



**d4SCIENCE**

Project acronym	D4Science
Project full title	Distributed colLaboratories Infrastructure on Grid Enabled Technology 4 Science
Project No	212488

**Deliverable No  
DSA3.2**

**Test Plan**

March 2008

**SEVENTH FRAMEWORK PROGRAMME  
Research Infrastructures**

INFRA-2007-1.2.2: Deployment of  
e-Infrastructures for scientific communities



## DOCUMENT INFORMATION

Project	
Project acronym:	D4Science
Project full title:	<b>DI</b> istributed col <b>L</b> aboratories <b>I</b> nfrastructure on <b>G</b> rid <b>EN</b> abled <b>T</b> echnology <b>4</b> <b>S</b> cience
Project start:	1 <sup>st</sup> January 2008
Project duration:	24 months
Call:	INFRA-2007-1.2.2: Deployment of e-Infrastructures for scientific communities
Grant agreement no.:	212488
Document	
Deliverable number:	DSA3.2
Deliverable title:	Test plan
Contractual Date of Delivery:	March 2008
Actual Date of Delivery:	8 April 2008
Editor(s):	Andor Dirner
Author(s):	Andor Dirner
Reviewer(s):	Diego Milano
Participant(s):	4D SOFT
Work package no.:	SA3
Work package title:	Service Activities
Work package leader:	ENG
Work package participants:	ENG, CERN, 4D SOFT
Est. Person-months:	24+
Distribution:	Public
Nature:	Other
Version/Revision:	1.1
Draft/Final	Final
Total number of pages: (including cover)	6
Keywords:	gCube; Testing;

## DISCLAIMER

---

This document contains a description of the D4Science project findings, work and products. Certain parts of it might be under partner Intellectual Property Right (IPR) rules so, prior to using its content please contact the consortium head for approval.  
E-mail: [info@d4science.research-infrastructures.eu](mailto:info@d4science.research-infrastructures.eu)

In case you believe that this document harms in any way IPR held by you as a person or as a representative of an entity, please do notify us immediately.

The authors of this document have taken any available measure in order for its content to be accurate, consistent and lawful. However, neither the project consortium as a whole nor the individual partners that implicitly or explicitly participated the creation and publication of this document hold any sort of responsibility that might occur as a result of using its content.

This publication has been produced with the assistance of the European Union. The content of this publication is the sole responsibility of D4Science consortium and can in no way be taken to reflect the views of the European Union.

The European Union is established in accordance with the Treaty on European Union (Maastricht). There are currently 27 Member States of the Union. It is based on the European Communities and the member states cooperation in the fields of Common Foreign and Security Policy and Justice and Home Affairs. The five main institutions of the European Union are the European Parliament, the Council of Ministers, the European Commission, the Court of Justice and the Court of Auditors. (<http://europa.eu.int/>)



**D4Science is a project partially funded by the European Union**

## SUMMARY

---

This document is to point to the “real” deliverable, SA3.2, the gCube testing plan, covering the following main points:

- General considerations on testing
- Unit testing
- Functional testing
- System testing
- Static code analysers
- Performance test
- Stability test

## DELIVERABLE DOCUMENTATION

---

Since in the gCube testing plan SA3.2 is a Deliverable having nature “Other”, it is provided as a web site, accessible at the URL:

<https://wiki.4dsoft.hu/d4s/index.php/D4Science - DSA3.2 Test plan>

This material provides official information, guidelines, software usage, responsibilities, and thoughts on how different kinds of testing should be, or can be executed and performed. Being a wiki-type web site, the documentation can be easily updated, and reviewed, time by time, as the need of doing modifications or adding details arises in the future.

Knowing the nature of the development process in general, and especially the complexity of developing the gCube software, an exact testing plan can only be completed after the initial components, and their initial test samples are developed and documented. However, before the development phase, the testing plan can contain general guidelines, information, the already integrated, to be integrated and other software to be used in the testing procedures. Since it depends on several circumstances, including the quantity and difficulty of detected misbehaviour of the testing targets, the needed effort is quite hard to be exactly foreseen in this early phase. Speaking in general again, the testing will be continuously executed until the final release of the gCube software is proven to behave as expected. The testing code and procedure must follow the possible modifications made in gCube components. Sometimes this requires more testing code to develop, sometimes changing the testing code, or perhaps new parameterization to be introduced in functional and system testing.

Static analyser tests will be run regularly on the compiled byte codes extracted from libraries. Although there are plug-ins that integrate the used analyser tools in the ETICS system, additional effort is needed to integrate the whole ETICS procedure in the official build procedure.

Stability and performance test methodologies are in a pre-planning phase for the time being. The proper way and strategy of these kinds of tests are under examination.

## REFERENCES

---

N/A