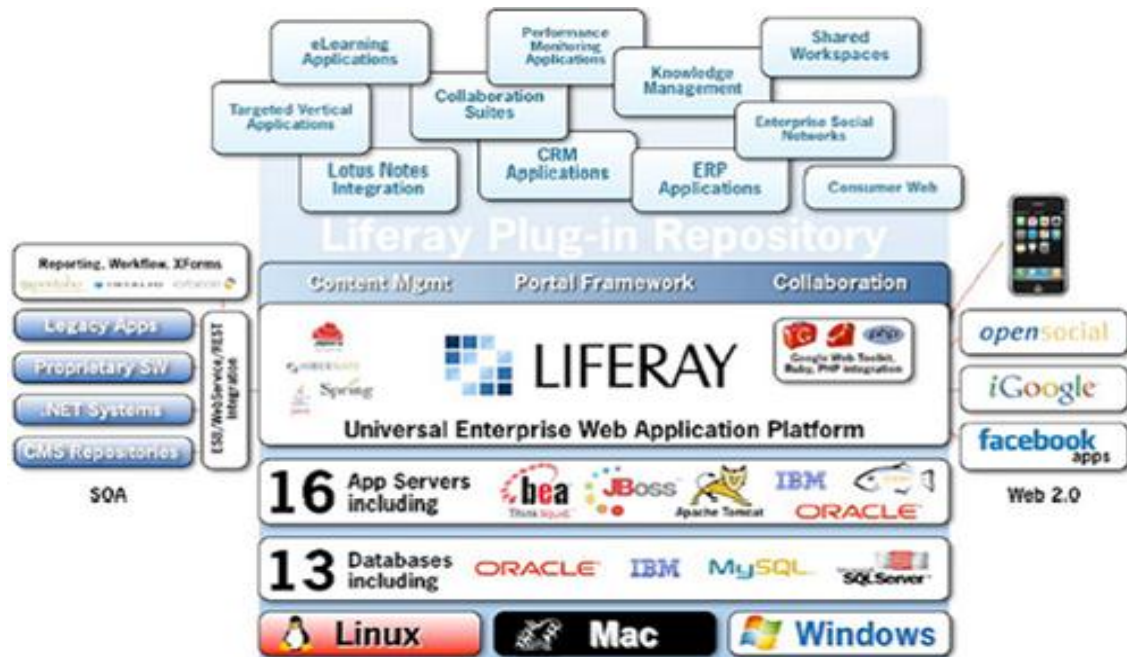
- The distributed computing system that will support the SuperB project will need a valid software tool for the management and monitoring
- Most functionalities have already been coded (e.g. Atlas tier1), but there is no general model, to be used in a distributed environment
- The typical case is the Italian SuperB Tier1 for offline analysis, not yet designed, but which will likely be a distributed Tier1, over four separated sites.

A small summary (tools)

Centralize all necessary applications in a Web portal



Use individual applications as components



- Already chosen by IGI, the Italian grid infrastructure new institute
 - Experienced users in Napoli, Catania, Bari
 - Public domain, but support is available
 - Integration with authentication and authorization tools already done
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- Can accomodate existing tools (Nagios, Network monitoring tools, etc.) with minimal re-writing, if any



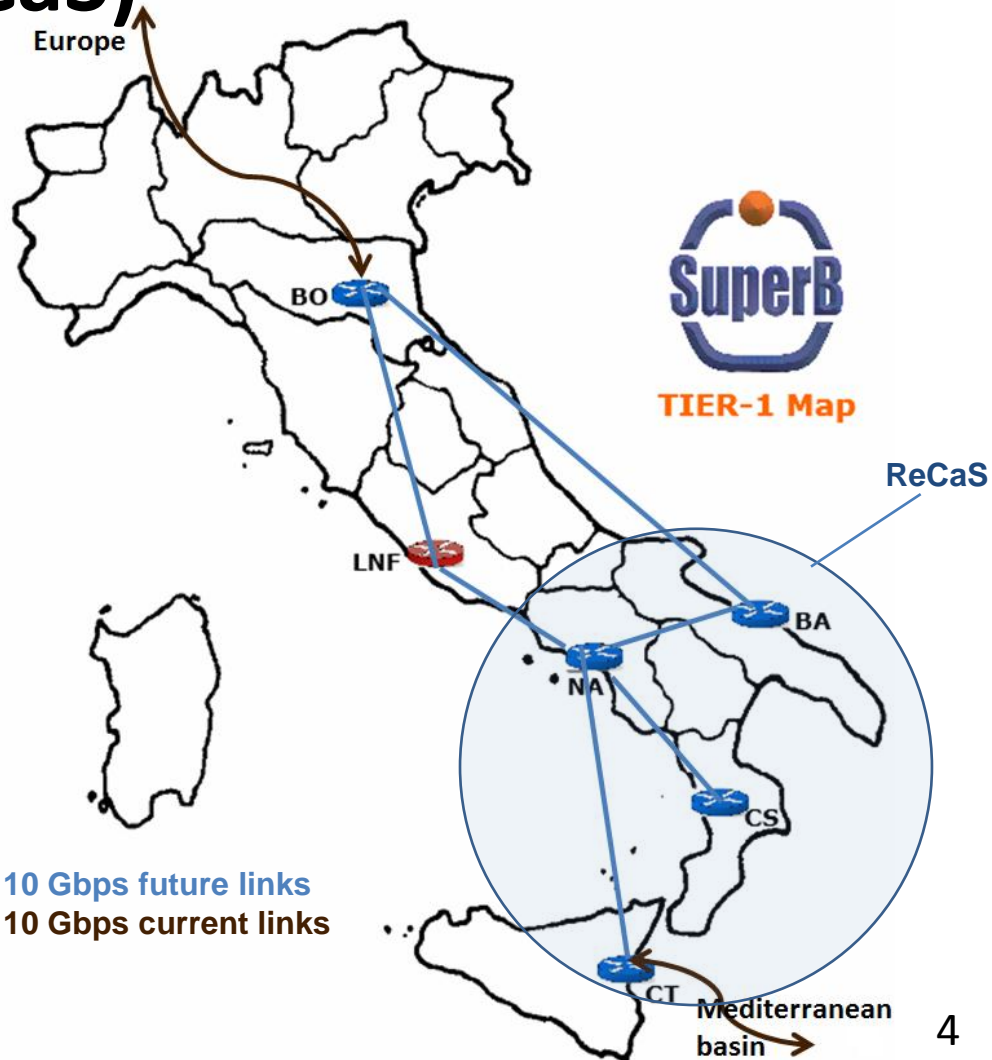
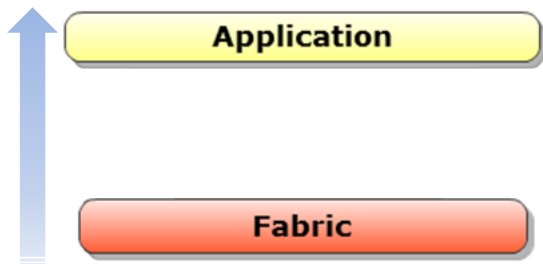
Computing sites for SuperB in Italy



(ReCaS)

Centralized monitoring: Using Liferay as a portlet container, we could integrate several heterogeneous tools, **allowing an integrated vision of all sites**

- Power
- Cooling
- Environmental monitoring
- Machine services
- Remote management hw
- Network
- GRID resources

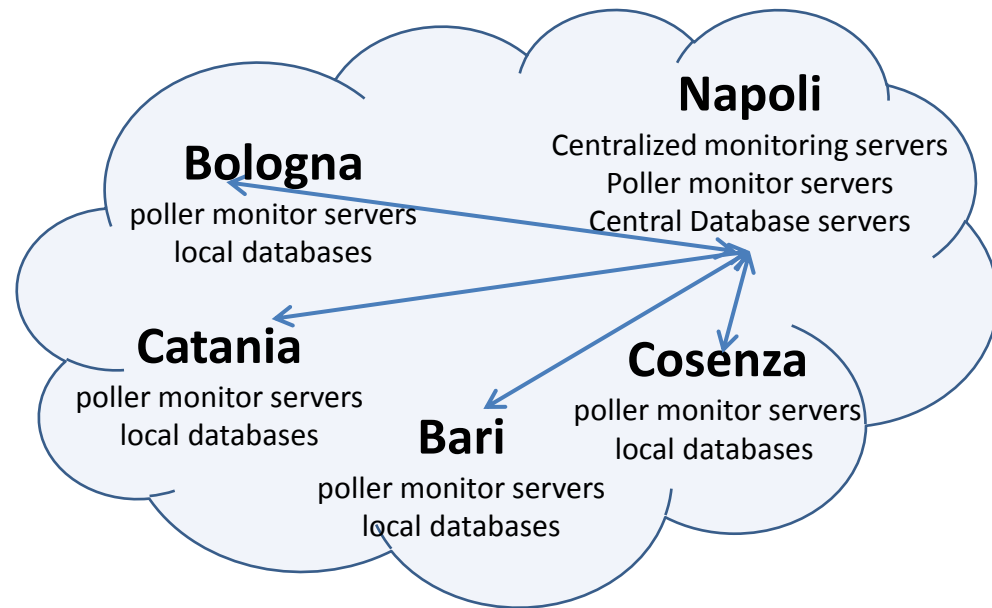


The basic idea for the distributed monitoring with the ReCaS project

- A Layer2-like network will ensure the visibility of remote nodes between sites



- Each site will have a physical machine with a number of VMs to dedicate to monitoring nodes
- Each monitoring node "talk" with both very local nodes (eg wn) than with the entire monitoring geographic network
- Each local site monitors all its resources
- Naples is the centralized site that collect and manage all monitoring informations



The system will be designed also to interface with other european and rest of world sites (monitoring the available resources)

Current status:

Extension of systems already developed using the Atlas experience

- Network monitoring
- Machines services monitoring
- Environmental monitoring
- GRID resources monitoring (queue, jobs, vo...)



R&D in progress on geographically distributed computing monitoring