

# Errata for the PDF Reference, fifth edition, version 1.6

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## Chapter 3, "Syntax"

### Page 74

In the **ID** entry in Table 3.13, "Entries in the file trailer dictionary," insert the following after the first sentence:

The two strings should be direct objects and should be unencrypted.

### Page 95

Append the following to the bulleted paragraph regarding AES encryption:

Strings and streams encrypted with AES use a padding scheme that is described in RFC 2898, PKCS #5: Password-Based Cryptography Specification Version 2.0. For an original message length of  $M$ , the pad consists of  $16 - (M \bmod 16)$  bytes whose value is also  $16 - (M \bmod 16)$ . For example, a 9-byte message has a pad of 7 bytes, each with the value 0x07. The pad can be unambiguously removed to determine the original message length when decrypting. Note that the pad is present when  $M$  is evenly divisible by 16; it contains 16 bytes of 0x10.

### Page 95

In Algorithm 3.1, after step 2, append the following:

If using the AES algorithm, extend the encryption key an additional 4 bytes by adding the value "sAIT", which corresponds to the hexadecimal values 0x73, 0x41, 0x6C, 0x54. (This addition is done for backward compatibility and is not intended to provide additional security.)

### Page 101

In step 6 of Algorithm 3.2, replace "Revision 3 or greater" with "Revision 4 or greater."

### Page 132

Steps 2 and 3 refer to 2-character language and country codes. "Character" in this context means byte (as in ASCII character), not Unicode character.

## Chapter 5, "Fonts"

### Page 384

In Table 5.8, "Entries in a Type 1 font dictionary," amend the entries **FirstChar**, **LastChar**, **Widths**, **Font** and **FontDescriptor** with the following note:

**Note:** Beginning with PDF 1.5, the special treatment given to the standard 14 fonts is deprecated. All fonts used in a PDF document should be represented using a complete font descriptor. For backwards compatibility, viewer applications must still provide the special treatment identified for the standard 14 fonts.

## Chapter 7, "Transparency"

### Page 490

The document *PDF Blend Modes: Addendum* provides additional information about the blend modes for PDF transparency. That addendum is available in the PDF Technologies site accessible through [http://adobe.com/go/acrobat\\_developer](http://adobe.com/go/acrobat_developer).

## Chapter 8, "Interactive Features"

### Page 572

In Table 8.11, "Entries common to all annotation dictionaries," the description of the **A** entry applies only to the annotation types link, widget, and screen, and the **AA** entry applies only to the annotation types widget and screen.

### Page 589

In Table 8.21, "Additional entries specific to a free text annotation," add the following entries:

KEY	TYPE	VALUE
<b>BE</b>	dictionary	(Optional; PDF 1.6) A border effect dictionary used in conjunction with the border style dictionary specified by the <b>BS</b> entry.
<b>RD</b>	rectangle	(Optional; PDF 1.6) A set of four numbers describing the numerical differences between two rectangles: the <b>Rect</b> entry of the annotation and a rectangle contained within that rectangle. The inner rectangle is where the annotation's text should be displayed. Any border styles and/or border effects specified by <b>BS</b> and <b>BE</b> entries, respectively, are applied to the border of the inner rectangle.  The four numbers correspond to the differences in default user space between the left, top, right, and bottom coordinates of <b>Rect</b> and those of the inner rectangle, respectively. Each value must be greater than or equal to 0. The sum of the top and bottom differences must be less than the height of <b>Rect</b> , and the sum of the left and right differences must be less than the width of <b>Rect</b> .
<b>LE</b>	array	(Optional; PDF 1.6) An array of two names specifying the line ending styles to be used in drawing the annotation's border. The first and second elements of the array specify the line ending styles for the endpoints defined, respectively, by the first and second pairs of coordinates, (x1 , y1 ) and (x2 , y2), in the <b>L</b> array. Table 8.27 shows the possible values.  Default value: [ /None /None ].

### Page 601

In Table 8.33, "Additional entries specific to a movie annotation," add the following entry:

KEY	TYPE	VALUE
<b>T</b>	text string	(Optional) The title of the movie annotation. Movie actions (page 626) can use this title to reference the movie annotation.

**Page 613**

In Table 8.43, “Entries in the document catalog’s additional-actions dictionary,” change **DC** to **WC**.

**Page 659**

In Table 8.79, “Entries in a signature field seed value dictionary,” change the type of the **V** entry to real.

**Page 699**

In the paragraph before Section 8.7.3, replace the last sentence, which currently reads “PKCS#1 signatures are therefore recommended in all cases where the added capabilities of PKCS#7 are not required” with the following:

The implication is that PKCS#1 signatures may be preferred for their increased portability. In practice, however, the PKCS#7 format is widely supported and it is a reasonable action to standardize on PKCS#7.

## Bibliography

**Page 1062**

Insert the following document into the list of IETF RFCs:

RFC 2898, *PKCS #5: Password-Based Cryptography Specification Version 2.0*