EGI-InSPIRE

UMD INFORMATION CAPABILITIES QUALITY CRITERIA v1.3

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Abstract

This document describes the Quality Criteria for the Information Capabilities identified in the UMD Roadmap.

Document Log

Issue	Date	Comment	Author/Partner
1.0	19/01/2011	Reorganisation of criteria into UMD roadmap 2 groups.	Enol Fernández
1.3	09/02/2011	Review of criteria	Enol Fernández

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1 INFORMATION MODEL

1.1 Information Model Schema

GlueSchema Conformance	
ID	**INFOMODEL_SCHEMA_1**
Mandatory	
Applicability	Information Model Appliances.
Related Requirements	None

Description	
Test for the conformance to GlueSchema v1.3 of the information published	
Input from TP	
Test for the GlueSchema 1.3 compliance.	
Test 1	
Pre-condition	Service information is available.
Test	Test that the Service information conforms to the v1.3 GlueSchema.
Expected Outcome	Information follows GlueSchema 1.3
Pass/Fail Criteria	
Pass if the test is provided and passes.	
Related Information	
See GlueSchema definition [R 2]	
History	

GlueSchema Conformance	
ID	**INFOMODEL_SCHEMA_2**
Non Mandatory	
Applicability	Information Model Appliances.
Related Requirements	None

Description	
Test for the conformance to GlueSchema v2 of the information published	
Input from TP	
Test for the GlueSchema 2 compliance.	
Test 1	
Pre-condition	Service information is available.
Test	Test that the Service information conforms to the GlueSchema v2.
Expected Outcome	Information follows GlueSchema v2
Pass/Fail Criteria	
Pass if the test is provided and passes.	
Related Information	
See GlueSchema definition [R 3].	
History	

2 INFORMATION DISCOVERY

2.1 *Information Discovery Interface*

Information Service Interface	
ID	**INFODISC_IFACE_1**
Mandatory	
Applicability	Information Discovery Appliances.
Related Requirements	None

Description	
Information published by the service must be available through LDAPv3 protocol	
Input from TP	
Test for the LDAP interface.	
Test 1	
Pre-condition	Information Service is Running
Test	Fetch information from LDAPv3 server
Expected Outcome	Information is retrieved correctly
Pass/Fail Criteria	
Pass if the test is provided and passes.	
Related Information	
History	

2.2 Information Discovery Services

2.2.1 Information Aggregation

The Information Discovery services aggregate information from lower level sources of information in a hierarchical way. Proper aggregation of information should be performed

Information Filtering Test	
ID	**INFODISC_AGG_1**
Mandatory	
Applicability	Information Discovery Appliances.
Related Requirements	None

Description	
The information discovery service must be able to filter some of the data coming from information sources (e.g. do not publish information a compute capability for a given VO)	
Input from TP	
Test for the information filtering features.	
Test 1	
Pre-condition	Valid sources of information are available. Valid filter.
Test	Filter sources according to filter.
Expected Outcome	Output filtered information
Test 2	
Pre-condition	Valid sources of information are available. Invalid filter.
Test	Filter sources according to filter.
Expected Outcome	Error message stating that the information cannot be filtered. Output unfiltered information.
Pass/Fail Criteria	
Pass if the test is provided and passes.	
Related Information	
History	

Aggregation Test	
ID	**INFODISC_AGG_2**
Mandatory	
Applicability	Information Discovery Appliances.
Related Requirements	None

Description	
The information discovery service must be able to collect data from different sources and aggregate them in a single source.	
Input from TP	
Test for the information aggregation features.	
Test 1	
Pre-condition	Set of valid information service sources available and correct.
Test	Aggregate information from sources
Expected Outcome	Output aggregated information
Test 2	
Pre-condition	Set of valid information service sources available, at least one incorrect (e.g. not GlueSchema compliant)
Test	Aggregate information from sources
Expected Outcome	Output aggregated information without incorrect source. Show a warning message.
Test 3	
Pre-condition	Set of valid information service sources, at least one unreachable
Test	Aggregate information from sources
Expected Outcome	Output aggregated information without unreachable source. Show a warning message.
Pass/Fail Criteria	
Pass if the test is provided and passes.	
Related Information	
History	

2.2.2 Availability/Scalability

Size Test	
ID	**INFODISC_AVAIL_1**
Mandatory	
Applicability	Information Discovery Appliances.
Related Requirements	None

Description	
The information discovery service must be able to handle big amounts of data. Central services for the whole EGI.eu infrastructure may contain information from several hundred sites.	
Input from TP	
Test for the limit of size of the data handled by the service.	
Test 1	
Pre-condition	Correctly configured service.
Test	Add information to the service until it cannot handle it.
Expected Outcome	Size limit of information
Pass/Fail Criteria	
Pass if the test is provided and the limit is enough to handle the current information of the *whole* EGI.eu infrastructure.	
Related Information	
History	

Stress Test	
ID	**INFODISC_AVAIL_2**
Mandatory	
Applicability	Information Discovery Appliances.
Related Requirements	None

Description	
The information discovery service should be available under realistic conditions.	
Input from TP	
Stress test for the service that calculates the maximum throughput of the service.	
Test 1	
Pre-condition	Correctly configured service.
Test	Stress test the service until is not available.
Expected Outcome	Throughput of the service is enough to handle realistic load.
Pass/Fail Criteria	
Pass if the test is provided and the service is able to handle at least 20 concurrent requests.	
Related Information	
History	

3 REFERENCES

R 1	UMD roadmap: https://documents.egi.eu/public/ShowDocument?docid=100
R 2	GlueSchema Specification v1.3: http://glueschema.forge.cnaf.infn.it/Spec/V13
R 3	GlueSchema Specification v2.0: http://www.ogf.org/documents/GFD.147.pdf