

TSA1.3 Service Deployment Validation

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EGI-InSPIRE – SA1 Kickoff Meeting



Outline

Task description

- Overview of task activities and internal structure

Partners involved

- Y1 Milestones and deliverables
- The Transition Period and Present SR
- Middleware workflow
 - From Product Teams (PTs) to EGI Middleware Unit (EGI MU)
 - From EGI MU to EGI Ops Unit (EGI OU)
 - From EGI OU to production

Relevant web sites and Issues for discussion



Task description

Ensure that new software releases for

- operational tools
- global and site services

will be deployed safely and reliably without any degradation of service to the production grid infrastructure.

• Software releases <u>must</u> maintain interoperability with other grids infrastructures.

 Achieved through a managed staged roll-out of middleware and operational tools

• NGIs and end-user communities will allow to build operational and user experience wrt to new software releases deployment.



Partners involved

Present structure

- One coordinator, several Early Adopters (EA)
 - At least one more person in needed for the coordination part
- Several Early Adopters (EA)
 - gLite stack
 - IBERGRID (PT + ES)
 - Individual teams which were use to do the same kind of job in EGEE
 - Expect and contacting NGIs which have requested funding for this task, and which still do not have members involved
 - Other MW stacks
 - No info from ARC and Unicore sites



Y1 Milestones and deliverables

• **TSA1.3 Service Deployment Validation:**

- MS402 (CSIC): Deploying Software into the EGI production infrastructure
 - We have already startup/draft docs that can be used for this:
 - doc in the agenda for the workflow
 - SR procedure
 - List of EAs with covered components
 - References to the repositories, wiki and RT.
 - Metrics
 - EA teams which did SR (taken from the RT system)
 - Number of release per component
 - Number of issues found after releasing a component into production, ...
- MS406 (CSIC in collaboration with TSA1.4): Deployment plan for the distribution of operational tools to the NGIs/EIROs
- MS407 (CNIC): Integrating Resources into the EGI Production Infrastructure



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Transition period: Now

The present SR procedure:

- Most of the work happens in the CERN Savannah project jra1mdw
 - Standard patches: new releases of a "node type" or component.
- The EA teams which volunteered for a given component are notified from Savannah
 - This is being done manually now.
- The EA installs/configures and tests the functionality of the new version
 - All information is available in the Savannah patch
- The EA fills a simple report held in the Savannah patch
- There is SR occurring as we speak...

MW Workflow (PT)



Software providers / EMI / Product teams (PT)

1.1. A new version of a component has been produced. At this stage or earlier, the PT creates a new ticket in the RT. This ticket will be in the RT queue "staged-rollout".

ISSUE: Will EMI use RT or other tool??

- 1.2. The version of the component is in the "Certified" status.
- 1.3. The PT pushes the packages (rpm, deb, tar, etc.) into the EGIRepo called <u>"contributed"</u> and the EGIRepo team will put it into the <u>"scratch"</u> repo after basic package verification (checksum, signatures, etc.)
- 1.4. The PT will put into the RT ticket the following information:
 - **1.4.1.** Release notes and ChangeLogs, or the link to them.
 - **1.4.2. Certification report(s) (from the agreed quality assurance documentation and tests), or link to it.**
 - **1.4.3.** Link to documentation: Users Manual, Admin Manual, etc... The documentation should be updated to this component version if applicable.
 - **1.4.4.** Links to all bugs, issues, features in this new release.
 - **1.4.5. It assigns the ticket to the EGI MU group.**



MW Workflow



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MW Workflow (EGI MU)



• EGI Midleware Unit (EGI MU) SA2

- 2.1. Verifies the new version (I will not detail more here).
- 2.2. Puts or triggers the packages into the "beta" repo.
- 2.3. Inserts the URL of the repo or the URL of all the packages in the RT ticket. This will be used later by the EAs to make the SR.
- 2.4. Sets the status of the RT ticket into "verified", at this point the ticket will be assigned to the SR coordinator which is thus notified that new packages are ready for the SR process.



MW Workflow



MW Workflow (EGI OU)



• EGI Midleware Unit (EGI MU) SA1

- 3.1. The SR coordinator sets all EA group as CC watchers of the ticket. In this way all EA site admins are notified that a new version of MW component is available for SR.
- 3.2. Any EA wanting to do SR on the component should enter in the RT and put into the comment field: "<u>accept</u>" <u>"site name</u>" within 1 working day after the notification, and set itself as "<u>AdminCC</u>" for that ticket.
- 3.3. The SR coordinator can check/control after 1 day if all tickets have been "accepted" for SR. If not, SR coordinator will take action. This might be by calling for volunteer sites to do SR.
- 3.4. A given EA should primarily <u>"accept"</u> SR on the components it has proposed to do. It is nonetheless possible to do SR on other components, even if not on a regular basis.
- 3.5. When the EA finishes the SR, it will fill the SR report template and put a <u>"done"</u> in the comment field when it finishes the task.
- 3.6. The SR coordinator closes the ticket, writing the outcome and possible further comments.



MW Workflow





MW Workflow (EA)

• Early Adopters (EA):

- When a site wants to become an EA, it should:
 - 1. The site administrator(s) should have an account in SSO.
 - 2. Send mail to david@lip.pt, with:
 - 2.1. Name of the site admins
 - 2.2. Their e-mail
 - 2.3. Site Name
 - 2.4. Component for which it is proposing the SR.
- There should be an EA group in SSO and in RT with all EA site admins.
- More information in
 - https://wiki.egi.eu/wiki/Staged-Rollout

Early Adopters: as of today e

Some NGIs have committed effort for this tasks

- but their EA have still not appeared
- No ARC or UNICORE site has still offered for this task
- We plan doing accounting on the EA sites doing SR
 - Based on the RT activity for a given component

Site	SSO/RT group	Contacts	Service/Component	MW Release	OS/Arch
LIP	EA-LIP	Mario David <david@lip.pt ==""> Goncalo Borges <goncalo@lip.pt ==""></goncalo@lip.pt></david@lip.pt>	VOMS mysql CREAM SGE BDII (site and top)	Glite 3.2	SL5/x86_64
GRIF	EA-GRIF	Michel Jouvin <jouvin@lal.in2p3.fr⊡></jouvin@lal.in2p3.fr⊡>	DPM_mysql LFC_mysql WMS+LB	Glite 3.1	SL4/x86_64
AEGIS01-IPB-SCL	EA-AEGIS	Dusan Vudragovic <dusan@ipb.ac.rs⊡> Antun Balaz <antun@ipb.ac.rs⊡></antun@ipb.ac.rs⊡></dusan@ipb.ac.rs⊡>	CREAM and TORQUE	Glite 3.2	SL5/x86_64
INFN-PADOVA	EA-PADOVA	Cristina Aiftimiei <cristina.aiftimiei@pd.infn.it⊡>Simone Dalla Fina<simone.dallafina@pd.infn.it⊡>Sara Bertoco<sara.bertocco@pd.infn.it⊡> Sergio Traldi<sergio.traldi@pd.infn.it⊡></sergio.traldi@pd.infn.it⊡></sara.bertocco@pd.infn.it⊡></simone.dallafina@pd.infn.it⊡></cristina.aiftimiei@pd.infn.it⊡>	CREAM and LSF LFC mysql	Glite 3.2	SL5/x86_64
INFN-CNAF	EA-CNAF	Danilo Dongiovanni <danilo.dongiovanni@cnaf.infn.it> Daniele Cesini<daniele.cesini@cnaf.infn.it></daniele.cesini@cnaf.infn.it></danilo.dongiovanni@cnaf.infn.it>	WMS+LB ARGUS STORM	Glite 3.2	SL5/x86_64
ITWM	EA-ITWM	Martin Braun <martin.braun@cern.ch⊡></martin.braun@cern.ch⊡>	DPM mysql WN + GLEXEC	Glite 3.2	SL5/x86_64
IFIC	EA-IFIC	Alvaro Fernandez Casani <alvaro.fernandez@ific.uv.es💷></alvaro.fernandez@ific.uv.es💷>	WMS+LB	Glite 3.2	SL5/x86_64
wcss	EA-WCSS	Franciszek Klajn <franciszek.klajn@pwr.wroc.pl⊡></franciszek.klajn@pwr.wroc.pl⊡>	Lcg-CE torque DPM mysql	Glite 3.1	SL4/x86_64
Australia-ATLAS	EA-AUSTRALIA	Tom Fifield <fifieldt@unimelb.edu.au⊡></fifieldt@unimelb.edu.au⊡>	AMGA	Glite 3.2	SL5/x86_64
UKI-SOUTHGRID- CAM-HEP	EA-CAM	Santanu Das <santanu@hep.phy.cam.ac.uk 🖃=""></santanu@hep.phy.cam.ac.uk>	APEL CREAM Condor	Glite 3.2	SL5/x86_64
CESGA	EA-CESGA	Javier Lopez <jlopez@cesga.es ☲=""> Sergio Diaz <sdiaz@cesga.es ☲=""></sdiaz@cesga.es></jlopez@cesga.es>	APEL CREAM SGE	Glite 3.2	SL5/x86_64
IFCA-LCG2	EA-IFCA	Pablo Orviz <orviz@cern.ch 🖃=""></orviz@cern.ch>	APEL	Glite 3.2	SL5/x86_64
UPV-GRyCAP	EA-UPV	Ignacio Blanquer Espert <iblanque@dsic.upv.es i=""> Miguel Caballer <micafer@itaca.upv.es i=""></micafer@itaca.upv.es></iblanque@dsic.upv.es>	UI	Glite 3.2	SL5/x86_64



Important oficial URLs

- SingleSignOn:
 - https://www.egi.eu/sso/
- Request Tracker:
 - https://rt.egi.eu/
- EGIRepo:
 - http://repository.egi.eu/
- Staged rollout
 - https://wiki.egi.eu/wiki/Staged-Rollout
- Staged rollout process during the transition phase
 - https://wiki.egi.eu/wiki/Transition

Important oficial URLs







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From present SR to the new SR model

Aiming for a "step by step" transition...

- The repos.egi already have the glite, ARC and Unicore releases
 - Should We start using it?
- The release information:
 - Should we start putting it into the egi.eu domain (wiki!)?
- Test the procedure with the new request tracker tool even if it has to be manually duplicated from the standard savannah patch?
- Probably some duplication of work during the transition

• Please have in mind that interaction with EMI in previous workflow is still under discussion



TSA1.3 Service deployment validation

- How can SA1 feed back requirements to the developers and define the priority of updates?
 - This is not presently in place:
 - Chief Operations Officer (COO) \Rightarrow Chief Technical Officer (CTO) + EGI external Advisory MW Coordination Board (MCB) \Rightarrow EMI and other SW providers.
 - There will be SLA's between EGI and EMI
 - UMD roadmap agreed between EGI and EMI
- What if you have some requirement/request for new service or new functionality?
 - Sites escalate up to COO !!
- If there are critical bugs or security vulnerabilities, they should be reported as now, through
 - https://savannah.cern.ch/bugs/?group=jra1mdw

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• **TSA1.3 Service deployment validation**

- How can SA1 be informed on release timelines, especially when critical fixes are expected considering that the EGI EMT-InSPIRE SA2 link is not in place at the moment
 - All releases published in egi.eu and/or wiki.egi.eu:
 https://wiki.egi.eu/wiki/Operationa/Main_Dage
 - https://wiki.egi.eu/wiki/Operations:Main_Page
 - There can be a kind of preview of the next releases and expected date
 - The UMD roadmap should give a higher level view of major releases and it's timelines.
 - We can implement in the wiki a page for known issues with a link to the bug (either savannah, or later RT)

- Track the evolution of the bug



TSA1.3 Service deployment validation

- Enough committement and enough resources from NGIs to cover all components?
 - It's now the time for you to come UP
 - Send an email to david@lip.pt
 - » Name of the site admins
 - » Their e-mail
 - » Site Name
 - » Component for which it is proposing the SR.

Some NGIs have committed effort for this tasks

- but their EAs have still not appeared

TSA1.3 Service deployment validation

- Staged rollout for regionalized operational tools (JRA1)
 - If something goes wrong, the admins might want to have in place a procedure to "very quick" rollback
 - say within 1 hour?
 - Are there failover instances inside the NGIs?
 - Some NGI's might have them
 - We should have a mailing list with "only" the admins of the operation tools at each NGI.
 - SR should be performed in a NGI which is able to guaranty a fast rollback
 - Identify those sites

TSA1.3 Service deployment validation

- About ActiveMQ (or AMQ) it is not only going to be used for accounting.
- Basically ActiveMQ is now being used to store monitoring information from the different tools.
- APEL will also use it but for the time being they have to use a separate ActiveMQ infrastructure because they want additional security for accounting and they don't want to include it in the current ActiveMQ monitoring infrastructure.
- Basically, we need more to know more about the component before decide how to proceed with it in SR



TSA1.3 Service deployment validation

- Plans of Unicore and ARC sites?
 - We can think of coordinators for each MW stack, from sites/NGIs using it, since they will now better of each stack.
 - Need to see what they think.