

# Current experience with the gLite release process

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EGEE-II INFSO-RI-031688

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- A 'gLite release' is something we do every week.
  - There are no more 'big bangs'

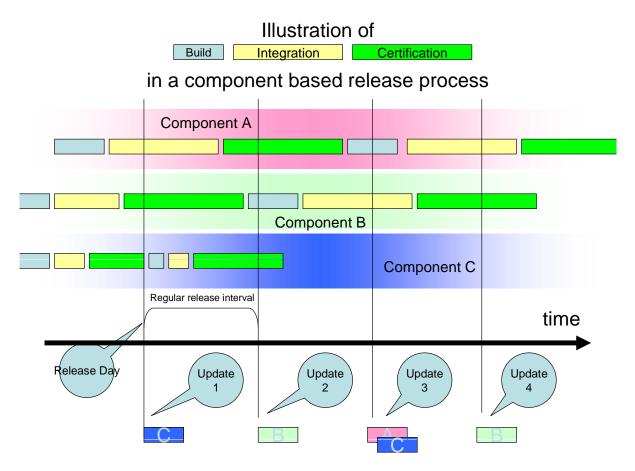
Enabling Grids for

- Process operates on patches
  - Even gLite 3.1 services are being introduced gradually
- Updates are released to PPS and production
  - Typically including up to 5 patches
- Currently maintaining 2 releases
  - gLite 3.0 == SL3 == VDT 1.2
  - gLite 3.1 == SL4 == VDT 1.6 + ETICS build system
- New gLite 3.1 services are being handled using as much of the existing process as possible
  - Addition of a 'preparation' phase before the formal process
  - Once this is over, the result will be plugged into the process like any patch



#### **Component based process**

Enabling Grids for E-sciencE



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### A typical update

Enabling Grids for E-sciencE

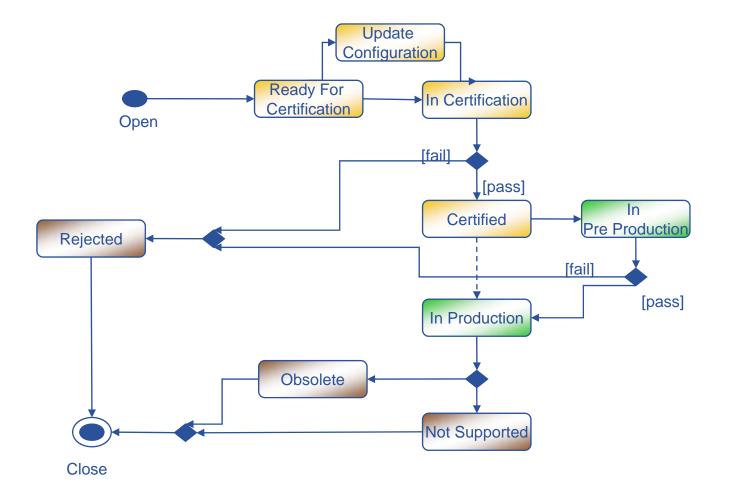
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🔾 🗢 🖉 http://glite.web.cern.ch/glite/packages/R3.1/deployment/glite-WN/3.1.0-4/glite-WN-3.1.0-4-update.html					ogle.com) Google		
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🔅 🧭 EGEE > gLite > gLite 3.3	1 > glite-WN > Update to glite			🐴 • 🔊	👻 🖶 👻 🔂 Page 👻 🎯 Tools		
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GLite gLite 3	<u>3.1</u> > <u>glite-WN</u> > Update to glite-	WN 3.1.0-4			Enabling Grids for E-science in Europe		
SLITE MIDDLEWARE	· · · · · · · · · · · · · · · · · · ·						
ITRODUCTION	gLite 3.1						
EOPLE	glite-WN - Upd	ate to	version 3.1.0-4				
GEE JRA1							
GEE JRA3	Date 14.08.07						
OWNLOAD	Priority Normal						
ATEST RELEASE SER INTERFACE							
REVIOUS RELEASES	Description						
OCUMENTATION	Service discovery						
ONTACT & SUPPORT	This undate fixes linking prob	lems hetweer	service-discovery-bdii and Idap, and removes unne	eressary dependencies on globus			
BOUT EGEE				seeseary dependencies on globas.			
	Please also have a look at the list of <u>known issues</u> .						
	Updated rpms						
	Name	Version	Full RPM name	Description			
	glite-service-discovery-api-c	2.2.2-2.slc4	glite-service-discovery-api-c-2.2.2-2.slc4.i386.rpm	gLite Service Discovery core API and library			
	glite-service-discovery-bdii-c	2.2.2-2.slc4	glite-service-discovery-bdii-c-2.2.2-2.slc4.i386.rpm	Command line interface for Service Discovery library.			
	glite-service-discovery-cli	2.2.1-2.slc4	glite-service-discovery-cli-2.2.1-2.slc4.i386.rpm	Command line interface for Service Discovery library.			
	glite-service-discovery-file-c	2.1.2-2.slc4	glite-service-discovery-file-c-2.1.2-2.slc4.i386.rpm	Command line interface for Service Discovery library.			
	glite-service-discovery-rgma-	c 2.0.5-2.slc4	glite-service-discovery-rgma-c-2.0.5-2.slc4.i386.rp	m qLite Service Discovery R-GMA plug-in			
	glite-WN	3.1.0-4	glite-W/N-3.1.0-4.noarch.rpm	Metapackage for the glite-WN			
	The DDMs are be undeted as						
	The RPMs can be updated us	sing yum via					
	<ul> <li>via apt: yum update</li> <li>or via a download from</li> </ul>	:					
	http://glitesoft.cem.ch/	/EGEE/gLite/	R3.1/glite-WN/sI4/i386/RPMS.updates/				
	Service reconfiguration a	fter update					
		fter update					
	Not needed.						

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#### The patch process

Enabling Grids for E-sciencE



### egee

#### Has XXX been released yet?

Enabling Grids for E-sciencE

		omscerts-4.6.0 adds cert [LCG Savannah] - Windo	ws Internet Explorer provi		_ 8
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-					
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LCG Savannah gin Status:	Ø gLite M	iddleware - Patches: patc	h #1355, 3.1: lcg-vo	omscerts-4.6.0 adds cert	
Not Logged In	Group	Main Homepage Download Docs Su	pport Mailing Lists Source Code	e Bugs Tasks <u>Patches</u> News	
Login New User <b>is Page</b>	You are not allowed t	o post comments on this tracker with your	current authentification level.		
Clean Reload Printer Version	patch #1355:	3.1: lcg-vomscerts-4.6.0 a	adds cert for US-A	TLAS server	
ଅRelated Recipes: arkup Reminder My log in?	Submitted by: Submitted on:	Maarten Litmaath <maart> 2007-09-07 14:05</maart>		Submit Changes	
arch	<u>Status:</u>	In PreProduction	Open/Closed:	Open	
in Projects 💌	Priority:	5 - Normal	Assigned to:	· Integration Team <iteam></iteam>	
Search sted Projects Register New Project	gLite subsystem tag (s) / ETICS configuration:	lcg-vomscerts_R_4_6_0_1			
Full List	<u>glite release:</u>	gLite 3.1			
Contributors Wanted Statistics	<u>RPM name(s):</u>	lcg-vomscerts-4.6.0-1.noarch.rpm			
te Help User Docs: Dokbook User Docs: In Depth Lide Get Support Contact Us hks GNU/Savane	<u>Affected</u> Metapackages:	glite-UI glite-CE lcg-CE lcg-CE_torque glite-WMS glite-LB glite-WMSLB lcg-RB glite-LFC_mysql glite-LFC_oracle glite-SE_classic glite-SE_dpm_disk glite-SE_dpm_mysql glite-SE_dpm_oracle glite-WN glite-VOBOX			
	<u>Metapackage</u> <u>changes:</u>	None			
	<u>External</u>			Local intranet	100% -
	)/cern.ch/dfs/users/o/ok	Control Panel	🌈 gLite Middleware - Pa	, , , , , , , , , , , , , , , , , , , ,	j≪ 100% + Sy≨2 & ∰ 99:1

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#### Issues



- The raw material
  - Complex, interdependent, varying maturity
  - Certification and Testing are often conflated
  - We have a responsibility not a choice to release a component
    - Cannot choose components only on the basis of stability
  - But we represent the only route to deployment in many cases
    - FC6 and Firefox 1.5
- Service introduction
  - How to handle new services
  - Acceptance criteria
  - Incubation
  - Experimental services / PPS



#### **SA3 resources**

- Resources
  - ~30 FTEs
    - test writing, testbed management, information system, configuration, testing, certification, integration
  - Assuming 60 Changers (JRA1 + LCG, VDT etc)
    - Changers/Testers ~ 5
    - Changers/Integrators ~ 10

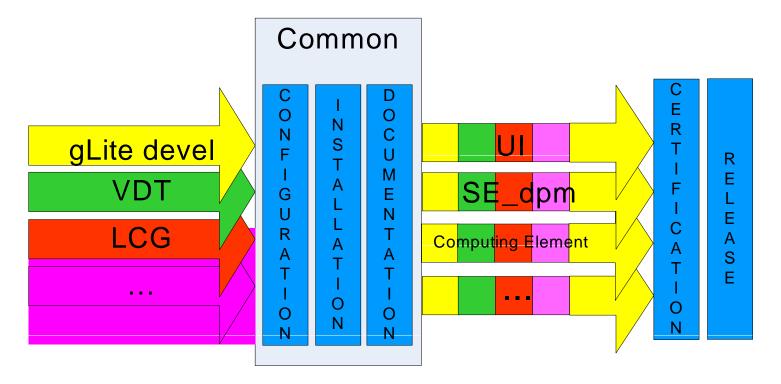
#### Scaling

- Patches are very 'parallelisable'
- Partners help to provide better coverage of deployment scenarios
- We have no spare capacity in order to be responsive something else gets dropped
- Supporting 3.0 while creating 3.1 has been difficult
  - Some overlap in support is inevitable



#### Process

- •'Integration points' introduce delays and extra dependencies
- •Important changes can be delayed by trivial ones
- •Doesn't change throughput, but affects latency
- •Node types should not be infinitely recombinable





- Repositories
  - Management scripts now working well
    - Treat ETICS as a 'build factory'
    - An ETICS project definition has no deterministic relationship to a release definition
  - AA repo
- Testing
  - Test coverage
  - Historical records
- Documentation
  - We've come a long way, but maybe info is not presented most effectively
    - Particularly deployment/rollout advice
- Configuration
  - Some 'split' yaim 4 modules have already been released
  - Hope this will improve responsiveness
- We will soon have to deal with 64bit issues
  - This will mean 3 platforms simultaneously
  - 64 bit nodes will need 32 bit libraries installed simultaneously
  - Once a service is released for 3.1, the 3.0 equivalent will not attract all updates and will ultimately be phased out.