

elnfra Central Service Catalogue & User Portal

European e-Infrastructure Services Gateway

e-IRG workshop, 3-4 October 2017, Estonia



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- 1. What is elnfraCentral?
- 2. Introduction to service catalogues and alignment
- 3. Prior efforts
- 4. Survey on e-Infrastructure service catalogues
- 5. State of affairs in the 5 flagship e-Infrastructures
- 6. State of affairs in other e-Infrastructures
- 7. Proposal for a service description template
- 8. A first attempt to a common service catalogue
- 9. Next steps
- 10. A review of the elnfraCentral gateway





What is elnfraCentral?



- Coordination and Support Action (CSA)
- 9 organisations including 5 major e-infrastructures
- January 2017 June 2019 (30 month)







Addressed the INFRASUPP-03-2016(b-3) call **Support the dissemination of the e-infrastructure programme** (Dissemination and collaboration activities for information sharing among projects and stakeholders *through the development of a web-portal*)

Sister project to e-IRGSP5 for policy support to einfrastructure programme (support of the e-IRG secretariat)







Ensure that by 2020 a broader and more varied set of users discovers and accesses the existing and developing e-Infrastructure capacity



Core objectives



- Structure an open and guided discussion between e-Infrastructures to consensually define a common catalogue for their services.
- 2. Develop a **web platform** to act as the gateway for end-users to browse to the European e-Infrastructure catalogue of services.
- 3. Device **tools and draw policy and sustainability lessons** for the future development of a European e-infrastructure marketplace.



Timeline









Introduction to service catalogues and alignment Why, What, How, When, Challenges





Service Catalogue Alignment

Why



- In tune with "Open Science, Open Innovation and Open to the World"; advancement of knowledge, technology production - expanding the role of e-infrastructures in the innovation chain; Horizon 2020; "e-infrastructure Commons"; European Open Science Cloud, the European Strategic Forum for Research Infrastructure (ESFRI), etc
- Need to harmonise the services provided by European e-Infrastructures
- Increase the user base by making services discoverable & easier to relate to user needs
- Widen the pool of users with more scientific communities, industry, citizens, etc.
- Facilitate service providers and third parties with a shared language and path to users
- Become more user-oriented, user-centric, business-focus
- Support the production and dissemination of research outputs
- Identify overlapping efforts or gaps and speed up innovation
- Lower costs for maintenance of information
- ...and last but not least facilitate continuous improvements



Service Catalogue Alignment



1. Common Vocabulary

- Service, Product, Provider, Management, Catalogue, Portfolio, Role, Component, SLA, etc

2. Structured information about Service Descriptions

Information that may be presented to Users/Customers

3. Harmonized information on Service Representations

- For listings, portals, repositories, etc

4. Common approach to Service Performance Monitoring

On usage, users, capacity, etc

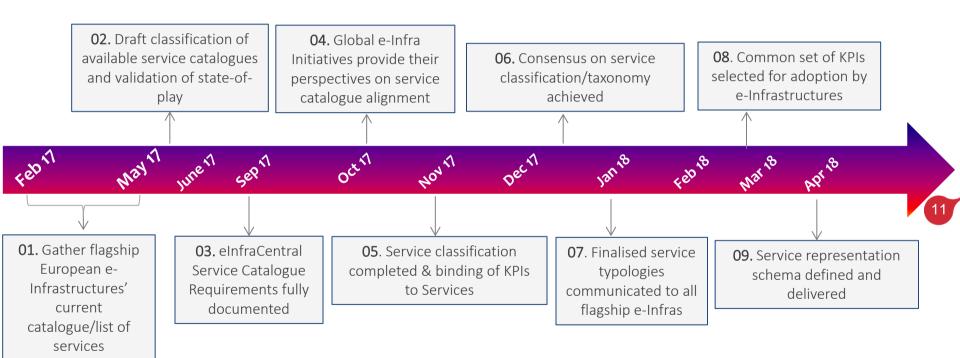
5. Common approach to harvesting of Service Descriptions





Service Catalogue Alignment How and When







Service Catalogue Alignment

Challenges



- **Different standards and frameworks** are available for Service Management.
- Diverse vocabulary about service management is used in the communities.
- Different processes to manage service portfolios are employed at different locations.
- Different levels of adoption of Service Management practices exist among the e-Infrastructures.
- **Different maturity in description of services offerings**, listings or catalogues are exhibited by e-Infrastructures.
- Different ways of describing and representing services by e-Infrastructures.
- There are various potentially overlapping service offerings from different e-Infrastructure providers.
- There are **service offerings at different levels**: centrally by an e-Infrastructure, at national or regional level (e.g. by an NREN) or even at local level (university).
- There is little experience on a common service catalogue/marketplace in the community.







Prior efforts Catalogue of Services Working Group e-IRG development of KPIs FedSM/FitSM eInfrastructure Observatory/e-nventory tmforum





Catalogue of Services Working Group

Term	Definition				
Service	Means of delive the customer w	ering value for the customer by facilitating results ants to achieve			
Service Catalogue	UTerm a Service	Definition E-mail contact	to ask more information to the service provider about this		
Service Portfolio	lr Contact	Service			
Service	^p Service N webpage	Term Customer	Definition Type of customers who are allowed to commission this service.		
Name Service ID	G Service O phase	group p	Restrictions may apply according to various criteria like the location (e.g. country) or type of activity (e.g. research, commercial).		
Service description	H fu	G User group Service r Condition	Type of Individuals that primarily benefits from and uses a service Restriction that applies to this service		
Value Service provider	T Service function C fe Service	Payment model	Supported payment models and restrictions that apply to each of them		
provider	Carea Service type	Terms of ^A use s	URL to a document containing the rules which one must agree to abide by in order to use the service		
		SLA	URL to a document containing information about the levels of performance that a service provider is expected to achieve (service level agreement)		



e-Infrastructure Catalogue of Services

Document Information

Date: 04/04/2016

- Authors: Sergio Andreozzi, Donatella Castelli, Angela Dappert, Tiziana Ferrari, Małgorzata Krakowian, Johannes Reetz, Andres Steijaert
- Abstract: This document outlines a framework for creating a Catalogue of Services (CoS), primarily intended for e-infrastructure services. It describes services at a high level and makes them discoverable. It can also be used to identify overlapping efforts or gaps in the catalogued service landscape.

The goal of this document is to define a framework that can be used to specify and implement a concrete catalogue. It is not a catalogue itself and does not list or describe services.

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The research leading to these results has received funding from the European Union's Horizon 2020 research and innovation programme for the THOR project under Grant number Agreement 654039, the EGI-fragege project under Grant Agreement number 654142, the 604-2 project under Grant Agreement number 731122 (GN4-2), the BlueBRIDGE project under Grant Agreement number 675680, the OpenAIRE2020 project under Grant Agreement number 64410, and the EUDAT2020 project under Grant Agreement number 654065.

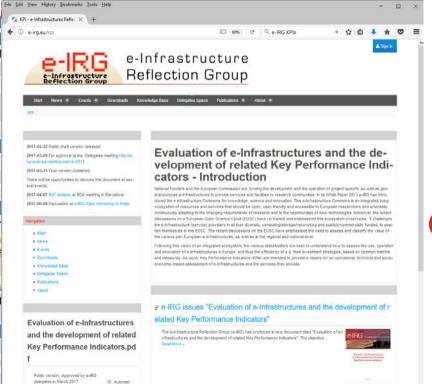


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e-IRG development of KPIs

-		
Class Category	Harmonised metrics	
Class of political expectations		
Federation/interoperability	Service Level Agreements in place; Standards use	
Long-term sustainability	Years of guaranteed funding	
Bottom-up governance	User representatives in governing bodies	
Leverage of member states investments	National research programs	
Trust	Transparency procedures; Communication with re	
Class of e-Infrastructure provider's exp	ectations	
Technical indicators	Number of CPUs bandwidth; storage	
Operational indicators	Number of up- and downtime Availability (7/24)	
Scientific outcome	Number of MSc and PhD theses; scientific publica	
Class of (scientific) user's expectation		
User satisfaction	Quotient of: active/passive users and long-/sho	
	feedback; Number of incidents/mean time to repair	
User development	No of days of trainings and no of attendees; No o	
	advanced users	
Service requests	No of service requests Basic/Advanced service usa	
e-Accessibility and barrier free	Adaptability of infrastructure to modify accessibil	
indicators		
Class of expectations of the general pul	<u>blic</u>	
Knowledge transfer	No of knowledge transfer events	
Socio-economic impact	No of applications from and exploitation by indus	
Innovation aspects	No of innovation prizes (short-/middle-/long-term	



ically Ex-

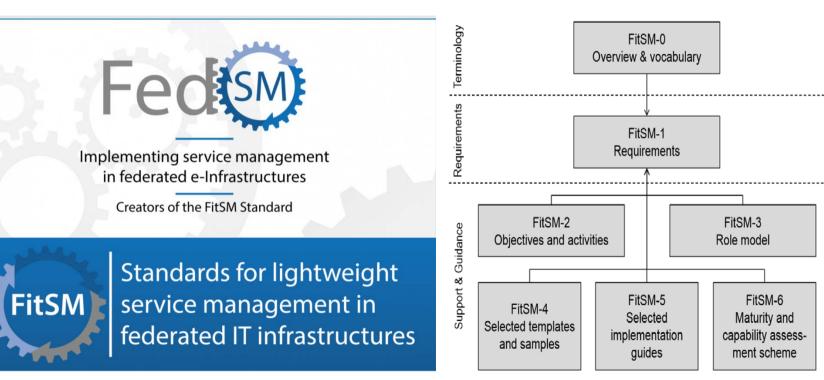


This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731049



Gentral

FedSM and FitSM standard

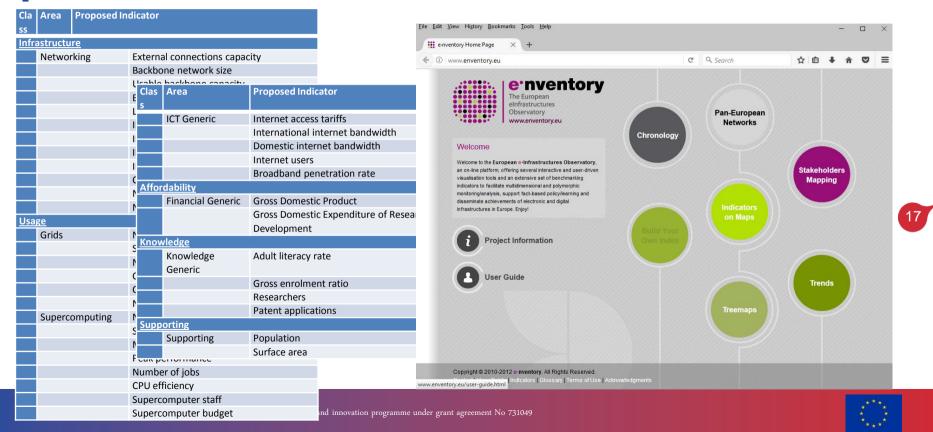






Gentra Central

elnfrastructure Observatory/e-nventory



tmter

nform innovate accelerate





Frameworx Specification

Product Catalog Management API REST Specification

TMF620
Release 14.5.1
June 2015

Latest Update: Frameworx Release 14.5 TM Forum Approved
Version 2.0.2 IPR Mode: RAND

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Frameworx Specification

Product Catalog API Conformance Profile

TMF660 Release 16.5.0 December 2016

 Latest Update:
 Frameworx Release 16.5
 Member Evaluation

 Version 1.0.0
 IPR Mode:
 RAND

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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731049



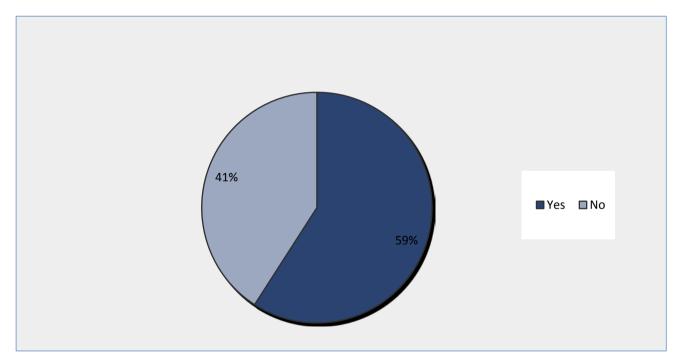
Survey on e-Infrastructure Service Catalogues 28 April until 30 June 2017







Have you faced any difficulties in the past in finding the right digital service to support your research?





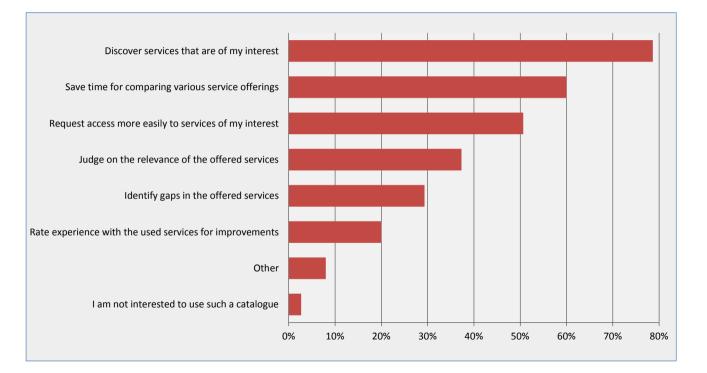




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What would be your main motivation to use a common e-Infrastructure service catalogue?





21



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Survey



Rating of a common e-infrastructure service catalogue functionality by users/consumers

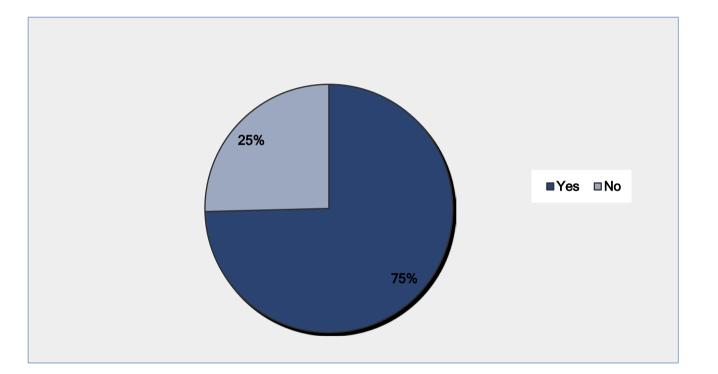
Answer Options	Not important	Somewhat important	Important	Very important	Extremely important	Rating Average
View characteristics of a specific service	3%	0%	28%	44%	25%	3,9
Search services using keywords	2%	9%	21%	39%	29%	3,9
Browse and search the services through specific filters (faceted search)	3%	6%	29%	42%	20%	3,7
Explore/browse a catalogue of services	3%	11%	26%	29%	31%	3,7
View services organised per categories	3%	9%	31%	29%	28%	3,7
Compare service characteristics and KPIs	6%	17%	33%	28%	16%	3,3
View key performance indicators (KPIs) of a specific service	5%	21%	35%	21%	18%	3,3
View KPIs of services in different types of graphs	15%	32%	35%	12%	5%	2,6





Survey

Do you face any challenges in increasing the visibility of your services?





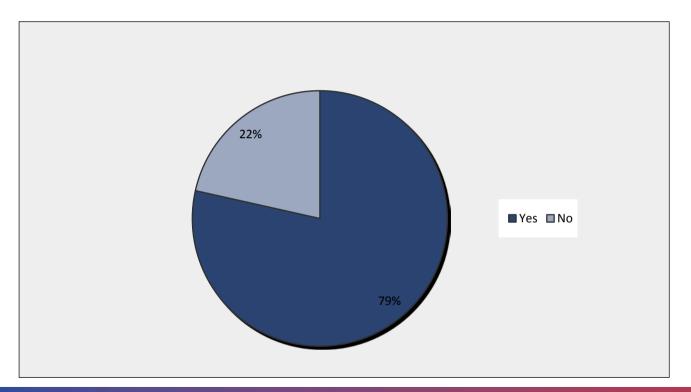




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Survey





Central





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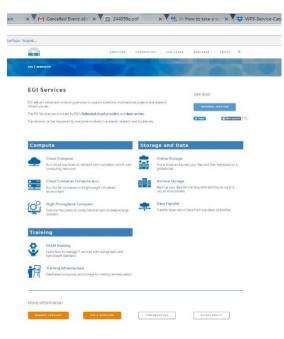


State of Affairs in the 5 Flagship eInfrastructures EGI, EUDAT, GEANT, OPENAIRE, PRACE





Services provided by flagship e-Infras EGI



HOW TO REQUEST A	OTHER LINKS	WHERE WE ARE
SERVICE		

26	SERVICES FEDERATION USE CASES	RUSINESS AROUT Q
OI / SERVICES / CU	DUD COMPUTE	
	Cloud Compute	REQUEST THIS DEEVICE
æ	Run virtual machines on-demand with complete control over computing resources	ASK FOR INFORMATION
omputacional resour ranaging physical ser loud Compute offers	the possibility to select pre-configured virtual appliances (e.g. CPU, memory, disk, operating on a catalogue replicated across all EGI cloud providers.	First person 150 Could Compute helped us to handle computational demand peaks when new data sets awived and by that goed up the whole process upvilcantly "K Förstner
Host long-run Create dispos infrastructure ner Select virtual: requirements	ute and data-internative workbask (britishan) and internative) in granice lay also also and observed that and an and an and an and an and bet testing and observed new new memory data) and application enhowments to fit your machine configurations (CR) memory data) and application enhowments to fit your Data Computer resources in a feedbe way with integrated monitoring and accounting Data Computer resources in a feedbe way with integrated monitoring and accounting Data Computer resources in a feedbe way with integrated monitoring and accounting Data Computer resources in a feedbe way with integrated monitoring and accounting the second sec	More services Cloud Container Compute High-Throughput Compute
ervice provide	d by	Usage figures 256,000 instantiated VMs (Jair 12 months)

E WE ARE

HOW TO REQUEST A	OTHER LINKS	WHER
SERVICE		

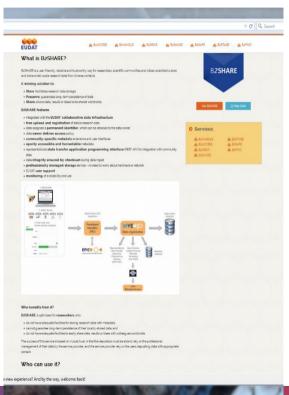


Central Central	Service Description	
Basic Service Infe		
Service Brand Name	Cloud Container Compute	
Service Tagline (If applicable)	Run Docker containers in a lightweight virtualised environment	
Service Full Name (If applicabl	-	
Service Description	Could Container Company pays in the ability to deploy and scale Docation containers on demands in their guarantee demyndiational insurances is a server and challed environment with a tabolard AP uses, which out eventiand of managing the opening quarking. The result is improved performance, shall for development user, and the development of the development of - Do some of performance - Do some of performance - Do some of performance - Do some of performance - Interconsult on distance - Inter	
Target Customers/Users	Customers: research organisations, SME/Industry	
	Users: researchers, innevators - Improved performance	
Customer/User Value	 ideal for development work Virtual organisations: ATLAS, CMS, biomad, chipster sec Fi, discience.org. 	
Usage and oppreciation	entra egentation: A bis, ces, atomas, cepter de r, bacante.org. entr.eu, extrai, peachrote, DABIAH, ENSODEV, NBIS	
Service Provider	FGI Foundation (via EGI resource providers)	
Hunding	Development: ECH2020 projects (primarily) and national projects/open source projects. Operations: capacity supported by national funding, federation and support co-funded between national funding and BCH2020	
Service Webpage/Repositors/	n tatis://www.est.eu/services/doud-container/	
Service Classifica	tion Information	
Service Version		
Service Phase/Status/TRL	Production	
Service Type/Category	Compute	
Related Services	Cloud Compute, High-Throughout Compute, Online Storage, Archive	
Service Support	Storago, Data Transfer	
	and the second	
Service Request	http://www.epi.eu/request-service/	
Service Helpdesk	https://ggas.eld	
Service User Manual	http://wiki.eg.eu/wiki/Tederated Cloud user support	
Service Training information	tstos://documents.epi.mu/public/showDocumentRood=u622	
Service Feedback	support@egt.eu	
Service Contract	ual Information	
Service Pricing	Free: Researchers meeting policies of the service providers; Pay-for-sec Special technical requirements; commercial entity support (beyond initial testing/piloting)	
Service Level Agreement	SLA templates available for both end users and providers	
Service Options	Type of initiance to host virtual mechine (e.g. no. of cores, RAM, local disk	
	for Users https://wiki.egi.eu/wiki/Federated Cloud user support	



Services provided by flagship e-Infras EUDAT



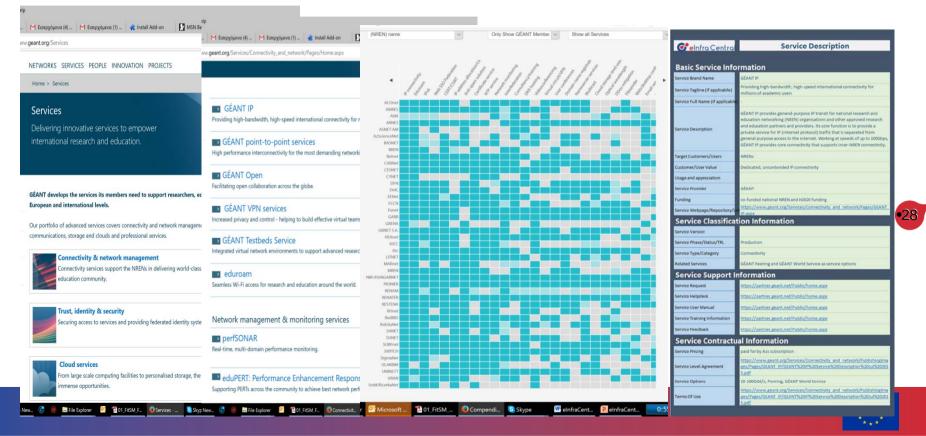




Central Central	Service Description
Paris Canadas Inform	
Basic Service Inform	REAFE
Service Tagline (If applicable)	Replicate research data safely
Service Full Name (If applicable)	reprise research one prevy
Service Full Name (in applicable)	25AFE is a robust, tafe and highly available service which allows community and departmental repositories to implement data managemen policies on their research dia across multiple administrative domains in a trustworthy menner. - abstraction layer of large scale, heterogeneous data storages - guards against data loss in long-term archiving - allows to occlume across for user (e.e., from different resion)
Target Customers/Users	Community data manager; service provider
Customer/User Value	For the communities who need to guard against data loss, B2SAFE is a customer facing service that allow data replication and safe storage between geographically distributed centres in the EUDAT CDI.
Usage and appreciation	-
Service Provider	EUDAT CDI consortium
Funding	EU.
Service Webpage/Repository/Link	https://www.eudat.eu/services/b2tafe
Service Classificatio	n Information
Service Version	3.1.2
Service Phase/Status/TRL	Production
Service Type/Category	Data storage
Related Services	B2ACCESS; B2HANDLE
Service Support Info	ormation
Service Request	http://eudat.eu/support-request?Service=825AFE
Service Helpdesk	http://eudat.eu/support-request?Service=825AFE
Service User Manual	https://eudat.eu/services/userdoc/b2safe
Service Training Information	https://eudat.eu/b2safe-training-suite
Service Feedback	http://eudat.eu/support-request?Service=825AFE
Service Contractual	Information
Service Pricing	Indirect funding
Service Level Agreement	
Service Options	Standard; with-DPM
Terms Of Use	

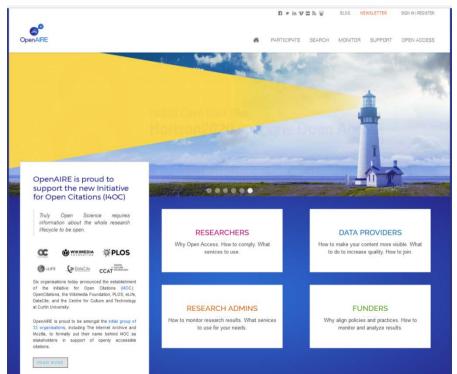


Services provided by flagship e-Infras GEANT



Gelnfra Central

Services provided by flagship e-Infras OpenAIRE





Genfra Centra	Service Description		
Basic Service Info	ormation		
Service Brand Name	OpenAIRE Discovery Portal		
Service Tagline (if applicable)	Find open linked research		
Service Full Name (If applicabl	-		
Service Description	The OperARIE Discovery partial provide access to OperArces research months. It to Jave do operARIE Operare hadres communications path that includes all reasons and scolarly addivides, spanning all abases of the accessibility operations and accessibility addivides, spanning all abases of the accessibility operations and accessibility addivides, spanning all abases of the approximation operations and accessibility and accessibility operations approximation operation of the accessibility operation operations and accessibility approximation operation of the accessibility operation operations in the accessibility operations and accessibility operations accessible accessibility operations and accessible accessibility operations and accessibility operations accessible accessibility operations and accessible accessibility operations and accessible accessible accessibility operations accessible accessibility operations accessible accessible accessible accessibility operations accessible accessibility operations accessible accessibility operations accessible accessible accessibility operations accessibility operations accessible accessibility operations accessibility operations accessibility operations accessibility operations accessibility operations acc		
Target Customers/Users	Academic community, Research Community, policy makers, funders, research literinies, educators, industry, othern scientists/public. Enable intelligent and contennalitued research discovery.		
Customer/User Value	Connect public to open access research in Europe and beyond. 9,200 registered users.		
Usage and appreciation	50,000 users use the service on the average every month.		
Service Provider	OpenAIRE concertium		
Funding	tic funding		
Service Webpage/Repository/	www.npenare.ey		
Service Classifica	tion Information		
Service Version	v3		
Service Phase/Status/TRL	Production		
Service Type/Category	Content delivery		
Related Services	OpenAIRE Discovery partial is based on a set of OpenAIRE services: - OpenAIRE Agreegation Service - OpenAIRE Internotes service - OpenAIRE Internotes service - OpenAIRE unge statistics service		
Service Support I	nformation		
Service Request	www.operaine.eu		
Service Helpdesk	https://www.openaire.eu/upport/helpdesk		
Service User Manual			
Service Training Information			
Service Teedback	https://www.openaire.eu/waport/helodeak		
Service Contract	al Information		
Service Pricing	free		
Service Level Agreement			
Service Options			
Terms of Use			
References (1			



Services provided by flagship e-Infras PRACE





🞯 elnfra Central	Service Description				
Basic Service Information					
Service Brand Name	PRACE Project Access				
Service Tagline (If applicable)	2				
Service Full Name (If applicable	1 -				
Service Description	Project Access is the access to PRACE Ten-0 world class high performance computing (IPP) resources for projects, which use codes that have been previously tested and have demonstrated high scalability and optimization. Preparatory Access is storogily recommended to collect technical data to support the request of resources. Propusals for Project Access must be based on computer codes and dataready to non on the Tier-0				
Target Customers/Users	Scientists and researchers				
Customer/User Value	Access to Tier-0 resources				
Usage and appreciation					
Service Provider	PRACE aisbi				
Funding	Hosting Members				
Service Webpage/Repository/	http://www.prace-ri.eu/prace-project-access				
Service Classifica	tion Information				
Service Version					
Service Phase/Status/TRL	Production				
Service Type/Category	Compute				
Related Services	Preparatory Access				
Service Support	nformation				
Service Request	http://www.prace-ri.eu/application-guide				
Service Helpdesk	prace-support@hostingsite.hostingcountry				
Service User Manual	http://www.prace-ri.ru/IMG/pdf/PRACE-Guide-for-Applicants-to-Tier-0- V2016-pdf				
Service Training Information	- 1 · ·				
Service Feedback					
Service Contract					
Service Pricing	Scientists and researchers from PRACE 2 members can access PRACE resources free of charge. Access is awarded through a rigerous peer review process. Industrial users, with head offlies or substantial R&D activity in Europe, are also eligible to apply for Open R&D projects and undergo the same review.				
Service Level Agreement					
Service Options					
Terms Of Use	Acceptable use Policies of the hosting sites				







State of Affairs in other elnfrastructures AARC, BlueBRIDGE, EarthServer, EDISON, EVER-EST, INDIGO-DataCloud, LEARN, MuG, OpenDreamKit, OpenMinTeD, PhenoMeNal, SESAME NET, READ, THOR, VI-SEEM, VRE4EIC, West-Life



Services provided by flagship e-Infras BlueBRIDGE



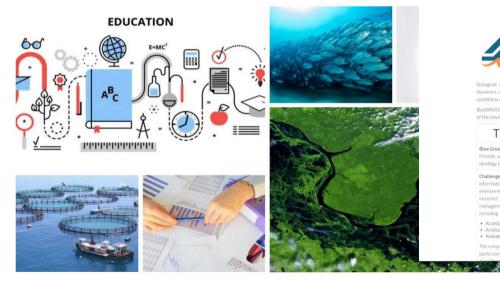
e-Infrastructure	Service list/catalogue	Link to Services in landing page	Service description
BlueBRIDGE	Yes	Yes	Intermediate to high level
EarthServer-2	Yes	Yes	Intermediate to high level
VI-SEEM	Yes	Yes	Intermediate to high level
INDIGO-DataCloud	Yes	Sort of	Intermediate to high level
PhenoMeNal	Yes	Sort of	Intermediate to high level
West-Life	Yes	Yes	Low level
OpenDreamKit	Yes	Sort of	Low level
OpenMinTeD	Yes	Sort of	Low level
SESAME NET	Yes	Sort of	Low level
READ	Yes	Sort of	Low level
AARC	No	No	Intermediate to high level
MuG	No	No	Intermediate level
EVER-EST	No	Yes	Low level
EDISON	No	No	Low level
THOR	No	No	Low level
LEARN	No	No	Low level
VRE4EIC	No	No	Low level



Services provided by flagship e-Infras **BlueBRIDGE**



OUR SERVICES



The status of stocks is an essential indicator for management and policy sessing the status of (mainly) fish populations (stocks) is a science by itself. and is needed to understand safe harvesting limits to help conserve marine ecosystems and maintain the sustainability of aquatic food resources. It requires

Good stock assessments require high quality datasets and robust models to estimate biological parameters. It makes use of catch statistics and can use

The Stock Assessment VRE in a nutshell

Blue Growth scenario:

C O www.bluebridge-vres.eu/services/support-stock-assessment

Challenges:

environment) are all used in fisheries stock assessment and management. Without this information, incorrect assumptions can be made with a substantial impact on stock assessment results and resulting management advice. The main challenge is to provide a dedicated environment for stock assessment, including

- · Access to relevant data:
- · Access to a range of related algorithms and models: · Availability of storage and dissemination tools

The complexity of stock assessment, and the widely varying quality and availability of data and algorithms, is

Service Detailed Description

Service List/Catalogue

Assessment Visible Link to the Services in the main page

Qi 🕸 🗄 Events Codata international conference, October 8-13, Saint Petersburg, Russia The Construirus Marine Week - 25-29 Sentember 2017. Brussels (Belgium) ICES Annual Science Conference 2017 BlueBRIDGE webinar: Semantic Integration of Marine Data, 28 June 2017, 11.10am CEST RDA Europe-BlueBRIDGE Datathon on Fisheries and Aquarulture June 15-16 Heraklion Crete Greece Services Strategic Investment Analysis Protected area impact maps production

VIEW ALL SERVICES



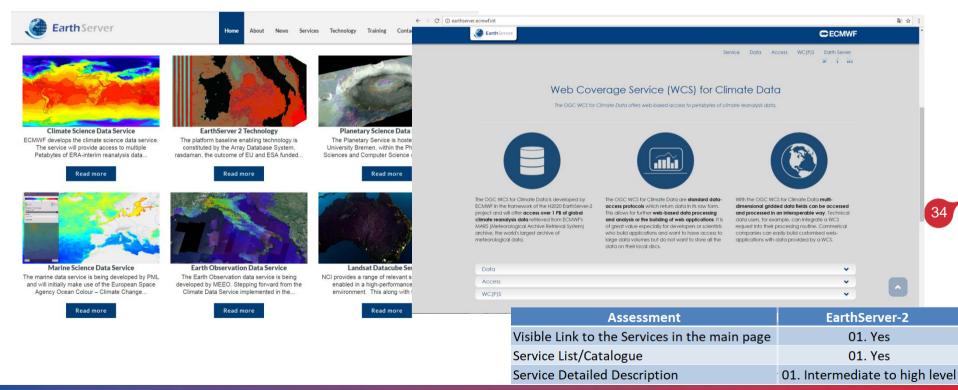
BlueBRIDGE

01. Yes 01. Yes

01. Intermediate to high level

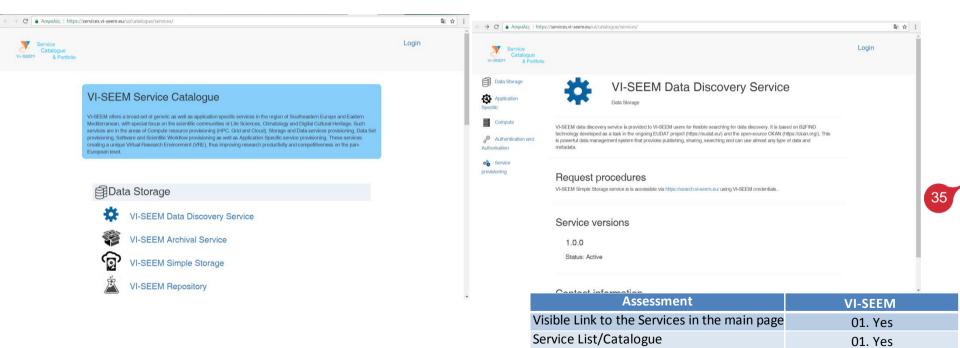
Services provided by flagship e-Infras EarthServer







Services provided by flagship e-Infras VI-SEEM



Service Detailed Description

01. Intermediate to high level

Gelnfra Central





Overview of Commercial Marketplaces Amazon Web Services, Oracle Cloud, Microsoft Azure, Google Play, iTunes Store, CNET Download



Service Catalogues at a global scale Amazon Web Services

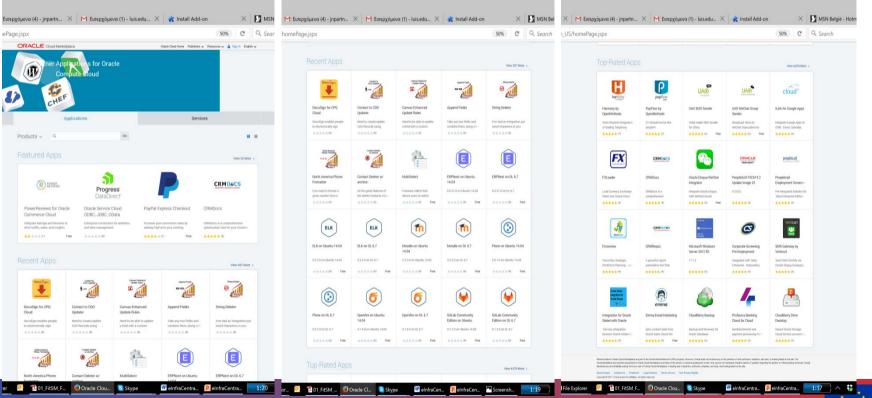


	E	xplore Our Product	For For Den 14	tory Bookmarks Iools Help Services (AW: × +				
				Itps://wws.amazon.com	Products - Solutions Pricing	Software Support Customers	Partners Enterprises Startups	C Q amazon s
Compute Amazon EC2	Storage	Database on EC2 Container Registry		HELISCI LICES	Compute Amazon EC2 Arreaton EC2 Container Registry	Networking & Content Delivery Amazon VPC Amazon CloudFront	Analytics Amazon Athens Amazon EMR	Application Services AWS Step Functions Amazon API Geteway
Amazon Lightsail Leunch and Manage Virtual Prive	Store i Amazi	nd Retrieve Docker Imagen on VPC d Oloud Resources			Anazon (CZ Conternet Service Anazon VPC AMS Batch AMS Batch AMS Exercice AMS Exercice Adds Exercice Ex	Amazon Route 53 AMS Direct Connect Beatre Load Balancing Developer Tools AMS CodeRom AMS CodeRom	Amazon Cioudilearch Amazon Kinesia Amazon Kinesia Amazon Apadokt Amazon Apadokt Amazon Apadokt AMS Data Rostine AMS Glue	Amazon Elastic Tanasoder Messaging Amazon Single Queue Service (SQS) Amazon Prepoint Amazon Sergie Email Service (SSS)
AWS Elastic Beanstalk Run and Manage Web Apps		ambda nur Code in Response to Events			Storage Amazon Simple Storage Service (S3) Amazon Diasto, Discho Oranger (200) Amazon Olacier	AWB CodeDeploy AWB CodeDeploy AWS X-Ray AWB Command Line Interface Management Tools	Security, Identity & Compliance AWS Identity and Access Management (AW) Amazon Inspector AWS Certificate Manager AWS Couthelial	Business Productivity Amazon Chime Amazon WorkDocs Amazon WorkDat Desktop & App Streaming
×	目目	ø			AWS Storage Gateway AWS Storage Gateway AWS Snowball AWS Snowball Edge AWS Snowball Edge	Amazon CloudWatch Amazon EC2 Systems Manager AWS CloudFormation AWS CloudFinal	AWS Directory Service Amazon Cloud Directory AWS Key Management Service AWD Organizations	Amazon WorkQpaces Amazon AppStream 2.0 Software
Developer Tools	Management Tools	Security, Identity & Compliance	a.		Database Amazon Aurona Amazon T/DS Amazon DynamoOB Amazon DynamoOB Accelerator (DAX) Amazon Butch Cache	AWS Config AWS Conflict AWS Service Catalog AWS Trusted Advisor AWS Personal Health Dashboard AWS Command Line Interface AWS Command Line Interface	AWB Shaid AWB Astilact Mobile Services AWB Mobile Hub Arrason API Gateway	AWS Marketplace Internet of Things AWS IoT Platform AWS IoT Platform AWS IoT Button
	nggeneeuwen oon VI-668				Amazon Rudduht AMS Database Migration Service Migration AMS Application Discovery Service AMS Depatase Migration Service AMS Server Migration Service AMS Server Migration Service	AWS Managed Santoses Antificial Intelligence Aneaon Les Amazon Relixophon Amazon Relixophon Amazon Machine Learning	Amazon Cognito Amazon Pinpoint AWG Swoole Firm AWG Mobile SDK	Contact Center Amaon Connect Game Development Amaon GameLift Amaon Lumbergard

AWS Snowmobile



Service Catalogues at a global scale Oracle Cloud



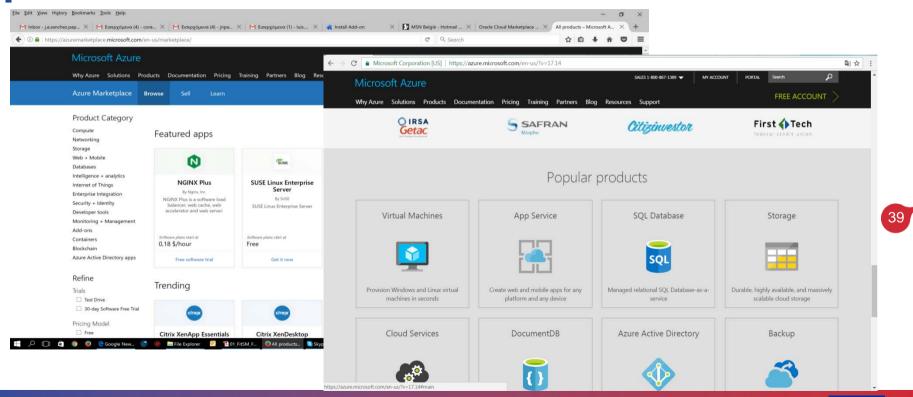
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731049

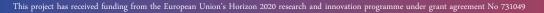


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Service Catalogues at a global scale

Microsoft Azure

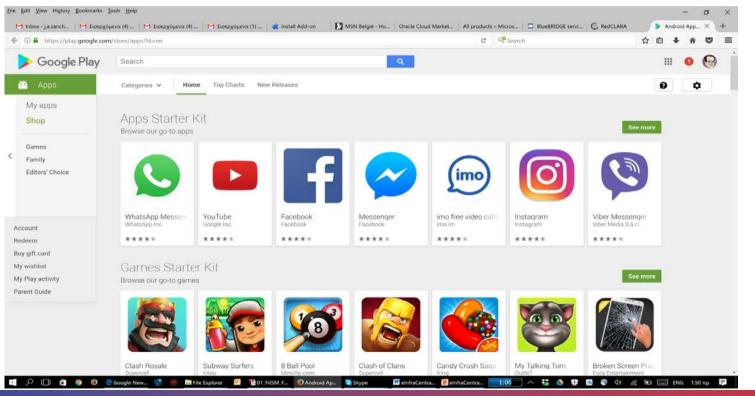






Service Catalogues at a global scale

Google Play



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731049

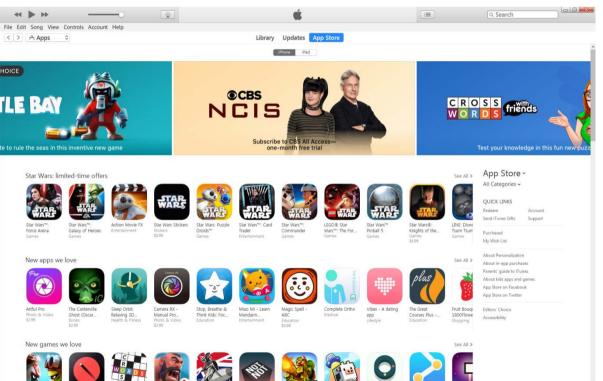


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Service Catalogues at a global scale



iTunes Store



41



Service Catalogues at a global scale CNET Download



() download.cnet.com/windows/						№ ☆ :				
ownload - Q	Search software, apps, ga	ames, & more	Popular Apps	$ \begin{array}{ccc} \text{Top Categories} & \text{GL} \\ \leftarrow & \rightarrow & \mathbb{C} \\ \end{array} $	ides CNET English lownload.cnet.com/windows/	×				
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		Contract on the Contract of Co	est version now! eset.com/	antivinis	Browsers	nasties. Read more »			2) Down	load on
Home > Windows Downloads					Business Software Communications	Accounting & Billing Software	Best Free Browsers	The best TV streaming	our webs	ite
Popular Links Security and	FEATURED		9 0		Desktop Enhancements	Business Applications CRM Software	ogle Chrome, zilla Firefox, or nething else?	service? Hulu, Youtube, Netflix & more duke	3) Get Fr	ee
Antivirus Center Guides					Developer Tools Digital Photo	Database Management Software	it out		Forms Online	
Most Popular			a contraction of the second se		Software Drivers	Document Management Software	ighty metro	polis. Play and	www.getformsonline.com	
New Releases	G H				Educational	E-Commerce Software	L			
Editor's Picks		Nº 25 361			Software	Inventory Software	Polis - the browser game set in Antio Id magnificent cities, forge mighty ances, utilize the power of the gods,		Most Popular Downloads	
User Favorites	11				Entertainment Software	Office Suites				
Top Freeware	What's the	best Winde	ows			Presentation Software	quer the world!			
Categories	antivirus?			Most	Games Graphic Design	Project Management	pmoted by grepo	lis.com	1. CCleaner	75
Security Software			jans, rootkits, and other		Software	Software Resume Software		See more 🛞	 Avast Free Antiviru 	us 264
Browsers	nasties. Read more » 1.	1. CI	1. C(Home Software	SEO Tools	dala alawa a Jar		 IObit Malware Figl 	hter 23	
Business Software	Best Star Wars	Best Free Browsers	The best TV	The best TV 2. Av Internet Software	Internet Software	Small Business Tools	vith three jaw-dropping	4. Driver Booster	22	
Communications	Games		streaming service?	3. 10	iTunes & iPod	Spreadsheet Software	ogle Lens comes to Google Assistant a		Malwarebytes	10
Desktop Enhancements	Celebrate 40 years	years Mozilla Firefox, or Hulu, Youtube, th these something else? Netflix & more duke	4. Di	Software	Tax Software		es to Google Assistant and d Google Photos get major	6. Advanced System	Care 9	
Developer Tools	of Porkins with these			Voice Recognition Software	Jates. ad more »	Free	-			
Digital Photo	mobile games it out 6. Ac	6. Ac Fr	Networking Word	Word Processing Software		 VirtualDJ 8 	94			
Software				Fr Software	Software	See all		 IObit Uninstaller 	7	
					Productivity Software		lessaging w	ith Amazon	9. PhotoScape	50
					Corooppoyate P	LCHO Alexa			10. Driver Easy	5
				ownload.cnet.com/bi			Amazon gives its virt	ual home assistant a	11 VI C Media Player	(64-bit) 55



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731049



Progress on Service Alignment

Service Management Vocabulary v0.10 Service Management Standards Assessment v0.10 Service Description Template v1.00 Service Catalogue v0.30 List of Functional and Non-Functional Requirements v1.00





Service Management Alignment

Service Management Vocabulary v0.10

D3.1 Service Catalogue Regularments - elegraCentral - Court Agreement number: 731049

Note: This might mean the total disk capacity or network bandwidth. It could also be the maximum transaction throughput of a system.

2.2.8 Change

Alteration (such as addition, removal, modification, replacement) of a configuration item (CI)

2.2.9 Classification

Adaptiment of hemic to defined groups based on common <u>attributes</u>, inclusions or other chirals have 1 licem there under to its shall be a more high data devicement, namely hade to its solicer reords or have records, <u>ansatz</u>, configuration items (Vol., etc., Befined groups may include cargoing) and an advance transpole or or charge, configuration items (Vol., etc., Befined groups may include cargotice) and an advance transpole or or charge, configuration items, and the solice intercontrol of the advance transpole or charge control and the solice transpole control interpole of the solice and the solice of the solice of the solice of the control interpole of the solice of the solice and the solice of the solice of the solice of the control interpole of the solice of the solice and proteints on adjustment of adjustment of the solice of the solice of the solice of adjustment of the solice of the

2.2.10 Closure

Final activity in a workflow of a process to indicate no further action is required for a specific case

Note: Cones that are subject to closure may lockate incidents, problems, service requests or changes. The actualty of closure parts the connected record functions the lockatent record, problem record, service request record or change record) in its final status, usually called "closed".

2.2.11 Competence

Sum of knowledge, skills and experience that an individual or group needs to effectively take on a specific role

2.2.12 Confidentiality of information

Property of information not being accessible to unauthorized parties

2.2.13 Conformity

Extent to which requirements are met in some context

Note: In the context of FISMs, the term compliance is generally used as a synonym for conformity. However, sametimes conformity is used in the context of adherence to internal regulations and requirements as defined by policies, processes and procedures, while compliance is used in the context of adherence to external requirements, such as ison, standards and contracts.

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03.5 Service Cohlogue Regularments - elifis@ercoal - Grant Agreenent number: 731049

2.2.14 Configuration

State of a specified set of attributes, relationships and other relevant properties of one or more configuration items (CIu)

Note: The documented configuration of a number of Cis at a given point in time is called a configuration baseline, which is usually taken prior to the deployment of one or more changes to these Cis In the five environment.

2.2.15 Configuration item (CI)

Element that contributes to the delivery of one or more services or service components, therefore requiring control of its configuration

Note 1: O's can vary widely, from technical components (e.g. computer hardware, network components, offwore) to non-technical items such as documents (e.g. service level agreements, manuals, license documentation).

Note 2: The data necessary for effective control of a G is stored in a G record. In addition to attribules of the G, the G record Medy includes information on relationships h has with other Cs, service components and services. If around services are stored in a configuration monogeneric database (RMM0)

2.2.16 Configuration management database (CMDB)

Store for data about configuration items (CIs)

Note: A CMDB is not necessarily a single database covering all configuration items (Cn). It may rather be compased of multiple physical data stores.

2.2.17 Continuity Property of a service to maintain all or parts of its functionality, even in expertional circumstances

Note: Ecceptional circumstances include emergencies, crises or disasters which affect the ability to provide services over extended periods of time.

2.2.18 Customer

Organisation or part of an organisation that commissions a service provider in order to receive one or more services

Note: A customer usually represents a number of users.

2,2.19 Document

Information and its supporting medium

Note: Examples of documents include publicles, plans, process descriptions, procedures, service level ogreements, contracts or records of activities performed.

2.2.20 Effectiveness

Extent to which goals and expectations are met Note: In a management system, effectiveness is mostly measured against the defined goals of the processes that are subject to this system.

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Gentral

013 Service Catalogue Brazilienents - elstrafortal - Grant Assessent number: 715581

2.2.21 Efficiency

Degree of ability to meet goals and expectations with minimum consumption of resources Note 1: In a management system, efficiency is mostly considered in the context of the processes that are subject to this system.

Note 2: Resources may be human, technical, informational or financial.

2.2.22 Escalatio

Change of responsibility for a case (such as an incident, service request, problem or change) or activity to another individual or group

Note: There are two bains types of escalation: Herearchical escalation transfers responsibility (temporarily) to someone with a higher level of authority. Functional escalation transfers responsibility to someone with a different set of competencies or privileges responsed to handle the case or activity.

2.2.23 Federation

Situation in which multiple parties, the federation members, jointly contribute to the delivery of services to customers without being organised in a strict hierarchical setup or supply chain.

2.2.25 Federation member

Individual, organisation or body that works together with other federation members in a federation to provide one or more services

Note: Often, federation members will not be bound together by strict controctual agreements

2.2.25 Federator

Body that acts to coordinate a set of federation members

2.2.25 Improvement

Action or set of actions carried out to increase the level of conforming, effectiveness or efficiency of a management system, process or activity, or to increase the quality or performance of a service or service component.

Note: An improvement is usually implemented after an apportunity for improvement has been identified, for instance during a service review, audit or management review.

2.2.27 Incident

Unplanned disruption of operation in a service or service component, or degradation of service quality versus the expected or agreed service level or operational level according to service level agreements (SLA), operational level agreements (DLA) and undergrading agreements (DLA).

2.2.28 Information security

Preservation of confidentiality, integrity and accessibility of information

2.2.29 Information security control

Means of controlling or treating one or more risks to information security

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Service Management Alignment Service Management Standards Assessment v0.10



		IT service	e management standards		
	Control Objectives for			LITY MATRIX	
	Control Objectives for		ITIL (Edition 2011)	ISO/IEC 20000:2011	COBIT 5
совн	support tool for doci	L	Service Portfolio Management (ITIL SS)		Manage portfolio (APO05)
	controls guidance au	Service Portfolio Management (PR1)	Design Coordination (ITIL SD, 4.1)	Design and transition of new or changed	Manage Solutions Identification and Bui
	in an enterprise.		Transition Planning and Support (ITIL ST, 4.1)	services (Clause 5)	(BAI03)
			Service Catalogue Management (ITIL SD,		
	FitSM is a free and li	Service Level Management (PR2)	4.2)	Service Level Management (Clause 6.1)	Manage Service Agreements (APO09)
	scenarios. The main	-	Service Level Management (ITIL SD, 4.3)		
	scenarios. The main	Service Reporting Management (PR3)	Service Reporting (ITIL CSI, 5.7)	Service Reporting (Clause 6.2)	Monitor, Evaluate and Assess Performar and Conformance (MEA01)
	Create a clear, prag	Service Availability & Continuity	Availability Management (ITIL SD, 4.4)	Service Continuity and Availability	Manage Continuity (DSS04)
itSM		Management (PR4)	IT Service Continuity Management (ITIL SD, 4.6)	Management (Clause 6.3)	
	situations.		Capacity Management (ITIL SD, 4.5)	Capacity Management (Clause 6.5)	Manage Availability and Capacity (BAIO
		Capacity Management (PR5)	Event Management (ITIL SO, 4.1)		
		Provide a baseline l	Information Security Management (PR6)	Information Security Management (ITIL SD,	Information Security Management (Clause
	competing organiz	information Security Management (PR6)	4.7) Access Management (ITIL SO, 4.5)	6.6)	Manage Security Services (DSS05)
			š	, Business Relationship Management (Clause	
		Customer Relationship Management (PR7)	4.5)	7.1)	Manage Relationships (APO08)
	Organization (ISO) ar	Suppler Relationship Management (PR8)	Supplier Management (ITIL SD, 4.8)	Supplier Management (Clause 7.2)	Manage Suppliers (APO10)
SO/IEC 20000	ner cent of the initia	Incident & Service Request Management (PR9)	Incident Management (ITIL SO, 4.2)		Manage Service Requests and Incidents
		(PR9)	Request Fulfilment (ITIL SO, 4.3)	(Clause 8.1)	(DSS02)
	requirements on ITS	Problem Management (PR10)	Problem Management (ITIL SO, 4.4)	Problem Management (Clause 8.2)	Manage Problems (DSS03)
		tructure Configuration Management (PR11)	Service Asset and Configuration	Configuration Management (Clause 9.1)	Manage Assets (BAI09)
			Management (ITIL ST, 4.3)	с с <i>с</i> ,	Manage Configuration (BAI10)
	best practices, with o	Change Management (PR12)	Change Management (ITIL ST, 4.2) Change Evaluation (ITIL ST, 4.6)	Change Management (Clause 9.2)	Manage Changes (BAI06)
TIL .	become the de facto		Release and Deployment Management (ITIL		Manage Change Acceptance and
	hest practices that a	Release & Deployment Management (PR13		Release and Deployment Management	Transitioning (BAI07)
			Service Validation and Testing (ITIL ST, 4.5)	(Clause 9.3)	
This project has received	funding from the European Union	Continual Service Improvement		Maintain and Improve the SMS (Clause	
		Management (PR14)	CSI, 4.1)	4.5.5)	

Service Description Alignment

Service Description Template v1.00

Genfra Central



Introductory note on Service Description Template v1.00

eficiCental II aiming to create a harmonide sovice catalogue view access a number of European einfrastructures. Each of those eliminatructures his their own service catalogue, perhaps with catomer views and internal views, and, potentially, sovice particlois, ehydractural interlash barmonise the parts of the service decisioption aiming to create a homogenised cutomer view of the individual service catalogues; so, information which might be considered internal view to a service catalogue or portfolio is not of interest to einfracturation.

Nearthiese, efriscentral provides this complete Service Decorption Templete for an entry in a Service Particlia or Catalopue in case an effectaturture work fills in oue with treatment for all three service Management Processes. Text Hought is not the interaction of effectatural to homogenice other Service Management Processes, it would be very effective if effectaturtures adopt a common Service Description Templeta, common vocabulary and a single service management standard.

The Service Description Information is organised in various blocks of information: Basic Service Information, Service Classification Information, Service Support Information, Service Contractual Information, Service Performance Information, Service Operations Information, Advanced Service Information, Service Business Case Information.

The Service Description Template provides a definition, potential values and their format (if any) as well as information related to whether the information is related only to the catalogue or to the overall portfolio (Uie column) as well as whether the attribute is mandatory or optional for the implementation of a number of features in the entinsembla platorm(common catalogue .

As it regards the "Visibility" column of the Service Description Template:

 Viable to Customers (Catalogue)Portfolio) refers to the service information that may be presented to a potential customer/user in a "live" manner at the enhancement platform(common catalogue;
 Internation Service Provide (Portfolio) refers to additional service information which is only available to designated staff of the service provider required for the service management;

3) Other refers to all other service information required by other service stakeholders.

Furthermore, this file provides a Service Presentation Template. This is a mock-up of how the service information could be presented in a service portal/ listing/marketplace to a customer/user. This allows for visualising the interrelations and complementanity of the service information.

Finally, the actual form for the service description required by einfraCentral platform/common catalogue is provided in the Service DescriptionforCatalogue worksheet.

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Based on: previous work of FedSM project co-funded by the European Commission/FP7 and the FitSM Standard

Developed by: JNP Strategy and Management Consulting.

With the contribution of Statisting EQL the University of Edinburgh, the University of Athens, GEANT Ltd, Considio Nazionale delle Ricerche, the Partnership for Aedvanced Computing in Europe ASBI, Gottfried Wilhelm Leibniz Universitate Hannover and the European Fature. Imovation System Centre.

in the framework of the einfraCentral project that has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 731049.

Contra Construct	Convice Description for Catalant	
Central Central	Service Description for Catalogu	е
Basic Service Informatio	n	_
Service ID	Free text (May become a List)	Mandati
Service URL	URL	Mandat
Service Name	Free text	Mandat
Service Tagline	Free text	Option
Service Full Name	Free text	Option
Service Description	Free text	Mandat
Service Options	Free text	Option
Target Customers/Users	Free text (May become a List)	Option
Customer/User Value	Free text	Option
Customer/User Base	Free text	Option
Service Symbol/Visual Element	URL	Option
Service Screenshots and Videos	URL	Option
Service Classification Inf	ormation	
Service Provider Name	Free text (May become a List)	Manda
Service Provider Description	Free text	Option
Service Version	Free text	Option
Service Last Update	Date	Option
Service Change Log	Free text	Option
Service Valid for	Date	Option
Service Life Cycle Status	List of values	Mandat
Service TRL	List of values	Manda
Service Category	Free text (May become a List)	Manda
Service Type/Subcategory	Free text (May become a List)	Mandat
Service Place	List of values	Mandat
Service Language	List of values	Mandat
Service Tags	Free text	Manda
Required Services	Free text (May become a List)	Option
Related Services	Free text (May become a List)	Option
Service Support Informa		
Service Request	101	Mandat



List of values	Mandator
List of values	Mandator
Free text	Mandator
Free text (May become a List)	Optional
Free text (May become a List)	Optional
URL	Mandator
URL	Optional
URL	Mandator
URL	Mandator
URL	Optional
Free text	Optional
Free text	Optional
Free text	Optiona
Free text	Optional
	Optional



Service Description Alignment Service Description Template v1.00

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• 🛈 www.einfracentral.eu		C Q Search	☆ 自 ♣ 斋 ♡
elnfra Central	HOME ABOUT SERVICE	CATALOGUE PORTAL NEWS	CONTACT PARTNERS 🔒 🍳
elnfra Central	Service Presentat	tion Template (Websit	e/Portal Mockup)
Service Name*	Service URL*	Service Symbol/Visual Element	Service Screenshots and Videos
Service Tagline	Service Provider*	Service Tags*	Service Price*
ervice Full Name	Service Category*	Service Subcategory*	Service Level Agreement*
Service Description*	Service Life Cycle Status*	Service TRL*	Service Terms of Use
Service Options	Service Place*	Service Language*	Service Funding
arget Customers/Users		Service Request*	Service Version
Customer/User Value		Service Helpdesk	Service Last Update
Customer/User Base		Service User Manual	Service Change Log
Funding		Service Training Information	Service Valid for
Service KPI 1	Service KPI 2	Service KPI 3	Service KPI 4
ervice KPI 5	Service KPI 6	Service KPI 7	





Service Description Alignment

Service Catalogue v0.30







Service Description Alignment



List of Functional and Non-Functional Platform Requirements v1.00

	View categories of services	High
All All users can vie	w services organized in categories.	
DI (047/02		10.1
PL/CAT/02 All	View subcategories	High
	ect a category and view all subcategories.	
All docto cur oci		
PL/CAT/03	View a list of services for a specific category/subcategory	High
All		
All users can sel	ect a category or subcategory and view a list of services belonging to the spec	cific category or sub-category
PL/CAT/04	Overview of services	High
All		-
All users have the	ne option for an overview of the services in a specific list	
PL/CAT/05	Select and view detailed characteristics of a specific service	High
All	a specific service the user can view its characteristics, including full name, de	
when selecting	a specific service the user can view its characteristics, including full name, de	scription, phase, TRL etc.
PL/CAT/06	Navigate to the service at the remote service provider	High
All		
The user will be	able to access the service s/he is viewing at the service provider site.	
PL/CAT/07	View additional material on the services	High
All		
	w additional material on the service which may include images and/or video the user to understand and evaluate the service.	os or any other material that can
PL/CAT/08	Search the catalogue of services through keywords	High
All		
The user is able	to search for specific services by providing keywords.	
PL/CAT/09	Faceted Search of the catalogue of services	High
All		
The user is able providers, brand	to filter the search results. The filter properties will include language, servic I name, etc.	ce categories and sub-categories,
01/017/40		
PL/CAT/10 All	Compare Services characteristics	Medium
	pose two or more services and fields on which a comparison between service	s will take place.
PL/CAT/11	Select different views of the services according to the user group	Medium
Authenticated u	sor	
Different views		

Different views are offered according to the identified priorities of the various stakeholder groups as reflected in the authenticated user profile. Users may have particular interests in afferent service characteristics and afferent needs in terms of the comparisons they would like to have. The views will ensure a direct and quick way for them to access this content in the platform.

PL/MON/01	Add personal rating to a service.	Medium
Authenticated use		
	personal rating of the service. This can be for example in a five star rating scale.	
The user can add a	personal rating of the service. This can be for example in a live star rating scale.	
PL/MON/02	Add commentary on the service	Low
Authenticated use		
The user can add c	omments on the service.	
PL/MON/03	View commentary on the service	Low
All		
	omments other users have made on the service.	
The user can see e		
	Annen annente es e estin	Low
PL/MON/04	Approve comments on a service	LOW
Administrator		
The administrator	is responsible to approve or reject comments before they are published.	
		-
PL/MON/05	View service KPIs	Medium
All		
The user will be at	le to see KPIs associated to a service in numeric format and charts.	
PL/MON/06	View service rating	Medium
	view service racing	Wedium
All		
The user will be able to :	see an average of the ratings that have been provided by the users for a service.	
		-
PL/MON/07	View usage statistics about a service	Low
All		
The user will be a	ble to see various statistics about a service collected by the platform (e.g., nu	mber of times the
	e been accessed or added to favourites, etc.)	
PL/MON/08	Define a new KPI	
	Denne a new KFT	
Service providers		
	ler can create a new KPI, by defining the type of the KPI measure (e.g., number	
KPI time granulari	ty (year, month, etc.), and the default visualization chart for this KPI (e.g. timelin	e)
		_
PL/MON/09	Associate a KPI with a service	Medium
Service providers		
The service provid	er can associate a list of KPIs with a service	
PL/MON/10	Manual update of a KPI for a service through data entry	Medium
	Wandar update of a KFI for a service through data entry	Wediam
Service providers		
The service provide	F can update a KPI associated with a service by filling in the values via a web form	
	-	
PL/MON/11	Manual update of a KPI for a service through a data file	
Service providers		
The service provid	fer can update a KPI associated with a service by uploading a data file (json,	xml) with the KPI
values		
PL/MON/12	Automatic update of a KDI for a service through a such assuing	Medium
Service providers	Automatic update of a KPI for a service through a web service	Wealan
	ler can enable the automatic update of a KPI associated with a service by defi	ning a web service
endpoint (API) tha	t provides the values for the KPI	
PL/MON/13	Set Interval of updates	Low
Service providers		
The service provid	er can set the time interval for automatic updates of a KPI associated to a service	e (On demand or in
	example once a month), when updated through a web service.	
inked intervals, for	example once a monthly, when apaatea thiough a web service.	
PL/MON/14	All all all a state that a state for a state for	
	Visualize KPIs and platform statistics for a service	Medium

Service providers The service providers can visualite and interact (through a dashboard) with all KPIs associated with a service through various types of charts (timeline, bars, pies, maps in case geographical information is provided, etc.) as well as platform-collected statistics about the use of a service (average rating, time the service was accessed, type of user accessing this service, etc.).

PL/REG/01 C	Create a new service	High			
Service provider	rs				
The service prov required and op	vider registers a new service and fills in the service information in the service information of the s	mation fields,			
PL/REG/02 V	/iew list of services associated with the service provider	Medium			
Service provider					
	ovider user views the list of services created by the sp ization he\she is affiliated with, through the servio hboard				
PL/REG/03 U	Jpdate a service	Medium			
Service provider	rs				
	vider updates the metadata of a service created by the sp zation he\she is affiliated with	pecific service			
PL/REG/04 D	De-activate \ activate a service	High			
Service provider	rs				
The service prov via the elnfraCer	vider flags a service as inactive \ active. The service stops be nral platform	ing accessible			
		1 Viele			
PL/REG/05 D Service provider	Delete a service	High			
The service providers The service provider can delete an inactive service. This function is provided only for wrongly created services. Services that are not accessible anymore via the elnfraCentral platform should be flagged as inactive.					
Pi /250 /26	a 11 at 12 t				
	/iew all actions applied on a service	Medium			
Service provider					
created by the s	vider can view details about the registration or the update specific service provider organization he\she is affiliated w creation, date of last update, etc.				





Engagement Plan

European Union Worldwide





Service Description Alignment European Union

Acronym 🚽	Full Title 💌	Status 🗸	Start Da 🗸	End Dat(🗸
EGI-Engage	Engaging the EGI Community towards an Open Science Commons	Engaged	1/3/2015	31/8/2017
EUDAT2020	EUDAT2020	Engaged	1/3/2015	28/2/2018
GEANT		Engaged		
OpenAIRE-Connec	OpenAIRE - CONNECTing scientific results in support of Open Science	Engaged	1/1/2017	30/6/2019
OpenAIRE2020	Open Access Infrastructure for Research in Europe 2020	Engaged	1/1/2015	30/6/2018
PRACE-4IP	PRACE 4th Implementation Phase Project	Engaged	1/2/2015	30/4/2017
PRACE-5IP	PRACE 5th Implementation Phase Project	Engaged	1/1/2017	30/4/2019
EOSCpilot	The European Open Science Cloud for Research Pilot Project.	Contacted	1/1/2017	31/12/2018
AARC	Authentication and Authorisation for Research and Collaboration	To be contacted	1/5/2015	30/4/2017
AARC2	Authentication and Authorisation For Research and Collaboration	To be contacted	1/5/2017	30/4/2019
BlueBRIDGE	Building Research environments for fostering Innovation, Decision making,	To be contacted	1/9/2015	28/2/2018
EarthServer-2	Agile Analytics on Big Data Cubes	To be contacted	1/5/2015	30/4/2018
EDISON	Education for Data Intensive Science to Open New science frontiers	To be contacted	1/9/2015	31/8/2017
EVER-EST	European Virtual Environment for Research - Earth Science Themes	To be contacted	1/10/2015	30/9/2018
INDIGO-DataCloud	INtegrating Distributed data Infrastructures for Global ExplOitation	To be contacted	1/4/2015	30/9/2017
LEARN	Leaders Activating Research Networks: Implementing the LERU Research Da	To be contacted	1/6/2015	31/5/2017
MuG	Multi-Scale Complex Genomics	To be contacted	1/11/2015	31/10/2018
OpenDreamKit	Open Digital Research Environment Toolkit for the Advancement of Mathem	To be contacted	1/9/2015	31/8/2019
OpenMinTeD	Open Mining INfrastructure for TExt and Data	To be contacted	1/6/2015	31/5/2018
PhenoMeNal	PhenoMeNal: A comprehensive and standardised e-infrastructure for analys	To be contacted	1/9/2015	31/8/2018
SESAME NET	Supercomputing Expertise for SmAll and Medium Enterprise Network	To be contacted	1/6/2015	31/5/2017
READ	Recognition and Enrichment of Archival Documents	To be contacted	1/1/2016	30/6/2019
THOR	THOR – Technical and Human Infrastructure for Open Research	To be contacted	1/6/2015	30/11/2017
VI-SEEM	VRE for regional Interdisciplinary communities in Southeast Europe and the	To be contacted	1/10/2015	30/9/2018
VRE4EIC	A Europe-wide Interoperable Virtual Research Environment to Empower Mu	To be contacted	1/10/2015	30/9/2018
West-Life	World-wide E-infrastructure for structural biology	To be contacted	1/11/2015	31/10/2018







Service Description Alignment

Worldwide

The Global e-Infra Initiatives Working Group is an external group of experts with the mission to provide high-level reflections and guidance on the subject of "eInfrastructure Service Catalogues" alignment, in terms of interoperability, adoption and ways of expression aiming to achieve a global alignment of service catalogues for eInfrastructures.



Dr. Andrew Treloar Director of Technology Australian National Data Service Australia



Prof. Simon Lin Project Director Academia Sinica Grid Computing Centre Taiwan



Dr. Exe Latin Latin

Prof. Xue-feng Yuan

Director

China

Dr. Florencio I. Utreras Executive Director Latin American Cooperation of Advanced Networks Latin America

National Supercomputer Centre at Guangzhou









Thank you for your attention!

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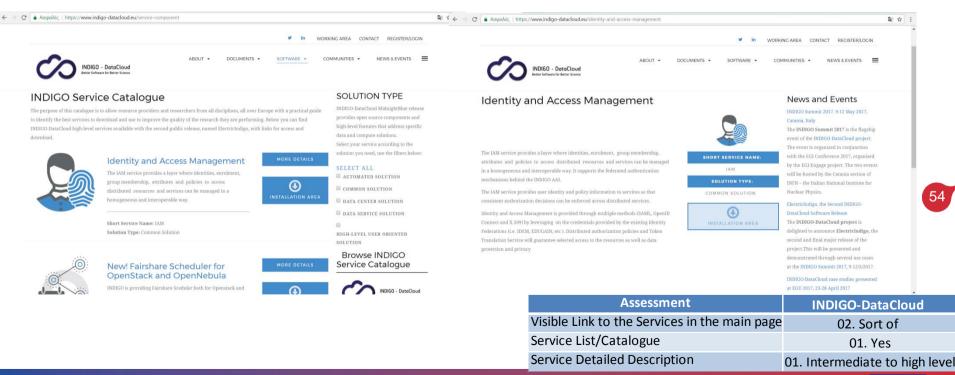






Services provided by flagship e-Infras INDIGO-DataCloud







Services provided by flagship e-Infras PhenoMeNal

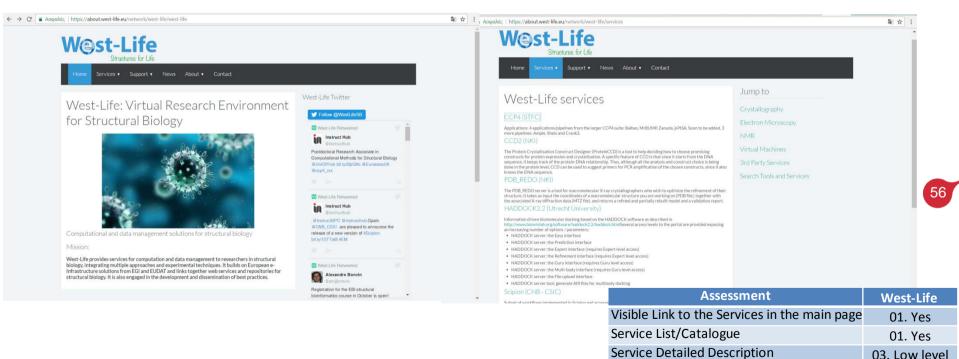


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PhenoMeNal	About	us Online Training Portal Contact Us		Home CRE A	pp Library Help Login	Î
Large-Scale Computing for Medical Metabolomics			Cloud Research Environment			
PhenoMeNal (Phenome and Metabolome aNalysis) is a comprehensive and standardised e-infrastructure that supports the data processing and analysis pipelines for molecular phenotype data generated by metabolomics applications. See About us.		Latest News June 5, 2017 Joint SAB-Stakeholder-Annual Consortium Meeting May 8, 2017 Future of Metabolomics in ELKIR – 25th April 4, 2017 Cloud/MET 2017 April 4, 2017 Cloud/MET 2017 April 4, 2017 Cloud/Computing in Life Sciences March 23, 2017 Workshop on "Future of Metabolomics in ELKIR" Tweets	How does it work?	All your favourite me applications under or through Open Sour Python coding environn Test drive our Cloud Re Galaxy Wo Note that this is a public instan Want to give Croat Cloud Research	ne hood accessible ce scientific web Vorkflow and Jupyter ment search Environment Atlow iit a go?	
Application Library (service catalogue) listing open source tools currently available through the PhenoMeNal Cloud Research Environment (CRE).	Deploy your own Cloud Research Environment (CRE) for Metabolomics data analysis on private and public cloud providers.	E-infrastructure for data processing and analysis of molecular phonotype data SAS @SusannaASarsone - 3h @PhrmBi20200 @EU_H2020 Mexhflow / foortainers & job officiality to help researchers, also reveable 4 other	IPython code web environment.			
★ PhenoMeNal Galaxy Installation Access all our available tools through an open	? User Support Our online training page offers tutorials on	#data types! #FAIRdata @eoscpilot 3 🛣	Do you like the idea but need a local installation of the CRE?			
Calaasi world an installation which runs on an	PhonoMoNal Cloud Research Environment		Assessm	nent	PhenoMeNal	
			Visible Link to the Servio	ces in the main page	02. Sort of	
			Service List/Catalogue		01. Yes	
			Service Detailed Descrip	otion	01. Intermediate to hig	gh l

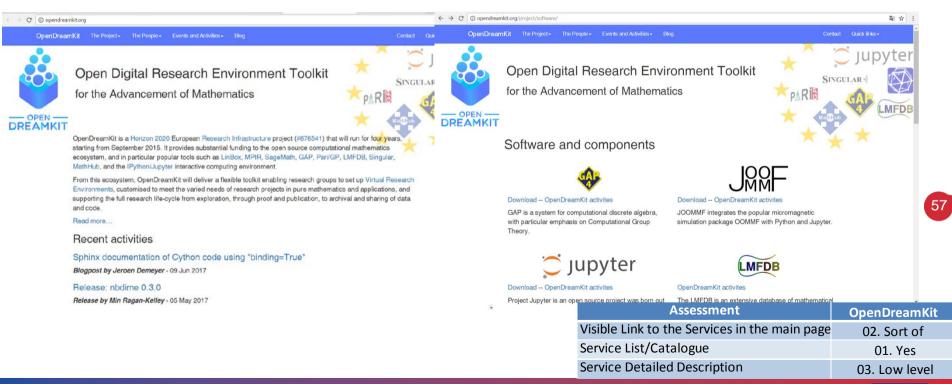


Services provided by flagship e-Infras West-Life





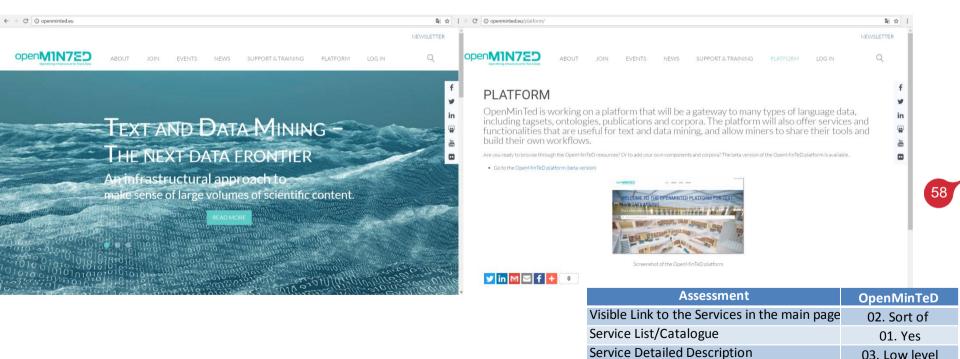
Services provided by flagship e-Infras OpenDreamKit







Services provided by flagship e-Infras OpenMinTeD

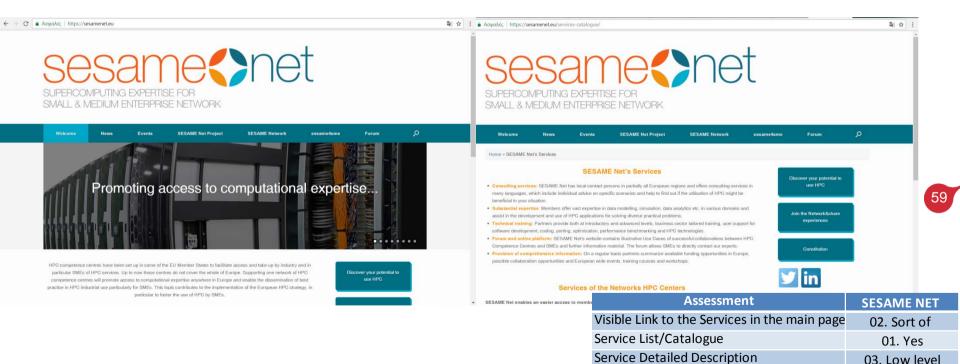




Gelnfra Central

Services provided by flagship e-Infras SESAME NET

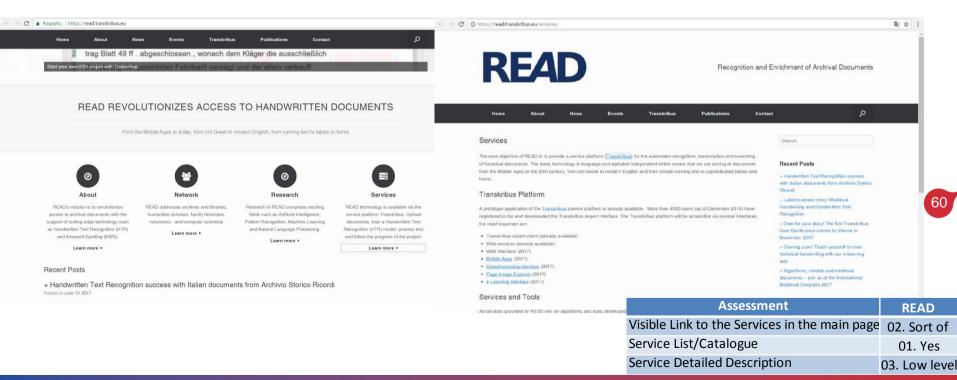




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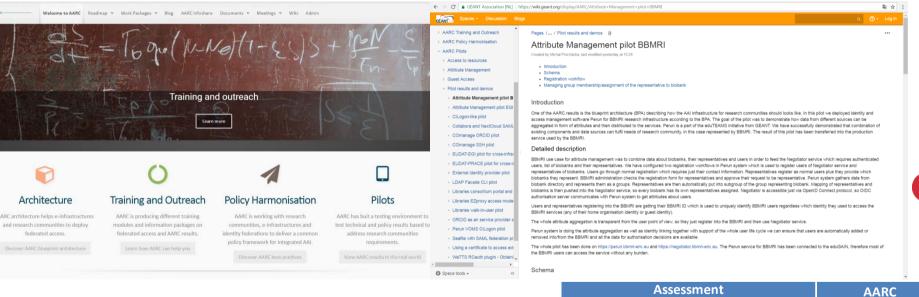
Services provided by flagship e-Infras READ







Services provided by flagship e-Infras AARC



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Visible Link to the Services in the main page

Service List/Catalogue

Service Detailed Description

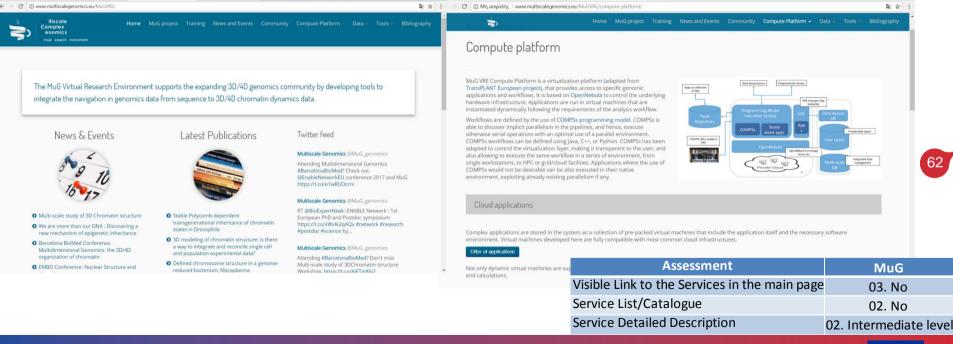
61

03. No

02. No

02. Intermediate level

Services provided by flagship e-Infras MuG



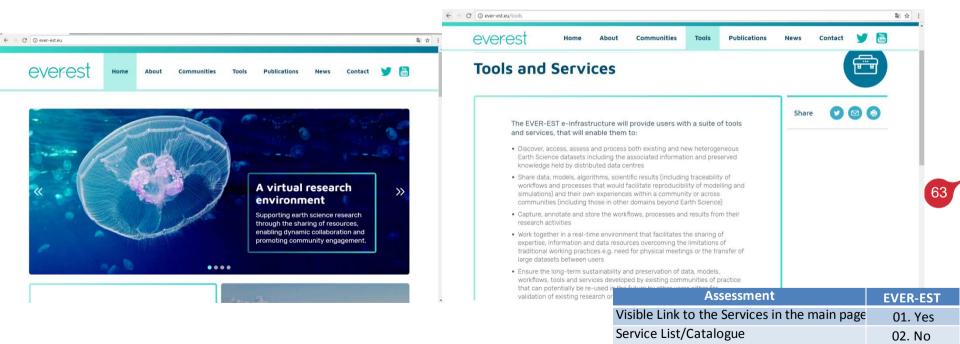


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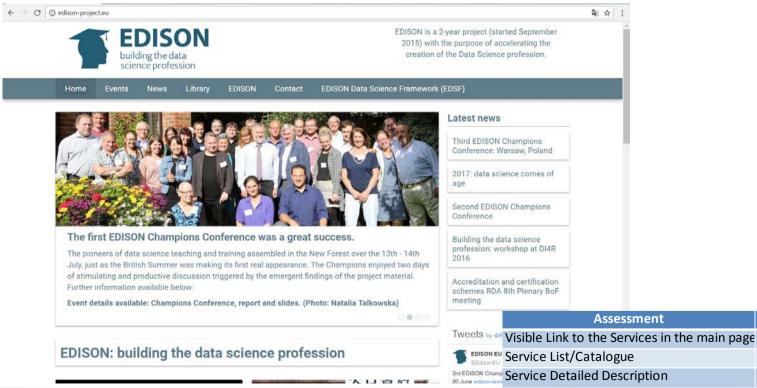


Service Detailed Description



03. Low level

Services provided by flagship e-Infras EDISON









EDISON

03. No

02. No

03. Low level

Services provided by flagship e-Infras THOR



Welcome to THOR

THOR is a 30 month project funded by the European Commission under the Horizon 2020 programme. It will establish seamless integration between articles, data, and researchers across the research lifecycle. This will create a wealth of open resources and foster a sustainable international einfrastructure. The result will be reduced duplication, economies of scale, richer research services, and opportunities for innovation. Learn more about the THOR mission.

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© Getting the message to acar promoting ORCID on a univ May 31, 2017 Comparison Comparison © Reuse of Research Data: The Things to Come May 19, 2017 Service List/Catalogue 02. No © Service Detailed Description 03. Low level



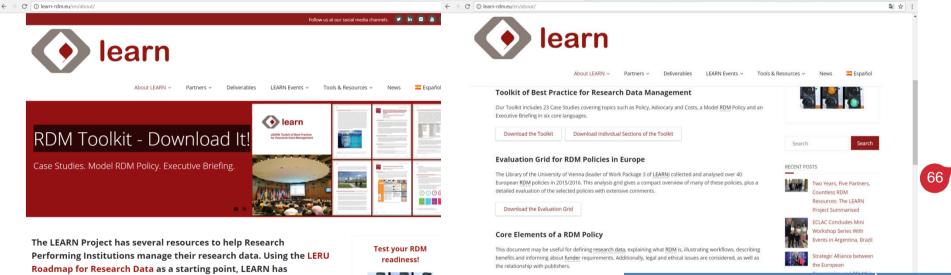




Gelnfra Central

Services provided by flagship e-Infras LEARN





Download the Core Elements Document

produced the following freely-accessible materials.



Assessment	LEARN
Visible Link to the Services in the main page	03. No
Service List/Catalogue	02. No
Service Detailed Description	03. Low level



Services provided by flagship e-Infras **VRE4EIC**

