

EGI

IBERGRID TRANSITION PLAN

Document identifier:	FILENAME Ibergrid_Transition_Plan_to_EGI_v1.4.doc
Date:	24/01/10
Country:	Spain (ES) and Portugal (PT)
NGI:	Ibergrid: NGI-ES + NGI-PT
Document status:	DRAFT
Document link:	HYPERLINK "https://edms.cern.ch/document/xxxxxx/" https://edms.cern.ch/document/xxxxxx/

Text in blue italics is included to provide guidance to the author and should be deleted before publishing the document.

Abstract: This document describes the transition plan to migrate Ibergrid infrastructure into EGI. Ibergrid is composed by NGI-ES and NGI-PT.

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Delivery Slip

	Name	Partner/ Activity	Date	Signature
From				
Verified				
Reviewed by				
Approved by				

Document Log

Issue	Date	Comment	Author
1.3	24/01/10	Initial Draft after Santander's meeting	Javier Lopez
1.4	25/01/10	Gantt chart and scheduled tasks	Alvaro Simon
1.5	25/01/10	Explanations and links to previous work	Isabel Campos
1.6	08/02/10	New time frame graph. Included FSF answers.	Alvaro Simon

Document Change Record

Issue	Date	Comment	Author

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1. INTRODUCTION

1.1. PURPOSE OF THIS DOCUMENT

This document describes the transition plan to migrate Ibergrid infrastructure into EGI. Ibergrid is composed by NGI-ES and NGI-PT.

The following planning and calendar of activities intends to provide with a smooth transition plan for the currently EGEE operated infrastructure to the NGI oriented model in the framework of the European Grid Initiative (EGI).

The activities towards the deployment of a National Grid Infrastructure in Spain began by middle of 2008, in the framework of the Spanish Network for e-Science group (<http://www-e-ciencia.es>). As part of the Network activities the group of Grid Infrastructure designed an interoperable framework for all the Grid infrastructures present in the country to be integrated under the umbrella of a Spanish NGI (see http://www.e-ciencia.es/wiki/images/e/ee/Documento_de_Arquitectura.pdf)

As a result, a testbed with a number of NGI dedicated services for monitoring, accounting and user support is in place for more than a year, running grid applications from Spanish research teams in the framework of the activities of the Spanish e-Science Network (see all details in <http://www.e-ciencia.es/wiki/index.php/Portal:Grid>).

The Portuguese NGI lead by LIP has also deployed services oriented to run the grid infrastructure in Portugal. Several core services will be shared by Portugal and Spain in the framework of the Ibergrid collaboration agreement. Also, when the architecture permits, backup services in one country will serve as failover instances to the other country to increase reliability.

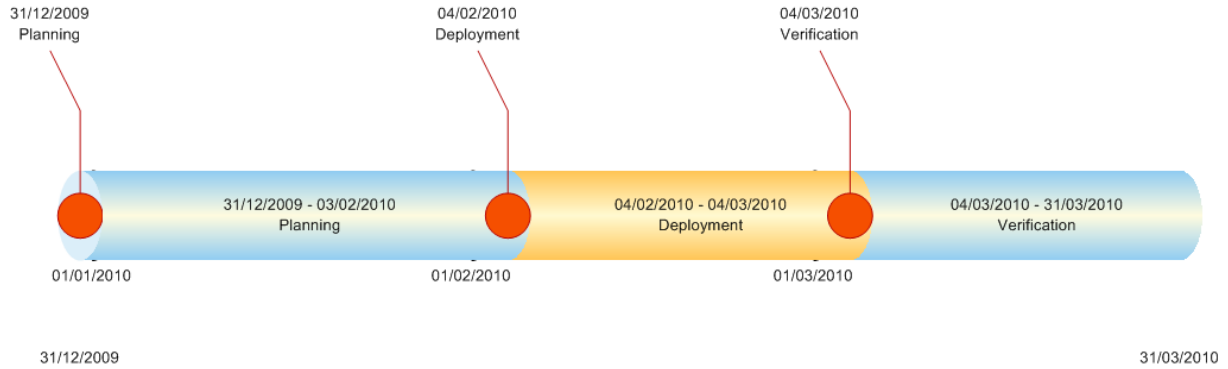
In the upcoming two months, which cover the final months of EGEE, we intend to stabilize the services already deployed in the current NGI testbed, deploy backup services in collaboration with the Portuguese NGI (PT-NGI), and describe the operations policies and strategies which will govern the Spanish and Portuguese NGIs and their integration in EGI.

1.2. REFERENCES

Table SEQ "Table" *Arabic 1: Table of references

R 1	XXXX HYPERLINK "https://edms.cern.ch/document/932615/" https://edms.cern.ch/document/932615/
	HYPERLINK "https://edms.cern.ch/document/934065/"
	HYPERLINK "http://project-eg ee-iii-na1-qa.web.cern.ch/project-EGEE-III-NA1-QA/EGEE-III/Procedures/procedures.html"
	HYPERLINK "https://edms.cern.ch/document/932422/"
	HYPERLINK "https://edms.cern.ch/document/963281/1"

2. SCHEDULE



2.1. TIME FRAME

Start Date: 2009.Dec.31

Finish Date: 2010.Mar.30

2.2. TASK LIST

Task	Start	Finish	Resource	Description	Baseline	Actual
Phase 1: Planning	2009.Dec.31	2010.Feb.04	Ibergrid	Planning of the migration process	2010.Jan.01	
	In progress					
Phase 2: Deployment	2010.Feb.05	2010.Mar.04	Ibergrid	Ibergrid deployment task		
Phase 3: Verification	2010.Mar.05	2010.Mar.30	Ibergrid	Verification and migration deadline		

2.3. MILESTONE LIST

Milestone	Date	Baseline
Ibergrid transition plan finished	2010.Feb.04	
Ibergrid infrastructure development finished	2010.Mar.04	
Verification process	2010.Mar.30	

2.4. RESOURCES AND TASK ASSIGNMENT

2.5. IBERGRID

Start	Finish	Days	Done	Task
2009.Dec.31	2010.Feb.04	26	0	Phase 1: Planning
2010.Feb.05	2010.Mar.04	20	0	Phase 2: Deployment
2010.Mar.05	2010.Mar.30	18	0	Phase 3: Verification
Total: 64 days scheduled, 0 days completed.				

- Ibergrid staff

2.6. DEPENDENCIES

- (2010.Feb.05 - 2010.Mar.04) Phase 2: Deployment
 - (2009.Dec.31 - 2010.Feb.04) Phase 1: Planning
- (2010.Mar.05 - 2010.Mar.30) Phase 3: Verification
 - (2010.Feb.05 - 2010.Mar.04) Phase 2: Deployment

Phase 1: Planning (Feb 7)

Phase 2: Deployment (March 7)

Phase 3: Verification (March 31)

3. SERVICES

3.1. OPERATIONAL SERVICES

3.1.1. NCG Nagios

Responsible: CESGA

Status: Up and running

Comments:

- Nagios will completely replace SAM (currently Nagios could submit similar tests using ops VO).
- New tests will be available, MPI tests are not included yet.

Actions:

- Ask to OAT for specific dates.
- CESGA:
 - The following page in the wiki needs to be checked or updated:
 - <http://www.e-ciencia.es/wiki/index.php/Monitorizacion>

3.1.2. GSTAT

Responsible: TBD

Status: Not available

Comments:

- Gstat 2.0 will be used in EGI.
- Regionalization is not clear.
- New Nagios version executes siteBDII sanity checks (org.bdii.Freshness, org.gstat.CE... etc)
- Gstat information is Nagios independent.

3.1.3. GOCDB

Responsible: CESGA

Status: Waiting for regional GOCDB to be available.

Comments:

- GOCDB+mySQL not available yet (until EGI start).
- Regional GOCSB+Oracle available by the end of February.
- Ongoing parallel work with external systems (HGSM).
- GOCDB4 available but v3 still there as backup.
- After regional GOCDB is tested it will be decided if we continue using HGSM or we move to GOCDB.

3.1.4. HGSM

Responsible: CESGA

Status: Up and running. Pending integration with GOCDB.

Comments: None

Actions:

- CESGA:
 - The following page in the wiki needs to be checked or updated:
 - <http://www.e-ciencia.es/wiki/index.php/Monitorizacion>

3.1.5. Accounting Portal

Responsible: CESGA

Status: Up and running

Actions:

- CESGA:
 - The following page in the wiki needs to be checked or updated:
 - <http://www.e-ciencia.es/wiki/index.php/Accounting>

3.1.6. Operations Portal

Responsible: LIP

Status: To be installed. Regional Dashboard rpms have been released for installation.

3.1.7. RT

Responsible: RedIris/IFCA/IFIC

Status: To be installed and integrated with GGUS. In the mean time SWE Regional Helpdesk and GGUS will be used.

Comments:

- Other NGIs already deployed RT (like UKI and SEE-GRID), they can provide useful information for the deployment and integration.
- Isabel will ask RedIris about the plans to deploy RT.
- Need timelines from RedIris.
- IFCA may help on RT configuration if needed.
- A list for the support teams in RT mus be set (action on IFCA)

3.1.8. SWE Regional Helpdesk

Responsible: IFIC

Status: Up and running (already integrated with GGUS)

3.2. CENTRAL SERVICES

3.2.1. Top BDII

Responsible: IFCA/LIP/CESGA

Status: Special configuration already deployed at CESGA allows to see both NGI and EGEE sites. IFCA and LIP will provide TopBDII with similar configurations. While automatic synchronization with regional HGSM/GOCDB is not available list of site TopBDII's will be kept in a web page. LIP will be responsible for the web page of Portuguese sites and IFCA will maintain the page with the list of Spanish sites.

Actions:

- CESGA:
 - The following page in the wiki needs to be checked/updated:
 - http://www.e-ciencia.es/wiki/index.php/Sistema_de_Información

3.2.2. WMS

Responsible: IFCA/LIP/CESGA (Isabel will ask other partners with WMS servers)

Status: Needs to be reconfigured to point to one of the NGI TopBDIIs. CESGA WMS already configured in this way.

Actions:

- IFCA:
 - The following page in the wiki needs to be checked/updated:
 - http://www.e-ciencia.es/wiki/index.php/Gestores_de_trabajos

3.2.3. VOMS

Responsible: IFCA/LIP/CESGA

Status: Up and running. The instance at IFCA is the main one for NGI-ES and LIP the main one for NGI-PT and Ibergrid VOs. CESGA provides a backup instance that it is automatically synchronized with the two main servers.

Actions:

- IFCA:
 - The following page in the wiki needs to be checked/updated:
 - http://www.e-ciencia.es/wiki/index.php/Servicios_VOMS

3.2.4. LFC

Responsible: IFCA/LIP/CESGA

Status: Up and running. The instance at IFCA is the main one for NGI-ES and LIP the main one for NGI-PT. CESGA provides a backup instance that it is automatically synchronized with the two main servers.

Comments:

- Javier has to check if it can be automatically synchronized with the main one.
- The backup at CESGA must be read-only to avoid sites writing there information that will be lost when main LFC comes back.
- Later we could check if it is possible to have distributed database with Oracle (or if MySQL supports this configuration).

Actions:

- IFCA:
 - Wait for input from Javier and update the wiki page with the configuration instructions for sites.
 - The following page in the wiki needs to be updated:
 - [http://www.e-ciencia.es/wiki/index.php/Pasarela a NGI-ES](http://www.e-ciencia.es/wiki/index.php/Pasarela_a_NGI-ES)

3.2.5. MyProxy

Responsible: LIP

Status: Up and running.

3.2.6. R-GMA Registry and Flexible Archiver

Responsible: CESGA

Status: Up and running

Comments:

- Changes in the service foreseen with the future migration from RGMA to ActiveMQ.
- More information needed to know when this will occur and to understand the migration process.
- ActiveMQ currently in certification.
- Before the end of EGEE: RGMA-based clients replaced by ActiveMQ, Central server supporting both methods (no date for decommission of the RGMA server).
- Meanwhile sites could publish using RGMA or ActiveMQ.

All core services should be reconfigured to support new Ibergrid VOs and TopBDIIs (LIP will coordinate and monitor this task).

3.3. LOCAL SERVICES

Request all sites to support the following VOs (Isabel):

- General Ibergrid VOs: *Write the right VO names here*
- Operational Ibergrid VO: *Write the right VO names here*

Additionally a small sites should support the training VOs and the training CAs from Spain and Portugal.

Sites should configure machines to use both VOMS servers (main and backup)

3.4. SECURITY

3.4.1. Infrastructure Security

Responsible: RedIris (NGI-ES), LIP (NGI-PT)

Status: Check current procedures. Update them if necessary.

3.4.2. Middleware Security

Responsible: UAB (Miquel A. Senar)

Status: Involved also in EMI in this task. A framework is being developed to monitor middleware security.

4. EGI GLOBAL TASKS

Within the EGI-InSPIRE proposal, the Ibergrid consortium has the duty to perform a number of tasks on behalf of the whole EGI-InSPIRE consortium. The proposal is currently under evaluation by the European Commission, and therefore subject to modifications. Anyway the tasks are being analyzed for future prospective.

Operations

O-E-2: Accounting Repositories: UK & Spain

O-E-9: Middleware Rollout: Spain & Portugal

Middleware & User

U-E-5: User Technical Services: Spain & Portugal

M-E-1, M-E-3: Document & Quality Criteria: IBERGRID (O-E-9)

4.1.1. O-E-2: Accounting Repositories

Responsible: CESGA (NGI-ES), RAL (UKI)

Comments: CESGA is already maintaining the accounting portal

4.1.2. O-E-9: Middleware Rollout

There will be a meeting in Madrid with Steven Newhouse. We will need some sort of pilot infrastructure to test middleware. We had a specific meeting about this task. Pilot services for critical and new components. Most of the testing offloaded to the developers. Need to clarify who will maintain the repositories and the communication tools available. Definition of the service transition procedures based on ITIL.A dedicated workplan will be developed after the meeting.

4.1.3. U-E-5: User Technical Services

Purpose: Creation of wiki pages to inform the users about all the tools available in the grid

Responsible: UPV (Ignacio Blanquer) + LIP (?)

4.1.4. M-E-1: Documentation of the Overall Process

Purpose: Document global process of interaction of EGI with EMI

Responsible: IFCA/LIP/CESGA

Notes: Documentation will be based on ITIL best practices. *Isabel will update the document after the meeting with Steven.*

4.1.5. M-E-3: Definition and Assessment of Criteria

Purpose: Quality Assurance of the global process

Responsible: IFCA/LIP/CESGA

Notes: Documentation will be based on ITIL best practices.

5. INTERNATIONAL TASKS

NGI International Tasks are those necessary to have the NGI resources integrated in EGI. The tasks can be grouped in the following items.

O-N-1: Operations of the NGI Grid topology and configuration repository

O-N-2: Operation of the NGI accounting repository

O-N-3: Operation of monitoring and performance repositories

O-N-4: Operations of the NGI Operations Portal

O-N-5: NGI infrastructure oversight, Operators on duty, etc...

O-N-6: Operations of the NGI ticketing system and gathering of new requirements

O-N-7: Regional Helpdesk

O-N-8: Operation of production core services for international VOs, catch-all CA,...

O-N-9: Operations Coordination at the NGI level

5.1.1. O-N-1: Operations of the NGI Grid topology and configuration repository

Responsible: CESGA

Services involved: HGSM (regional GOCDB when available)

Status: Up and running

5.1.2. O-N-2: Operation of the NGI accounting repository

Responsible: CESGA

Services involved: Ibergrid RGMA Registry/Flexible Archiver

Status: Up and running

5.1.3. O-N-3: Operation of monitoring and performance repositories

Purpose: Operate metrics portal, gstat, and future ActiveMQ repository. Further definition required (SA1 F2F, ask this). (NAGIOS + metrics portal) -> CESGA

5.1.4. O-N-4: Operations of the NGI Operations Portal

Purpose: Operate regional operations dashboard

Responsible: LIP

5.1.5. O-N-5: NGI infrastructure oversight, Operators on duty, etc...

Purpose: rotatory. A procedure will be written (LIP)

Responsible: LIP, IFCA, IFIC, CESGA (Isabel will ask if there are more partners interested)

Notes: Regional COD on Duty (should be an Ibergrid task). We need to adapt COD procedure to regional work (action on Gonçalo)

5.1.6. O-N-6: Operations of the NGI ticketing system and gathering of new requirements

RT / GGUS -> RedIris

Responsible: RedIris, IFCA, IFIC

5.1.7. O-N-7: Regional Helpdesk

Purpose: Support units.

Responsible: Isabel will ask which partners are interested and Support Units should be defined.

5.1.8. O-N-8: Operation of production core services for international VOs, catch-all CA, ...

Responsible: Several partners depending on the service. Responsibilities per service already defined in Section 3.

5.1.9. O-N-9: Operations Coordination at the NGI level

Responsible: LIP/IFCA/CESGA

Isabel will inform sites about the planning. Make a summary of the services and tell sites what to do. Distribute the information once we have this planning ready.