



Review of the Verification Process for UMD1.x

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Outline

- Introduction
- Overview EGI Software Validation Workflow
- The QC Verification Process
- Conclusions



Introduction

- The Verification (TSA2.3) is part of the EGI Software Provisioning Process.
- Some of the reasons for doing the verification before Stage Rollout (SR):
 - Check that bugs reported in previous releases have been fixed by the Technology Provider (TP).
 - Software can work well in the SR but might not have all the functionalities required by the EGI QC.
 - Software might not be safe, well documented or have the necessary installation rules or licenses.



- Technology Providers (TPs) are required to deliver a component release versioned according to the conventional *major.minor.revision* scheme.
 - Increment of the revision number means that only bug(s) have been fixed. No new functionalities.
 - New minor version brings new functionalities while preserving backward compatibility.
 - New major version means a large revision, possibly breaking the backward compatibility.

Technology Providers



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- For each release the TP will have to provide, apart from the software packages, the following documentation:
 - Release notes.
 - Changelog.
 - Documentation: User Manual, Admin manual, etc. The documentation should be updated (for example if the new release introduces new functionality).
 - Installation scripts and procedure.
 - A list of known issues and their workarounds (if applicable).



- When a new product pass the Software Validation workflow, and if the Staged Rollout and TP don't detect any issue, the new middleware is released into the EGI production infrastructure.
- At this moment were released one mayor and two minor releases into UMD:
 - UMD1.0: First UMD release into EGI Software Repository. 11/07/2011
 - UMD1.1: First UMD minor release. 01/08/2011
 - UMD1.2: Second UMD minor release. 12/09/2011



- When a new software component is released the TP has to follow the EGI Software Provisioning Process.
- Once the new software is correctly uploaded into EGI unverified repository and a new RT ticket is created for each product, the release enters into the Verification phase.
- The new RT tickets are created per product and architecture (PPA) automatically using a bouncer and composer script.
 - For SA2 a Product is a solution delivered by Technology Providers to EGI and provides for one or more capabilities as one single, indivisible unit. (as example cream or globus-myproxy)







- The Verification Pre-Conditions:
 - The verification starts when the following preconditions are met:
 - EGI RT ticket in in state **Open**: This state is set automatically by a bouncer script which processes the information submitted by the TP into a release.xml file (Product release notes, package dependencies, etc).
 - The RolloutProgress is set to **Unverified:** The Product was not verified yet.
 - CommunicationStatus is set to **OK:** Also set by the bouncer script.
 - Owner is set to **Nobody**.



• The Verification Pre-Conditions:

#2629: EMI.argus.sl5.x86_64-1.3.1

New messages

There are unread messages on this ticket. You can jump to the first unread message or jump to the first unread message and mark

Ficket metadata	
The Basics	
Id: 2629	
Status: open Priority: 0/	
Queue: sw-rel	
Custom Fields	
CommunicationStatus:	ok
RolloutProgress:	Unverified
ReleaseVersion:	emi.argus.sl5.x86_64-1.3.1
UMDRelease:	1
ReleaseMetadata:	bouncer-release-EMI.argus.sl5.x86_64-1.3.1-ppa.xml
RepositoryURL:	http://admin-repo.egi.eu/sw/unverified/emi.argus.sl5.x86_64/1/3/1
QualityCriteriaVerificationReport:	(no value)
Failed against mandatory documentation QC:	(no value)
StageRolloutReport:	(no value)
	Expand Release Info
People	
Owner: Nobody in particular	

Owner: Nobody in particul Requestors: Cc: Group: sw-rel-qc AdminCc:



- The Verification Process starts:
 - Once the verification ticket meets the previous preconditions, the verifier must perform the following steps:
 - Set RT ticket **owner** with the current verifier name.
 - Set **UMDRelease** field to the appropriate UMD release and save the state.
 - Change **RolloutProgress** to "**InVerification**" to start the verification process.



• The Verification Process starts

odify ticket #26	29				
ubject:	EMI.argus.sl5.x86_64-1.3.1				
tatus:	open (Unchanged) 🔻				
ueue:	sw-rel 🔻				
wner:	Alvaro Simon 🔻				
ime Estimated:	480 Minu	tes 🔻			
ime Worked:	Minu	tes 🔻			
me Left:	Minu	tes 🔻			
riority:	0				
inal Priority:	0				
olloutProgress elect one value		(no value) Submitted Unverified In verification Waiting for response	UMDRelease Select one value	(no value) 0 1 2 3	
ualityCriteriaVe Inter one value	rificationReport		Failed against mandatory documentation QC Check multiple values	True	



- The Verification Report Templates
 - Each product has a specific template that includes all QC that the product must comply with.
 - The QC report and Executive Summary templates are available at:

https://documents.egi.eu/public/ShowDocument? docid=417

 These documents are updated if a new EGI Quality Criteria is released. (At this moment we are using QC v2)



- The Verification Report Templates
 - The QC Verification Templates are generated automatically using a Python script which reads the current UMD QC service mapping: <u>https://documents.egi.eu/public/ShowDocument?</u> <u>docid=418</u>
 - This files provides an updated mapping for each TP product and the current QC.



- The Verification Report Templates
 - The fields to fill by the verifier are:
 - Accepted:
 - Y, when the product meets the criteria.
 - N, when the product does not meet the QC.
 - NA, Not Applicable for the verified product.
 - Tested:
 - *TP*, when the QC was tested by the Technology Provider and the validator trusts the results of the tests.
 - VLD, when the QC was tested by the validation team.
 - Comments:
 - The verifier can include in this field any relevant comment or links about the specified criteria.



• The Verification Report Templates

А	В	С	D
Criteria	Accepted (Y/N/NA)	Tested (TP/VLD)	Comments
Generic QC			
GENERIC_DOC_1 (Functional Description)	Y	VLD	Available at: http://www.dcache.org/manuals/Book-1.9.12/
GENERIC_DOC_2 (Release Notes)	Y	VLD	http://www.eu-emi.eu/kebnekaise-products/-/asset_publisher/4BKc/cont
GENERIC_DOC_3 (User Documentation)	Y	VLD	User documentation: http://www.dcache.org/manuals/Book-1.9.12/
GENERIC_DOC_4 (Online help (man pages))	Y	VLD	http://www.dcache.org/manuals/
GENERIC_DOC_5 (API Documentation)	Y	VLD	http://www.dcache.org/manuals/libdcap.shtml
GENERIC_DOC_6 (Administrator Documentation)	Y	VLD	http://www.dcache.org/manuals/Book-1.9.12/
GENERIC_DOC_7 (Service Reference Card)	Y	VLD	https://twiki.cern.ch/twiki/bin/view/EMI/DCacheServerServiceReferenceC
GENERIC_DOC_8 (Software License)	Y	VLD	http://www.dcache.org/manuals/dCacheSoftwareLicence.html
GENERIC_DOC_9 (Release changes testing)	Y	VLD	http://www.eu-emi.eu/kebnekaise-products/-/asset_publisher/4BKc/cont
GENERIC_DIST_1 (Source Code Availability)	N	VLD	dCache is free but not Open Source.
GENERIC_DIST_2 (Source Distribution)	Y	VLD	
GENERIC_DIST_3 (Binary Distribution)	Y	VLD	http://www.dcache.org/downloads/1.9/index.shtml#server-1.9.5
GENERIC_SERVICE_1 (Service control and status)	Y	VLD	Available at /etc/init.d/dcache
GENERIC_SERVICE_2 (Log Files)	Y	VLD	Daemon service /var/log/dcache-server



- Level of testing
 - All the products in verification must be installed in the EGI Verification Testbed.
 - However the verification process is different for UMD minor or major releases.
 - Major releases (may not be backwards compatible)
 - Verifiers must actively assess all assigned QCs.
 - Product installation from scratch.
 - Minor releases (backwards compatible)
 - Verifiers only check QCs affected by update changes.
 - Package update. Verifiers must update the new packages (using the UMD unverified repository) in an previous installed machine.
 - Product installation from scratch. Verifiers must install from scratch the new product.



- How to handle issues and TP feedback
 - During this process the verifies can find issues or need the TP feedback. (Missing documentation, a new middleware bug, etc)
 - In these cases the RT ticket **RolloutProgress** is set to *"Waiting for Response"*.
 - The verifier must open a GGUS ticket and include all the created GGUS links into the RT ticket (as reply) to track each issue.



- Product Acceptance:
 - QC tests are **Mandatory** (M) or **Optional** (O).
 - A product is **REJECTED** if it fails the installation on configuration process.
 - A product is **REJECTED** if it fails **ANY** Mandatory QC.
 - A product is **VERIFIED** if it pass **ALL** assigned QC.
 - A product is **VERIFIED** if it fails **ANY** Optional QC.



- Verification Reports and Executive Summaries:
 - When the QC assessment is finished the verifier creates a new EGI DocummentDB space to store the verification reports. The new public space includes:
 - The Verification Report: The excel file with the complete list of QCs and its results.
 - The Executive Summary: This document includes a summary of QCs failed and passed and comments for other teams involved in the Software Provisioning process (Stage Rollout, Quality Criteria, etc).
 - A DocDB example:
 - https://documents.egi.eu/public/ShowDocument?docid=730
 - This link is included by the verifier into RT field: QualityCriteriaVerificationReport.



• Verification Reports and Executive Summaries:

EGI Document 730-v1

[DocDB Home] [Search] [Last 20 Days] [List Authors] [List Topics] [List Events]

QC Verification Report: dCache v1.9.12

Permalink:	Abstract:	Viewable by:
https://documents.egi.eu	dCache v1.9.12 Verification reports.	> Public document
/document/730	Files in Document:	
Document #: EGI-doc-730-v1 Document type: Document Status: FINAL Submitted by: Alvaro Simon Updated by: Alvaro Simon Document Created: 18 Aug 2011, 17:38 Contents Revised: 18 Aug 2011, 17:38 DB Info Revised: 18 Aug 2011, 17:38	 <u>QC Executive Summary dCache v1.9.12</u> (QC_Verification -Executive_Summary - dCache_v1.9.12.doc, 109.0 kB) <u>QC Verification Report dCache v1.9.12</u> (QC_Verification - dCache_v1.9.12.xls, 19.5 kB) <u>Topics:</u> <u>WP5</u> <u>Software Provisioning Verification Reports</u> <u>Authors:</u> <u>Alvaro Simon</u> <u>Keywords:</u> <u>Quality Criteria Verification EMI dCache</u> 	Modifiable by: > inspire-sa2



- The Verification process ends:
 - When the verification is finished the RT field
 RolloutProgress is changed to:
 - *StagedRollout*: The product was verified and **accepted**. The Stage Rollout team will continue with the software provisioning process. The new middleware will tested by the SA1 Early Adopters.
 - *Rejected*: The product is **not accepted** because it does not met the QC or the rejection was requested by the TP. A script automatically moves the software to a rejected repository. The TP is notified by the RT ticket system and through GGUS.



- Metrics:
 - Available at :

https://wiki.egi.eu/wiki/InSPIRE-SA2:WP5_Project_Metrics

- From UMD1.0 to UMD1.2:
 - We have verified more than **40** products to be included into UMD.
 - The mean time to verify a new product was **21h**. The verification time depends on the complexity of the product and if is a major or minor release.
 - In this time were rejected **5** products during the verification process.



Conclusions

- Verification process prevents software to enter into the production UMD repository if it doesn't follow the quality criteria defined in TSA2.2.
- The Software Provisioning Process has experienced significant changes in the last year. Now the interaction with external TPs are coordinated by the GGUS ticket system.



Conclusions

- TP feedback and DMSU time response is critical for the verification process to avoid bottlenecks:
 - If a new issue is found the verifier opens an new GGUS ticket. The DMSU must assign it to the correct Responsible Unit as soon as possible.
- Verifiers must know the middleware that are they verifying. If not:
 - They can open tickets by mistake.
 - Or the verification process can be delayed.





Thank you for your attention Questions?