Release Management

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Task SA1.3

- This task deals with release management and coordination and the maintenance of the package repositories, defining policies and release cycles. This task also covers the smooth transition from many middleware distributions to one, so that the production infrastructures stay functional without noticeable discontinuity

Types of Releases

- Major release (mainly for EMI)
  - A major release of EMI is characterized by well-defined interfaces, behaviour and dependencies for all included components, available on a predefined set of platforms
    - Backward incompatible changes to a component can be introduced only in a new EMI major release
  - Major releases are made available on a periodic basis, tentatively twelve months
    - Stability vs. innovation
    - "integration exercise" already at month 6
  - Multiple major releases may be supported at the same time according to their negotiated end-of-life policies

Types of Releases /2

- Mainly for single components/services
- Minor release
  - Can only include backward compatible changes in interface or behaviour within the same EMI major release, but it can include new functionality
  - Scheduled
- Revision release
  - Only bug fixes
  - Scheduled
- Emergency release
  - Includes fixes only to high-impact, high-severity bugs like security issues and can follow special shortened release procedures
  - Unscheduled

MSA1.2.{1,2,3,4}

- EMI Reference Releases
- Months 6, 12, 24, 36
- EMI plans to have at least a baseline reference release per year to introduce the major functionality changes and improvements foreseen by the EMI Technical Development Plan (DNA1.3) [foreseen at month 2]

DSA1.2

- Software Release Plan
- This document describes the release procedures and policies for the middleware services and the complete EMI reference distributions. It also 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
- Due at month 3 but some basic principles and guidelines can already be anticipated

Changes

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

How to start a new major release

- Define supported platforms and freeze them
- Choose external dependencies and freeze them
- PTs declare what versions of their components they intend to deliver
  - Interfaces
- What do we do for the first EMI release at M6?

Artefacts

- By default binary packages, source packages, binary tarballs, source tarballs

- Plus documentation, build reports, test reports, etc.

Release Notes

- Release notes, i.e. a piece of descriptive English text, only for major and minor releases

- Otherwise the changelog should suffice and must be present

Metapackages

- Just containers of other packages
- Their version corresponds to a change in the list of packages, not their version
- MPs are used to install, not to upgrade an installation
- MPs address typical installation scenarios

Roles

- What is the exact interface between a PT 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?

Tools

- ETICS to manage the distribution
  - One project for the whole EMI
    - For each release, a new project configuration is locked and versioned
  - Strict guidelines on how components and subsystem configurations should be written
- Tool to manage and track releases TBD
  - RT, to conform to UMD?

Repository

- One single yum/apt/... repository for the whole distribution within a major EMI release
- Alternative repos are possible for testing, preview, etc.

EMT

- The Engineering Management Team is the place where most discussions related to release management (and maintenance and quality control) will happen
- Participants: Release Manager (Cristina Aiftimiei, chair), PT leaders, a Quality Assurance representative, a security representative, representatives of the operations teams (?) and technical experts if needed
  - Keep it as open as possible
- Mailing list
  - emt@eu-emi.eu
  - more info at http://mail.eu-emi.eu/mailman/listinfo/emt