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Information technology — Biometric application programming interface

Part 2: Biometric archive function provider interface



AS ISO/IEC 19784.2—2010

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Preface

This Standard was prepared by the Standards Australia Committee IT-032, Biometrics and Identification.

^{A2} This Standard incorporates Amendment No. 1 (October 2021) and Amendment No. 2 (1st November 2021). The start and end of changes introduced by the Amendment are indicated in the text by tags including the amendment number. ^{A2}

^{A2} Amendment Nos. 1 and 2 to this Standard were prepared by the Standards Australia Committee IT-032, Biometrics and Identification. ^{A2}

The objective of this Standard is to specify the interface to an archive biometric function provider.

^{A2} This Standard is identical with, and has been reproduced from, ISO/IEC 19784-2:2007, *Information technology — Biometric application programming interface — Part 2: Biometric archive function provider interface* and its Corrigendum No. 1 (2011) and Corrigendum No. 2 (2013), which have been added at the end of the source text. ^{A2}

ISO/IEC 19784 consists of the following parts, under the general title *Information technology — Biometric application programming interface*:

Part 1: BioAPI specification

Part 2: Biometric archive function provider interface

As this Standard is reproduced from an international standard, the following applies:

- (a) Its number appears on the cover and title page while the international standard number appears only on the cover.
- (b) In the source text 'ISO/IEC 19784' should read 'AS ISO/IEC 19784'.
- (c) A full point substitutes for a comma when referring to a decimal marker.

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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 19784-2 was prepared by Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 37, *Biometrics*.

ISO/IEC 19784 consists of the following parts, under the general title *Information technology — Biometric application programming interface*:

- *Part 1: BioAPI specification*
- *Part 2: Biometric archive function provider interface*

Introduction

This part of ISO/IEC 19784 specifies the interface to an archive BFP. An archive BFP is responsible for the storage and management of BIRs. The archive BFP interface covers functions to attach, detach and operate related functional units by the biometric service provider, to store BIRs, to retrieve information about stored BIRs and to retrieve formerly stored BIRs for further processing by a BSP.

ISO/IEC 19784-1 provides a high-level generic biometric authentication model. This part of ISO/IEC 19784 specifies a BSP archive interface. An archive is responsible for the management of biometric data storage. Because of the application-specific requirements of biometric data storage, an archive interface is standardized.

The BioAPI Unit where the BIRs are stored is completely under control of the archive BFP. The general model for the handling of BIRs is as if they were data records in a database.

NOTES

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1 Scope

This part of ISO/IEC 19784 specifies the interface to an archive biometric function provider.

NOTE The interface assumes that the archive will be handled as a database, regardless of its physical realization. (Smartcards, tokens, memory sticks, files on hard drives and any other kind of memory can be handled via an abstraction layer presenting a database interface.)

This part of ISO/IEC 19784 enables any third party to create biometric archive function providers, which may be plugged into any biometric service provider supporting this interface.

It is not in the scope of this part of ISO/IEC 19784 to define security and privacy requirements for storage and management of BIRs.

2 Conformance

A conformant BAFP is required to support all functions and parameters specified in this part of ISO/IEC 19784. No subsets of conformant BAFP functions are defined.

NOTE BSPs may require any of those functions and parameters.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

NOTE Function names and data element names are not included here, but are defined within the body of this part of ISO/IEC 19784.

3.1

biometric archive function provider

BAFP

BioAPI component, attached to a BSP via its interface, for storage, management and interchange of BIRs

3.2

biometric archive function provider interface

BAFPI

BAFP-to-BSP interface which supports the functions to manage the BAFP itself, its databases or BIRs

4 Interface architecture

ISO/IEC 19784-1:2006 specifies the interface at the top of the BioAPI Framework, which a biometric application uses to interact with BSPs, and through that to biometric units either directly or through BFPs (see Figure 1 and Figure 2 of ISO/IEC 19784-1:2006).

The BAFPI contains the following types of functions.

- General BFP management functions, which are called by the BSP to manage the BFP and its associated BioAPI Units. These functions are not directly related to SPI functions:
 - BioAFPI_BAFPLoad;
 - BioAFPI_BAFPUnload;