INTERNATIONAL STANDARD

ISO
12651-1

First edition
2012-01-15

Electronic document management — Vocabulary —

Part 1: Electronic document imaging

Gestion électronique de documents — Vocabulaire —

Partie 1: Imagerie documentaire électronique

© ISO 2012

iTeh STANDARD PREVIEW
(standards.iteh.ai)

ISO 12651-1:2012
https://standards.iteh.ai/catalog/standards/sist/53986c33-b693-4b04-a16a-
d7f751f6308e/iso-12651-1-2012

Contents

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work 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. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 12651-1 was prepared by Technical Committee ISO/TC 171, *Document management applications*, Subcommittee SC 3, *General issues*.

This first edition of ISO 12651-1, together with ISO 12651-2[1], cancels and replaces ISO 12651:1999.

ISO 12651 consists of the following parts, under the general title *Electronic document management — Vocabulary*:

— *Part 1: Electronic document imaging*

The following parts are under preparation:

— *Part 2: Document workflow*

---

[1] Under preparation.

Electronic document management — Vocabulary —

Part 1:
Electronic document imaging

1 Scope

This part of ISO 12651 is intended to facilitate communication in the field of electronic document management and translation of the terms it contains into other languages.

The term "electronic document management" used throughout this part of ISO 12651 is intended as an all-encompassing term referring to inputting technologies [scanning, indexing, optical character recognition (OCR), forms, digital creation, etc.], management technologies (document services, workflow, and other work management tools), and storage (primarily optical/magnetic) technologies.

All terms and definitions in this part of ISO 12651 have been drafted in accordance with ISO 10241-1 and ISO 1087-1. The selection of terms and the wording of definitions have, as far as possible, followed established usage. Where there were contradictions, solutions agreeable to the majority have been sought.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 11544, *Information technology — Coded representation of picture and audio information — Progressive bi-level image compression*

ISO/IEC 10918-4, *Information technology — Digital compression and coding of continuous-tone still images: Registration of JPEG profiles, SPIFF profiles, SPIFF tags, SPIFF colour spaces, APPn markers, SPIFF compression types and Registration Authorities (REGAUT)*

ISO 18901, *Imaging materials — Processed silver-gelatin-type black-and-white films — Specifications for stability*

3 Principles and conventions

3.1 Definition, formatting and organization of entries

All terms and definitions listed in Clause 4 meet the requirements of ISO 10241-1:2011.

3.2 Spelling

Terms, definitions, examples and notes are given in the spelling preferred in the United Kingdom, unless otherwise indicated. Other correct spellings may be used without violating this International Standard.

4 Terms and definitions

4.1
aberration
defect in a lens or mirror that produces distortions in an **image** (4.67)

EXAMPLES   Astigmatism, chromatic aberration, curvature of field.

4.2
ablation
deformation in an **optical disk** (4.99) created by a high-powered laser during write operation, that burns or melts the surface

NOTE   This is also known as a pit.

4.3
addressability
number of discrete **pixels** (4.108) that can be addressed using a co-ordinate system on a display or in the devices supporting a display

EXAMPLE   1,600 × 1,200.

4.4
analogue monitor
output device that uses an analogue signal to display an **image** (4.67)

NOTE   The voltage that determines the brightness of each colour component varies continuously.

4.5
analogue transmission
transmission of continuously varying electronic signals analogous to tonal variations

4.6
analogue-to-digital conversion
A/D
process of converting a continuous electrical current or signal into digital form

4.7
aperture card scanner
device for scanning micro-images in aperture cards

NOTE   Some **scanner**s (4.124) can also read information printed on the card.

4.8
aspect ratio
ratio of height to width of a rectangle

4.9
automatic character recognition
technology using special systems, such as **OCR** (4.100) or **ICR** (4.80), to identify human-readable characters, usually alphanumeric, and then use the data

4.10
automatic document feeder
powered device to feed microforms, films or paper into a **scanner** (4.124) for capture

NOTE   It can also position the microform, film, or paper.

4.11
auxiliary operation
activity supplementary to the primary operations of a **document** (4.41) management system

EXAMPLES   Film cleaning, splicing, mounting, packaging, loading, coding.

4.12
backfile
collection of **document**s (4.41), usually predating the **imaging** (4.76) system, that have not been digitized

4.13
backfile conversion
process of scanning, **index**ing (4.77) and quality control of the **backfile** (4.12)

4.14
backward compatibility
ability to move data from a more advanced version of a system or software package to a less advanced version

4.15
bar-code scanner
device used to read bar codes by means of reflected light

4.16
bar-code symbol
machine-generated and readable representation of data, usually numeric, in the form of a printed series of contrasting parallel bars of various widths, spacing and/or heights

4.17
batch processing
machine processing of a batch of **document**s (4.41)

NOTE   The **document**s (4.41) could have been collected over a period of time.

4.18
bit-mapped image
image (4.67) derived from an array of **pixel**s (4.108)

4.19
bitonal image
image (4.67) having a number of **pixel**s (4.108), each of which has an "on" or an "off" value

4.20
bleed-through, US
show-through, GB
undesired appearance of information from the reverse of a **document** (4.41) when viewed and/or scanned

4.21
blocking
unintentional adhesion of adjacent sheets of film or paper

4.22
browsing
searching for information in a database or in a **document** (4.41)

4.23
cache
temporary storage providing rapid access to frequently used information

4.24
character recognition
identification of graphic characters by automatic means

4.25
CCD scanner
charge-coupled device scanner
scanner (4.124) that incorporates a light-sensitive semiconductor device that can collect, store and move electric charges in packets

4.26
clipped pixel array
actual **pixel** (4.108) array to be imaged as determined by all clipping parameters

4.27
clipping
reduction in the range of tones recorded by a **scanner** (4.124) due to limited spectral sensitivity of its photodetector

4.28
CD-ROM
compact disk–read only memory
optical disk (4.99), conforming to compact disk specifications, created by a mastering process and used for distributing read-only information

4.29
CD-R
compact disk recordable
optical disk (4.99), conforming to compact disk specifications, on which data is recorded by the user once and can be read many times

iTeh STANDARD PREVIEW
(standards.iteh.ai)

4.30
compound document
document (4.41) that contains information in more than one object

EXAMPLE   Text, graphics and **image**s (4.67) in a single **document** (4.41) or a spreadsheet embedded in a word-processing document.

4.31
compression
reduction in size of an electronic file

NOTE 1   Compression can be **lossy** (4.88) or **lossless** (4.87).

NOTE 2   Compression is usually carried out to reduce storage requirements, to reduce network traffic and/or to reduce file transmission times.

4.32
compression ratio
relationship of the file size before **compression** (4.31) to the file size after compression

4.33
COLD
computer output to laser disk
technology used to store computer-generated reports in a computer-based accessible format through the use of virtual printers or other technology, in order to capture the report as it is generated or printed

NOTE   This term is sometimes referred to as **enterprise report management** (4.54).

4.34
continuous-tone
having continuous variation in colour and/or density

NOTE   Colour includes shades of grey.

4.35
contrast
difference in density between darkest and lightest fields

4.36
decompression
expansion of a compressed file

4.37
deskewing
process of rotating an **image** (4.67) by the same amount as its skew (slant), but in the opposite direction, resulting in a horizontally and vertically aligned image where the text runs across the page rather than at an angle

NOTE 1   See also **skewing** (4.129).

NOTE 2   Improperly aligned **image**s (4.67) make optical character recognition [**OCR** (4.100)] more difficult and can cause the OCR process to become slower and less accurate. Deskewing the **document**s (4.41) beforehand can make the OCR process faster and more accurate.

4.38
digitize
use of a **scanner** (4.124) to convert **document**s (4.41) to digitally coded **electronic image**s (4.48)

4.39
digitizer
device for the digitization of a **document** (4.41)

NOTE   This term is often used, by extension, to refer to a device that allows both the scanning and the actual digitization of the **document** (4.41).

4.40
dithering
method of simulating shades of grey using different patterns of black and white **pixel**s (4.108) within a cell or simulating colours by using patterns of other (often primary) colours

4.41
document
recorded information or object which can be treated as a unit

[ISO 15489-1:2001, definition 3.10]

4.42
document profile
set of attributes which specifies the characteristics of a **document** (4.41) as a whole

[ISO/IEC 2382-23:1994, 23.02.02]

4.43
document service
component, module, or application supporting and/or providing authoring, check-in/check-out, and version control capabilities, along with other features necessary to create, manage, update and secure **document**-based (4.41) information in an automated fashion

4.44
dpi
dots per inch
measure of resolution

4.45
dropout ink
ink of a colour that cannot be detected by a **scanner** (4.124)

4.46
edge enhancement
technique for sharpening the appearance of line edges on an **electronic image** (4.48)

4.47
EDMS
electronic document management system
computer-based application dealing with the management of **document**s (4.41) throughout the **document** (4.41) life cycle

NOTE   This may comprise one or more technologies, such as document imaging, document/library services, workflow, enterprise report management, forms management and automatic character recognition.

4.48
electronic image
digital representation of a **document** (4.41)

4.49
electronic image management
coordinated use of all **electronic imaging** (4.51) techniques

4.50
electronic image grey scaling
production of an **electronic image** (4.48) representing the **image** (4.67) contents in shades of grey, converting **continuous-tone** (4.34) images into a limited number of grey shades

4.51
electronic imaging
technique for inputting, recording, processing, storing, transferring and using **image**s (4.67)

4.52
enhancement
technique for processing an **image** (4.67) so that the result is visually clearer than the image

4.53
ECM
enterprise content management
strategies, methods and tools used to capture, manage, store, preserve and deliver content and **document**s (4.41) related to organizational processes

NOTE   ECM tools and strategies allow management of an organization's unstructured information, wherever that information exists.

4.54
enterprise report management
ERM
technology used to store computer-generated reports in a computer-based accessible format, using virtual printers or other technology to capture the report as it is generated or printed

NOTE   See also **COLD** (4.33).

4.55
expunge
completely remove a **document** (4.41), **image** (4.67) or file and its **index**ing (4.77) from a computer system, leaving no evidence of it ever having appeared in the system

4.56
flat-bed scanner
device for scanning that has a flat surface for input material

NOTE   This is generally used for scanning bound material and other originals unsuitable for **automatic document feeder**s (4.10).

4.57
formatting
setting up the space divisions on a data medium and initiating a space allocation table that will know exactly how to reach each bit of data that could be stored there later

4.58
forms overlay
printer feature by which a set of standard-form **images** (4.67) can be stored in the printer or computer and selectively overlaid on variable data to be printed in specified locations of the form

4.59
forms removal
system (usually software) which removes a fixed overlay from a **digitize**d (4.38) **image** (4.67), leaving only the variable data

4.60
forward compatibility
ability to move data from a less advanced version of a system or software package to a more advanced version

4.61
Group 3 (compression)
form of **compression** (4.31) to the T.4 compression standard in which run-length encoding is used to reduce redundancy

4.62
Group 4 (compression)
form of **compression** (4.31) to the T.6 compression standard in which run-length encoding is used to reduce redundancy

4.63
halftone
technique for reproducing **continuous-tone** (4.34) originals as a series of dots by photographing the **image** (4.67) through a hatched screen

NOTE   The finer the screen, the greater the detail in the resulting negative.

4.64
horizontal image resolution
number of discrete elements used to **image** (4.67) the width of the page

4.65
Huffman coding
data **compression** (4.31) technique that assigns shorter bit sequences to frequently occurring symbols and longer bit sequences to less frequent symbols