PostScript® Language 
Document Comment Extensions for Page Layout

Adobe Developer Support

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1 Introduction

This document describes new PostScript® language comments used for page layout. The comments are generated by the application for document structuring and image replacement, and by the print driver to provide job control comments in the PostScript file.

2 Document Structuring Comments

This section describes new comments used for document structuring. These comments are not yet official Document Structuring Convention (DSC) comments, and hence will be referred to as structuring comments, and not as DSC comments. They will be added to the next version of the specification, which is currently Adobe Technical Note #5001, *PostScript Language Document Structuring Conventions Specification, Version 3.0* (which is the same version in the *PostScript Language Reference Manual, Second Edition*). The new comments in this document conform to all conventions and rules specified by that specification.

```
%%CropBox:  { <llx> <lly> <urx> <ury> } | (atend)
<llx> ::= <real>(Lower left x coordinate)
<lly> ::= <real>(Lower left y coordinate)
<urx> ::= <real>(Upper right x coordinate)
<ury> ::= <real>(Upper right y coordinate)
```

%%CropBox: specifies, for all pages in the document, the size of the final trimmed page, or crop box, as shown in Figure 1. The crop box is the region enclosed by the crop marks, but not including the crop marks. %%CropBox: describes the union of all crop boxes in the document. (See %%BoundingBox: in the DSC 3.0 specification for an illustration of box union.) The %%CropBox: comment tells an imposition program where on the physical page a document should be positioned. It also gives post-processing applications the information they need to bleed an image off the edge of the final trimmed page. The %%Cropbox comment must not have an empty argument list.
Figure 1  Definition of \texttt{%%CropBox}: and related bounding boxes

For the example shown in Figure 1, the crop box would be represented by:

\texttt{%%CropBox}: 20.0 25.0 580.0 770.0

The following comments could also be used to describe related aspects of this example:

\texttt{%%DocumentMedia}: PlainLetter 612 792 75 white ( )
\texttt{%%BoundingBox}: 15 20 586 776
\texttt{%%HiResBoundingBox}: 15.2 20.15 585.3 775.7

\textbf{Location}: Header

\textbf{See Also}: \texttt{%%PageCropBox}, \texttt{%%BoundingBox}, and \texttt{%%DocumentMedia}: in the DSC 3.0 specification, and \texttt{%%HiResBoundingBox}: in this document.
%%HiResBoundingBox:  { <llx> <lly> <urx> <ury> } | (atend)
<llx> ::= <real>(Lower left x coordinate)
<lly>  ::= <real>(Lower left y coordinate)
<urx> ::= <real>(Upper right x coordinate)
<ury> ::= <real>(Upper right y coordinate)

Similar to the %BoundingBox: comment, %HiResBoundingBox: specifies the bounding box that encloses all marks painted on all pages of a document. The four arguments correspond to the lower left (llx, lly) and upper right corners (urx, ury) of the bounding box in the default user coordinate system (PostScript units). %HiResBoundingBox differs from %BoundingBox: by taking as its arguments real numbers rather than integers. Using real numbers provides a more precise definition of the bounding box. The %HiResBoundingBox comment must not have an empty argument list.

Note  Because %HiResBoundingBox: is a new comment that is not in the current DSC 3.0 specification, DSC producers that use it should also continue to include the %BoundingBox: comment for use by the applications that rely on it. Note that %BoundingBox: is required in EPS files even if %HiResBoundingBox: is present.

Location: Header

See Also: %PageHiResBoundingBox: and %BoundingBox: in the DSC 3.0 specification, and %CropBox: in this document.

%%PlateColor:  <colorant> | (atend)
<colorant> ::= Cyan | Magenta | Yellow | Black | Other | Custom <name> | <name>
<name> ::= <textline>

This comment identifies a page in a PostScript language file as being preseparated and defines the plate colorant (i.e. ink) represented by the current separation of that page. A colorant name can consist of multiple words. For example:

%%PlateColor: PANTONE 635 CV

Any color listed by %PlateColor: must also be listed in the appropriate %DocumentProcessColors: or %DocumentCustomColors: comment in the outermost context of the document.
The four process colors are Cyan, Magenta, Yellow, and Black. The preferred method of specifying a non-process color is to simply use the name of the color. The arguments Other and Custom are older methods of specifying non-process colors, and their use is discouraged.

Note: The process color Other is used by QuarkXPress 3.1 and earlier. Custom is used by PageMaker® 5.0 software. PageMaker 6.0 software and QuarkXPress 3.11, as well as more recent versions of both products, use just name for non-process colors. Adobe® PostScript® Extreme™ does not support either Other or Custom.

Location: Page Header

Also Required: %%Page:, plus either %%DocumentProcessColors:
or %%DocumentCustomColors:

Recommended: %%%EndPageComments

3 Image Replacement Comments

This section describes new image replacement comments which have been added to better support object replacement using EPS or PDF images. The new image replacement comments described below are not yet official Open Prepress Interchange (OPI) comments. In this document they will be referred to as image replacement comments rather than as OPI comments. They will be added to the next version of the specification, which currently is Open Prepress Interface (OPI) Specification, Version 2.0. Also, version 2.0 is currently in draft form, but is expected to be published shortly. The image replacement comments conform to all conventions and rules specified by that specification.

%%%OPIGraphicType: IMAGE | EPSF | PDF

Specifies the type of graphic file that was imported into the original application document file, and which has been replaced or encapsulated by this OPI 2.0 context. This comment should appear before the %%OPIPage: comment and preferably immediately after the %%BeginOPI: 2.0 coment.

%%%OPIPage: <pagenumber>

<pagenumber> ::= <uint> (page number of the graphic)

%%%OPIPage: specifies the page within a multi-page (for example, PDF) file that should be used as the replacement image. This comment may appear anywhere between %%BeginOPI: 2.0 and %%%BeginIncludedImage.
4 Driver Job Control Comments

This section describes new job control comments produced by the AdobePS™ driver for Windows® 4.X.

Page layout applications typically create page content and certain job control feature PostScript code and comments, and the driver creates certain other job control feature PostScript code and comments. Specifically, the AdobePS 4.X printer driver for Windows supports some new job control comments that heretofore have not been documented in any Adobe specifications or technical notes. Those comments are generated only by the Windows 4.X driver for Windows 9X; they are not produced by the Windows NT® or the Macintosh print driver.

The new job control comments are generally device-specific and reflect printer capabilities and, in some cases, user choices. As such, they are beyond the scope of this document.

The following is a partial list of the job control comments that might be encountered in the PostScript file:

%%DocumentSuppliedFeatures:
%%PageFeatures:
%%EndPageComments
%%TargetDevice:
%%+jRandom6-32
%%TrailerLength:

5 Application Comment Delimiters

New or recently updated versions of Adobe applications may create another class of structuring comments. Their purpose is to help DSC consumers distinguish between comments that the driver writes and those duplicate comments written by the application. They are only used when printing, not when exporting to EPS or ‘For Prepress’ files.
Any document structuring comments included between one of the Begin/End pairs (see below) are there because they contain more accurate information than the same comments created by the print driver. Comments related to color or font usage are typical examples.

The delimiting comments consist of the following:

%ADO_BeginApplicationHeaderComments
%ADO_EndApplicationHeaderComments

%ADO_BeginApplicationTrailerComments
%ADO_EndApplicationTrailerComments

%ADO_BeginApplicationPageHeaderComments
%ADO_EndApplicationPageHeaderComments

%ADO_BeginApplicationPageTrailerComments
%ADO_EndApplicationPageTrailerComments

Note that these comments begin with ‘%ADO_’, not ‘%%’, because their purpose is to give post-processors a way to work around some of the problems associated with synchronizing driver comments to be fully DSC compliant. It is hoped that these delimiting comments will not be necessary in future releases of the software.