



Enabling Grids for E-science

OAT - Deployment of Operational Tools. Sep 24th 2009 EGEE 09 Barcelona

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- **Rules for Deployment**
- **Method for Deployment**
 - Repositories.
- **Regionalization of Components.**
- **Status of Each Component**
 - With respect to deployment readiness.
- **Deployment Issues and Solutions.**

The move to NGIs has led to a need for some operational tools to be deployable at a regional level and potentially federated with central services. As some of these tools are now going to be deployed outside of their development environment it is vital that the experiences learnt elsewhere in the project (i.e. JRA1 and SA3) on software development, testing and certification are applied here. Progress on the operations tools that are being actively developed during the second year for a regional deployment will be required to use best practices from elsewhere within the project, and will be monitored by the TMB. The Operational Automation Team (OAT - metrics automation) should be a priority for any resources made available by transitioning effort to the NGIs.

EGEE SA1 Program of Work.

- **All SA1-OAT software is released via egee-SA1 repositories hosted in Manchester.**
 - <https://twiki.cern.ch/twiki/bin/view/EGEE/EGEESA1PackageRepository>
- **Three repositories exist:**
 - devel - Contains fresh builds
 - testing- Candidates for release
 - release - The actual released version of the software.
- **Repositories are populated and managed by koji.**
 - <http://skoji.cern.ch/koji>
 - <https://twiki.cern.ch/twiki/bin/view/EGEE/EGEESA1BuildingPackages>

- **Method into repositories in decreasing preference.**
 - Built directly from Manchester SVN
 - Built directly from some other SVN/CVS/GIT.
 - Supply a SRC RPM to KOJI.
 - Provide software publicly to OAT (Steve) to be built.
 - § Don't email it to me.
- **Request extra dependencies now**
 - e.g. symfony or php-oci.
- **The technical details of deployment are present.**
- **Missing items:**
 - Strategy for certification and testing process.
 - § Nagios by it's nature very easy to test.
 - Clear process for announcing releases.
 - § How?
 - § To who?

- **A table is maintained showing deployment readiness.**
 - <https://twiki.cern.ch/twiki/bin/view/EGEE/OATComponentStatus>
- **e.g: gstat**

Edit	gstat-web	
RCS URL	Public	http://www.sysadmin.hep.ac.uk/svn/grid-monitoring/trunk/
RCS Notes		
Spec Written	☺	http://goc.grid.sinica.edu.tw/gocwiki/GSOoverview
Spec Notes		
Koji	☺	http://skoji.cern.ch/koji/packageinfo?packageID=76
RPM Released	☺	http://www.sysadmin.hep.ac.uk/rpms/egee-SA1/centos5/
Documentation	☺	http://goc.grid.sinica.edu.tw/gocwiki/GSInstallationGuide
Database Requirements	MySQL	
Software Requirements	PHP5, Django, Nagios, httpd	
OS	SL5	
Languages	python	
Deployment Scope	Optional@Site, Optional@ROC, Optional@NGI, Optional@Project	
Hardware		
Notes		

	Project	ROC or NGI	Site
Today	Nagios, NCG, MsgBroker	Nagios, NCG.	Nagios, NCG
Step 1	ATP, MDDDB, Nagios, NCG, MsgBroker	Nagios, NCG.	Nagios, NCG
Step 2	ATP, Nagios, MDDDB, NCG, MsgBroker, Metric Store, MyEGEE	Nagios, NCG, MsgBroker, ATP Cache, MDDDB Cache, Metric Store	Nagios, NCG, Broker
Step 3	MsgBroker, ATP & MDDDB.	Nagios, NCG, MsgBroker, ATP, MDDDB, Metric Store, Regional DB, MyEGEE	Nagios, NCG, Broker, ATP Cache, MDDDB Cache, Metric Store, MyOSG

- Compulsory Items/Optional Items
- End result, no project services except the MSG back bone and descriptions.

- **Aggregated Topology Provider:**
 - A development instance exists.
 - Packaging started, not completed, being worked on.
 - § django web app needs integrating to RPM.
 - Is required by many new components.
 - § Metric Store.
 - § MyEGEE
 - A cache copy at least of ATP needed at ROCs as well.
 - § This does not exist.
- **Metric Description Database**
 - Production MDDDB at CERN exists nearly.
 - Requires newer PHP than SL5 and symfony.
 - § PHP 5.29 and symfony in SA1 devel repos now.
 - No RPM or package of MDB has been seen or released.
- **ATP and MDDDB are high priority.**

- **Today's Deployment.**
 - 2 nodes at CERN and 1 at SRCE(Croatia)
 - § For now this is plenty.
 - Brokers also in UK (APEL), Germany (GGUS), Greece (SEE-grid)
 - § Our aim is to have one production broker network for all.
- **Packaging and Deployment.**
 - A more modular configuration is needed.
 - § Now understood via spring bean inclusion.
 - § New/More yaim needed.
- **Next steps.**
 - Deploy with security copying NDGF's example.
 - § Allows APEL and GGUS to utilize prod' brokers.
 - Deploy special camel routing required at ROC nagios.
 - Deploy at each of the ROCs and optionally at the sites.

- **Pre-Releases have been made.**
- **SVN is currently closed outside RAL.**
 - This can remain but source tgz releases must be made.
- **SPEC file written and good.**
- **Today requires Oracle of course.**
 - Heavy for smaller NGIs?
- **Dependencies:**
 - php and php-oci8.
 - § These are available in SA1 devel repo now.
 - *Newer PHP than needed.*
 - *AFAIK not tested against this PHP.*
- **Next Step.**
 - Build through koji and add to at least devel repositories.
 - Will ensure all dependencies are in place.

- **Requires PHP newer than SL5 provides**
- **PHP webapp framework symfony.**
 - Both available in SA1 devel repos -> never tested.
 - Can be deployed on MySQL at ROCs.
- **Requires lavoisier, packaged in SA1 repo.**
- **No releases as yet nor installation documentation.**
- **Is not pending on anything:**
 - Only consumes messages that are already present?

- **Metric Store**
 - Runs at the site.
 - Requires both ATP and MDDDB read only cache at sites.
 - A spec file exists.
 - Some integration into NCG needed.
 - § Or wait for the broker at ROCs.
- **MyEGEE**
 - A SPEC file does exist.
 - Requires Metric Store to be in place for deployment.
 - Can be deployed on Project earlier.

- **Some components nearly ready but not released.**
 - Lack of ATP and MDDDB blocking other steps.
 - Need to push to get pre-releases out the door.
 - § Use the devel repositories.
 - § YAIM has to be written for some items after release.
 - § Allows deployment to sorted early.
- **More Documentation for Release Process.**
 - Testing process and a log of that testing.