



# Information technology — Text and office systems — Document Printing Application (DPA) —

## Part 1: Abstract service definition and procedures

### TECHNICAL CORRIGENDUM 4

*Technologies de l'information — Bureautique — Application impression de documents (DPA) —*

*Partie 1: Définition de service abstrait et procédures*

RECTIFICATIF TECHNIQUE 4

Technical Corrigendum 4 to International Standard ISO/IEC 10175-1:1996 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 33, *Distributed application services*.

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#### Subclause 6.4.5.1

Replace the text of paragraphs f) *subset-of*, g) *superset-of*, and h) *non-null-set-intersection* with the following text:

- f) **subset-of**, it evaluates to TRUE if and only if all of the assertion value is present in, or lies within, the attribute value.

This matching rule applies both to multi-valued attributes and to single-valued attributes that specify:

- (1) ranges,
- (2) two-dimensional areas,
- (3) sequences of a single type.

In the case of multi-valued attributes, the assertion evaluates to TRUE if and only if each of the assertion value members is present in the attribute value set.

For attributes that specify a range (or two-dimensional area), the assertion evaluates to TRUE if and only if the assertion range|area lies within the attribute value range|area. For examples, see 9.1.5.16, IntegerRange and integerRangeSyntax, and 9.1.5.47, Area and areaSyntax.

In the case of single-valued sequence types (other than range or area types), the assertion evaluates to TRUE if and only if each of the assertion value members is present in the attribute value sequence, and the assertion value members are in the same sequence as the attribute value members.

- g) **superset-of**, it evaluates to TRUE if and only if all of the attribute value is present in, or lies completely within, the assertion value.

This matching rule applies both to multi-valued attributes and to single-valued attributes that specify:

- (1) ranges,
- (2) two-dimensional areas,
- (3) sequences of a single type.

In the case of multi-valued attributes, the assertion evaluates to TRUE if and only if each of the attribute value members is present in the assertion value set.

For attributes that specify a range (or two-dimensional area), the assertion evaluates to TRUE if and only if the attribute range|area lies within the assertion value range|area. For examples, see 9.1.5.16, IntegerRange and integerRangeSyntax, and 9.1.5.47, Area and areaSyntax.

In the case of single-valued sequence types (other than range or area types), the assertion evaluates to TRUE if and only if each of the attribute value members is present in the assertion value sequence, and the attribute value members are in the same sequence as the assertion value members.

- h) **non-null-set-intersection**, it evaluates to TRUE if and only if at least one of the assertion members is present in the attribute value.

This matching rule applies to multi-valued attributes, and to single-valued attributes that specify sequences of a single type.

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### Subclause 8.2.1

In the second paragraph following the ASN.1, replace the current text:

This International Standard assumes that printers and other server components are reset or returned to appropriate states prior to processing each job. The **reset-printer** attribute permits the client to suspend the reset of the printer after particular documents, if desired for down-line loading of fonts, forms, PDL prologues, etc.

with the following text:

This part of ISO/IEC 10175 stipulates that printers and other server components are reset or returned to appropriate states prior to processing each job. However, between documents of the same job, resetting of the printer or interpreter depends upon the type of document format and/or the value of the **reset-printer** attribute. For page-independent document formats, the printer and interpreter should reset their states automatically at the end of printing each document. For other document formats, the **reset-printer** attribute permits the client to suspend the reset of the printer after particular documents, if desired for down-line loading of fonts, forms, PDL prologues, etc.

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### Subclause 8.2.2.1

Delete the sixth paragraph from the bottom of the page, which reads as follows:

If the client lists a required attribute (i.e. an attribute element of the **PrintArgument**) in either the **job-non-compulsory-attributes** or **non-compulsory-attributes** attribute, the server shall completely ignore this particular value of the attribute.

**Subclause 9.2.8.2**

Following the table in 9.2.8.2, add the following text and table:

The following table indicates in which states the **job-state-reasons** are valid. The event that sets a particular **job-state-reason** may occur in a different state from the state in which the **job-state-reason** is reported; in such cases, the **job-state-reason** usually indicates why the job has transitioned to its current state.

Descriptive Name	Job States							
	held	pending	processing	paused	interrupted	terminating	retained	completed
documents-needed	X							
job-hold-set	X							
job-print-after-specified	X							
required-resources-not-ready	X							
successful completion							X	X
completed-with-warnings							X	X
completed-with-errors							X	X
cancelled-by-user						X	X	X
cancelled-by-operator						X	X	X
aborted-by-system						X	X	X
logfile-pending						X	X	
logfile-transferring						X	X	
cancelled-by-shutdown						X	X	X
printer-unavailable		X				X	X	X
wrong-printer		X				X	X	X
bad-job						X	X	X
job-interrupted-by-printer-failure	X			X				
cascaded			X				X	X
deleted-by-administrator						X	X	X
discard-time-arrived						X	X	X
pre-processing-failed	X		X	X		X	X	X
post-processing-failed						X	X	X
submission-interrupted						X	X	X
max-job-fault-count-exceeded						X	X	X
job-outgoing			X					
device-stopped-partly			X	X				
device-stopped				X				
job-interpreting			X					
job-printing			X					
service-off-line	X							
job-canceled-at-device						X	X	X
job-resubmitted by user	X	X		X			X	
job-resubmitted by operator	X	X		X			X	
job-resubmission-completed	X	X		X			X	

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#### Subclause 9.2.8.25

At the end of the 9.2.8.25, add the following note:

NOTE - the value of **processing-time** only includes those periods when the job is actually being processed in some way; **processing-time** does *not* include time periods during which the job has been paused or held while awaiting some operator action, for example. Upon completion of the job, the value of this attribute should represent the total amount of processing time actually consumed by the job.

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#### Subclause 9.3.2.16.1

Replace 9.3.2.16 and the first paragraph in 9.3.2.16.1, which read:

##### 9.3.2.16 Imposition attributes

This group of attributes identify and/or specify the imposition operations performed on each page. An imposition operation consists of 3 steps performed in the order given below and specified by six attributes. The steps are:

- a) **number-up**: the number of source page-images to make up a target page image. This operation may be complex.
- b) **binding-edge-shift**: the amount to shift the target page image away from the binding edge, based on **plex** and **binding edge**.
- c) **page-image-shift**: the final amount to shift in the x and y direction without regard to **plex**.

As introduced in 6.3.13, imposition functions affect the placement, orientation and scaling of page images on the selected media. Examples include applying binding margins, placing two page images on a side of the medium, and simple pamphlet.

##### 9.3.2.16.1 Number-up

This attribute specifies the number of source page-images to impose upon a single instance of a selected medium. The attribute can be specified either by a number directly or by naming an imposition object which specifies some particular number-up imposition.

with the following text:

##### 9.3.2.16 Imposition attributes

This group of attributes identify and/or specify the imposition operations performed to construct each page of the output document. As introduced in 6.3.13, imposition functions affect the placement, orientation and scaling of page images on the selected media. Examples include applying binding margins and placing two page images on a surface of the medium to produce a simple pamphlet.

Imposition operations are specified by the six attributes defined in this subclause. Imposition attributes are classified in three groups, which are applied in a fixed sequence, regardless of the order in which the attributes appear in a print request. These three groups are described below, listed in the order of their application:

- a) *number-up*: determines the number, scaling and placement of source page-images to make up a target page image. The **number-up** attribute may specify a simple number-up operation operation, or it may identify a predefined imposition function, which may be complex.
- b) *binding-edge-shift*: determines the amount to shift the target page image away from the binding edge, based on **plex** and **binding edge**.
- c) *page-image-shift*: determines the final amount to shift in the x and y direction without regard to **plex**.

##### 9.3.2.16.1 Number-up

This attribute specifies an imposition function to impose upon each surface of a selected medium to be imaged in a document. The operation can be specified either by supplying a number directly or by naming an imposition object which specifies some particular imposition function.