

#### **SA1 Session Report**

Francesco Giacomini (INFN) EMI Kick-off Meeting CERN, 26-28 May 2010



# SA1 Objectives

- Ensure the efficient and transparent management of the maintenance process providing software problems analysis and resolutions
- Ensure customers receive certified software releases of middleware services and components according to agreed release policies and quality of service attributes
- Increase the quality levels of the EMI software by contributing to the implementation of the Quality Control procedures defined by the project QA activity
- Establish the EMI User Support (Service Desk) function and integrate it with the overall EGI, PRACE and VRCs user support channels



# Objectives in practice

- Guarantee the stability of the software deployed in production
  - Apply important/urgent changes
  - Support users
- Do it well
  - It will be measured
- Innovation comes from JRA1



#### Tasks

- One task per objective
  - SA1.2: Software Maintenance
  - SA1.3: Release Management
  - SA1.4: Quality Control
  - SA1.5: User Support
- Plus SA1.1: Work Package Coordination



#### SA1.1 – Work Package Coordination

- Task leader: INFN (Francesco Giacomini)
- All partners participate to meetings and reviews
- This task deals with:
  - regular coordination of the Work Package
  - reporting and review of milestones and deliverables



# SA1.2 – Software Maintenance

- Task leader: INFN (Francesco Giacomini)
- All partners allocate effort to maintenance according to their technical expertise
- This task deals with:
  - Analysis and correction of software defects found in released components
  - Definition of the processes governing Software Maintenance, Problem Management and Change Management and the execution of related procedures



# SA1.3 – Release Management

- Task leader: INFN (Cristina Aiftimiei)
- Participants: CERN, CINECA, UPJS
- This task deals with:
  - Release management and coordination
  - Maintenance of the package repositories
  - Definition of release policies
- This task also covers the smooth transition from many middleware distributions to one, so that the production infrastructures stay functional without noticeable discontinuity



# EMI Major Releases

- Characterized by well-defined interfaces, behaviour and dependencies for all included components, available on a predefined set of platforms
- Made available on a periodic basis, tentatively twelve months
  - Stability vs. Innovation (that comes from JRA1)
- Within an EMI major release components can change only in a backwards-compatible way
  - Minor, revision, emergency releases



### Changes

- Changes that are included in the different types of releases are applied in different contexts
  - Major releases  $\rightarrow$  JRA1
  - Revision and emergency releases  $\rightarrow$  SA1
  - Minor releases  $\rightarrow$  JRA1 + SA1
- Changes to be applied to production releases need to be specifically agreed
  - EMT and/or PTB and/or PEB



#### Release Management – Open Issues

- What is the exact interface between a Product Team and the Release Manager?
  - What information is passed from a PT to the RM when a release is ready from the PT's point of view?
- Does the RM re-build from source?
- Which tool to integrate the components?
  - Start with ETICS
- Which tool to manage and track releases?
  - RT, to conform to UMD?



# SA1.4 – Quality Control

- Task leader: CINECA (Giuseppe Fiameni)
- All partners allocate effort to the continuous QC tasks according to their technical expertise
- CSIC is responsible for the security assessment
- This task deals with:
  - Application of QA processes and procedures defined by SA2
  - Verification that all the releases of EMI components satisfy well-defined certification and validation criteria before being included in a stable EMI distribution, including that no regressions are introduced
  - Security assessments of selected EMI components under the coordination of CSIC



# Quality Control /2

- Keep everything easy
  - QC should be perceived as an effective tool to improved software quality
- Next actions:
  - Identify metrics and procedures that require a quality control in SA1 (SA2 provides input here)
  - Figure out how to collect measurements from potentially heterogeneous tools, e.g. bug trackers
- Need to select the EMI components for security assessment

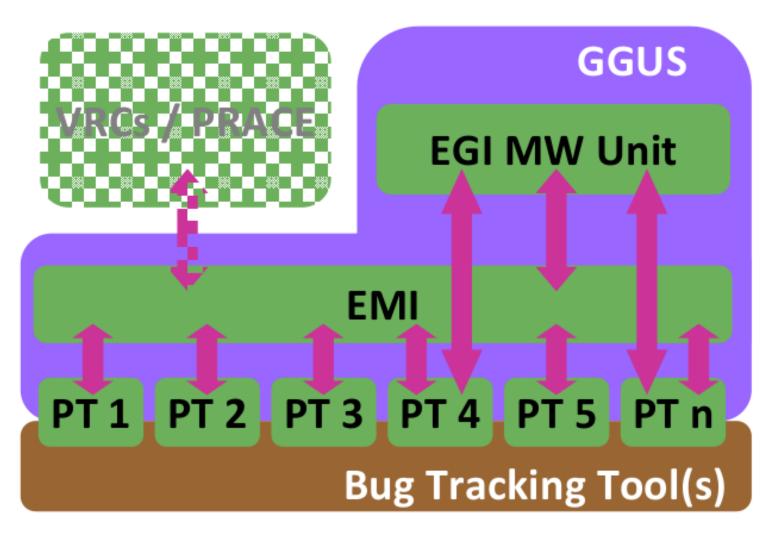


# SA1.5 – User Support

- Task leader: JUELICH (Mathilde Romberg)
- All partners allocate effort to support according to their technical expertise and the defined support shifts
- This task deals with:
  - provision of 3rd-level user support for incidents and requests escalated from the user support channels of the customer infrastructures and user communities
- The task coordinator is responsible to define the User Support and escalation processes and monitor the correct execution and respect of the SLAs



## User Support /2





# User Support /3

- Support units have to be integrated in GGUS
  - Month-1 milestone
- Keep the number of bug tracking systems to a minimum
- All contribute to the catch-all support unit

   shifts
- Need to define the levels of support for EMI components
  - How many versions? For how long?
  - To be included in SLAs



# Next Deliverables

- DSA1.1 Software Maintenance and Support Plan [M1]
  - Describes the Software Maintenance and Support processes, the roles and responsibilities and the main metrics to be used for the Service Level Agreements
- DSA1.2 Software Release Plan [M3]
  - Describes the release procedures and policies for the middleware services and the complete EMI reference distributions
  - Contains the initial release schedule to be prepared in collaboration with the PTB and the JRA1 Work Package. The release schedule will be updated every three months during the course of the project



#### EMI 0 Release

- EMI Major Releases foreseen at months 12, 24, 36
- An integration exercise is foreseen already at month 6, i.e. October 2010
  - Not recommended for production use
  - Based on current versions of components
- Open (known) issues:
  - Which platforms?
  - Which external deps (e.g. globus)?
  - How to integrate?



# Key Performance Indicators

- KSA1.1 Number of incidents
- KSA1.2 Incident resolution time
- KSA1.3 Number of problems
- KSA1.4 Number of urgent changes
- KSA1.5 Change application time
- KSA1.6 Number of releases
- KSA1.7 Number of release rollbacks



### EMT

- The Engineering Management Team is the place where most technical discussions related to day-to-day work will happen
- Participants: Release Manager (Cristina Aiftimiei, chair), PT leaders, Quality Assurance/Control representatives, technical experts, etc.
  - As open as possible
- Will start soon
- Mailing list
  - <u>emt@eu-emi.eu</u>
  - more info at

http://mail.eu-emi.eu/mailman/listinfo/emt



## SA1 Mailing list

- emi-sa1@eu-emi.eu
  - More info at

http://mail.eu-emi.eu/mailman/listinfo/emi-sa1

- Administrative issues
- Low traffic