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Zdravstvena informatika - Arhitektura storitve - 3. del: Računalniški vidik (ISO 12967-3:2009)

Health informatics - Service architecture - Part 3: Computational viewpoint (ISO 12967-3:2009)

Medizinische Informatik Servicearchitektur Teil 3: Verarbeitungssicht (ISO 12967-3:2009) (standards.iteh.ai)

Informatique de santé - Architecture ide iservice 36P-artie 3: Point de vue informatique (ISO 12967-3:2009) https://standards.iteh.ai/catalog/standards/sist/d6fe1608-8a6a-44b3-b453-a36accaa04eb/sist-en-iso-12967-3-2011

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ICS:

35.240.80 Uporabniške rešitve IT v

zdravstveni tehniki

IT applications in health care

technology

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en

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Health informatics - Service architecture - Part 3: Computational viewpoint (ISO 12967-3:2009)

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Management Centre: Avenue Marnix 17, B-1000 Brussels

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EN ISO 12967-3:2011 (E)

Foreword

The text of ISO 12967-3:2009 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 12967-3:2011 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of an identical text or by endorsement, at the latest by September 2011, and conflicting national standards shall be withdrawn at the latest by September 2011.

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The text of ISO 12967-3:2009 has been approved by CEN as a EN ISO 12967-3:2011 without any modification.

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INTERNATIONAL STANDARD

ISO 12967-3

First edition 2009-08-15

Health informatics — Service architecture —

Part 3: **Computational viewpoint**

Informatique de santé — Architecture de service —

iTeh STPartie 3: Point de vue informatique W
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ISO

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Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 12967-3 was prepared by Technical Committee ISO/TC 215, *Health informatics*, based on the European Standard EN 12967-3:2007 with minor editorial amendments.

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ISO 12967 consists of the following parts, under the general title *Health informatics* — *Service architecture*:

— Part 1: Enterprise viewpoint

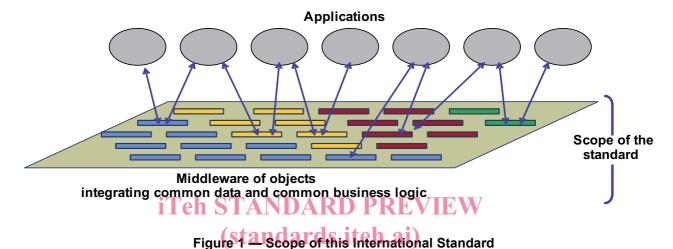
— Part 2: Information viewpoint

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— Part 3: Computational viewpoint

Introduction

ISO 12967 is 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.



The overall architecture is formalized <u>Saccording to 1SO/IEC 1</u>0746 (all parts) $^{[10]}$ [11] $^{[12]}$ [13] and is therefore structured through the following three viewpoints dards/sist/d6fe1608-8a6a-44b3-b453-

a36accaa04eb/sist-en-iso-12967-3-2011

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 ISO 12967-2.

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 this part of ISO 12967.

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