

Table of Contents

glxec/Argus Pilot Service: Home Page.....	1
Description.....	2
Use cases.....	2
Objective and metrics.....	2
Planning.....	3
Initial plan.....	3
Constraints and milestones.....	3
Technical documentation.....	4
Installation Documentation.....	4
Configuration instructions.....	4
Post configuration tests.....	4
Configuration requirements for sites supporting Atlas.....	5
General documentation (user guides).....	5
Test documentation.....	5
Pilot Layout.....	6
SWITCH.....	6
FZK-LCG2.....	6
CNAF.....	6
Results.....	7
Feedback from the experiments.....	7
Comments and issues from operations.....	7
SWITCH.....	7
FZK / KIT.....	7
List of issues.....	7
Recommendation for Deployment in production.....	7
Final assessment.....	7
Tasks and actions:.....	8
Open.....	8
Closed.....	8
History.....	10

glexec/Argus Pilot Service: Home Page

- Start Date: Tue 24 Nov 2009
 - End Date (tentative): 12 April 2010
 - Description: Pilot Service of glexec/Argus @ FZK, SWITCH, CESNET, SRCE, INFN
 - Coordinator: Antonio Retico
 - Contact e-mail: egee-pilot-argus@cern.ch
 - Status : In Progress
 - Related meetings
-

Description

Use cases

- Experiment framework using glxec for production pilot jobs.
- Test of grid-wise banning feature by OSCT
- Gathering of requirements and analysis for monitoring tools

Objective and metrics

Objective:

1. Chain glxec - Argus demonstrated to interact correctly with LHC Experiments' frameworks for pilot jobs
2. Maintenance and operations of the Argus service declared supportable by the sites
3. OSCT able to ban a user on the whole pilot infrastructure without specific intervention of the site administrators
4. Collection of exhaustive requirements for the implementation of monitoring tools

Planning

Initial plan

<i>Task</i>	<i>Owner</i>	<i>Start Date</i>	<i>Due Date</i>	<i>Status</i>
Set-up repositories and documentation	SA1, SA3, CNAF	23-Nov-09	24-Nov-09	Done
Preliminary installation (ARGUS, WN, CE)	SWITCH	25-Nov-09	27-Nov-09	Done
Core installations (ARGUS, WN, CE)	FZK, SRCE, CESNET, CNAF	30-Nov-09	10-Dec-09	In progress

Constraints and milestones

- kick-off with sites: 25-Nov (11 AM CET)
- 1st site technically available for Experiments to test (SWITCH): 1-Dec
- kick-off with experiments: 1-Dec (11 AM CET)
- All sites technically available for Experiments to test: 15-Jan
- Indicative start of Alice developments to integrate glxexec: 18-Jan
- Indicative start of CMS developments to integrate glxexec: 15-Feb
- END of activity (proposed): 31-Mar

Technical documentation

Installation Documentation

Yum repo:

Argus service

- *Repository URL* : http://grid-it.cnaf.infn.it/apt/glite/pps/pilot/ARGUS/argus/sl5/x86_64/
- *INFO* : the repository includes PATCH:3076
- Certification report of the Argus patch: ArgusCertification

Worker Node

- *Repository URL* : http://grid-it.cnaf.infn.it/apt/glite/pps/pilot/ARGUS/glite-WN/sl5/x86_64/
- *INFO* : the repository is synchronised to the production WN repository ([link](#)) and contains in addition
 - ◆ PATCH:3394 (gLExec SL5)
 - ◆ PATCH:3093 (LCMAPS with PEP-c client)

Computing Element

- *Repository URL* : Production repository (I hope)
- *INFO* :

Configuration instructions

Both for the Argus service and GLEEXEC, YAIM modules are available:

- https://twiki.cern.ch/twiki/bin/view/LCG/Site-info_configuration_variables#ARGUS
- https://twiki.cern.ch/twiki/bin/view/LCG/Site-info_configuration_variables#GLEEXEC_wn

For more fine tunings:

- Argus: <https://twiki.cern.ch/twiki/bin/view/EGEE/AuthorizationFrameworkArchive>

Post configuration tests

In order to test the correct deployment of Argus, after the installation/configuration some basic tests can be done using the pap-admin to store/list/update/remove policies. After this, the pepcli can be used to test authorization requests/responses. pap-admin and pepcli are documented in the Argus main twiki.

In order to test the interaction glEXEC-Argus do something like this from a whitelisted account on the Worker Node:

```
export X509_USER_PROXY=<target_proxy>
export GLEEXEC_CLIENT_CERT=${GLEEXEC_CLIENT_CERT:-$X509_USER_PROXY}
$GLITE_LOCATION/sbin/glexec /usr/bin/whoami
```

And verify that the returned user is the mapped one.

Configuration requirements for sites supporting Atlas

- if a myproxy server is used to pass the credentials, myproxy-logon has to be installed on the WN (it should be the default in production by now)
- if a plain proxy is retrieved, and adding voms attributes on the WN is needed, the vomses file has to be reachable from the WN.
- both the roles `atlas:/atlas/Role=production` and `atlas:/atlas/usatlas/Role=pilot` need to be enabled to submit to the queue

General documentation (user guides)

- Argus user guide: <https://twiki.cern.ch/twiki/bin/view/EGEE/AuthorizationFrameworkArchive>

Test documentation

- Extract from Argus load and aging test (from GDB 14-Nov-2009 [↗](#))

Show Hide

Summary of the load and aging tests done before the certification

- Load tests:
 - ◆ Service Host: 1x 2.33GHz CPU, 1gig ram
 - ◆ client recreated - simulates what glxec would do
 - ◇ ~60 req/sec, ~160ms (limited by spawning processes)
 - ◆ client reused - simulates what CREAM/WMS would do
 - ◇ ~240 req/sec, ~120ms
 - ◆ client reused, repeat request - simulates pilot jobs
 - ◇ ~1000 req/sec, ~37.6ms
 - Aging tests:
 - ◆ Test operation over several days with several mio requests
 - ◆ Memory usage: stable
-
-

- Certification report of the Argus patch: [ArgusCertification](#)

Pilot Layout

SWITCH

Argus one virtual machine with SL5 64 bit, installed from the following repository

[http://grid-deployment.web.cern.ch/grid-deployment/glite/cert/3.2/patches/3076/sl5/\\$basearch/](http://grid-deployment.web.cern.ch/grid-deployment/glite/cert/3.2/patches/3076/sl5/$basearch/) (an alternative is now available here http://grid-it.cnaf.infn.it/apt/glite/pps/pilot/ARGUS/argus/sl5/x86_64/)

CE One lcg-CE (diana.switch.ch) with two WNs (SL5 64 bit): all as vmware virtual machines. VOs enabled: dteam,dech,ops,atlas (no atlas software installed). The WNs were installed pointing to the following repository

CE endpoint http://grid-it.cnaf.infn.it/apt/glite/pps/pilot/ARGUS/glite-WN/sl5/x86_64/

FZK-LCG2

Argus one virtual machine with SL5 64 bit

CE All CEs at GridKa are usable but please refer to cream-3-fzk.gridka.de. The queue must be "pps". All software installations are available on the PPS WNs. Enabled VOs: alice, atlas, cms, dteam, lhcb and ops.

WNs The PPS cluster has been extended to 300 cores

For alice a separate **VOBox** is available: test-mw-fzk.gridka.de

CNAF

Argus one virtual machine on SL5/64bit

CE One CREAM CE with two virtual WNs (SL5 64 bit). VOs enabled: dteam, infngrid, ops.

CE endpoint `devce.cnaf.infn.it:8443/cream-pbs-cert`

Results

Feedback from the experiments

Comments and issues from operations

SWITCH

The instructions to manually install the Argus compatible WNs are wrong. It is recommended that yaim be used instead.

FZK / KIT

reduction of the policy refresh time from 4hours to 15 mins requested: Angela opened the bug <https://savannah.cern.ch/bugs/index.php?62281>

List of issues

Issue	Reported by	Bug(s)	Status	Open/Closed
(Affects glxexec on WMS-->GLEEXEC-->CREAM chain): Wrongly configured GLITE_LOCATION makes sometimes impossible the discovery of the glxexec executable	CERN	BUG:62810)fixed with patch 3760 (with provider)	open	
The default policy refresh time set to 4hours seems too long	KIT	BUG:62281	To be discussed with JSPG	open
PEPd should require client-cert authentication support for connecting pep clients	CNAF-T1	BUG:60041	fixed with patch 3536 In certification	open

Recommendation for Deployment in production

Final assessment

Tasks and actions:

Actions for SA1 are tracked via the Sa1 Deployment task tracker [↗](#)

Failed to include URL

<http://egee-pre-production-service.web.cern.ch/egee-pre-production-service/MPS/show-tree.php?task=12720> [↗](#)

Can't connect to egee-pre-production-service.web.cern.ch:80 (Bad hostname)

Tasks for other participants are tracked here

Open

Assigned to	Due date	Description	State	Closed	Notify
GiuseppeMIsurelli	2010-02-19	Provide a report describing the issues being faced by CNAF for the installation of glxexec on the WNs. INFN-T1 is experiencing a problem on the stability of GPFS interacting with the WN on demand system adopted locally into the resource center. Since they decided to provide virtual WNs for the pilot, the issue is affecting consequently the deployment of the glxexec WN component into the site.		2010-02-19 MaartenLitmaath	edit
GianniPucciani	2010-02-19	Provide functional specification of glxexec tests being implemented at SRCE			edit
ChadLaJoie	2010-02-03	Provide instructions on how to preserve local policies during the upgrade of the Argus server to a newer version both in an e-mail to the sites and in the PATCH:3536 ↗ this was done on the 2nd of February This is done now at https://savannah.cern.ch/patch/?3536 ↗		2010-03-02 MaartenLitmaath	edit

Closed

Assigned to	Due date	Description	State	Closed	Notify
AngelaPoschlad	2010-02-03	Open a bug to request the reduction of the policy refresh time from 4hours to 15 mins		2010-02-05 MaartenLitmaath	

PilotServiceArgus < EGEE < TWiki

		<p>3-2-10: Angeal opened the bug https://savannah.cern.ch/bugs/index.php?62281 Provide the timeline for an installation of a reasonable scale (>100WNs) to be available to Atlas in order to test glxexec in production</p>	
AntonioRetico	2009-12-18	<p>Update 18-Dec (Andrea Ceccanti) : Converging on CANF offering the first large-scale installation. They are currently working to the installation at the T! and they hope to have finished before Christmas or alternatively by the 6th of January in order to be ready by the 15th. If the preliminary tests now undergoing succeed they are Ok to use Argus 1.1 whenit will be in status "Ready for Certification"</p>	<p>2009-12-18 AntonioRetico</p>
Main.SWITCH, Main.NIKHEF, Main.SA3	2009-12-01	<p>Finalise the YAIM configuration for Argus -compatible GLEXEC_WN enumerate available deployment scenarios and see whether new developments have to be requested (or re-negotiations are needed with the sites)</p>	<p>2009-12-18 AntonioRetico</p>
GianniPucciani	2009-12-04	<p>Update 26-Nov. After discussion with JRA1 and SA3 it was proposed to extend the support of the clients on SL4 . A new patch has been requested to the developers Antonio</p>	<p>2009-12-08 MaartenLitmaath</p>
GianniPucciani	2009-12-01	<p>Update 1-Dec During the last meeting Gianni was put in charge to open the bug with the change request</p> <p>Update 18-Dec (Gianni) : All new developments are now tracked by bugs provide reference for basic testing for site administrators in the twiki</p>	<p>2009-12-03 MaartenLitmaath</p>
AngelaPoschlad	2009-12-01	<p>Update 1-Dec : info now available in #Post_configuration_tests reply to proposed timelines for FZK</p> <p>Angela confirmed that staring on the 30th is fine for her</p>	<p>2009-11-26 MaartenLitmaath</p>

History

30-Mar-2010 : Check point (PPIslandFollowUp2010x03x30):

- Argus 1.1 server part in "Ready for Rollout"

17-Mar-2010 : Check point (PPIslandFollowUp2010x03x17):

- Installation at CNAF T1 finished
- Decision to use the production repository for future operations
- Testing of the OSCT global banning list approved.
- Pilot end date shifts to the 16th of April
- Further developments and tests to be followed within the GDB

16-Feb-2010 : Check point (PPIslandFollowUp2010x02x16):

- Installation at KIT/FZK scaled-up to 300 cores

2-Feb-2010 : Check point (PPIslandFollowUp2010x02x02):

- All sites will be soon requested to upgrade to the new version of Argus PATCH:3536 [↗](#) . CNAF-T1 will be the first, the other will follow
- All sites requested to apply the workaround in BUG:62206 [↗](#) in order for the Argus servers to start being published in the information system.
- Integration works in progress for Alice
- Integration works confirmed to start at mid February for CMS

18-Dec-2009 : Check point (PPIslandFollowUp2009x12x18):

- Testing of Argus version 1.1. in progress at CNAF
- installation in progress at all sites. Platform expected available by the 15th of Dec

1-Dec-2009 : First installation at SWITCH available for testing

1-Dec-2009 : kick-off with the experiments (PPIslandKickOff2009x12x01)

25-Nov-2009 : kick-off with sites (PPIslandKickOff2009x11x25)

24-Nov-2009 : Pilot Home page created

This topic: EGEE > PilotServiceArgus

Topic revision: r35 - 2016-07-05 - MaartenLitmaath



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