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Information technology — Conformance testing for the biometric application programming interface (BioAPI) —

Part 2: Test assertions for biometric service providers

Technologies de l'information — Essai de conformité pour l'interface de programmation d'applications biométriques (BioAPI) —

Partie 2: Assertions d'essai pour les fournisseurs de services biométriques

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Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work. In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1.

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

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

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

ISO/IEC 24709-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 37, *Biometrics*.

ISO/IEC 24709 consists of the following parts, under the general title *Information technology — Conformance testing for the biometric application programming interface (BioAPI)*:

— *Part 1: Methods and procedures*

— *Part 2: Test assertions for biometric service providers*

The following parts are under preparation:

— *Part 3: Test assertions for BioAPI frameworks*

— *Part 4: Test assertions for biometric applications*

Introduction

This part of ISO/IEC 24709 defines a number of test assertions written in the assertion language specified in ISO/IEC 24709-1. These assertions enable a user of this part of ISO/IEC 24709 (such as a testing laboratory) to test the conformance to ISO/IEC 19784-1 (BioAPI 2.0) of any biometric service provider (BSP) that claims to be a conforming implementation of that International Standard.

The organization of the test assertions in this part of ISO/IEC 24709 reflects the structure of Annex A of ISO/IEC 19784-1:2006, which specifies conformance to BioAPI for various types of implementations (BSPs, frameworks, and applications) and for BSPs belonging to several conformance subclasses.

This part of ISO/IEC 24709 contains test assertions for testing conformance of BSPs of all conformance subclasses. The assertions are further organized according to conformance subclasses (if any) and claimed support of optional features.

Each test assertion exercises one or more (possibly elementary) features of an implementation under test. Assertions are placed into packages (one or more assertions per package) as required by the assertion language.

Clause 6 specifies general principles.

Clause 7 lists test assertions to be used in the conformance testing model for BioAPI BSPs, with specific provisions as follows:

Clause 7.1 contains descriptions of the BioAPI Conformity Statement and the test assertions.

Clause 7.2 contains specific provisions for BSPs of subclass "Verification BSP".

Clause 7.3 contains specific provisions for BSPs of subclass "Identification BSP".

Clause 7.4 contains specific provisions for BSPs of subclass "Capture BSP".

Clause 7.5 contains specific provisions for BSPs of subclass "Verification Engine".

Clause 7.6 contains specific provisions for BSPs of subclass "Identification Engine".

Clause 8 specifies the assertions to be used in the conformance testing model for BioAPI BSPs, for all conformance subclasses of BSPs (see ISO/IEC 19784-1:2006, A.4).

Information technology — Conformance testing for the biometric application programming interface (BioAPI) —

Part 2: Test assertions for biometric service providers

1 Scope

This part of ISO/IEC 24709 defines a number of test assertions written in the assertion language specified in ISO/IEC 24709-1.

This part of ISO/IEC 24709 specifies what subset of all the test assertions defined herein are to be executed for each of the five conformance subclasses of BSPs defined in ISO/IEC 19784-1 (BioAPI 2.0). It also specifies additional assertions that are to be executed depending on the optional features of BioAPI 2.0 that the implementation under test claims to support.

Test assertions specified in this part of ISO/IEC 24709 are not claimed to be exhaustive (see also ISO/IEC 24709-1:2007, Clause 6). Biometric service provider implementations that are tested according to the methodology specified in ISO/IEC 24709-1 and with the test assertions specified in this part of ISO/IEC 24709 can (only) claim conformance to those aspects of ISO/IEC 19784-1 that are covered by these test assertions.

2 Conformance

Implementations (BioAPI conformance test suites) claiming conformance to this part of ISO/IEC 24709 shall be able to process all the test assertions specified in Clause 8 according to the methodology specified in ISO/IEC 24709-1 and the general principles and provisions specified in Clauses 6 and 7.

3 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 19784-1:2006*, Information technology — Biometric application programming interface — Part 1: BioAPI specification*

ISO/IEC 24709-1:2007, *Information technology — Conformance testing for the biometric application programming interface (BioAPI) — Part 1: Methods and procedures*