Health informatics - Service architecture - Part 2: Information viewpoint (ISO 12967-2:2009)



FESTI STANDARDI FESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 12967-2:2011 sisaldab Euroopa standardi EN ISO 12967-2:2011 ingliskeelset teksti.

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Foreword

The text of ISO 12967-2:2009 has been prepared by Technical Committee ISO/TC 215 "Health informatics" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 12967-2:2011 by Technical Committee CEN/TC 251 "Health informatics" the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2011, and conflicting national standards shall be withdrawn at the latest by September 2011.

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Endorsement notice

The text of ISO 12967-2:2009 has been approved by CEN as a EN ISO 12967-2:2011 without any modification.

Contents

Page

Forewo	ord	v
Introdu	ıction	vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Symbols and abbreviations	2
5 5.1 5.2 5.3 5.4 5.5 5.6	Methodological principles Language and notation adopted for the specification of the model (informative) UML Class Diagram notation guidelines and profile (informative) Clusters of objects in the information model Operational and descriptive information: classifications, knowledge and its instantiation DataTypes Organization of the document	2 4 5 7
6 6.1 6.2 6.3	General characteristics of the model Common structure of each information object: the GenericHisaClass UML diagram Specification of Generic HISA Class	9 .10
6.3.1 6.3.2 6.3.3	General Class: Set of structured attributes Class: Set of class specific attributes	.11 .11 .11
6.3.4 6.3.5 6.3.6	Class: Set of common attributes	.12 .12
6.3.7 6.3.8 6.3.9 6.3.10	Class: Extended attributes	.13 .14
7 7.1 7.1.1	The reference information models	.15 .15
7.1.2 7.1.3 7.2	UML information model	.15 .16 .19
7.2.1 7.2.2 7.2.3	UML information model	.19 .20
7.3 7.3.1 7.3.2	Activity management objects	.25 .25
7.3.3 7.4 7.4.1	Specification of the individual classes	.33 .33
7.4.2 7.4.3 7.5	UML information model	.34 .39
7.5.1 7.5.2 7.5.3	UML information model	.39

	User and authorization objects	
7.6.1 7.6.2	ScopeUML information model	45 46
7.6.3	Specification of the individual classes	
7.7	Messaging Objects	
7.7.1	Scope	
7.7.2	UML information model	52
7.7.3	·	
	A (informative) Mappings between HISA and GPIC	
Bibliog	raphy	58
	Thronk is a protion of the same of the sam	

Introduction

This is the second part of ISO 12967, a multi-part standard that provides guidance for the description, planning and development of new systems as well as for the integration of existing information systems, both within one enterprise and across different healthcare organizations through an architecture integrating the common data and business logic into a specific architectural layer (i.e. the middleware), distinct from individual applications and accessible throughout the whole information system through services, as shown in Figure 1.

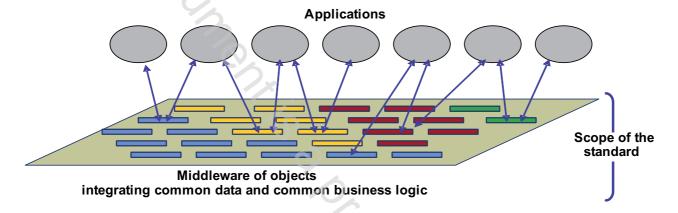


Figure 1 — Scope

The overall architecture is formalized according to ISO/IEC 10746 (all parts) and is therefore structured through the following three viewpoints.

a) Enterprise viewpoint: specifies a set of fundamental common requirements at enterprise level with respect to the organizational purposes, scopes and policies that must be supported by the information and functionality of the middleware. It also provides guidance on how one individual enterprise (e.g. a regional healthcare authority, a large hospital or any other organization where this model is applicable) can specify and document additional specific business requirements, with a view to achieving a complete specification, adequate for the characteristics of that enterprise.

Enterprise viewpoint is specified in ISO 12967-1.

b) Information viewpoint: specifies the fundamental semantics of the information model to be implemented by the middleware to integrate the common enterprise data and to support the enterprise requirements formalized in ISO 12967-1. It also provides guidance on how one individual enterprise can extend the standard model with additional concepts needed to support local requirements in terms of information to be put in common.

Information viewpoint is specified in this part of ISO 12967.

c) Computational viewpoint: specifies the scope and characteristics of the services that must be provided by the middleware for allowing access to the common data as well as the execution of the business logic supporting the enterprise processes identified in the information viewpoint and in ISO 12967-1. It also provides guidance on how one individual enterprise can specify additional services needed to support local specific requirements in terms of common business logic to be implemented.

Computational viewpoint is specified in ISO 12967-3.

Health informatics — Service architecture —

Part 2:

Information viewpoint

1 Scope

This part of ISO 12967 specifies the fundamental characteristics of the information model to be implemented by a specific architectural layer (i.e. the middleware) of the information system to provide a comprehensive and integrated storage of the common enterprise data and to support the fundamental business processes of the healthcare organization, as defined in ISO 12967-1.

The information model is specified without any explicit or implicit assumption on the physical technologies, tools or solutions to be adopted for its physical implementation in the various target scenarios. The specification is nevertheless formal, complete and non-ambiguous enough to allow implementers to derive an efficient design of the system in the specific technological environment that will be selected for the physical implementation.

This specification does not aim at representing a fixed, complete, specification of all possible data that can be necessary for any requirement of any healthcare enterprise. It specifies only a set of characteristics, in terms of overall organization and individual information objects, identified as fundamental and common to all healthcare organizations, and that is satisfied by the information model implemented by the middleware.

Preserving consistency with the provisions of this part of ISO 12967, physical implementations allow extensions to the standard information model in order to support additional and local requirements. Extensions include both the definition of additional attributes in the objects of the standard model, and the implementation of entirely new objects.

Also this standard specification is extensible over time according to the evolution of the applicable standardization initiatives.

The specification of extensions is carried out according to the methodology defined in ISO 12967-1:2009, Clause 7, "Methodology for extensions".

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 11404:2007, Information technology — General-Purpose Datatypes (GPD)

ISO 12967-1:2009, Health informatics — Service architecture — Part 1: Enterprise viewpoint

ISO 12967-3:2009, Health informatics — Service architecture — Part 3: Computational viewpoint

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