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Information technology — Rich media user interfaces —

Part 2: Advanced user interaction (AUI) interfaces

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

Partie 2: Interfaces d'intéraction d'utilisateur avancé (AUI)

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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.

ISO/IEC 23007-2 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

R&D activities regarding advanced user interaction devices and mechanisms (often referred as HCI) such as motion and voice recognitions were used to reside within academia and lab environments. However, user interaction devices of industry have evolved dramatically in recent years with the maturing technologies. Consequently various advanced interaction devices, such as multi-touch pad, g-sensor, etc., are already incorporated into consumer electronics and offered in the market.

Although multimedia technologies have been studied to provide mature applicable technologies; however, current user interaction standards mostly focus on basic interaction devices such as pointing and keying devices. This lack of support results in unavailability to utilize such industry ready advanced interaction devices in a standard way.

This part of ISO/IEC 23007 presents the list of new data formats for scene specific advanced user interaction devices. It also includes the high-level view of the relationship between semantically recognized information and physical sensed information. Moreover it provides other interface formats of advanced user interaction devices in order to show the applicability of this International Standard with the existing standard.

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Information technology — Rich media user interfaces —

Part 2:
Advanced user interaction (AUI) interfaces

1 Scope

This part of ISO/IEC 23007 specifies advanced user interaction interfaces (AUI) to support various advanced user interaction devices. The AUI interface is a part of the bridge between scene descriptions and system resources. A scene description is a self-contained living entity composed of video, audio, 2D graphics objects, and animations. Through the AUI interfaces or other existing interfaces such as DOM events, a scene description accesses interesting system resources to interact with users. In general, a scene composition is conducted by a third party and remotely deployed.

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.

W3C DOM Events, "*Document Object Model Events*", available at http://www.w3.org/TR/DOM-Level-2-Events/events.html

W3C XML, *Extensible Markup Language 1.0 (Second Edition)*, W3C Recommendation, 6 October 2000

W3C XMLSCHEMA, *XML Schema Part 1: Structures Second Edition* and *XML Schema Part 2: Datatypes Second Edition*, W3C Recommendations, 28 October 2004