



# EGI-InSPIRE

## Usage and future support for the deployed software

### Survey results



## 1 INTRODUCTION

Several EC-funded projects that are sourcing code currently deployed in the EGI production infrastructure, will terminate in 2013. Among these are EMI (ARC, dCache, gLite, UNICORE) and IGE (Globus).

EGI needs to define the list of **software products whose maintenance and supported is considered to be high priority** in order to ensure service continuation to the end-users. The information collected through this survey is of great importance, and will be used by EGI to define a software support plan.

Please make sure that your input to the survey is accurate and correctly reflects the position of your community.

Purpose of this survey is to:

- Define the list of products that are considered to be high priority
- Assess current usage of these high priority products:
- which communities are using what
- current workload (where available)
- Assess which operations and/or user communities will directly contribute to software development and maintenance after 2013 (last question of the survey)

This survey is targeted to virtual research communities and resource infrastructure providers (EIROs and NGIs), who are responsible of collecting information from their users and resource centres respectively.

You can find a preview of the questions in the survey at:

<https://wiki.egi.eu/w/images/0/0a/Survey-usage-support-middleware.pdf>

**Note:** In this document, a component defined “*not supported*” means that -considering the survey answers- no NGIs nor VOs have plans to maintain the component.

### 1.1 Participants

33 NGIs answered to the survey, namely:

Asia Pacific, CERN, CRO NGI (NGI\_HR), CyGRID, NGI\_FI, France, Ibergrid(pt), Latvian NGI, NGI\_AEGIS, NGI\_BY, NGI\_CH, NGI\_CZ, NGI\_FRANCE, NGI\_HU, NGI\_HU, NGI\_IBERGRID(es), NGI\_IE, NGI\_IL, NGI\_IT, NGI\_MARGI, NGI\_MD, NGI\_ME, NGI\_NDGF, NGI\_NL, NGI\_SK, NGI\_TR, NGI\_UA, NGI\_ZA, NGI\_DE, NGI\_PL, NGI\_SE, UK

We received 6 answers from the VOs: **Earth Science VRC**, iMarine project, **Life Science VRC**, **WeNMR VRC**, SuperB, ZEUS VO. In the following tables the three VRCs will be considered: Earth/Life science, WeNMR; as they represent a bigger user base.

## 2 SUMMARY OF PRIORITIES

The following table contains the results for all the components included in the survey, and the VOs or NGIs who consider these components as high priority in their infrastructure.

Colour codes for the first column:

- **Green background:** one or more NGI or community committed to support the service after 2013
- **Component written in red:** high priority components for the majority of the NGIs or VOs (or both)

Component	VOs in the survey considering the component high priority	NGIs considering the component high priority
ARC CE	0	8
CREAM	3	26
EMI worker node	3	25
gLEnec	0	15
gLite MPI	1	16
WMS	3	25
(L&B)	3	22
Torque Server and WN config	2	21
CREAM GE module	0	5
CREAM LSF module	1	4
UNICORE TSI	0	4
UNICORE WS, UNICORE/X	0	4
Globus GRAM	0	7
Globus RLS	0	0
LFC mysql,LFC oracle	3	21
ARC gridftp server	0	4
dCache	1	13

DPM	3	27
GridFTP	2	18
StoRM	2	8
UNICORE TSI	0	3
UNICORE/X, UNICORE WS	0	3
ARC InfoSys	0	7
<b>BDII top/site</b>	<b>3</b>	<b>32</b>
UNICORE Registry	0	3
ARGUS	1	6
ARGUS EES	1	1
<b>gLite-Proxyrenewal</b>	<b>3</b>	<b>23</b>
<b>VOMS</b>	<b>3</b>	<b>27</b>
UNICORE Gateway	0	3
UNICORE UVOS	0	3
UNICORE XUUDB	0	2
<b>APEL parser</b>	<b>3</b>	<b>20</b>
<b>APEL publisher</b>	<b>3</b>	<b>22</b>
DGAS sensor	1	3
SGAS	0	2
ARC Clients	0	7
<b>EMI User Interface</b>	<b>3</b>	<b>24</b>
<b>GFAL/lcg_util</b>	<b>3</b>	<b>16</b>
UNICORE Client	0	3
UNICORE HILA	0	1



Globus GSISSH	1	11
AMGA	0	4
CEMon	0	1
FTS	0	10

### 3 SUMMARY OF DEVELOPMENT PLANS AFTER 2013

This section provides information about NGIs and communities committed to contribute effort in software maintenance after 2013.

The following table summarize the commitment to support deployed software, as expressed in the survey by the NGIs and VRCs.

Community	Products	Comments
Life Science VRC	VO Dashboard, application software	
nordugrid.org	ARC Products	Nordugrid contribution to ARC products is included in the MoU signed by 11 members.
NGI_FI	SOMA2 (workflow for molecular modeling)	
Ibergrid	CREAM GE	Best effort
NDGF	ARC, dCache	Funding level not clear at the moment
NGI_CZ	LB, glite-MyProxy, glite-px	
NGI_IE	gLite-MPI, StratusLab Marketplace, Quattor toolkit	
NGI_IT	cream, voms, storm, wnodes, dgas clients, wms, argus, gLibrary	
NGI_UA	ARC components	Best effort basis



NGI-DE	Not NGI commitment	NGI-DE partners involved in software development projects will continue the maintenance of their software, at least on a best effort basis.
NGI_PL	<i>UNICORE, QoSGrid</i>	<i>UNICORE will be supported if future projects will include this stack in their plans</i>
UK	APEL	

## 4 USAGE ASSESSMENT

In this paragraph the VOs reported to use high priority components are grouped by component. If two or more components are often used together, and they have been reported both high priority (all the NGIs reporting the first components as high priority, reported also the second one as high priority), they can be reported in the same table row.

### 4.1 Job execution environment

<b>ARC-ce</b>	nordugrid.org, bio.ndgf.org, ATLAS, balticgrid, SweGrid, SMSCG, IceCube, Biogrid
<b>CREAM-WN</b>	biomed, seismo.see-grid-sci.eu, meteo.see-grid-sci.eu, env.see-grid-sci.eu, seagrid, see, esr, auger, atlas, alice, voce, vo.plgrid.pl, vo.paus.pic.es, vo.cta.in2p3.fr, vo.aginfra.eu, vlemed, t2k.org, social.vo.ibergrid.eu, ops, nuclearby, nabics, mpi-kickstar, magic, lsgrid, lofar, life.vo.ibergrid, lhcb, imath.cesga.es, ict.vo.ibergrid.eu, hone, fusion, eumed, enmr.eu, enmr, eng.vo.ibergrid.eu, earth.vo.ibergrid.eu, dzero, dech, compchem, compass, cms, chem.vo.ibergrid.eu, cdf, belle, bbmri.nl, babar, astrogrid, VOCE, VO-MPI, LHC-VOsphys.vo.ibergrid.eu, Auger
<b>WMSLB</b>	LHC-VOs, biomed, seismo.see-grid-sci.eu, seagrid, see, meteo.see-grid-sci.eu, esr, env.see-grid-sci.eu, auger, atlas, alice, voce, vo.paus.pic.es, vo.cta.in2p3.fr, vo.aginfra.eu, vlemed, t2k.org, social.vo.ibergrid.eu, phys.vo.ibergrid.eu, ops, nuclearby, nabics, mpi-kickstar, magic, lsgrid, lofar, life.vo.ibergrid, lhcb, imath.cesga.es, ict.vo.ibergrid.eu, hone, fusion, eumed, enmr.eu, enmr, eng.vo.ibergrid.eu, earth.vo.ibergrid.eu, dzero, dech, compchem, compass, cms, chem.vo.ibergrid.eu, cdf, belle, bbmri.nl, babar, astrogrid, VOCE, VO-MPI, Auger
<b>LSF</b>	LHC-VOs, vo.paus.pic.es, vo.cta.in2p3.fr, t2k.org, social.vo.ibergrid.eu, phys.vo.ibergrid.eu, magic, life.vo.ibergrid, imath.cesga.es, ict.vo.ibergrid.eu, fusion, enmr.eu, eng.vo.ibergrid.eu, earth.vo.ibergrid.eu, compchem, chem.vo.ibergrid.eu, biomed, auger, LHC-VOs

<b>Torque</b>	LHC-VOs, biomed, seismo.see-grid-sci.eu, seegrid, see, meteo.see-grid-sci.eu, esr, env.see-grid-sci.eu, auger, atlas, alice, voce, vo.paus.pic.es, vo.cta.in2p3.fr, vo.agintra.eu, vlemed, t2k.org, social.vo.ibergrid.eu, phys.vo.ibergrid.eu, ops, nuclearby, nabics, mpi-kickstar, magic, lsgrid, lofar, life.vo.ibergrid, lhcb, imath.cesga.es, ict.vo.ibergrid.eu, hone, fusion, eumed, enmr.eu, enmr, eng.vo.ibergrid.eu, earth.vo.ibergrid.eu, dzero, dech, compchem, compass, cms, chem.vo.ibergrid.eu, cdf, belle, bbmri.nl, babar, astrogrid
<b>GE</b>	LHC-VOs, vo.paus.pic.es, vo.cta.in2p3.fr, t2k.org, social.vo.ibergrid.eu, phys.vo.ibergrid.eu, magic, life.vo.ibergrid, imath.cesga.es, ict.vo.ibergrid.eu, fusion, enmr.eu, eng.vo.ibergrid.eu, earth.vo.ibergrid.eu, compchem, chem.vo.ibergrid.eu, biomed, auger
<b>UNICORE-TSI-WS-X</b>	vo.plgrid.pl, shiwa-workflow.eu, medigrid, dgtest, bwgrid, astrogrid
<b>GRAM</b>	medigrid, dgtest, bwgrid, astrogrid
<b>gLite-mpi</b>	seismo.see-grid-sci.eu, meteo.see-grid-sci.eu, env.see-grid-sci.eu, biomed, auger, vo.paus.pic.es, vo.cta.in2p3.fr, vlemed, t2k.org, social.vo.ibergrid.eu, seegrid, see, hys.vo.ibergrid.eu, hpc.vo.ibergrid.eu, iber.vo.ibergrid.eu, phys.vo.ibergrid.eu, ops, nuclearby, nabics, mpi-kickstar, magic, lsgrid, lofar, life.vo.ibergrid, lhcb, imath.cesga.es, ict.vo.ibergrid.eu, fusion, eumed, esr, enmr.eu, enmr, eng.vo.ibergrid.eu, earth.vo.ibergrid.eu, dzero, dech, compchem, compass, cms, chem.vo.ibergrid.eu, cesga, cdf, belle, bbmri.nl, babar, atlas, astrogrid, alice, VOCE, VO-MPI, Auger
<b>gLexec</b>	LHC-VOs

## 4.2 Data access, transfer, storage

<b>ARC gridftp</b>	ATLAS, eismo.see-grid-sci.eu, seagrid, nordugrid.org, meteo.see-grid-sci.eu, margi, env.see-grid-sci.eu, biomed, balticgrid, SweGrid, SMSCG, IceCube, Biogrid,
<b>dCache</b>	LHC-VOs, biomed
<b>StoRM</b>	<b>StoRM:</b> LHC-VOs
<b>DPM</b>	sgdemo, seismo.see-grid-sci.eu, seagrid, see, phys.vo.ibergrid.eu, meteo.see-grid-sci.eu, iber.vo.ibergrid.eu, hpc.vo.ibergrid.eu, env.see-grid-sci.eu, aegis, SMSCG, LHC-VOs, Cesga, biomed
<b>UNICORE</b>	Same VOs who are using UNICORE job execution services

## 4.3 Metadata catalogue

<b>LFC MySQL/Oracle</b>	LHC-VOs, enmr.eu, nordugrid.org, balticgrid, margi, seismo.see-grid-sci.eu, cosmo, gene, gitest, gitut, solovo, vo.helio-vo.eu, vo.cmip5.e-inis.ie, seismo.see-grid-sci.eu, gaussian, turbomole, eumed, aegis, see, seagrid, sgdemo, meteo.see-grid-sci.eu, seismo.see-grid-sci.eu, env.see-grid-sci.eu, belarus, nabics, nuclearby, SweGrid, IceCube, Biogrid, argo, bio, compassit, compchem, cyclops, d4science.research-infrastructures.eu, enea, eticsproject.eu, euchina, euindia, gridit, glast.org, libi, omiiEurope, pamela, planck, superbvo.org, theophys, virgo, vo.plgrid.pl, shiwa-workflow.eu
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## 4.4 Information system

<b>BDII</b>	Almost all the VOs
<b>UNICORE</b>	Same VOs supported by previous UNICORE instances
<b>ARC infosys</b>	nordugrid.org, bio.ndgf.org, balticgrid, SweGrid, SMSCG, IceCube, CMS, Biogrid, ATLAS, ALICE

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#### 4.5 Attribute authority, AuthZ, AuthN

<b>VOMS, Globus MyProxy</b>	<b>VOMS, Globus MyProxy:</b> LHC-VOs, and most of the other VOs
<b>Argus</b>	<b>Argus:</b> LHC-VOs

#### 4.6 Accounting

<b>Apel Parse/Publisher</b>	Almost all VOs
<b>DGAS</b>	eumed, and all VOIs in NGI_IT (including LHC-VOs)

#### 4.7 Clients

<b>ARC clients</b>	LHC-VOs, nordugrid, balticgrid, SweGRid, Icecube, Biogrid, smscg, bio.ndgf.org
<b>EMI UI/Gfal-LCG utils</b>	LHC-VOs, biomed, mdgrid, mdgridedu, seagrid, margi, meteo.see-grid-sci.eu, seismo.see-grid-sci.eu, env.see-grid-sci.eu. Almost all the VOIs
<b>UNICORE Client/HILA</b>	belarus, nabics, nuclearby

#### 4.8 Other

<b>Globus GSISSH</b>	LHC-VOs (VO Box)
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#### 4.9 Not in UMD

<b>FTS,</b>	LHC-VOs, SweGrid, Icecube, Biogrid,
<b>Amga</b>	indicate, decide, gisela
<b>Squid/ CVMFS</b>	LHC-VOs



<b>Ganga</b>	LHCb, ATLAS, SuperB, neuroscience
<b>WNoDes</b>	Deployed in three NGI_IT sites (including T1)
<b>HLR</b>	DGAS accounting repository
<b>SGAS</b>	NGI_NDGF
<b>QosCosGrid</b>	Deployed by NGI_PL, ~90 users and 300k cpu hours/month

## 5 ANNEX I - PRIORITIES

### 5.1 VRC PRIORITIES

The following table groups the components considered high priorities by at least one of the three VRCs who answered to the survey. Components on a green background will be supported after 2013 by at least one NGI/Community.

Component	VOs in the survey considering the component high priority
CREAM	3
EMI worker node	3
WMS	3
(L&B)	3
LFC mysql,LFC oracle	3
DPM	3
BDII top/site	3
gLite-Proxyrenewal	3
VOMS	3
APEL parser	3
APEL publisher	3
EMI User Interface	3
GFAL/lcg_util	3
Torque Server and WN config	2
GridFTP	2
StoRM	2
gLite MPI	1
CREAM LSF module	1
dCache	1
ARGUS	1
ARGUS EES	1
DGAS sensor	1

### 5.2 NGI Priorities

The following table groups the components considered high priorities by at least 10 NGIs who answered to the survey. Components on a green background will be supported after 2013 by at least one NGI/Community.

Component	NGIs considering the component high priority
BDII top/site	32
DPM	27
VOMS	27
CREAM	26
EMI worker node	25
WMS	25
EMI User Interface	24
gLite-Proxyrenewal	23
(L&B)	22
APEL publisher	22
Torque Server and WN config	21
LFC mysql,LFC oracle	21
APEL parser	20
GridFTP	18
gLite MPI	16
GFAL/lcg_util	16
gLEexec	15
dCache	13
Globus GSISSH	11
FTS	10
ARC CE	8
StoRM	8

## 6 ANNEX II – DEVELOPMENT AFTER 2013

### 6.1 NGI contributions

The following table contains the middleware components that will be supported by one or more NGIs after 2013 according to the information gathered in the survey. Note well: JRU partners that are part of a NGI consortium may individually contribute to software development activities: these activities/plans are not detailed in the table below as the survey was submitted to NGIs.

Component	NGIs or Vos communities plans to support this component	Comments
APEL	NGI_UK	
ARC CE	Nordugrid, NGI_UA, NDGF(T1)	Nordugrid, commitment expressed in the MoU signed by 11 participants. NGI_UA, best effort
ARC Clients	Nordugrid, NGI_UA, NDGF(T1)	Nordugrid, commitment expressed in the MoU signed by 11 participants. NGI_UA, best effort
ARC gridftp	Nordugrid, NGI_UA, NDGF(T1)	Nordugrid, commitment expressed in the MoU signed by 11 participants. NGI_UA, best effort
ARC infosys	Nordugrid, NGI_UA, NDGF(T1)	Nordugrid, commitment expressed in the MoU signed by 11 participants. NGI_UA, best effort
ARGUS	NGI_IT	Basic maintenance
ARGUS EES	?	?
CREAM	NGI_IT	Basic maintenance
CREAM-GE	IBERGRID	<i>Best effort</i>
dCache	NGI_NDGF(T1)	

DGAS	NGI_IT	Basic maintenance
gLite-MPI	NGI_IE,	
gLite-px	NGI_CZ	
L&B	NGI_CZ	
SGAS	NGI_NDGF(T1)	
StoRM	NGI_IT	Basic maintenance
Stratuslab Marketplace	NGI_IE,	
VOMS	NGI_IT	
WMS	NGI_IT	Basic maintenance
wNoDeS	NGI_IT	Basic maintenance