

INTERNATIONAL
STANDARD

ISO/IEC
23007-3

First edition
2011-07-15

**Information technology — Rich media
user interfaces**

**Part 3:
Conformance and reference software**

*Technologies de l'information — Interfaces d'utilisateur au support
riche —*

Partie 3: Conformité et logiciel de référence

Reference number
ISO/IEC 23007-3:2011(E)



© ISO/IEC 2011



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2011

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
Introduction.....	v
1 Scope	1
2 Normative references.....	1
3 Terms and definitions	1
4 Conformance of Widgets	1
4.1 Introduction.....	1
4.2 Conformance of manifests	1
4.3 Conformance of packages.....	2
4.4 Conformance of context information	2
4.5 Conformance of the MPEG-U widget scripts.....	2
5 Conformance of Widget Managers	2
6 Conformance Sequences	3
6.1 Introduction.....	3
6.2 Sequences.....	3
6.3 Coverage of MPEG-U features	4
7 Reference software description.....	7
7.1 Overview and architecture.....	7
7.2 Reference software description.....	8
Bibliography.....	11

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 23007-3 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

ISO/IEC 23007 consists of the following parts, under the general title *Information technology — Rich media user interfaces*:

- *Part 1: Widgets*
- *Part 2: Advanced user interaction (AUI) interfaces*
- *Part 3: Conformance and reference software*

Introduction

User interfaces represent a crucial feature for many consumer devices and services. User interfaces have recently evolved to support more media types including audio, video, 2D or 3D graphics and have become rich media user interfaces. User interfaces are also moving towards a collection of small dedicated applications, called Widgets.

Additionally, more and more devices are capable of displaying rich media user interfaces, from desktop computers, to mobile devices, to home appliances including TV sets. In this heterogeneous environment, users expect a homogeneous, unified experience when interacting with their devices.

In ISO/IEC 23007, Widgets can be processed by entities running on different devices, called Widget Managers, in charge of processing and managing the life cycle of the widgets supporting communications with other entities locally or remotely deployed and enabling widget mobility across devices.

The objective of ISO/IEC 23007 is to provide normative interfaces between Widgets and Widget Managers, to allow Widgets from different service providers to run, communicate and be transferred within a unique framework.

ISO/IEC 23007, rich media user interfaces is also known as MPEG-U. ISO/IEC 23007-1 addresses the normative aspects of the MPEG-U Widgets. In particular, it specifies widget packaging formats, aspects for widget communications with external entities and for widget mobility. It also contains a technical annex describing a list of use cases and examples to address such use cases. ISO/IEC 23007-2 addresses advanced user interaction (AUI) interfaces. This part of ISO/IEC 23007 addresses reference software and conformance aspects.

Information technology — Rich media user interfaces —

Part 3: Conformance and reference software

1 Scope

This part of ISO/IEC 23007 specifies how to test whether data and decoders meet requirements specified by ISO/IEC 23007-1. It also describes the procedures for testing the conformance of widgets and widget managers to the requirements defined in ISO/IEC 23007-1.

In this part of ISO/IEC 23007, widget generators are not addressed specifically. A generator can be said to be an ISO/IEC 23007 generator if it generates widgets compliant with the syntactic and semantic requirements specified in ISO/IEC 23007-1.

2 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 23007-1, *Information technology — Rich media user interfaces — Part 1: Widgets*