

2019-08-01 ARB Agenda/Minutes

Date: 2019-08-01

Facilitator: [Anthony Julian](#)

Note Taker: [Anthony Julian](#)

Attendees

	Name	Affiliation
X	Lorraine Constable	Constable Consulting Inc.
X	Anthony Julian	Mayo Clinic
X	Ron G Parker	Parker Digital Health Computing
	Wayne Kubick	HL7 CTO
X	Jean Duteau	Duteau Design
X	Andy Stechishin	CANA Software and Service Ltd
	Zoran Milosevic	Deontik Pty Ltd
X	Jeff Brown	Cigna Healthcare
R	Hugh Glover	Blue Wave Informatics

Guests

	Name	Affiliation
	Mario Hyland	AEGIS
	Cecil Lynch	Accenture
	Patrick E Loyd	ICode Solutions
	Paul Knapp	PKnapp Consulting

Create Decision from Template

Agenda Topics

Agenda Outline	Agenda Item	Meeting Minutes from Discussion	Mover/Second	Vote
Management	Minute Approval			
Methodology	SAIF-CD Ballot Reconciliation	Reconciliation of SAIF-CD comments - Not Persuasive		
Methodology	RTSS	Will be put on the TSC agenda on August 12.		
Management	Next agenda	Cancel 8/8 call?		
	For 8/15 agenda	Conformance, Guidance and Best Practices for FHIR Implementation Guides PSS		
Adjournment		Adjourned at		

Supporting Documents

Outline Reference	Supporting Document
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Minute Approval	2019-07-18 ARB Agenda/Minutes
SAIF-CD Ballot Reconciliation - General comments	<p>Based on OMG's Model Driven Architecture (MDA), early activities in the German CORBA community to develop a reference architecture for comparing and assessing diverse technologies, and the work of the EU project Healthcare Advanced Networked Systems Architecture (HANSA), a Generic Component Model (GCM) was developed, and was first published in 1997. The GCM has meanwhile advanced to an Interoperability Reference Architecture Model and Framework (IRAMF) to be published in the foundational ISO standard ISO 23903. In short, IRAMF extends ISO/IEC 10746 RM-ODP by another view. Furthermore, it transforms the one dimensional development process throughout the viewpoints by a generic granularity dimension as well as a domain dimension, architecturally considering the different domains contributing to the business system. For representing the ISO RM-ODP views, the representation means defined in that standard are deployed. For representing the business system architecture in its components, their behavior and relations, the domains' ontologies are used. The behavioral aspects beyond the ontological considerations are represented using domain-specific policies as well as BPML definitions. Rules for selecting components, functions and relations including related constraints according to a business case are called policies. Policies define the intended behavior of a system. Because of its domain and technology agnostic nature, IRAMF covers all existing architectural models and approaches such as Zachman Framework, The Open Group Architecture Framework (TOGAF), the US Department of Defense Architecture Framework (DoDAF), etc., as demonstrated in Stud Health Technol Inform. 2015; 211: 18-56.</p> <p>When pushing the development of an HL7 Architectural Framework and establishing an HL7 Architecture Review Board (ARB), that advanced model and framework was submitted as one of the first related documents, but unfortunately completely ignored in all further efforts including the balloted HL7 specification SAIF_CANON_R2_N1_2014.</p> <p>SAIF_CANON_R2_N1_2014 is more crowdedly organized than the related ISO and OMG specifications and contradicts (at least partially) the latter. This especially concerns the enrichment of the ISO RM-ODP with interoperability levels. More details follow in the Detailed Comments section. The new ISO 23903 specification covers all aspects and allows for correctly and consistently placing all HL7 artifacts including those in SAIF-CD for cross-specification interoperability. Regarding the management of advanced interoperability, each of the ISO RM-ODP views including the additional ICT-independent Business View of IRAMF represented using business domain ontologies is related to a specific interoperability level (Figure 1). The development process shall start with the Business View, thereafter transforming it into the other views, where the different views can be managed in an iterative way. As result, different interoperability levels can be accommodated as needed.</p> <p>There is no need for retaining SAIF_CANON_R2_N1_2014SEP. Instead, HL7 should join ISO and CEN in deploying IRAMF. See also the attached docx file.</p> <p>Information Perspective Organization Perspective ISO 10746 RM-ODP View Interoperability Level Instances Interoperability Level Technology View Technical Technical plug&play, signal & protocol compatibility Light-weight interactions Engineering View Structural Simple EDI, envelopes Data sharing Computational View Syntactic Messages and clinical documents with agreed vocabulary Information sharing Information View Semantic Advanced messaging with common information models and terminologies Knowledge sharing at IT concept level in computer-parsable form Coordination Enterprise View Organization/Service Common business process Knowledge sharing at business concept level Agreed cooperation Business View Knowledge based Multi-domain processes Knowledge sharing at domain level Cross-domain cooperation Business View Skills based Individual engagement in multiple domains Knowledge sharing in individual context Moderated end-user collaboration</p> <p>Figure 1: Relations between ISO 10746 RM-ODP Views and Interoperability Levels, the latter provided both for an information and an organization perspective.</p> <p>There is no need for retaining SAIF_CANON_R2_N1_2014SEP. Instead, HL7 should join ISO and CEN in deploying IRAMF.</p> <p>Based on OMG's Model Driven Architecture (MDA), early activities in the German CORBA community to develop a reference architecture for comparing and assessing diverse technologies, and the work of the EU project Healthcare Advanced Networked Systems Architecture (HANSA), a Generic Component Model (GCM) was developed, and was first published in 1997. The GCM has meanwhile advanced to an Interoperability Reference Architecture Model and Framework (IRAMF) to be published in the foundational ISO standard ISO 23903. In short, IRAMF extends ISO/IEC 10746 RM-ODP by another view. Furthermore, it transforms the one dimensional development process throughout the viewpoints by a generic granularity dimension as well as a domain dimension, architecturally considering the different domains contributing to the business system. For representing the ISO RM-ODP views, the representation means defined in that standard are deployed. 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Detailed Comments

IRAMF represents with its policies the SAIF-CD Governance Framework (SAIF-CD GF) and the SAIF-CD Behavioral Framework (SAIF-CD BF).

Chapter 6: Interoperability Specification Matrix (ISM)

ISM specifies 5 view and 3 perspectives spanning a two-dimensional matrix or table, thereby suggesting orthogonality of the two axes. The view dimension is borrowed from ISO RM-ODP, while the perspective dimension corresponds – without being explicitly declared – to the OMG MDA specification. The MDA Computation Independent Viewpoint and Model (CIM) corresponds to the SAIF IMS conceptual perspective, the MDA Platform Independent Viewpoint and Model (PIM) corresponds to the SAIF IMS logical perspective, and the Computation Specific Viewpoint and Model (PSM) corresponds to the SAIF IMS implementable perspective. Also between MDA and ISO RM-ODP, those relations can be defined: CIM <-> ISO RM-ODP Enterprise View, PIM <-> Information View and Computational View, PSM <-> Engineering View and Technology View. All three – the ISO RM-ODP, the MDA Models and the SAIF IMS perspective – represent an ICT development process by addressing the domain model or business system, its platform-independent operational issues, and finally the technical implementation and deployment. So, they are certainly not orthogonal. In other words, we cannot define the fields in the table beside those in the principal diagonal, which correspond to each other. Implementable details cannot be defined at the enterprise view, conceptual issues cannot be tackled technologically, etc. The statement that the SAIF-CD IMS dimensions correspond to the ISO RM-ODP representation styles for the different views instead of the views themselves does not solve the aforementioned problem. The sections 6.2.x underpin this problem by stating that the not directly corresponding relations are not really populated. The same criticisms also arose when balloting similar specifications of the HL7 SOA WG, and they have been accepted.

Open JIRA:

key summary type created updated due assignee reporter priority status resolution



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Action items

[Anthony Julian](#) 02 Aug 2019 contact Bernd and ask him to withdraw

[Anthony Julian](#) 08 Aug 2019 Request recirculation ballot