D4.2 1st Periodical assessment of AI and Infrastructure services

Status: Final
Dissemination Level: Public

Document Description

D4.2 1st Periodical assessment of AI and Infrastructure services			
Work Package 4			
Document Type	Deliverable		
Document Status	Final	Version	1.0
Dissemination level	Public		
Lead Partner	CSIC		
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DOI	10.5281/zenodo.8413095		
Document link	https://documents.egi.eu/document/4007		

Description

Abstract	The report provides the first-year usage statistics and assessment of all the Artificial Intelligence platform and the underlying Infrastructure services provided under virtual access in WP4.
Keywords	AI, Virtual Access, Infrastructure, Cloud, CPU, GPU, Storage, Services, Installations

Revision History

Issue	Item	Comments	Author/Reviewer
V 0.1	Draft version		Álvaro López García (CSIC)

| V 0.3 | Revised version | Incorporating comments from reviewers. | Álvaro López García (CSIC) 3 |
| V 1.0 | Submitted version | | Hien Bui (EGI Foundation) |

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Table of content

Executive summary

This report provides an assessment at M12 of the WP4 installations provided by the iMagine project under the Virtual Access (VA) mechanism. This assessment is based on the metrics collected by the M12 for WP4 installations during the first 2 periods of observation: M01–M06 and M07–M12.

WP4 installations can be classified in two groups:
- iMagine AI platform operated in two installations:
  - Task 4.1 – iMagine AI development service
  - Task 4.2 – iMagine AI deployment service
- Infrastructure Services (Task 4.3) where 4 providers (CSIC, LIP, Walton, Tubitak) provide compute and storage services underpinning the iMagine AI platform, together offering 132,000 GPU hours, 6,000,000 CPU and 1,500 TB month during the 36-month long project.

In PY1 the ' iMagine AI development service' has been used at an increasing scale by 8 use cases of the project. This growth was facilitated by 1 online and 2 face-to-face training sessions (1 online and 1 face-to-face to the project use cases, 1 public tutorial at the EGI Conference). The installation served 16 users from 7 countries in the period, and these users started the development of 5 new AI models.

All the use cases that the project supports are still in the service development phase (training and validating AI models), therefore the 'iMagine AI deployment service' was not yet in use during the first 12 months. The usage is expected to start in 2024 because the project use cases will reach delivery maturity, and because the project started attracting additional use cases via the open call[1] and via its presence in the EOSC Marketplace[2].

The 4 compute infrastructure providers from Task 4.3 are all online, and they are added one-by-one into the platform. By the end of the first year CSIC and LIP have been integrated and together delivered 662,547 CPU-hours, 14,400 GPU-hours and 34 TByte-month storage to the platform and the supported use cases. 89% of the budgeted CPU and GPU-hours, and 98% of the budgeted storage is still available for the remaining 2-years. The growth will be fuelled by adding Walton and Tubitak to the platform during Q1 of 2024.

The first year was also a technology transitioning phase for the whole iMagine AI platform (Task 4.1 and 4.2). The setup moved from the DEEP software distribution

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[1] https://www.imagine-ai.eu/article/imagine-call-for-use-cases/
[2] https://marketplace.eosc-portal.eu/services/imaging-ai-platform-for-aquatic-science

to its successor, the AI4OS software developed by the AI4EOSC project. In order to make this transition transparent for the users, there was a transition phase where there was an overlap in the resource utilization, therefore the first half of the period had a higher usage (with both the old and new setups being used) compared to the second period (when only the new setup was used).

1. Introduction

Virtual Access (VA) is financial instruments to reimburse the access provisioning costs to access providers. This instrument is provided by the European Commission to increase the sharing of research infrastructures and services that otherwise would not be available to international user groups.

In VA, the services – also called "installations" – must be made available 'free of charge at the point of use' for European or International researchers. VA access is open and free access to services through communication networks to resources needed for research, without selecting the researchers to whom access is provided.

Virtual Access to services of the iMagine catalogue applies to the following 2 categories:

1. AI platform and compute infrastructure services in WP4
2. Imaging data and analysis service in aquatic sciences in WP5

This document provides Virtual Access metrics and assessment for WP4 during the 1st year of the project (Sep 2022 – Aug 2023).

In the 1st project year WP4 worked on the establishment of the iMagine AI platform, serving the 8 use cases that are part of the consortium, and participated in the setup of the open call to attract further users from Q3 2023.

1.1 WP4 Installations

Within iMagine project 6 installations are part of Virtual Access work package 4. These installations support the baseline computing infrastructure of iMagine as part of the following services and their usage metrics:

- iMagine Platform AI Application Development Service (formally called DEEP): Is for development and validation of AI models. The service was used during PY1 by the 8 use cases. The usage is monitored with the following metrics:
    - ML training cycles measured in CPU/GPU hours
    - Number of AI models trained
    - The total number of AI models developed both in the marketplace and private
    - Names of the countries reached over last year (users' location)
    - Number of the countries reached over last year (users' location)
- iMagine Platform AI Application as a Service (formally called DEEP): Is for the delivery of validated models 'as services' for external users. During PY1 the

service has not yet been delivered, as the use cases are still under development. However, the needed services to provide the functionality to the use cases have been deployed and are ready to be used. The usage is monitored with the following metrics:

- ML application usage cycles measured in CPU/GPU hours
- Number of AI applications hosted via the iMagine platform
- Names of the countries reached over last year (users' location)
- Number of the countries reached over last year (users' location)

- Cloud compute and storage services underpinning the previous two:
  - IFCA CSIC Scientific Cloudin Spain: Was used since day 1 and installation migrated to a new setup mid-year (explained in section 2.3).
  - INCD cloud in Portugal: The CPU part was used since day 1 . The GPU and storage are not yet in use, usage is expected from Q1 2024 when all resources are fully integrated in the platform.
  - TR-FC1-ULAKBIM in Turkey: Was not used in the AI platform. Expected use to start in Q1 2024 when all resources are fully integrated in the platform.
  - WaltonCloud in Ireland: Was integrated in the EGI Federated Cloud during Y1, and has not been used in the AI platform yet. Expected usage to start from Q1 2024.

The usage is monitored with the following metrics:

- Number of users
- CPU/GPU node-hours served
- Storage served
- Names of the countries reached (users' location)
- Number of countries reached over the period (users' location)

2. Installations

2.1 iMagine – AI Application Development Service

Description	The iMagine AI Application Development Service allows Artificial Intelligence developers to prototype, build and train AI applications, exploiting resources from EU e-Infrastructures. The installation allows the prototyping of AI models and applications through the train-test-evaluation cycle on underlying GPU-CPU-Storage. Once a model has been initially built, the Dashboard allows users to interact with resources and with the Open Catalogue. The service can store the history of all the performed training sessions for the monitoring the status of training directly from the training Dashboard. The development environment is based on JupyterLab instances, where users have access to major data science, artificial intelligence, machine learning and deep learning frameworks and various tools, with corresponding user support.
Task	T4.1
URL	https://dashboard.cloud.imagine-ai.eu/
Service Category	Infrastructure service
Service Catalogue	https://marketplace.eosc-portal.eu/services/imaging-ai-platform-for-aquatic-science
Providers	CSIC, LIP, UPV, KIT, IISAS
Location	Spain, Slovakia, Germany, Portugal
Duration	M1–M36
Modality of access	API and Web GUI based access (M1–M36) Additional terms: https://confluence.egi.eu/display/IMPAIP/Acceptable+Use+Policy
Support offered	Support is offered via the EGI Helpdesk. Detailed documentation about service, APIs, user guides, tutorials, etc. available. https://confluence.egi.eu/display/IMPAIP/User+guide#Userguide-Gettingaccess
Operational since	2020

Description	The iMagine AI Application Development Service allows Artificial Intelligence developers to prototype, build and train AI applications, exploiting resources from EU e-Infrastructures. The installation allows the prototyping of AI models and applications through the train-test-evaluation cycle on underlying GPU-CPU-Storage. Once a model has been initially built, the Dashboard allows users to interact with resources and with the Open Catalogue. The service can store the history of all the performed training sessions for the monitoring the status of training directly from the training Dashboard. The development environment is based on JupyterLab instances, where users have access to major data science, artificial intelligence, machine learning and deep learning frameworks and various tools, with corresponding user support.
Task	T4.1
URL	https://dashboard.cloud.imagine-ai.eu/
Service Category	Infrastructure service
Service Catalogue	https://marketplace.eosc-portal.eu/services/imaging-ai-platform-for-aquatic-science
Providers	CSIC, LIP, UPV, KIT, IISAS
Location	Spain, Slovakia, Germany, Portugal
Duration	M1-M36
Modality of access	API and Web GUI based access (M1-M36) Additional terms: https://confluence.egi.eu/display/IMPAIP/Acceptable+Use+Policy
User definition	Single researchers, collaborations of any size, citizen scientists

2.1.1 Metrics

Metric name	Baseline	Define how measurement is done	M1–M6	M7–M12
Number of AI models developed	30	logs	5	5
Number of AI models trained	500	logs	5	5
ML training cycles (CPU+GPU–hours)	4.000.000	logs	105,456	448,680
Number of countries reach	10	logs	6	7
Names of countries reach	SP, PT, FR, US, DE, UK, SK, CZ, CH, AU	logs	FR, BE, ES, IT, PT, IE	FR, BE, ES, IE, DE, SK, NL

2.1.2 Assessment

The numbers reported for the iMagine AI platform refer for the specific usage of the system for developing AI–based image models and tools for aquatic science. As it can be seen, the usage of the platform has increased over the first year period, with a significant increase in the second half of the period. This is as expected due to two different facts. On the one hand, as outlined in the Section 1 – Introduction, the platform software stack was transitioned from the DEEP–2 to the AI4OS–1 software, with an overlap of the two systems in order to provide a transparent transition for the users. On the other hand, there is an increase in the CPU usage as use cases are in the initial phases of developing the models using CPU based deployments, before transitioning to large–scale training of them using CPU resources.

2.2 iMagine – AI Applications as a Service

Description	The iMagine AI Applications as a Service allows the transitioning of developed and trained AI/ML models into online services, following a serverless architecture.This installation allows the deployment of the AI models as an application to be offered to end users (i.e. not the application developers in the project, but for researchers outside), making it possible to build imaging data tools as production

	services. With the serverless approach the service can exploit the full potential of this computing model (i.e. function composition, event-based processing). Served models will exploit the DEEPaaS API to expose the underlying functionality.	
Task	T4.2	
URL	Not yet deployed. Will be available under https://services.imagine-ai.eu or similar location	
Service Category		
Service Catalogue		
Providers	CSIC, LIP, UPV, KIT, IISAS	
Location	Spain, Slovakia, Germany	
Duration	36 months	
Modality of access	API and Web GUI based access (M1-M36) Additional terms: https://confluence.egi.eu/display/IMPAIP/Acceptable+Use+Policy	
Support offered	Support is offered via the EGI Helpdesk. Detailed documentation about service, APIs, user guides, tutorials, etc. available.	
Operational since	2020	
User definition	Single researchers, collaborations of any size, citizen scientists	

2.2.1 Metrics

Metric name	Baseline	Define how measurement is done	M1-M6	M7-M12
ML application usage cycles, measured in CPU/GPU hours	0	Logs	0	0

Number of AI applications hosted via the iMagine platform	15	Logs	0	0
Number of countries reached over last year	0	Logs	0	0
Names of the countries reached over last year	N/A	Logs	N/A	0

2.2.2 Assessment

The numbers are as expected. Although use cases are actively developing their models, these have not reached the expected maturity to be delivered as services towards end users (expected in M20). However, we expect that the usage numbers start to increase from Q1 2024, as the use cases will start deploying inference services for internal testing.

2.3 IFCA-CSIC Scientific Cloud – CPU

Description	A federated compute environment based on the EGI Cloud Compute services, with multiple IaaS providers that offer compute resources (CPUs and GPUs) as VMs, alongside associated storage (Block/Object storage) for storing and accessing datasets. The service is suitable for hosting and processing of large datasets in a scalable way and is used as the major element of the EOSC Compute Platform.
Task	T4.3
URL	https://www.egi.eu/services/cloud-compute/
Service Category	Infrastructure service
Service Catalogue	https://www.egi.eu/services/cloud-compute/
Location	Spain
Duration	36 months

Modality of access	Services are free at the point of use. Access to the service require registration as an EGI user on Check-in and enrolment into a Virtual Organisation for authorisation
Support offered	Technical support is provided via the helpdesk central support team, and by the support team at the installation. EGI provides central documentation, trainings, webinars and hands-on sessions during conferences and events.
Operational since	2012
User definition	Single researchers, small communities, large collaborations

2.3.1 Metrics

Metric name	Baseline	Define how measurement is done	M1-M6	M7-M12
CPU node/hours served over the period	3M	Collected from local accounting	94,656	393,888
Names of the countries reached over the period	ES, PT, FR, UK, IT, GE, BE, SK, PL	Collected from local AAI system	FR, BE, ES, IT, PT, IE	FR, BE, ES, IE, DE, SK, NL
Number of countries reached over the period	9	Collected from local AAI system	6	7
Number of users	200	Collected from local AAI system	20	16

2.3.2 Assessment

The resources delivered by this installation include the following two different usages:

- Deployment of the control plane of the iMagine platform (e.g. API, dashboard, etc.) and storage services (e.g. NextCloud).

- Deployment of the platform nodes used to deliver the computing power for the iMagine AI platform and AI as a Service installations.

As it can be seen from the given numbers, there has been a decrease of the usage in the second half of the period. This is due to the fact that the platform resources were migrated from the old installation software (DEEP-2) to the new platform software (AI4OS-1). During the transition period there was an overlap on the resources usage, leading to an increase of the usage during the first part of the period.

2.4 IFCA-CSIC Scientific Cloud – GPU

Description	A federated compute environment based on the EGI Cloud Compute services, with multiple IaaS providers that offer compute resources (CPUs and GPUs) as VMs, alongside associated storage (Block/Object storage) for storing and accessing datasets. The service is suitable for hosting and processing of large datasets in a scalable way and is used as the major element of the EOSC Compute Platform.
Task	T4.3
URL	https://www.egi.eu/services/cloud-compute/
Service Category	Infrastructure service
Service Catalogue	https://www.egi.eu/services/cloud-compute/
Location	Spain
Duration	36 months
Modality of access	Services are free at the point of use. Access to the service require registration as an EGI user on Check-in and enrolment into a Virtual Organisation for authorisation

Support offered	Technical support is provided via the helpdesk central support team, and by the support team at the installation. EGI provides central documentation, trainings, webinars and hands-on sessions during conferences and events.
Operational since	2012
User definition	Single researchers, small communities, large collaborations

2.4.1 Metrics

Metric name	Baseline	Define how measurement is done	M1–M6	M7–M12
GPU node/hours served over the period	1M	Collected from local accounting	10,800	3,600
Names of the countries reached over the period	ES, PT, FR, UK, IT, GE, BE, SK, PL	Collected from local AAI system	FR, BE, ES, IT, PT, IE	FR, BE, ES, IE, DE, SK, NL
Number of countries reached over the period	9	Collected from local AAI system	6	7
Number of users	200	Collected from local AAI system	20	16

2.4.2 Assessment

These resources are being used solely by the iMagine AI platform to deliver computing power to the use cases to develop their AI models. As it can be seen, there is also a decrease in the usage, due to two different facts:

- In Q1 2023 there was an in-person use case workshop, including a set of tutorials, that led to a spike in the usage.

- The platform was also affected by the transition to the new platform, suffering from the same resource utilization overlap. The overall numbers are aligned with the expectations, taking into account that use cases are exploiting CPU resources for the initial development phases of the AI models (i.e. higher CPU usage) so that reach a state when they can do training at scale, using GPU resources (i.e. when the GPU utilization will raise).

2.5   IFCA–CSIC Scientific Cloud – Storage

Description	A federated compute environment based on the EGI Cloud Compute services, with multiple IaaS providers that offer compute resources (CPUs and GPUs) as VMs, alongside associated storage (Block/Object storage) for storing and accessing datasets. The service is suitable for hosting and processing of large datasets in a scalable way and is used as the major element of the EOSC Compute Platform.
Task	T4.3
URL	https://www.egi.eu/services/cloud-compute/
Service Category	Infrastructure service
Service Catalogue	https://www.egi.eu/services/cloud-compute/
Location	Spain
Duration	36 months
Modality of access	Services are free at the point of use. Access to the service require registration as an EGI user on Check–in and enrolment into a Virtual Organisation for authorisation
Support offered	Technical support is provided via the helpdesk central support team, and by the support team at the installation. EGI provides central documentation, trainings, webinars and hands–on sessions during conferences and events.
Operational since	2012

User definition	Single researchers, small communities, large collaborations

2.5.1 Metrics

Metric name	Baseline	Define how measurement is done	M1–M6	M7–M12
Names of the countries reached over the period	ES, PT, FR, UK, IT, GE, BE, SK, PL	Collected from local AAI system	FR, BE, ES, IT, PT, IE	FR, BE, ES, IE, DE, SK, NL
Number of countries reached over the period	9	Collected from local AAI system	6	7
Number of users	> 200	Collected from local AAI system	20	16
Storage served over the period	1 PB	Collected from local accounting	0	30

2.5.2 Assessment

The numbers indicate the storage used through the Nextcloud Cloud storage deployed for the iMagine AI platform. The number is low due to several reasons: use cases datasets are undergoing a labelling and data preparation phase, and users have not yet reached the large scale training phase of their models are the most relevant reasons. Within iMagine we are working on providing online labelling systems through the AI platform itself, as a way to ease this process online, so that data can be uploaded and accessed from the early stages of the machine learning life cycle.

2.6   INCD – CPU

Description	A federated compute environment based on the EGI Cloud Compute services, with multiple IaaS providers that offer compute resources (CPUs and GPGPUs) as VMs, alongside associated storage (Block/Object storage) for storing and accessing datasets. The service is suitable for hosting and processing of large datasets in a scalable way and is used as the major element of the EOSC Compute Platform.
Task	T4.3
URL	https://www.egi.eu/services/cloud-compute/
Service Category	Infrastructure service
Service Catalogue	https://www.egi.eu/services/cloud-compute/
Location	Portugal
Duration	36 months
Modality of access	Modality of access (Duration): API and Web GUI based access (M01-M36)
Support offered	Helpdesk, support for deployment and usage of ML applications
Operational since	2018
User definition	Mostly user communities both big and small that correspond to openstack tenants

2.6.1 Metrics

Metric name	Baseline	Define how measurement is done	M1–M6	M7–M12
CPU/hours served over the period	3,900,000	openstack accounting	O	174,003
Names of the countries reached over the period	ES, PT	country of tenant email	O	FR, BE, ES, IE, DE, SK, NL
Number of countries reached over the period	2	country of tenant email	O	7
Number of users	50	openstack tenant	O	16

2.6.2 Assessment

INCD Cloud has been used for testing and integration of the iMagine AI platform over the second half of the period. It is expected that, as with the rest of cloud providers, its usage will increase starting in Q1 2024.

2.7 INCD-GPU

Description	A federated compute environment based on the EGI Cloud Compute services, with multiple IaaS providers that offer compute resources (CPUs and GPGPUs) as VMs, alongside associated storage (Block/Object storage) for storing and accessing datasets. The service is suitable for hosting and processing of large datasets in a scalable way and is used as the major element of the EOSC Compute Platform.
Task	T4.3
URL	https://www.egi.eu/services/cloud-compute/
Service Category	Infrastructure service

Service Catalogue	https://www.egi.eu/services/cloud-compute/
Location	Portugal
Duration	36 months
Modality of access	Modality of access (Duration): API and Web GUI based access (M01–M36)
Support offered	Helpdesk, support for deployment and usage of ML applications
Operational since	2018
User definition	Mostly user communities both big and small that correspond to openstack tenants

2.7.1 Metrics

Metric name	Baseline	Define how measurement is done	M1–M6	M7–M12
GPU node/hours served over the period	> 15000	openstack accounting	0	0
Names of the countries reached over the period	PT, ES	country of tenant email	0	0
Number of countries reached over the period	2	country of tenant email	0	0
Number of users	50	openstack tenant	0	0

2.7.2 Assessment

INCD Cloud has been used for testing and integration of the iMagine AI platform over the second half of the period. It is expected that, as with the rest of cloud providers, its usage will increase starting in Q1 2024.

2.8 INCD-Storage

Description	A federated compute environment based on the EGI Cloud Compute services, with multiple IaaS providers that offer compute resources (CPUs and GPGPUs) as VMs, alongside associated storage (Block/Object storage) for storing and accessing datasets. The service is suitable for hosting and processing of large datasets in a scalable way and is used as the major element of the EOSC Compute Platform.
Task	T4.3
URL	https://www.egi.eu/services/cloud-compute/
Service Category	Infrastructure service
Service Catalogue	https://www.egi.eu/services/cloud-compute/
Location	Portugal
Duration	36 months
Modality of access	Modality of access (Duration): API and Web GUI based access (M01-M36)
Support offered	Helpdesk, support for deployment and usage of ML applications
Operational since	2018
User definition	Mostly user communities both big and small that correspond to openstack tenants

2.8.1 Metrics

Metric name	Baseline	Define how measurement is done	M1–M6	M7–M12
Names of the countries reached over the period	ES, PT	country of tenant email	0	FR, BE, ES, IE, DE, SK, NL
Number of countries reached over the period	2	country of tenant email	0	7
Number of users	50	openstack tenant	0	16
TB/month served over the period	> 100	openstack accounting	0	3.4

2.8.2 Assessment

INCD Cloud has been used for testing and integration of the iMagine AI platform over the second half of the period. It is expected that, as with the rest of cloud providers, its usage will increase starting in Q1 2024.

2.9   TR–FC1–ULAKBIM

Description	A federated compute environment based on the EGI Cloud Compute services, with multiple IaaS providers that offer compute resources (CPUs and GPUs) as VMs, alongside associated storage (Block/Object storage) for storing and accessing datasets. The service is suitable for hosting and processing of large datasets in a scalable way and is used as the major element of the EOSC Compute Platform.
Task	T4.3
URL	https://www.egi.eu/services/cloud-compute/

Service Category	Infrastructure service
Service Catalogue	https://www.egi.eu/services/cloud-compute/
Location	TURKEY
Duration	36 months
Modality of access	Modality of access (Duration): API and Web GUI based access (M01–M36)
Support offered	Technical support is provided via the helpdesk central support team, and by the support team at the installation. EGI provides central documentation, trainings, webinars and hands-on sessions during conferences and events.
Operational since	2014
User definition	Single researchers, small and big communtities

2.9.1   Metrics

Metric name	Baseline	Define how measurement is done	M1–M6	M7–M12
GPU node/hours served over the period with 2 CPU, 40 core and 4 GPU (V100)	29433.6	Local Accounting	0	0
Names of the countries reached over the period	TR	Turkey, National HPC Centre	0	0
Number of countries reached over the period	1	Turkey, National HPC Centre	0	0
Number of unique users	269	Local Accounting	0	0

2.9.2 Assessment

The TR-FC1-ULAKBIM was not used in this period, due to the fact that the iMagine AI platform was transitioning from the old software stack to the new one and the deployment effort focused on this transition, transparent for the use cases. iMagine WP will now focus on the upscaling on the platform towards the rest of the cloud installations. It is expected that TR-FC1-ULAKBIM installation will be used in Q1 2024.

2.10   WaltonCloud – CPU

Description	A federated compute environment based on the EGI Cloud Compute services, with multiple IaaS providers that offer compute resources (CPUs and GPUs) as VMs alongside associated storage (Block/Object storage) for storing and accessing datasets. The service is suitable for hosting and processing of large datasets in a scalable way.
Task	T4.3
URL	https://www.egi.eu/services/cloud-compute/
Service Category	Infrastructure service
Service Catalogue	https://www.egi.eu/services/cloud-compute/
Location	Waterford, Ireland
Duration	36 months
Modality of access	A federated compute environment based on the EGI Cloud Compute services, with multiple IaaS providers that offer compute resources (CPUs and GPGPUs) as VMs, alongside associated storage (Block/Object storage) for storing and accessing datasets.
Support offered	User onboarding
Operational since	2016

User definition	Single researchers, small and big communities

2.10.1 Metrics

Metric name	Baseline	Define how measurement is done	M1–M6	M7–M12
CPU/hours served over the period	11,586,723	OpenStack builtin statistics for reference period	0	0
Names of the countries reached over the period	0	To be developed	0	0
Number of countries reached over the period	0	To be developed	0	0
Number of users	105	Checked against User logins over 12 month period	0	0

2.10.2 Assessment

The WaltonCloud was not used in this period, due to the fact that the installation was in the process of being integrated in the EGI Federated Cloud and that the iMagine AI platform was transitioning from the old software stack to the new one and the deployment effort focused on this transition, transparent for the use cases. iMagine WP will now focus on the upscaling on the platform towards the rest of the cloud installations.. It is expected that WaltonCloud installation will be used in Q1 2024.

2.11 WaltonCloud – Storage

Description	A federated compute environment based on the EGI Cloud Compute services, with multiple IaaS providers that offer compute resources (CPUs and GPUs) as VMs alongside associated storage (Block/Object storage) for storing and accessing datasets. The service is suitable for hosting and processing of large datasets in a scalable way.

Task	T4.3
URL	https://www.egi.eu/services/cloud-compute/
Service Category	Infrastructure service
Service Catalogue	https://www.egi.eu/services/cloud-compute/
Location	Waterford, Ireland
Duration	36 months
Modality of access	A federated compute environment based on the EGI Cloud Compute services, with multiple IaaS providers that offer compute resources (CPUs and GPGPUs) as VMs, alongside associated storage (Block/Object storage) for storing and accessing datasets.
Support offered	User onboarding
Operational since	2016
User definition	Single researchers, small and big communities

2.11.1   Metrics

Metric name	Baseline	Define how measurement is done	M1–M6	M7–M12
Names of the countries reached over the period	0	To be developed	0	0
Number of countries reached over the period	0	To be developed	0	0
Number of users	105	Checked against User logins over 12 month period	0	0

TB/month served over the period	1188	OpenStack builtin statistics for reference period	0	0

2.11.2 Assessment

The WaltonCloud was not used in this period, due to the fact that the installation was in the process of being integrated in the EGI Federated Cloud and that the iMagine AI platform was transitioning from the old software stack to the new one and the deployment effort focused on this transition, transparent for the use cases. iMagine WP will now focus on the upscaling on the platform towards the rest of the cloud installations.. It is expected that WaltonCloud installation will be used in Q1 2024.