



HSRA – Healthcare Services Reference Architecture Project Update

14-11-2019



HSRA MODEL STATUS

HSRA Status

- The structure is near to be completed.
- The objective is to have a complete model for the Sydney WGM that include the Service Inventory and examples of architectural patterns.
- The first for comment/informative ballot is postponed to the next cycle.

HSRA MODEL RECAP

Healthcare Service Reference Architecture: recap

- The objective of the HL7 Healthcare Service Reference Architecture (HL7-HSRA) is to support the design of medium/large scale eHealth architectures based on HL7 services and standards.
- This project organizes adopted HL7 Service Functional Models, Functional Profiles and Domain Models as a basis for:
 - a formalized Enterprise Service Inventory (Normative)
 - an Architectural Patterns Catalog (Normative)
 - guidelines for enterprise Service Discovery and Orchestration (Informative)

Modeling language for HSRA

- The Modeling language used for HSRA is the OMG UAF (Unified Architecture Framework).
- UAF is a modeling language based on UML/SysML and also integrated with BPMN2 and SoaML.
- The UAF scope is to cover the representation of complex Architectures

UAF - Unified Architecture Framework



- The Unified Architecture Framework (UAF <https://www.omg.org/uaf/>) defines how 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 framework, supports the needs of the commercial sector as well as the military.

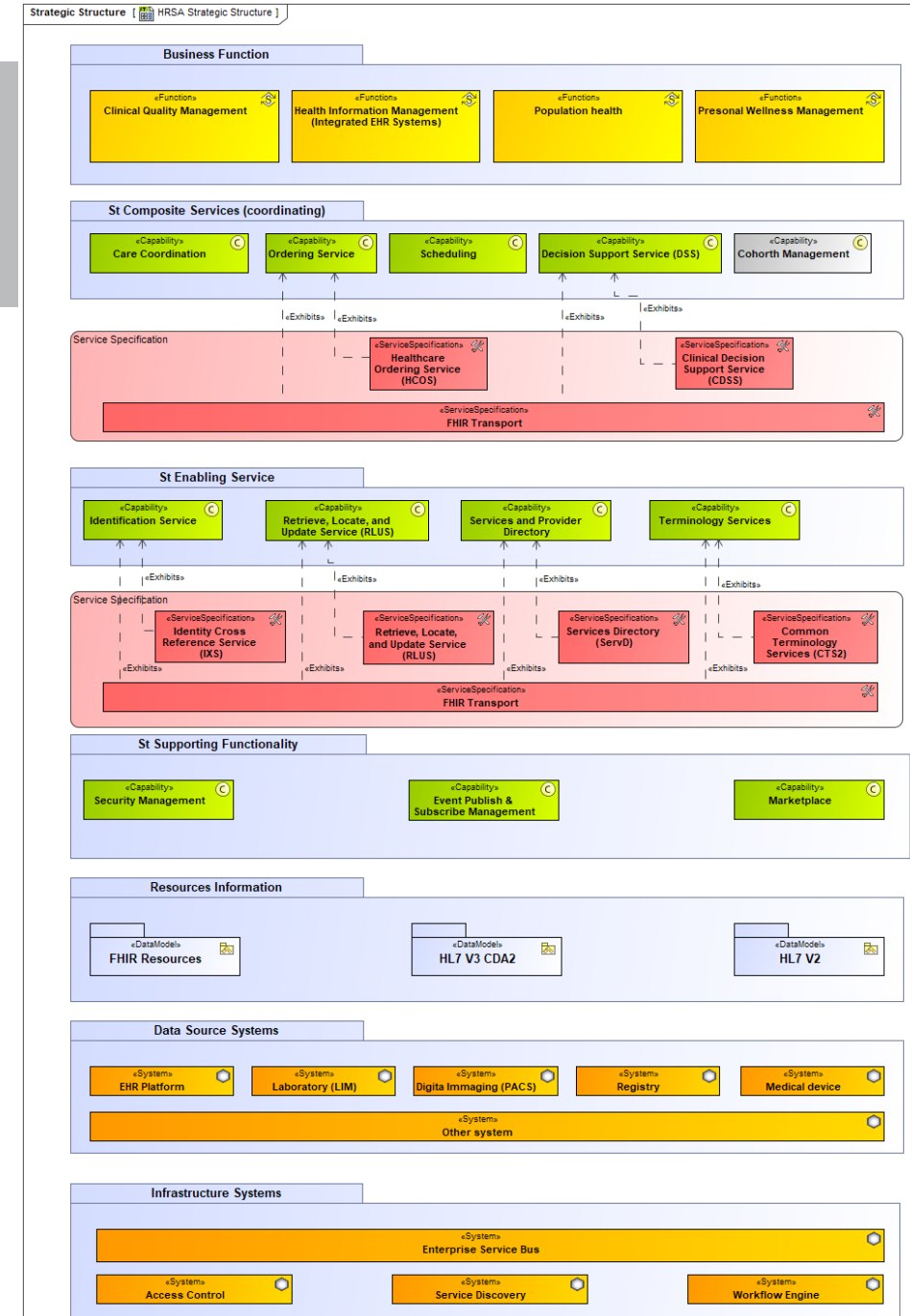
A *single artifact* approach

- We use of a specific modeling language, as UAF, to support a “single artifact” approach with the objective to support the maintainability and the navigability of HSRA
- We’ll have a single artifact (the model) that can be easily transformed in a web site with linked standard documents, or in a traditional document.
- The UAF editor used is MagicDraw. Unfortunately the HL7/Sparx EA license agreement do not include UAF plugin.

HSRA MODEL UPDATE

From Archimate to UAF

- UAF replaced Archimate also for the Reference Architecture map
- The reason is that Archimate is good language only for high level Architectures, but we have the necessity to 'drill down' from high level architectures to services detail.
- This is one of the reason of the UAF use.
- However, as you can see, the result substantially the same.
- The model include 8 levels:
 1. High level Business Functions
 2. Composite services (that include Service Functional Model and Service Technical Model)
 3. Enabling Services (that include Service Functional Model and Service Technical Model)
 4. Supporting Functionality
 5. Resources Information
 6. Data Source Systems
 7. Infrastructure Systems



Model

HSRA model navigation

Q&A

Thank
You

HSRA HL7 Confluence Page

[https://confluence.hl7.org/display/SOA/Health+Services+Reference+Architecture+\(HL7-HSRA\)](https://confluence.hl7.org/display/SOA/Health+Services+Reference+Architecture+(HL7-HSRA))