TECHNICAL REPORT

ISO/IEC TR 13066-2

First edition
2012-10-15

Information technology — Interoperability with Assistive Technology (AT) —

Part 2: Windows accessibility application programming interface (API)

Technologies de l'information — Interopérabilité avec les technologies d'assistance —

Partie 2: Interface de programmation d'applications (API) d'accessibilité Windows

Reference number
ISO/IEC TR 13066-2:2012(E)

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

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.

In exceptional circumstances, when the joint technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide to publish a Technical Report. A Technical Report is entirely informative in nature and shall be subject to review every five years in the same manner as an International Standard.

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 TR 13066-2 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 35, *User interfaces*.

ISO/IEC TR 13066 consists of the following parts, under the general title *Information technology — Interoperability with Assistive Technology (AT)*:

— *Part 1: Requirements and recommendations for interoperability*

— *Part 2: Windows accessibility application programming interface (API)* [Technical Report]

— *Part 3: IAccessible2 accessibility application programming interface (API)* [Technical Report]

— *Part 4: Linux/UNIX graphical environments accessibility API* [Technical Report][1]

— *Part 6: Java accessibility API* [Technical Report]

[1] To be published.

Introduction

Individuals with a wide range of functional disabilities, impairments, and difficulties require specific technology to enable computers and software to be accessible to them. This part of ISO/IEC TR 13066 provides information about the Microsoft® Windows® Automation Frameworks, including Microsoft Active Accessibility, User Interface (UI) Automation, and the common interfaces of these accessibility frameworks including the IAccessibleEx interface specification.

The intent of this part of ISO/IEC TR 13066 is to provide information and application programming interfaces (APIs) needed to use these frameworks. A primary goal of this part of ISO/IEC TR 13066 is to ensure that accessible software applications can be written in such a way that they are fully compatible with the Microsoft Accessibility APIs available on the Microsoft Windows operating system.

Information technology — Interoperability with Assistive Technology (AT) —

Part 2: Windows accessibility application programming interface (API)

1 Scope

This part of ISO/IEC TR 13066 specifies services provided in the Microsoft Windows platform to enable assistive technologies (AT) to interact with other software. One goal of this part of ISO/IEC TR 13066 is to define a set of application programming interfaces (APIs) for allowing software applications to enable accessible technologies on the Microsoft Windows platform. Another goal of this part of ISO/IEC TR 13066 is to facilitate extensibility and interoperability by enabling implementations by multiple vendors on multiple platforms.

This part of ISO/IEC TR 13066 is applicable to the broad range of ergonomics and how ergonomics apply to human interaction with software systems.

2 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

2.1
application programming interface
API
standard set of documented and supported routines that expose operating system programming interfaces and services to applications

NOTE An API is usually a source code interface that an operating system, library, or service provides to support requests made by computer programs.

EXAMPLE Examples of operating system services that are exposed by APIs include administration and management, diagnostics, graphics and multimedia, networking, security, system services, user interfaces, and accessibility.

2.2
accessibility
degree to which a computer system is easy to use by all people, including those with disabilities

2.3
accessible object
part of user interface object that is accessible by Microsoft Active Accessibility

NOTE An accessible object is represented by an IAccessible interface and a ChildId identifier.