

Information technology ~~—~~ Registered escape sequences and coded character sets

~~DTR stage~~

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ISO/IEC DTR 2375

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Foreword

ISO (the International Organization for Standardization) ~~is a~~ and IEC (the International Electrotechnical Commission) ~~form the specialized system for worldwide federation of national standards~~ standardization. National bodies ~~(that are members of ISO member bodies). The work~~ or IEC participate in the development of ~~preparing~~ International Standards ~~is normally carried out~~ through ISO technical committees. Each member body interested in a subject for which a technical committee has been established ~~has the right to be represented on that committee 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. ~~ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.~~

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 ~~ISO~~ 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 ~~2~~ (see www.iso.org/directives or www.iec.ch/members_experts/refdocs)).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), ~~see~~ www.iso.org/iso/foreword.html ~~see~~ www.iso.org/iso/foreword.html. In the IEC, ~~see~~ www.iec.ch/understanding-standards.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 2, *Coded character sets*.

This first edition ~~of DTR 2375~~ cancels and replaces ISO/IEC 2375:2003, ~~which has been technically revised~~.

The main changes ~~compared to ISO/IEC 2375:2003~~ are as follows:

- removal of the registration procedure specification due to the ~~retirement~~ cancellation of the Registration Authority;
- inclusion of the registered data published by the former Registration Authority.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html ~~www.iso.org/members.html~~ and www.iec.ch/national-committees.

Introduction

~~This technical report is intended to preserve ISO/IEC 2022 uses the registered escape sequences, coded character sets, and related information registered by ISO/IEC 2375. The contents in sequence to control the code extension procedures. The International Register were conformant to defined by ISO/IEC 2375 (previous edition of this document) provided the version of ISO/IEC 2375 in force at the time of registration, and some information was different from the final version of ISO/IEC 2375.~~

~~Before the development of ISO/IEC 10646, ISO/IEC 2022 was used as a character code structure. ISO/IEC 2022 was a stateful encoding and uses escape sequences to specify the character set. The escape sequences were expected to be defined for each subset, and a registration mechanism was specified to maintain the escape sequences for ISO/IEC 2022. ISO/IEC 2375 was this registration procedure; ISO/IEC 2022 did not define the escape sequences by itself. ISO/IEC 2375 was not the International Register itself, but the registration authority providing the information on the escape sequences, and the registered code chart through the website and character sets.~~

Since no new escape sequences have been registered since 2004, and no new organization was found to take over the registration authority as of 2020, ISO/IEC JTC1 / SC2 decided to replace ISO/IEC 2375 with ISO/IEC TR 2375, [\(this document\)](#), which contains the data provided by the former registration authority, to ensure interoperability with archival digital data encoded by ISO/IEC 2022. [This document and electronic attachments replace the International Register.](#)

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Information technology — Registered escape sequences and coded character sets

1 Scope

This document provides the escape sequences and coded character sets that were registered and published by the former registration authority in ISO/IEC 2375:2003. ~~(the previous edition of this document).~~

2 Normative references

There are no normative references in this ~~Technical Report~~document.

3 Terms and definitions

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

ISO and IEC maintain ~~terminological~~terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

<https://standards.iteh.ai/catalog/standards/iso/194cf505-aa5c-4041-8107-9afc27669dab/iso-iec-dtr-2375>

3.1 bit combination

~~An~~ordered set of bits used for the representation of characters.

3.2

byte

~~A~~bit string that is operated upon as a unit.

3.3

catalogue

~~A~~list of the registrations and supplementary data, with reference to their locations.

3.4

character

~~A~~member of a set of elements used for the organization, control, or representation of data.

3.5

coded character set; code

~~A~~set of unambiguous rules that establishes a character set and the relationship between the characters of the set and their coded representation.

3.6

code position

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~~That~~ part of a code table identified by its column and row coordinates:

3.7

code table

~~A~~ table showing the characters allocated to each bit combination in a code:

3.8

combining character

~~A~~ member of an identified subset of the coded character set intended for combination ~~(either~~

- a) with the preceding non-combining graphic character, or with a sequence of combining characters preceded by a non-combining character (as, ~~for example, presented~~ in ISO/IEC 10646), or
- ~~(b)~~ with the following non-combining graphic character, or with a sequence of combining characters followed by a non-combining character (as, ~~for example, presented~~ in ISO/IEC 6937);]

3.9

combining sequence

~~A~~ sequence of graphic characters consisting of ~~(either~~

- a) a non-combining character followed by one or more combining characters (as, ~~for example, presented~~ in ISO/IEC 10646), or
- ~~(b)~~ a non-combining character preceded by one or more combining characters (as, ~~for example, presented~~ in ISO/IEC 6937);]

3.10

control function

~~An~~ action that affects the recording, processing, transmission, or interpretation of data, and that has a coded representation consisting of one or more bit-combinations:

3.11

escape sequence

~~A~~ string of bit combinations that is used for control purposes in code extension procedures:

Note 1 to entry: The first of these bit combinations represents the control function ESCAPE.

3.12

ESC F_s sequence

~~escape sequence with the second bit combination in the range 6/0 to 7/14~~

Note 1 to entry: ESC F_s sequences are used for the standardized single control functions.

3.13

former registration authority

~~organization designated by ISO that ensured the maintenance of the registry of the escape sequence, character set, and the mapping tables defined by ISO/IEC 2375:2003 (the previous edition of this document)~~

3.14

graphic character

~~A~~ character, other than a control function, that has a visual representation normally handwritten, printed, or displayed, and that has a coded representation consisting of one or more bit-combinations:

3.15

International Register

~~The~~ register of the coded character sets and the escape sequences ~~for~~in ISO/IEC 2022:

Note 1 to entry: In this document, this ~~term~~ **International Register** means the archive of the former International Register, ~~(from ISO/IEC 2375, now withdrawn and for which is now preserved by ISO, the registration mechanism is no longer available since the withdrawal of ISO/IEC 2375,)~~ which ~~was the standard of the registration procedure for the former International Register~~ **is now provided in electronic attachment in this document.**

3.16

octet

~~An~~ ordered sequence of eight bits considered as a unit.

~~3.1~~

Registration Authority

~~An organization nominated and appointed by ISO/IEC Council to register the entities requested by the technical standard. In this document, this term means the Registration Authority for ISO/IEC 2375, which registered the character sets, the escape sequences, and related information to the International Register.~~

~~3.2~~

3.17

repertoire

~~A~~ specified set of characters that are each represented by one or more bit combinations of a coded character set.

Note 1 to entry: A registration does not specify the repertoire of the sequences obtained by combining the characters (see A.3).

3.18

standard return

~~An~~ escape sequence to switch the coding system to the ISO/IEC 646 character set under the ISO/IEC 2022 coding system, i.e., “ESC 2/5 4/0”, ~~which~~

Note 1 to entry: **Standard return** fits the DESIGNATE OTHER CODING SYSTEM specified in ISO/IEC 2022:1994, 15.4.

4 International Register

4.1 Purpose of the International Register

~~ISO/IEC 2022 uses the escape sequence (see ISO/IEC 2022, 4.13) to control the code extension procedures. The International Register defined by ISO/IEC 2375 provided the character sets, escape sequences, and related information. The International Register in this technical report takes over from the former Registration Authority. Because the Registration Authority has been retired and the International Register is archived, the registration procedure is unavailable.~~

The International Register provides the catalogue of the registered character set standards with their registration numbers, the names of the character set standards, and their final bytes (for the ~~definitions~~ **definition** of ~~the~~ final bytes, see ISO/IEC 2022:1994, 4.14). The catalogue includes hyperlinks to the electronic document for each registration, which is preserved in the International Register ~~either~~.

Registration of the graphic character sets and the control character sets ~~consist~~ **consists** of three parts; a cover page, a code table, and a list of character names. Registration of the coding systems not ~~conformant in conformance~~ with ISO/IEC 2022 has a cover page, and a description text of the coding system, but can lack both ~~of a~~ code table and a list of character names.

4.2 Location of the International Register

The International Register can be found at

<https://standards.iso.org/iso-iec/tr/2375/ed-1/en>

4.3 Machine readability

The electronic data in the International Register were primarily produced for printing, while some data were based on scanned images which were image data and not machine-readable text. In the case that registration has the mapping table to ISO/IEC 10646, it is in machine-readable format (see an example in [Annex E](#)).

4.4 Catalogue

4.4.1 Structure of the catalogue

The catalogue classifies the registered character set standards into nine types under three ~~major~~main categories. The top category is determined by the types of the character defined by ISO/IEC 2022: the graphic character (see ISO/IEC 2022:1994, 4.15), the control character (see ISO/IEC 2022:1994, 4.9), and the coding systems not ~~conformant in conformance~~ with ISO/IEC 2022 (see ~~B.1~~B.1).

a) Graphic character sets

~~In the category of the graphic character sets,~~ ISO/IEC 2022 specifies three types of coded graphic character sets (see ISO/IEC 2022:1994, 6.3.1):

— “94-character set”;

— “96-character set” ~~and~~;

— “multiple-byte set”.

The International Register has two subtypes under “94-character graphic character set”, which are distinguished by the length of their intermediate bytes (see ISO/IEC 2022,4.14): ~~“94-character graphic character sets” with one Intermediate Byte and “94-character graphic character sets” with two Intermediate Bytes. Hence, the graphic character sets in the International Register fall into four types:~~ <https://standards.iteh.ai/catalog/standards/iso/194cf505-aa5c-4041-8107-9afc27669dab/iso-iec-dtr-2375>

— “94-character graphic character sets” with one intermediate byte;

— “94-character graphic character sets” with two intermediate bytes.

Hence, the graphic character sets in the International Register fall into four types:

— 94-character graphic character sets with one intermediate byte;

— 94-character graphic character sets with two intermediate bytes;

— 96-character graphic character sets;

NOTE 1 The escape sequences for this type use one intermediate byte.

— multiple byte graphic character sets.

NOTE 2 The escape sequences for this type use two intermediate bytes.

b) Control character sets

ISO/IEC 2022 specifies two types of “sets of control functions”:

— the primary sets of coded control functions (CO) (see ISO/IEC 2022:1994, 6.4.1), and 6.4.4);

— the supplementary sets of coded control functions (CI) (see ISO/IEC 2022,~~6.4.2~~); ~~they are named C0 and C1 (see ISO/IEC 2022:1994, 6.4.4).2 and 6.4.4~~);