D2.3 – Deployment of intermediate version of hybrid open cloud and processing middleware

Project Full Title: *PRedictive In-silico Multiscale Analytics to support cancer personalized diaGnosis and prognosis, Empowered by imaging biomarkers*
Project acronym: *PRIMAGE*
Project type: Horizon 2020 | RIA (Topic SC1-DTH-07-2018)
Grant agreement no: 826494

1. Introduction

The objective of this deliverable is to show in practical terms the deployment of PRIMAGE (PRedictive In-silico Multiscale Analytics to support cancer personalized diaGnosis and prognosis) applications and services on top of a public cloud offering. The deliverable is of type "Other", which relates to a prototype. This report is an explanatory guide and a reference document for understanding and using the prototype.

1.1. Scope of the document

This document constitutes the third deliverable of WP2. It covers a first preliminary prototype that addresses a set of fundamental and mandatory requirements needed for the implementation of the applications in PRIMAGE. The document comprises the procedures that a user should follow to grant access to the resources, the URLs for the repositories of software, configuration descriptions and binaries, as well as the key services of this first version of the PRIMAGE platform.

1.2. Target Audience

The document is mainly intended for internal use, although it is publicly released. The main target of this document is the global team of technical experts of the PRIMAGE project that will access and use the resources. It also serves to the dissemination and exploitation partners to understand the relations with other projects in the landscape of EOSC (European Open Science Cloud).

1.3. Structure of the document

This document is organised in 6 sections, starting with this introduction. Section 2 summarizes the software architecture proposal, with special attention to the three layers (security, storage and processing), identifying the actual components to be used. Section 3 describes the repositories and URLs to be used in the frame of the project, and section 4 describes two canonical applications that can be used as examples. Finally, section 5 presents the conclusions and section 6 includes some references and acronyms.

5. Conclusion

This document describes in practical terms the first version of the cloud platform defined for the project. This platform fulfils a first set of 21 requirements and it is deployed on a European funded Research Infrastructure from the EOSC initiative. The document contains URLs, procedures, command examples, snapshots and examples to develop applications using two canonical examples. The document will be extended with the support of the rest of requirements, as well as with additional services and compatibility, as the project evolves.

The use of EOSC services, such as EGI check-in, EGI Datahub and EGI Cloud Compute will be relevant for the sustainability of the project and will help on building the EOSC concept. As data and services are being developed, the project will consider releasing the access to such services and data, according to the privacy regulations imposed by the nature of the data.