Technical Coordinators' Report

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Subjects

- Architecture Group
- Port to Solaris
- Release Plans
- Tutorial

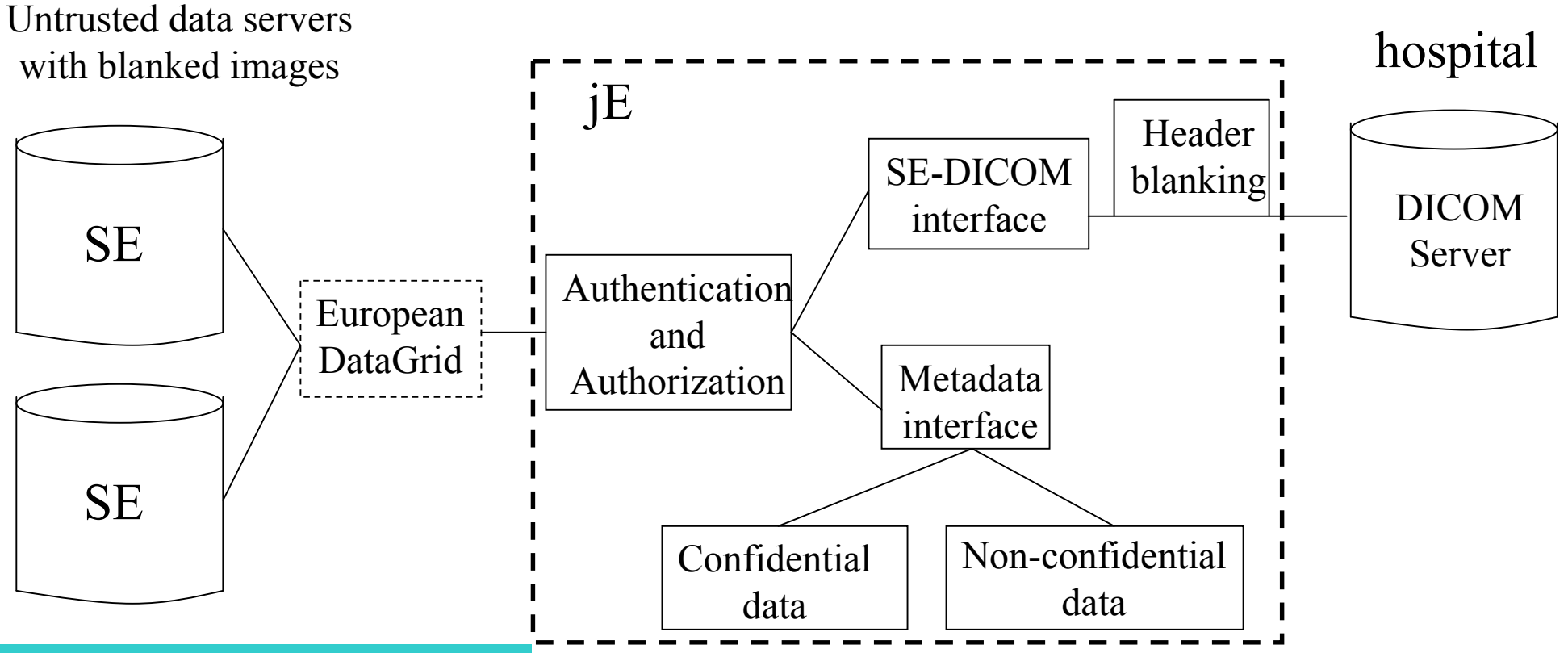
Architecture Group 9th April 2002

- Short presentations lead to in-depth discussions
- Applications:
  - 10: data mgmt & security requirements
  - 8: prioritized requirements & common use cases
  - 9: requirements & use cases
- Middleware: 2, 5
- CrossGrid Architecture

Foreseen medical data infrastructure

Johan Montagnat, WP10

Split nominative and anonymous data to allow data replication on unsecured sites.



Consider jE as a SE and investigate implications with WP2 & WP5

WP8 Technical requirements

Critical for development (emergency)

mid-term requirement (testbed 2)

long-term requirement

- 1. Realistic Large-Scale Tests

  Reliability! Need *reliable* dg-job-* command suite

- 2. Data management

  Reliability! Need *reliable* gdmp-* command suite, file-transfer commands

- 3. Mass Storage Support

  Working access to MSS (CASTOR and HPSS at CERN, Lyon)

- 4. Lightweight User Interface

  Put on a laptop or std. Desktop machine

- 5. Portability
  - Demonstrable portability of middleware: a) use other resources, b) debugging
- 6. Scratch Space
  - Job requests X amount of scratch space to be available during execution, system tells job where it is
- 7. Output File Support
  - JDL support for output files: specify where output should go in JDL, not in job script

Requirements

- Use cases
  - Lots of possibilities in configuration and design choices
  - Importance of application use cases to drive approach
- Web Portals
  - Don't think EDG can produce a "one size fits all" web portal
  - Better to ensure middleware interfaces exist with sufficient documentation and a basic example that can be extended/customised
- Lighweight User Interface
  - Need simpler "one-click" approach to installation
- Usability
  - Some middleware interfaces are not easy to use (too many ways to get it wrong,too many intermediate steps)
  - Establish "commands black-list" and make them easier to user

WP2: Spitfire

- Secure database for meta-data
- Scenarios for how it can be used as Metadata Catalog Replica Manager and within WP10
- Security layer designed in collaboration with EDG security group and could be reused for other areas of middleware
- All Application groups have need for application specific metadata
- Spitfire could be used in these cases with multiple instances
- But how closely linked should application metas-data be to middleware usage of Spitfire and how consistency and scalability be addressed

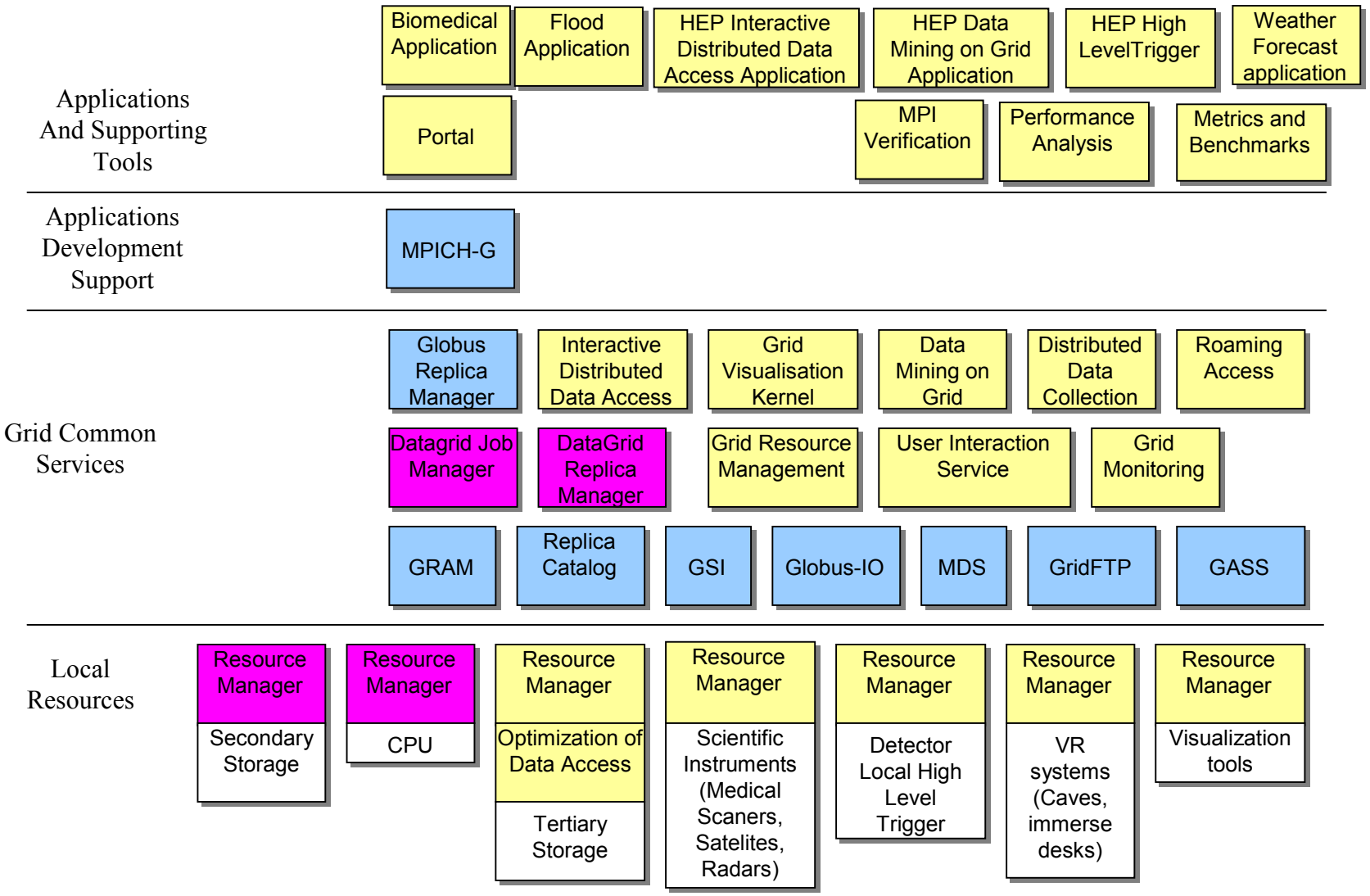
Consider WP8 & WP9 user cases
Clarify Spitfire diagrams

WP5

- Difficult to define interface that satisfies all SE aspects and can be implemented for all MSS
- WP9's AMS could be a good test for suitability of plug-in interface for MSS
- Support for "local files" complicates the story
- Still many questions coming from the scope of the SE
- Raised questions of auditing and tracability that affect all middleware components

Consider WP8 & WP9 user cases
Clarify Spitfire diagrams

CrossGrid Architecture



Next Steps

- Merge Prioritised Requirements
- Consider Use Cases
- Update D12.4 with clarifications to testbed 1 architecture (May 2002)
  - Dependencies, interfaces, UML diagrams
  - Need clearer definitions of CE, SE, WN etc.
- Develop testbed 2 architecture taking into account prioritised requirements & use cases (July 2002)
- To meet goals need to increase time architecture group spends together
- Next meetings
  - May 6 & 7
  - June 12 & 13
  - GGF (July)
  - EDG Conference (September)

Software Release Planning

- Release dates
  - 1.3 May
  - 1.4 July
  - 2.0 October
- WP details for each release being updated now
- When release 1.4 is being produced we need to review release plans beyond 2.0
  - Is 2 monthly interval suitable?
  - Release dates to pick for 2003

Porting EDG release to new platforms I/II

- EDG 1.0/1.1/1.2 available on RedHat 6.2
- EDG 1.3 available on RH6.2 but WP6 autobuild tools should be used to produce the release

  WPs are migrating to autobuild tools now (with nightly builds and log files allowing inspection of results and investigation of problems)

  Important to simplify porting to other platforms

  Build servers can then be set-up for different platforms

  1. RedHat 6.2
  2. RedHat 7.x
  3. Solaris 2.x
- EDG 1.4 available on RH6.2 & RH 7.x

  Different compiler versions

Porting EDG release to new platforms II/II

- WPs asked to investigate implications of porting to Solaris

  Initial responses

  WP1: details after meeting on April16/17

  WP2: new Java based software should be simple to port

  WP3: GRM/PROVE already ported to Solaris.

  R-GMA mostly Java, C++ APIs are quite simple

  WP4: installation task most difficult

  Sensor framework portability being considered

  WP5: rfio no problem. gridFTp server to be tested on Solaris soon.

  WP6 & WP7: script based software should be simple

- Availability of external toolkits and packages is principle concern
- Once information is available we can plan a schedule for port to Solaris and map it onto EDG releases

Tutorials

- Many requests for overviews, introductions, how to use EDG software
- Material being produced by many individuals in different WPs
- Aim to produce overall tutorial that can be reused for different occasions
  - Presentations covering architecture, middleware, interfaces & APIs from a user, application developer & system manager point of view
  - Hands-on exercises covering UI and principle middleware interfaces with document and working examples

How to develop tutorial material

- Draft outline available
- To be extended and revised taking input from all WPs especially the application groups
- Once agreed, each WP contributes a portion of the material for the presentations and exercises
- Activity coordinated by Mario Reale & Elisabetta Ronchieri
- Expect to have material completed by EDG 1.4 (July)
- Needs to be kept up to date with each release

  Store worked examples in CVS and make part of test-plan?