HSRA – Healthcare Services Reference Architecture

Status 04/18/2019
The basic idea is to represent the HSRA metamodel with UAF.

UAF is a language based on UML/SysML integrated also with BPMN2 and SoaML.

UAF covers the representation of complex Enterprise Architectures.
The Unified Architecture Framework (UAF) defines ways of representing an enterprise architecture that enables stakeholders to focus on specific areas of interest in the enterprise while retaining sight of the big picture. UAF meets the specific business, operational and systems-of-systems integration needs of commercial and industrial enterprises as well as the U.S. Department of Defense (DoD), the UK Ministry of Defence (MOD), the North Atlantic Treaty Organization (NATO) and other defense organizations.

UAF requirements were derived from military frameworks however these requirements were combined with requirements from the business sector (because 90% of concepts and themes captured in the military frameworks are equally applicable in the commercial domains), UAF, as a commercial framework that supports the needs of the commercial sector as well as the military.
The «Pure model» approach

- We use of a specific modeling language, UAF, to support a «pure model» approach

- The objective is to support the maintainability and the navigability of HSRA

- We’ll have at the end of the day a single artifact that can be easily transformed in a web site with linked standard documents, or in a traditional document.

- The UAF editor is MagicDraw. Unfortunately the HL7/Sparx EA license agreement do not include UAF plugin.
HSRA METAMODEL MAPPING WITH UAF
Service Functional model mapping

Service Functional Model

Mapped on

Strategic Taxonomy (required capabilities)
Describe the functional capabilities of a coherent business service.

The requirements are derived, generally, from the HL7 SFM

The original standard documents will be linked to the model

A textual description of the capability is integrated in the model
A detailed information model is out of scope for HSRA, the relevant information is limited to the standard type (the semantic signifier) that can be used with a specific service.
The Service Structure identify the appropriate operations in each Tecnology Projection (e.g. SOAP Webservices, RESTful FHIR Transport).

Interfaces are fully documented and the behaviour can be added when appropriate.

Original standard documents and textual descriptions are linked and integrated in the model.
Capabilities/Services mapping

- The mapping among Capabilities and Services is specified with a table (Sv-Tr - Service Specifications to Capabilities Mapping).
The Pattern Catalog mapping candidate is the UAF Actual Resource domain.

The domain illustrate the expected/achieved resource configuration.

This area will be verified before Montreal WGM.
HSRA: TO DO AND PLAN
To do and plan

To do

- Complete the Service Functional Model (capabilities) area and the Service Technical Model (services) area.
- Create an overview similar to Archimate Diagram or insert the Archimate diagram into the model.
- Verify UAF Actual Resource domain usability and model the pattern catalog

Plan

- It’s realistic to have a consolidated model in September WGM
- We can have a *for comment* ballot in January (this is a shift of one WGM against the original plan)