

EGI Foundation

DIRAC4EGI

Operational level Agreement

Service Provider	EGI Foundation
Component Provider	CNRS, CYFRONET
First day of service delivery	01 st January 2018
Last day of service delivery	31 st December 2020
Status	Final
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DOCUMENT LOG

Issue	Date	Comment	Author
			Giuseppe La Rocca
			Małgorzata Krakowian
0.2	27/06/2017	Draft under discussion	Alessandro Paolini
1.0	09/11/2017	Final version valid until 31/12/2017	Alessandro Paolini
2.0	30/05/2018	New OLA covering 2018, 2019, 2020	Alessandro Paolini
2.1	11/08/2019	yearly review; updated Violations, Escalation,	Alessandro Paolini
		and Complaints sections; added the distinction	
		between Component Providers involvement	

TERMINOLOGY

The EGI glossary of terms is available at: https://wiki.egi.eu/wiki/Glossary

For the purpose of this Agreement, the following terms and definitions apply. The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119.



Contents

Table of Contents

1	The	he Services4		
2	Serv	Service hours and exceptions5		
3	Sup	Support5		
	3.1	Incident handling6		
	3.2	Service requests		
4	Serv	ice level targets		
5	Limitations and constraints6			
6	5 Communication, reporting and escalation			
	6.1	General communication7		
	6.2	Regular reporting7		
	6.3	Violations7		
	6.4	Escalation and complaints8		
7	Information security and data protection8			
8	Res	oonsibilities		
	8.1	Of the Component Provider		
	8.2	Of the Service Provider9		
9	Revi	ew, extensions and termination9		



The present Agreement ("the Agreement') is made between **EGI Foundation (the Service Provider)** and **CNRS, CYFRONET (the Component Providers)** to define the provision and support of the provided services as described hereafter. Representatives and contact information are defined in Section 6.

This Agreement is valid from January 1st 2018 to 31st December 2020.

The Agreement was discussed and approved by EGI Foundation and the Component Providers July 26th 2018.

The Component providers are bound by the terms and conditions of the Corporate-level EGI Operational Level Agreement¹ supplemented by the terms and conditions of this specific Agreement:

1 The Services

The Services are defined by the following properties:

Technical	 The DIRAC4EGI service is a cluster of instances to allow the users to submit computational tasks to the HTC and Cloud services, monitor the status and retrieve the results. Users interact with DIRAC both using GUI and API. The components of the DIRAC service are: DIRAC WMS server (multiple high performance machines) DIRAC DB (MySQL) server (high performance, large memory machine) DIRAC REST server (medium sized machine) DIRAC Web server (low CPU, high memory machine) DIRAC configuration server (low CPU, high memory machine) DIRAC data manager service (low CPU, high memory machine)
Coordination	 With the virtual organizations: to support the technical configuration and training With EGI user support team and Operations: to gather requirements and use cases
Operation	 Operate the technical services hardware operated by CYFRONET software operated by CNRS

¹<u>https://documents.egi.eu/document/2752</u>



 Configure new VOs in the DIRAC4EGI service Handle security requests Provision usage statistics upon request Provisioning of a high availability configuration The physical nodes are connected with two separate network links to two different switches. The DIRAC machines are run as VMs, and all are located on different physical nodes. The underlying virtualisation solution allows performing live migration of the VMs between the physical nodes. In daily operations, this feature is used in the maintenance of the physical nodes, without interruption of running services in the VMs. The block devices attached to the VMs are served by a SAN. The SAN solution used in Cyfronet is designed to ensure high performance and availability by using redundant devices and access paths. The setup is resistant to fail of a SAN switch, RAID controller, disk loop and the power supply. Data stored on the VMs are daily archived by making snapshots and creating incremental backups. In the case of a failure, the DIRAC machines and the MySQL DB can be restored within 1 hour Implementing all the measures for mitigating the risks listed in the Availability and Continuity Plan for the DIRAC4EGI service² Maintenance 				
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 Requirements gathering 				
Documentation	Maintenance			

2 Service hours and exceptions

As defined in Corporate-level EGI Operational Level Agreement.

3 Support

As defined in Corporate-level EGI Operational Level Agreement.

Support is provided via EGI Service Desk³ Support Unit: DIRAC

² <u>https://wiki.egi.eu/wiki/EGI Workload Manager Availability and Continuity Plan</u>



Additional support is provided on best effort basis by DIRAC team.

Support is available between:

- Monday and Friday
- 9:00 and 17:00 CET/CEST time

This excludes public holidays at the same time in all organizations providing the service.

3.1 Incident handling

As defined in Corporate-level EGI Operational Level Agreement.

3.2 Service requests

As defined in Corporate-level EGI Operational Level Agreement.

4 Service level targets

Monthly Availability

- Defined as the ability of a service or service component to fulfil its intended function at a specific time or over a calendar month.
- Minimum (as a percentage per month): 99%

Monthly Reliability

- Defined as the ability of a service or service component to fulfil its intended function at a specific time or over a calendar month, excluding scheduled maintenance periods.
- Minimum (as a percentage per month): 99%

Quality of Support level

• Medium (Section 3)

5 Limitations and constraints

As defined in Corporate-level EGI Operational Level Agreement.

³ <u>http://helpdesk.egi.eu/</u>



6 Communication, reporting and escalation

6.1 General communication

The following contacts will be generally used for communications related to the service in the scope of this Agreement.

Service Provider contact	Alessandro Paolini	
	operations@egi.eu	
Component Providers contacts	Andrei Tsaregorodtsev (CPPM/IN2P3/CNRS)	
	atsareg@in2p3.fr	
	Tomasz Szepieniec (CYFRONET)	
	t.szepieniec@cyfronet.pl	
Service Support contact	See Section 3	

6.2 Regular reporting

As part of the fulfilment of this Agreement and provisioning of the service, the following reports will be provided:

Report title	Contents	Frequency	Produced by	Delivery
Service Performance Report	The document provides the overall assessment of service performance (per month) and OLA target performance achieved during reporting period	Every 9 months (first report covering the period Jan – Sep 2018)	Component Provider	Survey form prepared by EGI Foundation

All reports shall follow predefined templates⁴.

6.3 Violations

The Component Provider commits to inform the Service Provider, if this Agreement is violated or violation is anticipated. The following rules are agreed for communication in the event of violation:

⁴ <u>https://documents.egi.eu/document/2748</u>



- In case of any violations of the Services targets, the Component Provider will provide justifications and a plan for Services enhancement to the Service Provider. The Component Provider will produce a status report and a Service enhancement plan for the improvement of the Services within one month from the date of the first notification.
- The Service Provider will notify the supporting Resource Centres in case of suspected violation via the EGI Service Desk. The case will be analysed to identify the cause and verify the violation.

6.4 Escalation and complaints

For escalation and complaints, the Component Provider contacts point shall be used, and the following rules apply.

- In case of repeated violation of the Services targets for two consecutive months or four months over a period of 12 months, a review of the Agreement and of the Services enhancement plan will take place involving the parties of the Agreement.
- Complaints or concerns about the Services provided should be directed to the Component Provider contacts who will promptly address these concerns. Should the Service Provider still feel dissatisfied, about either the result of the response or the behaviour of the Component Provider, EGI Foundation Director <u>director@egi.eu</u> should be informed.

7 Information security and data protection

As defined in Corporate-level EGI Operational Level Agreement

8 Responsibilities

8.1 Of the Component Provider

Additional responsibilities of the Component Provider are as follow:

- Adhere to all applicable operational and security policies and procedures⁵ and to other policy documents referenced therein;
- Use communication channel defined in the agreement;
- Attend OMB⁶ and other operations meeting when needed;

⁶ <u>https://wiki.egi.eu/wiki/OMB</u>



⁵ <u>https://www.egi.eu/about/policy/policies_procedures.html</u>

- Accept EGI monitoring services provided to measure fulfilment of agreed service level targets.
- Service with associated roles are registered in GOC DB⁷ as site entity under EGI.eu Operations Centre hosting EGI central operations tools⁸
- Changes in the system must be rolled in production in a controlled way in order to avoid service disruption

8.2 Of the Service Provider

The responsibilities of the Service Provider are:

- Raise any issues deemed necessary to the attention of the Component Provider;
- Collect requirements from the Resource infrastructure Providers;
- Support coordination with other EGI services
- Provide monitoring to measure fulfilment of agreed service level targets.

9 Review, extensions and termination

There will be reviews of the service performance against service level targets and of this Agreement at planned intervals with the Service Provider according to the following rules:

• Technical content of the agreement and targets will be reviewed on a yearly basis.

⁸ <u>https://goc.egi.eu/portal/index.php?Page Type=NGI&id=4</u>



⁷ <u>http://goc.egi.eu/</u>