



# 1. Introduction

This deliverable, as part of WP1, user requirements and clinical scenarios, comprises the last deliverable of this work package and introduces the first version of the architecture designed for the PRIMAGE platform, its standards and interconnectivities. This deliverable is of type “Report” and is related to WP7, platform integration, in which all the developments regarding PRIMAGE platform are included.

## 1.1. Scope of the document

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The main goal of this document is to present the current status of the PRIMAGE platform and the future developments that are needed to integrate the different developments done in the remaining WPs (WP2-WP6). In this way, it is going to be introduced the requirements found that are relevant to achieve these endpoints and the web front-end and web back-end that has been designed as optimal for the PRIMAGE platform together with the technologies that are needed to be used.

## 1.2. Target Audience

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The document addresses multiple profiles and targets. In the context of WP1, it defines the last task related with the definition of the user requirements regarding the PRIMAGE platform. In the context of WP7, it establishes the definition of the architecture of the platform in which WP has to be developed. In the context of WP2, this deliverable is the way to understand how patient data is going to be uploaded to the platform. In the same way, in the context of WP3, it is going to be explained both the manual and automatic feeding of information to the platform and the technologies used for this purpose. At the level of WP4 and WP5, the document serves as an overview of the way analysis modules are integrated into the platform and how they can use imaging and clinical data on their analysis. Finally, at the level of WP6, it is useful to understand how the different visualisation tools are integrated into the platform.

Finally, it serves as a guide for external readers to evaluate if the PRIMAGE platform meets their expectations in relation to their needs.

## 1.3. Structure of the document

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The document has been divided into four main sections:

- PRIMAGE platform overview which aims to summarize the platform needs and goals that has to comply for the project.
- PRIMAGE platform requirements which describe all the requirements collected.
- PRIMAGE platform design that has been split into three main sections:
  - Platform architecture where the architecture of the web PRIMAGE platform is introduced together with all the technologies used.
  - Application front-end where all the views that can be found on the PRIMAGE platform are summarized.
  - Application back-end where the database models structure, the inputs and outputs interconnectivity, the imaging data persistence structure and the users authentication procedure are explained.
- According to all the requirements found, in this point, it is going to be explained the current status and which developments are missing for their accomplishment.



## 6. Conclusion

This deliverable summarizes the first version of the PRIMAGE platform architecture, especially regarding the web interface.

The PRIMAGE web platform is the point of connexion between all PRIMAGE project partners. It is where they are going to integrate their developments and is the platform which is going to be used to visualise all the data and results from each patient included in the project. Therefore, to satisfy the needs of all the project partners, different user requirements have been collected and summarized in this deliverable. Additionally, the current status as well as the future developments to be done for accomplishing these requirements have been explained.

For a better understanding of the PRIMAGE web platform, it has been also summarized how it has been built going from the front-end architecture to the back-end architecture. Regarding the front-end, all the views already included have been explained along the whole deliverable. However, the back-end is still under construction to fit with the needs of each development performed in the project (e.g. REST API development and DICOM node exposition for the automatic uploading of patient data and medical images respectively; data storage in the PRIMAGE platform persistence layer, etc.).

To summarize, the PRIMAGE web platform has the main task of connecting all the parts that make up the PRIMAGE project and allow the interaction and visualisation of all of them in a user friendly and intuitively way.

