TECHNICAL REPORT

ISO/IEC TR 11581-1

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Information technology — User interface icons —

Part 1:

Introduction to and overview of icon standards

Technologies de l'information — Icônes d'interface utilisateur —
Partie 1: Normes d'icônes, introduction et généralités

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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 easing 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 11581-1 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 35, *User interfaces*.

ISO/IEC 11581 consists of the following parts, under the general title *Information technology* — *User interface icons*:

- Part 1: Introduction to and overview of icon standards [Technical Report]
- Part 2: Object icons
- Part 3: Pointer icons
- Part 5: Tool icons
- Part 6: Action icons
- Part 10: Framework and general guidance
- Part 40: Management of icon registration
- Part 41: Data structure to be used by the ISO/IEC JTC 1/SC 35 icon database [Technical Report]

Introduction

Icons are used on Information and Communications Technology (ICT) products to facilitate interaction with their users. Icons can provide a language-independent means of communicating information to the user. They can facilitate the user's ability to learn, understand, and remember functional elements of the system, and aid in the manipulation of these elements. They are especially suitable for elements that are frequently used and where the meaning of the icon can be easily understood.

Typically, icons draw on a user's environment to provide a metaphorical representation of the user's tasks, objects, actions, and attributes. A metaphor provides an analogy to concepts already familiar to the user, from which the user can deduce the system's use and behaviour. Icons can express the metaphor directly, as graphical representations of the metaphorical objects. They may also directly represent a physical object.

Icons are distinguished from other user interface symbols by the fact that they represent underlying system functions. Icons represent the objects, pointers, controls and tools making up the domain of an application that users manipulate in doing their jobs. They can also represent status indicators used by the computer system to give information to the user and to mediate user interactions with software applications.

While the most common form of icons is as a graphical icon, icons can also be rendered in auditory or tactile modalities.

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Information technology — User interface icons —

Part 1:

Introduction to and overview of icon standards

1 Scope

This part of ISO/IEC 11581 introduces the ISO/IEC 11581 series and provides developers and other icon standards users with an overview of currently available and future anticipated icon-standards.

This part of ISO/IEC 11581:

- describes the structure of parts that will be used to encompass all present and future icon standards;
- introduces currently existing icon standards, whether they are parts of ISO/IEC 11581 or they have their own separate numbers;
- recognizes that currently existing standards will eventually be replaced by new parts;

NOTE This part of ISO/IEC 11581 will be revised as new parts of ISO/IEC 11581 become available, adding to or replacing the set of existing parts.

2 Terms and definitions

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

2.1

icon

user interface symbol representing an object and/or function of the computer system

NOTE 1 Within this part of ISO/IEC 11581, "icon" is also used to refer to the function or object represented by the user interface symbol. An icon, which is generally rendered using an identifiable user interface symbol, is much more than just a user interface symbol, it also includes functionality (either as the object it represents or as the function that it represents).

NOTE 2 The concept of a symbol is used in the most generic of senses and can be rendered in various modalities. Some renderings of these user interface symbols include: visual (graphical) icons, auditory icons, and tactile icons.

[ISO/IEC 11581-10, definition 3.4]

3 Applicability of icons

Icons can be used to represent user interface objects, actions, and/or attributes. While icons are often graphically (visually) presented in a user interface, they can also be presented aurally or tactiley.

The use of icons is most applicable to common user interface objects, actions, and/or attributes that are used repeatedly within an application and across multiple applications.

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Icons can be used to:

- aid in immediate recognition of the user interface object, action, and/or attributes;
- save presentation space or time;
- provide representation of the user interface object, actions, and/or attributes that is culturally and linguistically independent and thus accessible to the widest possible range of users.

The ISO/IEC 11581 series of standards deals with icons that are generally applicable to a wide range of applications.

4 Overview of current icon standards

4.1 ISO/IEC 11581-2 Object icons

ISO/IEC 11581-2 addresses only object icons, which are icons that represent functions by association with an object and that can be moved and opened. nunction runction the full part of 15011EC object and that can be moved and opened.

Specific icons in ISO/IEC 11581-2 include:

- Document
- Folder
- Filing cabinet
- Mail
- Printer
- Telephone
- Facsimile
- Diskette
- Wastepaper can
- Calendar
- Calculator
- Clock
- Display
- Keyboard
- Mouse
- Network
- Audio device

4.2 ISO/IEC 11581-3 Pointer icons

ISO/IEC 11581-3 addresses pointer icons that are logically attached to a physical input device, and that the user manipulates to interact with other screen elements. It describes user interaction with and appearance of pointer icons on the screen. It also specifies how pointer icons on a screen change appearance to give users feedback.

Specific icons in ISO/IEC 11581-3 include:

- Text pointer
- Border control pointer
- Cross hair pointer
- Busy indicator (actually a Busy pointer)

4.3 ISO/IEC 11581-5 Tool icons

com. Click to view the full Path of 15 ISO/IEC 11581-5 addresses tool icons that represent functions by association with real life tools. ISO/IEC 11581-5 describes user interaction with and appearance of tools on the screen. It also specifies the relationship between tools and pointers.

Specific icons in ISO/IEC 11581-5 include:

- Text input
- Straight Line Draw
- Freehand Draw
- Arc draw
- Circle draw
- Rectangle draw
- Polygon draw
- Flood fill
- Color pick-up
- **Erase**
- Brush paint
- Gradation fill
- Spray Paint
- Rectangular area select
- Irregular area select
- Rotate

ISO/IEC TR 11581-1:2011(E)

— Flip
— Group
— Ungroup
— Background move
— Zoom
4.4 ISO/IEC 11581-6 Action icons
ISO/IEC 11581-6 addresses action icons that represent actions by association with objects that prompt the user to recall the intended actions. ISO/IEC 11581-6 describes user interaction with and appearance of action icons on the screen. Specific icons in ISO/IEC 11581-6 include: Help Find Save Create new (document) Open Save Print preview Print Cut Copy
Specific icons in ISO/IEC 11581-6 include:
— Help
— Find
— Save
— Create new (document)
— Open
— Save
— Print preview
— Print
— Cut
 Cut Copy Paste Undo Redo
— Paste
— Undo
— Redo CA
— Increase indent
 Decrease indent
— Enumerate/Number
— Itemize/bullet
— Make bold
— Italicize

— Underline

	Align left
	Align right
	Center
	Full justify
4.5	ISO/IEC
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18035 Multimedia control icons

ISO/IEC 18035 applies to icons shown on a computer screen that users can manipulate and interact with, and that represent computer system functions. ISO/IEC 18035 describes user interaction with and the appearance of multimedia control icons on the screen.

ISO/IEC 18035 defines a consistent set of icons and related functions that are presented by multimedia applications on a computer screen and that users interact with to control such applications. These control icons typically represent actions by association with conventional controls on hardware devices (for example video recorders and compact disk players) that prompt the user to recall the intended actions.

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Specific icons in ISO/IEC 18035 include:
— Play
— Stop
— Pause
— Replay
— Play backward
Scan backward
Scan forward
— Fast forward
Specific icons in ISO/IEC 18035 include: — Play — Stop — Pause — Replay — Play backward — Scan backward — Scan forward — Fast forward — Rewind — Step forward — Step backward
— Step forward
— Step backward
— Record
— Loop
— Set volume
— Mute
— Speaker on
— Go to beginning
 Go to previous

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Go to next

— Go to end
— Main menu
— Eject
— Help
— Snapshot
— Save
4.6 ISO/IEC 18036 Web browser icons
ISO/IEC 18036 applies to icons shown on a computer screen that users can manipulate and interact with, and that represent data or computer system functions. ISO/IEC 18036 describes user interaction with and the appearance of World Wide Web toolbar icons on the screen.
ISO/IEC 18036 defines a consistent set of icons and related functions that are presented by World Wide Web browser applications on a computer screen and that users interact with to control such applications. These toolbar icons typically represent actions by association with objects in the real world and conventional controls on hardware, and that prompt the user to recall the intended actions.
Specific icons in ISO/IEC 18036 include:
— Back
— Forward
— Reload/refresh
— Home
— Search
toolbar icons typically represent actions by association with objects in the real world and conventional controls on hardware, and that prompt the user to recall the intended actions. Specific icons in ISO/IEC 18036 include: Back Forward Home Search Print Stop
— Stop

4.7 ISO/IEC 24738 Multimedia link attribute icons

Bookmark/favorit

Save (page)

ISO/IEC 24738 defines a consistent set of icon symbols and related attributes that are presented on a computer screen and with which users interact to decide whether or not to take the associated link. These symbols represent attributes of the link and/or destination of the link.

ISO/IEC 24738 applies to icons that are shown on a computer screen in conjunction with a link also shown on that screen. It describes user interaction with and the appearance of link attribute icons on the screen.