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Part 2: Java implementation

Technologies de l'information — Objet orienté BioAPI —

Partie 2: Mise en oeuvre Java

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

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

This second edition cancels and replaces the first edition (ISO/IEC 30106-2:2016), which has been technically revised.

The main changes compared to the previous edition are as follows:

— correction of typing errors;

— addition of AnalyseQuality method.

A list of all parts in the ISO/IEC 30106 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Introduction

This document specifies an application programming interface expressed in Java language. Java is intended to be a simple, general-purpose, object-oriented programming language that is aimed at enabling programmers to quickly build a wide range of applications for multiple platforms.

This Java implementation allows an easy use of Java BSPs, Java-based application servers or Java applets. It is therefore the best way to write desktop and web applications/services. This document provides an advanced and well-designed remote framework.

Although the best practices of Java programming state that variables should be written in lowercase letters, in the case of symbols, such as BSP or BFPs, they have been retained in uppercase letters.

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Information technology — Object oriented BioAPI —

Part 2:
Java implementation

1 Scope

This document specifies an interface of a BioAPI Java framework and BioAPI Java BSP, which will mirror the corresponding components, specified in ISO/IEC 30106-1. The semantic equivalent of ISO/IEC 30106-1 is maintained in this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 10646, *Information technology — Universal Coded Character Set (UCS)*

ISO/IEC 30106-1, *Information technology — Object oriented BioAPI — Part 1: Architecture*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

4 BioAPI Java package structure

4.1 Overall structure

The BioAPI Java interface is divided into several packages. The following is the package structure.

— Package org.bioapi: Contains functionality to manage units, BSPs, BFPs, the Framework and Applications.

— Package org.bioapi.data: Contains all the data structures.

4.2 Package org.bioapi

4.2.1 Package description

This package contains all the components responsible for managing and executing the functionality of BioAPI. Component Registry interface is also defined in this package.

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