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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 41903.2-2022

**Information technology - Object oriented BioAPI - Part 2: Java
implementation**

信息技术 面向对象的生物特征识别应用编程接口 第2部分：Java实现

(English Translation)

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Table of Contents

Preface	
Introduction	
1 Scope	
2 Normative references	
3 Terms and Definitions	
4 Abbreviations	
5 Structure of BioAPIJava package	
5.1 Overall structure	
5.2 org.bioapi package	
5.3 org.bioapi.data package	
6 Data types and constants	
6.1 ACBioParameters class	
6.2 BFPListElement class	
6.3 BFPSchema Class	
6.4 BIR category	
6.5 BSPSchema class	
6.6 Candidate class	
6.7 DataTypes class	
6.8 Date class	
6.9 FrameworkSchema class	
6.10 GUIBitmap class	
6.11 IdentifyPopulation class	
6.12 PopulationMember class	
6.13 RegistryID class	
6.14 SecurityProfileType class	
6.15 UnitList class	
6.16 UnitListElement class	
6.17 UnitSchema class	
6.18 UUID class	
7 Object-oriented interface supporting BioAPI_Unit	
7.1 General requirements	
7.2 Archive interface	

- 7.3 Comparison interface
- 7.4 Processing interfaces
- 7.5 Sensor interface
- 8 BFP layer
 - 8.1 BFP interface description
 - 8.2 Import interface
 - 8.3 Summary of methods
- 9 BSP layer
 - 9.1 BSP interface description
 - 9.2 Import interface
 - 9.3 Summary of methods
- 10 frame layer
 - 10.1 ComponentRegistry interface
 - 10.2 Framework interfaces
- 11 Application Interaction
 - 11.2 GUI callback function
- 12 BSP Interaction
- 13 BFP Interaction
 - 13.2 BFPEventListener interface
- Appendix A (informative) Java version requirements
- Appendix B (Informative) Call Sequence Example and Example Code
 - B.1 Reference implementation
 - B.2 API Architecture
- Reference

Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1: Structure and Drafting Rules for Standardization Documents" drafting.

This document is part 2 of GB/T 41903 "Information Technology Object-Oriented Biometric Application Programming Interface".

GB/T 41903 has issued the following parts.

--- Part 1: Architecture;

--- Part 2: Java implementation;

- Part 3: C --- 8.1 of this document corresponds to 7.1 of ISO /IEC 30106-2:2020;
- 8.2 and 8.3 of this document correspond to 7.1.2 and 7.1.3 of ISO /IEC 30106-2:2020;
- 8.3.2~8.3.8 of this document correspond to 7.1.3.1~7.1.3.7 of ISO /IEC 30106-2:2020;
- 9.1 of this document corresponds to 8.1 of ISO /IEC 30106-2:2020;
- 9.2 and 9.3 of this document correspond to 8.1.2 and 8.1.3 of ISO /IEC 30106-2:2020;
- 9.3.2~9.3.26 of this document correspond to 8.1.3.1~8.1.3.25 of ISO /IEC 30106-2:2020.

The technical differences between this document and ISO /IEC 30106-2:2020 and their reasons are as follows.

- ISO /IEC 30106-1:2016 is replaced by GB/T 41903.1-2022 with normative references, the correspondence between the two documents The relationship is modified (see Chapter 1, 5.3.2, 6.4.1, 6.7.1, 6.7.2.1, 6.7.2.2, 11.1.1, 11.2.1) to adapt to the technology of our country condition;
- Added GB 18030 for normative references, so as to adapt to my country's coded character standards (see 6.3.2.7, 6.5.2.20, 6.9.2.5, 11.2.2.1, 11.2.2.2, 11.2.2.3). The following editorial changes were made to this document.
- Deleted "6.18.1" "11.2.2.1.1" "11.2.2.1.1.1" "11.2.2.2.1" "11.2.2.2.1.1" "11.2.2.3.1" "11.2.2.3.1.1" "12.1" "12.1.1" "12.1.1.1" "13.1.1" "13.1.1.1" "13.2.1" "13.2.1.1" "13.3.1" "13.3.1.1" Article number;
- Added "8.3.1" and "9.3.1" article numbers.
- Replaced ISO /IEC 8824-1 with the informative referenced GB/T 16262.1;
- Replaced ISO /IEC 19794 (all parts) with informative references to GB/T 26237 (all parts);
- Replaced ISO /IEC 19784-1 with the informative referenced GB/T 30267.1.

Introduction

The BioAPI described in C language is suitable for applications written in C, and also suitable for applications written in C. but, like Function-based languages like C do not map easily to object-oriented programming languages. In particular, in object-oriented applications Using the C version of the API internally is inconvenient and requires programming constructs that introduce complexity into application development. object-oriented development The BioAPI version is designed to improve the productivity of software practitioners, while using BioAPI while retaining the object-oriented programming model.

For Java, the standard object-oriented version of BioAPI allows BSPs loaded into

Java-based application servers to execute Perform verification and/or identification operations. In these application servers, using object-oriented BioAPI when developing framework and BSP is better than using C version of BioAPI is more convenient.

Another area where the standard object-oriented version of BioAPI is used is in small computing devices based on object-oriented languages, where In a device (like the large application server mentioned above) an object-oriented BioAPI framework and an object-oriented BSP will outperform it Their C equivalents are more suitable.

The object-oriented application programming interface requires a unified architecture, and the implementation languages include Java, C This document applies to the development and application of Java programming interfaces for object-oriented biometric applications.

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, dated references For documents, only the version corresponding to the date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to this document.

GB/T 13000-2010 Information technology universal multi-octet coded character set (UCS) (ISO /IEC 10646:2003, IDT)

Note: There is no technical difference between the referenced content of ISO /IEC 10646:2017 and the referenced content of ISO /IEC 10646:2003, so use

GB/T 13000-2010 replaces ISO /IEC 10646:2017.

GB 18030 Information Technology Chinese Coded Character Set

GB/T 41903.1-2022 Information Technology Object-Oriented Biometric Application Programming Interface Part 1: Architecture (ISO /IEC 30106-1:2016, MOD)

3 Terms and Definitions

This document does not have terms and definitions that need to be defined.

4 Abbreviations

The following abbreviations apply to this document.

ACBio Biometric Authentication Background Information API application programming interface BDB Biometric Data Block BFP Biometric Feature Provider BIR biometric information record BSP Biometric Service Provider CBEFF Common Biometric Interchange Format Framework FMR False Match Rate GUI graphical user interface IRI Internationalized Resource Identifier MAC message authentication code SB security block