



# **FHIR in Engineering healthcare solutions**

May 12 th 2022



# FHIR approach in Engineering

- *Engineering has decided to adopt FHIR standards in 2016*
- *We were designing a new healthcare platform*
- *We had projects where integrations were becoming a critical issue for costs, skills, stability and problem determination of the installations*
- *We thought about using FHIR in the new product and waiting for opportunities to extend its use in old applications*



# Why FHIR

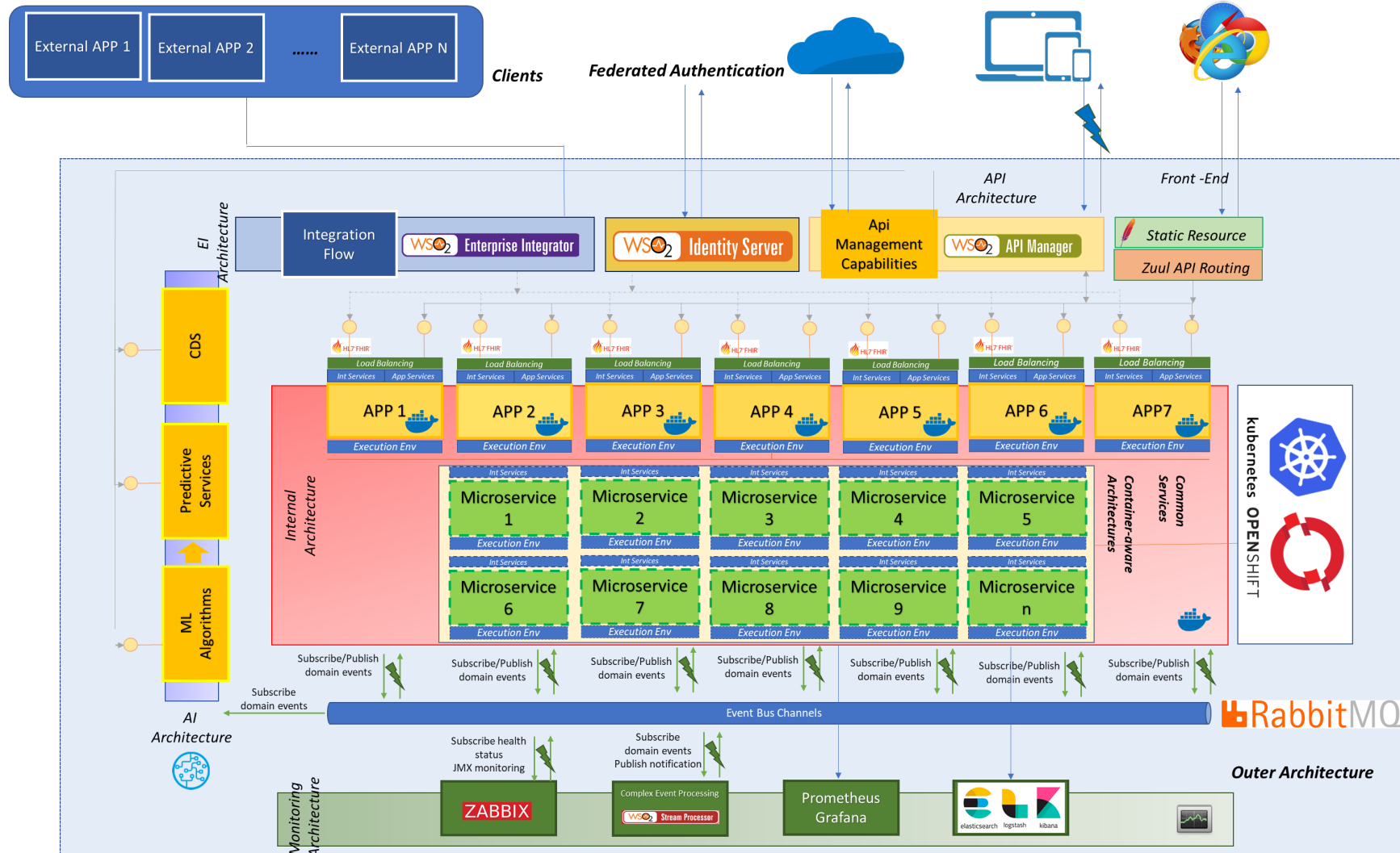
- *Focus on Interoperability as key feature of the new platform in order to improve integration capabilities and decouple application functionalities from integration issues*
- *Standard compliance to be prepared on new tenders and market trend*
- *International market goals to simplify interactions with partners and address integration scenarios*



- Engineering's new healthcare platform (**ellipse**) has been designed with a set of key concepts as a reference
- These concepts refer to technological, functional and organizational aspects
- FHIR standard is one of these and we can say that ellipse is a **FHIR native solution**



# ellipse Architecture



# FHIR in ellipse



- *Integration with external systems*
- *DB data model*
- *Communications between microservices*
- *Software Components (Terminology & MDI)*
- *Design support (Observation, Continuity of care, Privacy by design)*



# Points of attention

- *FHIR Knowledge of working teams*
- *FHIR extensions for localization and new*
- *Needs for synchronous interactions with other components imply use of extensions, search parameter and bundle FHIR features*
- *Custom definitions in in the absence of shared references*



# Customer's reactions

- *A lot of attention and needs for further information*
- *Existing and consolidated scenarios maintains the previous approach based on HL7 2.0 or proprietary solutions*
- *New integration profiles take in account FHIR model at customer site*
- *Tenders and new regional projects have reference to FHIR specifications*





# Conclusions

- *FHIR adoption in Engineering has been simplified by the development of a new platform*
- *On older products we introduce FHIR support when an opportunity arises but it can be complex and expensive*
- *Customer vision about FHIR is very positive but till now few projects use it*
- *In order to avoid proprietary solutions all (Customers, Regions, MOH, European Institutions, software vendors, standard organizations) must collaborate and coordinate*



# Thanks for attention

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