



PDF Redaction: Addendum for the PDF Reference, sixth edition, version 1.7

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Introduction

Redaction is the process of removing data from a page. With printed pages, redaction involves blacking-out or cutting-out areas of the printed page. With electronic documents that use formats such as PDF, redaction involves removing (not just obscuring) content within a region.

Additions to the PDF Reference

This section describes content added to the PDF Reference.

- [8.4.5 Annotation Types](#) summarizes a new entry added to Table 8.20. This table starts on page 615.
- [Redaction Annotations](#) describes the new annotation type. It follows the description of the watermark annotation, which ends on page 647.
- [H.3 Implementation Notes](#) describes the implementation note mentioned in [Redaction Annotations](#). This note follows the heading 8.4.5, "Annotation Types" (Watermark Annotations) on page 1115.

8.4.5 Annotation Types

Table 8.20, Annotation types

ANNOTATION TYPE	DESCRIPTION	MARKUP?	DISCUSSED IN SECTION
Redact	(PDF 1.7) Redact annotation	Yes	"Redaction Annotations" on page 2

Redaction Annotations

A redaction annotation (PDF 1.7) identifies content that is intended to be removed from the document. The intent of redaction annotations is to enable the following process:

1. *Content identification.* A user applies redact annotations that specify the pieces or regions of content that should be removed. Up until the next step is performed, the user can see, move and redefine these annotations.
2. *Content removal.* The user instructs the viewer application to apply the redact annotations, after which the content in the area specified by the redact annotations is removed. In the removed content's place, some marking appears to indicate the area has been redacted. Also, the redact annotations are removed from the PDF document.

Redaction annotations provide a mechanism for the first step in the redaction process (content identification). This allows content to be marked for redaction in a non-destructive way, thus enabling a review process for evaluating potential redactions prior to removing the specified content.

Redaction annotations must provide enough information to be used in the second phase of the redaction process (content removal). This phase is application-specific and requires the viewer application to remove all content identified by the redaction annotation, as well as the annotation itself.

Viewer applications that support redaction annotations must provide a mechanism for applying content removal, and they must remove all traces of the specified content. For example, if a portion of an image is contained in a redaction region, that portion of the image data must be destroyed; it is insufficient to use clipping or image masks to hide that data. Such viewer applications must also be diligent in their consideration of all content that can exist in a PDF document, including XML Forms Architecture (XFA) content and Extensible Metadata Platform (XMP) content. (See implementation note [98](#).)

Table 1. Additional entries specific to a redaction annotation

KEY	TYPE	VALUE
Subtype	name	<i>(Required)</i> The type of annotation that this dictionary describes; must be Redact for a redaction annotation.
QuadPoints	array	<i>(Optional)</i> An array of 8 x n numbers specifying the coordinates of n quadrilaterals in default user space, as described in Table 8.26 for text markup annotations. If present, these quadrilaterals denote the content region that is intended to be removed. If this entry is not present, the Rect entry denotes the content region that is intended to be removed.
IC	array	<i>(Optional)</i> An array of three numbers in the range 0.0 to 1.0 specifying the components, in the DeviceRGB color space, of the interior color with which to fill the redacted region after the affected content has been removed. If this entry is absent, the interior of the redaction region is left transparent. This entry is ignored if the RO entry is present.
RO	stream	<i>(Optional)</i> A form XObject specifying the overlay appearance for this redaction annotation. After this redaction is applied and the affected content has been removed, the overlay appearance should be drawn such that its origin lines up with the lower-left corner of the annotation rectangle. This form XObject is not necessarily related to other annotation appearances, and may or may not be present in the AP dictionary. This entry takes precedence over the IC , OverlayText , DA , and Q entries.
OverlayText	text string	<i>(Optional)</i> A text string specifying the overlay text that should be drawn over the redacted region after the affected content has been removed. This entry is ignored if the RO entry is present.
Repeat	boolean	<i>(Optional)</i> If true , then the text specified by OverlayText should be repeated to fill the redacted region after the affected content has been removed. This entry is ignored if the RO entry is present. Default value: false .

KEY	TYPE	VALUE
DA	byte string	<i>(Required if OverlayText is present, ignored otherwise)</i> The appearance string to be used in formatting the overlay text when it is drawn after the affected content has been removed (see “Variable Text” on page 677). This entry is ignored if the RO entry is present.
Q	integer	<i>(Optional)</i> A code specifying the form of quadding (justification) to be used in laying out the overlay text: 0 Left-justified 1 Centered 2 Right-justified This entry is ignored if the RO entry is present. Default value: 0 (left-justified).

H.3 Implementation Notes

8.4.5, “Annotation Types” (Redaction Annotations)

98. Acrobat 8.0 does not allow users to apply redaction annotations to PDF documents containing XML Forms Architecture (XFA) content.