TECHNICAL REPORT

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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





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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 | TC 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).

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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/IEC JTC 1, *Information technology*, Subcommittee SC 35, *User interfaces*.

This second edition cancels and replaces the first edition (ISO/IEC/TR 13066–2:2012), which has been technically revised.

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)
- Part 3: IAccessible2 accessibility application programming interface (API)
- Part 4: Linux/UNIX graphical environments accessibility API
- Part 6: Java accessibility application programming interface (API)

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 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.

J/IEL .se these are applica pility APIs ava. The intent of this part of ISO/IEC 13066 is to provide information and application programming interfaces (APIs) needed to use these frameworks. A primary goal of this part of ISO/IEC 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 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 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 13066 is to facilitate extensibility and interoperability by enabling implementations by multiple vendors on multiple platforms.

This part of ISO/IEC 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

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

Note 1 to entry: 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 1 to entry: An accessible object is represented by an IAccessible interface and a ChildId identifier

2.4

Accessible Rich Internet Applications

accessibility framework from W3C that exposes web content to assistive technologies such as screen readers and speech commanding programs