



Middleware Rollout: Task TSA1.3

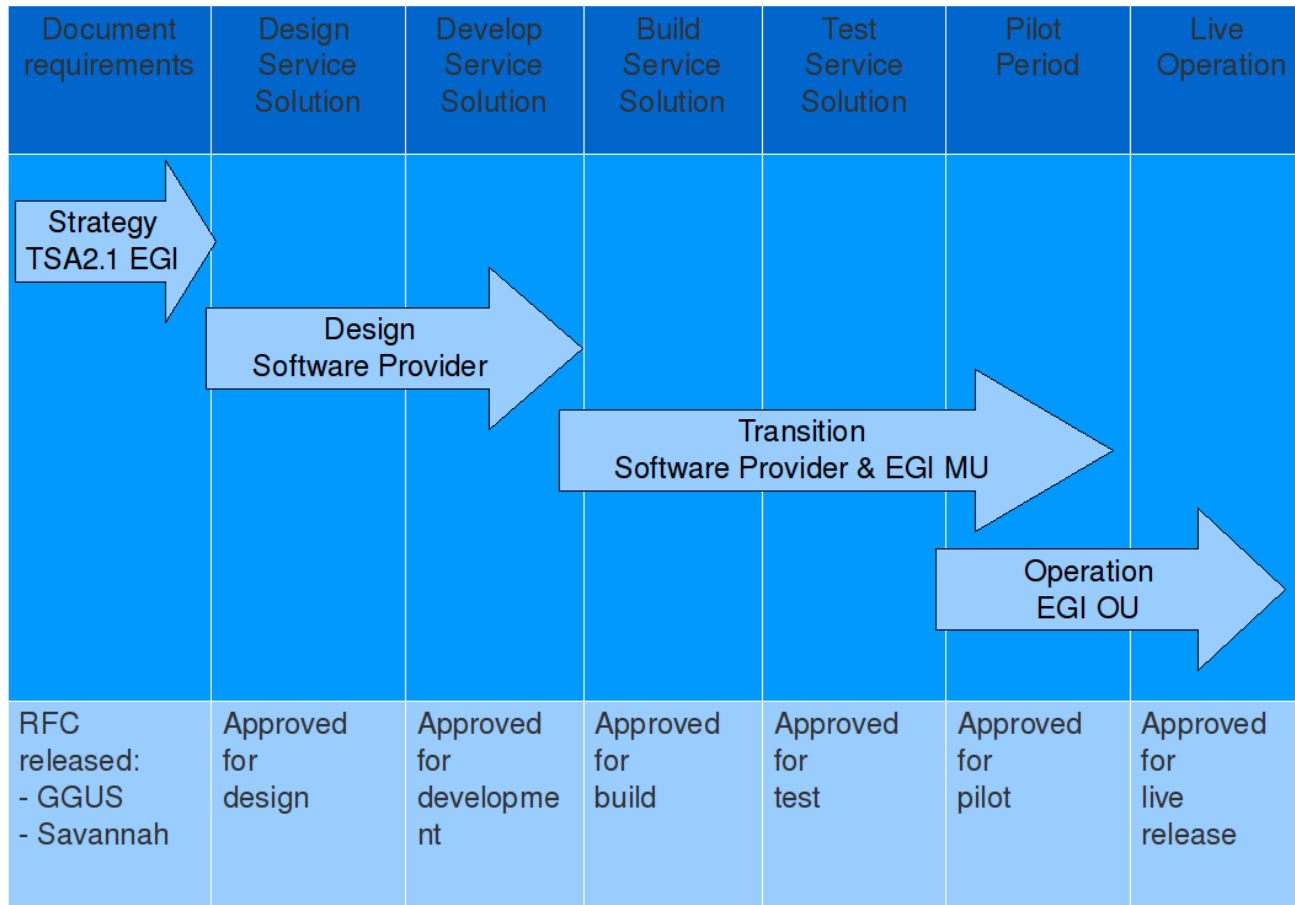
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(on behalf of IBERGRID ES-NGI and PT-NGI)

- **“Proposal” procedures for EGI InSPIRE**
- **Version scheme of MW components**
- **Operational tools for the MW rollout task**
- **Service Level Agreements**
- **Early Adopters:**
 - Engagement.
- **Pilot Services and other MW testing processes**

Javier Lopez

SERVICE LIFECYCLE

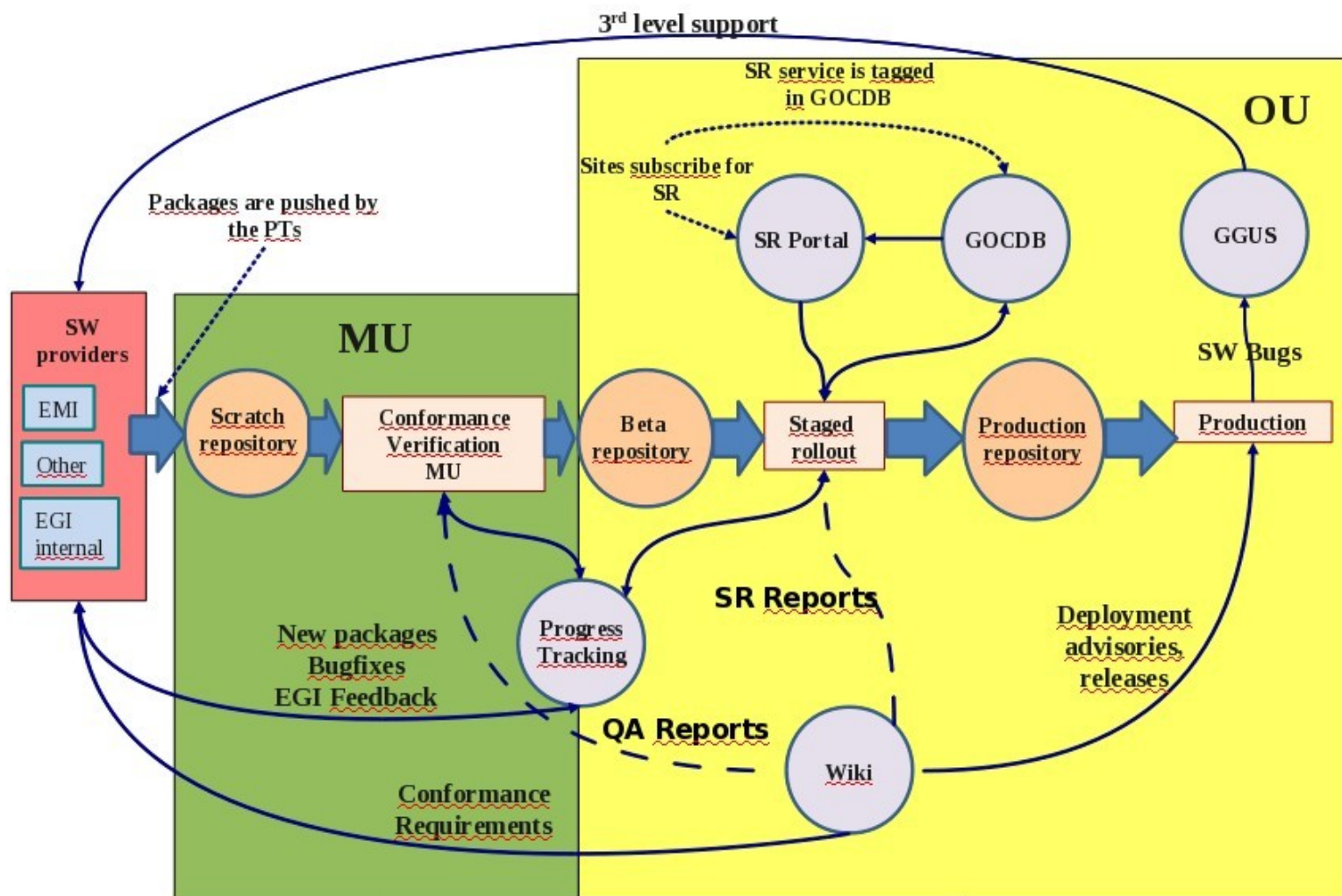


- **Categories:**
 - 1. Emergency (when needed):** bug fixes, or security vulnerability, backward compatible.
 - 2. Revision release (at most once every two weeks):** bug fix, backward compatible.
 - 3. Minor release (at most once per month):** new functionality, backward compatible.
 - 4. Major release (at most twice per year):**
 - a.** New functionality not necessarily backward compatible.
 - b.** New service.

Timelines to be agreed upon (in the SLA's?), take into account:

- Roadmap**
- “Urgency” of the new versions to EGI.**
- Alignment with SW providers**

- **For a given UMD major release, any given MW component can be updated only up to a “Minor Release”:**
 - The “Major Releases” of any given component may only be included in the next major UMD release, dependent on the roadmap.
- **All categories of updates to the components will undergo the SR procedure, though the timelines and depth of the SR may vary with the category:**
 - The sole exception is an Emergency release, for which, under exceptional circumstances to be evaluated in a case by case basis, may skip the SR.
- **EGI-InSPIRE will accept only certified and validated updates provided by the SW providers.**
- **In the SR phase, if bugs or issues are found in a given component for which some solution or workaround is proposed, the fix(es) should be communicated and implemented by the PT:**
 - MW components with workarounds to bugs or issues should be avoided in production.
- **The UMD release will be based on Components.**
- **It is the responsibility of the EGI-InSPIRE MU, to provide requirements for the components to the SW providers and advise the Operations for the deployment of any given “Capability”.**



- **The EGI MU and OU will interact with SW providers through GGUS (DMSU).**
- **Tools under the “egi.eu” domain:**
 - **Wiki:**
 - Documenting all releases with deployment advisories,
 - Links to release notes
 - Links to certification and validation of components provided by the SW providers.
 - **https://wiki.egi.eu/wiki/Main_Page**
 - For the MW rollout process: **https://wiki.egi.eu/wiki/Middleware:Release_Process**
 - Links to the monitoring (nagios, gridview) of all services participating in the SR.
 - *Filter the services based in GOCDB tag “beta”.*
 - *This may give an integrated view of the quality of these services, and eventually of the MW component.*
 - **Progress tracking and task tool (will be RT):**
 - Follow all the MW process from the moment it is declared ready and made available by the PTs until released into production.
 - Manage all the SR process.
 - *Creation of task teams for each service in SR,*
 - *Notification and reporting capabilities.*
 - *Record and display the effort of each team.*
 - *Define and display metrics for the effort and for the usage of the service during the period of SR.*
 - Feedback to the Software Providers:
 - *Interface or link with GGUS.*
 - Interface with GOCDB:
 - *Fetch the site names,*
 - *Get the services tagged as beta, eventually other information.*

- **Early Adopters Portal:**
 - **web form** where sites can subscribe to do the SR as Early Adopters (EA).
 - Integrated in the WIKI **OR** “Progress tracking and task tool” **OR** “Repositories”. It makes sense to be in the “Progress tracking and task tool”
 - A site subscribes as EA:
 - Site name: *it should be selectable from the GOCDB.*
 - Responsible persons: site squad. Should be the only manual operation of registration.
 - Services which the site proposes to perform the SR: all that where tagged “beta” in the GOCDB, and eventually others which are not tagged and the squad decide to do the test in a production instance.
 - The coordinator is notified.
 - The coordinator may contacts the site for more information and planing.
- **Repositories: next presentation**

Entity Level 1	Entity Level 2	Entity Level 3	Comment
Squad Mangement[n]			
	Site	Site Name	
		Site ID	Information taken from the GOCDB: Interface to GOCDB
		Creation date	subscription date to the staged rollout
		End date	
	Squad		Information about the squad given when it subsribed to SR
		E-mail [n]	email of each person
		Name[n]	name of each person
	Service[n]		Some interface to "supported" components/OS/Arch
		Service name	name of package/component
		Op System	operating system
		Architecture	Architecture
		Major UMD Release	Major UMD Release
		Creation date	start date of subscription to SR for this service
		End date	
Task[n]			Automatic creation of tasks and assignment to 1 or more squads
	Subject		containing the name of the component, OS, arch, major UMD release
	ID		task ID (from the task tracker tool)
	Status		status of the staged rollout for that component
	Report		report of the SR, when closing the task
	Creation date		date the task was created
	End date		dated when task is set to done or close
	Patch[j]		Interface to product teams trackers? To get all patches/or bugs for this version of the component
		Release notes and other documentation	release notes, documentation location, configuration changes, etc.
	List of packages	list of rpms, tarballs, deb, etc.	
Monitoring			Link or interface to monitoring tools (nagios, gridview?) selecting only services in SR: interface to GOCDB selecting "beta" tag
WIKI			Advisory deployment: taken from "Release notes and other documentation" of "Patch" and eventually from the "Report" of "Task" Link to "Production" repositories

- **From Javier Lopez.**
 - **Service Level Agreements (SLA)** should be established following the best-practices defined in ITIL. In this case SLAs should be agreed between:
 - Software Providers (EMI and others) and EGI Middleware Unit.
 - In a longer term **Operational Level Agreements**, between:
 - EGI Middleware Unit and EGI Operations Unit.
- **Should cover important aspects like:**
 - **A common Configuration Management Database (CMDB):**
 - A database used to store relevant information about each of the middleware components part of UMD and the relationships between them.
 - **Definitive Media Library (DML):**
 - One or more locations in which the definitive and approved versions of all the middleware components are stored.
 - Should be part of the repository information.
 - **Release Unit:** Components that will be normally released together.
 - **Release Identification:** A naming convention used to uniquely identify a Release.

- **An Early Adopter:**
 - Site which has committed to perform the SR for one or more MW components or services and report that test.
- **The site should preferably preform the SR in the production instances, having rollback procedures in place in case of problems. The component should be exposed to production loads and usage during the SR phase.**
- **The EAs operation procedure may evolve with time. More confidence and more robust MW releases.**

- **Whatever the procedure that the site decides to follow in the SR process, it must be taken into account that the site “Reliability and Availability” should not be affected if problems occur due to the new versions of the MW components.**
 - Sites will have to have confidence when deploying new versions in the production instances.
 - That they will not be black listed by VO's.
- **The workflow of the operational procedure for the EAs is planing phase.**

- **It is expected that the NGIs that have requested effort in the EGI-InSPIRE proposal for this task, will commit sites to SR as early as possible.**
- **Requesters of new functionalities or new services, if approved, should be required to engage in the SR phase eventually committing new sites.**

- **The Staged Rollout and Pilot Services** are the supported processes to release new middleware component versions into the production infrastructure.
- **Testing Alpha and Beta releases of middleware components under development:**
 - There is a tight collaboration between the interested parties:
 - A set of sites, users communities and the developers of the component.
 - It is usual that the versions of these middleware components are deployed and used in production by the participating sites and user communities, before they reach the production repositories for general availability.
 - The EGI MU should be **aware OR** participate as an **observer** in this process.
 - There should be a report from the SW providers which should be part of the verification documentation delivered to the EGI MU.
- **Nonetheless, though these components went under heavy testing when they reach the EGI Scratch repositories, they should still be put under the Staged Rollout process.**

<https://twiki.cern.ch/twiki/bin/view/EGEE/ProductTeams>

- AMGA
- Authorization
- Batch System Integration
- Compute Element
- Data Management
- dCache
- Information Systems
- Integrated Clients
- Job Management
- Logging and Bookkeeping
- MPI
- Security Infrastructure
- Service Discovery
- VO Management
- **Configuration: YAIM (core)**
- **DM: does it include DPM? LFC?**
- **StoRM: status?**
- **lcg-CE: included in Compute Element?**
- **MyPROXY: included in Sec. Infrastr.?**
- **Roadmap updated?**
- **Dependency tree of the components?**