

INTERNATIONAL STANDARD

ISO/IEC
30106-2

First edition
2016-03-15

Information technology — Object oriented BioAPI —

Part 2: Java implementation

*Technologies de l'information — Objet orienté BioAPI —
Partie 2: Mise en oeuvre Java*

Withhold

Reference number
ISO/IEC 30106-2:2016(E)



© ISO/IEC 2016

Withdrawn



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2016, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

Contents

Page

Foreword	vi
Introduction	vii
1 Scope	1
2 Normative references	1
3 BioAPI Java package structure	1
3.1 Package org.bioapi	1
3.1.1 Package description	1
3.1.2 Structure	1
3.2 Package org.bioapi.data	2
3.2.1 Package description	2
3.2.2 Structure	2
4 Data types and constants	2
4.1 Class ACBioParameters	2
4.1.1 Description	2
4.1.2 Method summary	2
4.2 Class BFPListElement	2
4.2.1 Description	2
4.2.2 Method summary	3
4.3 Class BFPSchema	3
4.3.1 Description	3
4.3.2 Method summary	3
4.4 Class BIR	4
4.4.1 Description	4
4.4.2 Method summary	4
4.5 Class BSPSchema	9
4.5.1 Description	9
4.5.2 Method summary	9
4.6 Class candidate	12
4.6.1 Description	12
4.6.2 Method summary	12
4.7 Class DataTypes	13
4.7.1 Description	13
4.7.2 Enumerations	14
4.8 Class date	20
4.8.1 Description	20
4.8.2 Method summary	21
4.9 Class FrameworkSchema	22
4.9.1 Description	22
4.9.2 Method summary	23
4.10 Class GUIBitmap	24
4.10.1 Description	24
4.10.2 Method summary	24
4.11 Class IdentifyPopulation	24
4.11.1 Description	24
4.11.2 Method summary	24
4.12 Class PopulationMember	25
4.12.1 Description	25
4.12.2 Method summary	25
4.13 Class RegistryID	25
4.13.1 Description	25
4.13.2 Method summary	25
4.14 Class SecurityProfileType	26
4.14.1 Description	26

4.14.2	Method summary	26
4.15	Class UnitList	27
4.15.1	Description	27
4.15.2	Method summary	27
4.16	Class UnitListElement	27
4.16.1	Description	27
4.16.2	Method summary	27
4.17	Class UnitSchema	28
4.17.1	Description	28
4.17.2	Method summary	28
4.18	Class UUID	30
4.18.1	Description	30
5	Object oriented interfaces for supporting BioAPI_Units	30
5.1	General	30
5.2	Interface archive	30
5.2.1	Description	30
5.2.2	Method summary	31
5.3	Interface comparison	34
5.3.1	Description	34
5.3.2	Method summary	34
5.4	Interface processing	36
5.4.1	Description	36
5.4.2	Method summary	36
5.5	Interface sensor	37
5.5.1	Description	37
5.5.2	Method summary	38
6	BFP level	39
6.1	Interface BFP	39
6.1.1	Description	39
6.1.2	Imported interfaces	39
6.1.3	Method summary	40
7	BSP level	42
7.1	Interface BSP	42
7.1.1	Description	42
7.1.2	Imported interfaces	42
7.1.3	Method summary	42
8	Framework level	49
8.1	Interface ComponentRegistry	49
8.1.1	Description	49
8.1.2	Method summary	50
8.2	Interface framework	51
8.2.1	Description	51
8.2.2	Inherited interfaces	51
8.2.3	Method summary	52
9	Application interaction	56
9.1	class BioAPIException extends Exception	56
9.1.1	Description	56
9.1.2	Constructor summary	56
9.1.3	Method summary	57
9.2	GUI callback functions	57
9.2.1	Description	57
9.2.2	Callback interface specification	58
10	BSP Interaction	61
10.1	Interface BSPEventListener	61
10.1.1	Method summary	61

11	BFP interaction	62
11.1	Interface BFPEnumerationListener	62
11.1.1	Method summary	62
11.2	Interface BFPEventListener	62
11.2.1	Method summary	62
11.3	Interface BFPGUIProgressEventListener	63
11.3.1	Method summary	63
Annex A	(informative) Java requirements	64
Annex B	(informative) Calling sequence examples and sample code	65

Withdrawn

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.

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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC JTC1, *Information technology*, Subcommittee SC 37, *Biometrics*.

ISO/IEC 30106 consists of the following parts, under the general title *Information technology — Object oriented BioAPI*:

- *Part 1: Architecture*
- *Part 2: Java implementation*
- *Part 3: C# implementation*

Introduction

In this part of ISO/IEC 30106, an application programming interface expressed in Java language is specified. 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. Therefore, it is the best way to write desktop and web applications/services and this specification provides an advanced and well-designed remote framework.

Although the best practices of Java programming states that variables should be written in smallcase letters, in the case of symbols, such as BSP or BFPs, it has been kept as uppercase letters.

Withdrawn

Information technology — Object oriented BioAPI —

Part 2: Java implementation

1 Scope

This part of ISO/IEC 30106 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 this standard is maintained in this part of ISO/IEC 30106.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 30106-1, *Information technology — BioAPI for object oriented programming languages — Part 1: Architecture*