

eText PDF Guidelines

**Presented by:
Content Management Services**

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Revision Sheet

Release No.	Date	Revision Description
Rev. 0	31 Oct 2008	Original (Erik Unhjem)
Rev. 1	30 Nov 2008	Updated to include bounding box/trim size requirement
Rev. 2	20 Jan 2009	Updated to emphasize removal of InDesign transparency, additional layers and to include low-resolution requirements
Rev. 3	20 Feb 2009	Updated to reflect modifications from discussions with CG production teams.
Rev. 4	1 Mar 2009	Adapted for use with both Higher Ed and Curriculum Group titles
Rev. 5	17 Mar 2009	Modified to emphasize the need for generating PDFs as v1.3
Rev. 6	15 May 2009	Modified to update to PDF 1.4 and recommend export as PDF from InDesign
Rev. 7	26 May 2009	Updated to recommendation for consistent page size
Rev. 8	23 Feb 2010	Updated to remove flattening requirement
Rev. 9	10 Jun 2010	Updated to preserve transparency
Rev. 10	2 Feb 2011	Updated to include ownership and revision information, no password protection, iPad processing
Rev. 11	19 Jul 2011	Updated to explicitly exclude DeviceN spot colors.
Rev. 12	11 Nov 2011	Updated to specify 1024 pixel maximum trim box size

Contacts

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Introduction

These eText PDF Guidelines provide standards and best practices for the high-resolution printer PDFs that will be used for eText ingestion.

Responsibility for maintaining this eText PDF guidelines document lies with Content Management Services. As updates become necessary, Content Management Services will consult with other Pearson, such as Higher Ed Production, CG Technical Production Services and Pearson vendors, as appropriate.

When questions arise about details of these eText PDF guidelines, whether from inside or outside of Pearson, they should be forwarded to Erik Unhjem, of Content Management Services, who will coordinate efforts to update the specification, if necessary, with appropriate parties.

Whenever the eText PDF specifications are updated, Erik Unhjem will post the document to the Content Management Services site for North America, and an appropriate distribution list will be alerted.

If this document is referenced on other Pearson sites, a link to the Content Management Services site at <http://cmsna.pearson.com/etext> should be included. Because these are evolving guidelines, copies of this document should not be made or stored on other internal Pearson sites. The document can be copied and sent to vendors, but Pearson staff must refer to the CMS site at the outset of a project, to ensure they are using the latest version of the specifications.

High-Resolution eText PDF Guidelines

General

During ingestion, high-resolution printer PDFs are transformed into high-resolution zoomable Shockwave Flash (SWF) files that are that are incorporated into the Flex-based eText viewed with a browser and a computer that support Adobe's Shockwave. The same hi-resolution printer PDFs are also processed to generate a set of highly-optimized, low-resolution single-page PDFs that will be used with the Pearson iPad eText app.

The hi-resolution printer PDFs are uploaded to the Content Manager FTP server (see eText File Submission Guidelines

http://cmsna.pearson.com/groups/etext/wiki/afeb4/Production_Higher_Ed_Production_of_Your_Title.html or

http://cmsna.pearson.com/groups/etext/wiki/11f1e/Production_CG_Guidelines.html, as appropriate).

- PDFs should be created in v1.4 format, although good results have been obtained with PDF 1.5. The eText ingestion process does not currently support PDF 1.6, but that version should be supported with Release 4.5, scheduled for December 2011.
- If using Adobe InDesign, PDFs should be created through the Export as PDF feature instead of generating Postscript (for subsequent processing with Distiller or an equivalent). Exporting as PDF has been shown to dramatically improve screen rendition of the transformed SWF.

eText PDF Guidelines

- PDFs can be cropped or uncropped, but they should be consistent, with a consistent page size for the entire eText. Inconsistent page sizes may result in problems particularly when the eText is viewed with two-page display.
- Uncropped PDFs must include a trim box, which is used to determine final page size in the transformed SWFs for the Flex-based eText Viewer and the PDFs used with the Pearson iPad eText app. Without a correctly set trim box, crop marks in uncropped PDFs will show in the transformed pages.
- If an iPad view will be produced, the PDF trim box MUST NOT EXCEED 1024 pixels in either dimension.
- Use logical page numbers wherever possible, but those logical page numbers must not include anything other than numbers, letters and/or underscores (“_”), hyphens (“-“), or periods (“.”)
- Remove any stray points, hidden layers and/or any objects that should not be rendered, including any “off page” elements.
- File size for any single page must be less than 30 MB, and multi-page PDFs must be less than 300 MB and not have any single pages within that exceed the 30 MB per-page limitation. If either maximum is exceeded, ingestion will fail.
- Acrobat’s optimization feature should be used to reduce file size, but transparency should be preserved during optimization. Optimization typically reduces file size by as much as 90%, dramatically reducing uploading and ingestion processing time, as well as server storage space requirements.

Security

- PDFs must not be password protected. Any security must be removed prior to uploading.

Color

- Use only CMYK process color for color books and grayscale for 1-color books.
- Pantone-specified or other spot colors such as DeviceN colors that have not been converted to CMYK do not render properly and should be avoided.
- The eText ingestion system is unable to selectively recognize some colors and not others, so if a color is visible, it will be rendered. This is especially important when instructor annotations have been included in the PDF, or when state-specific colors are used. Therefore, only a single state-specific color should be included and visible in a PDF intended for eText ingestion.
- There eText ingestion system is not able to substitute colors, such as replacing Process Cyan, when it’s used to indicate a second color, with the desired color. PDFs must display correct CMYK colors when uploaded for ingestion, because what you see is what you will get when the page is rendered.

Fonts

- Embed a subset of all fonts that are used, as needed.
- Use Adobe Type 1 fonts or Open Type fonts only. Composite or CID fonts may cause problems and should not be used.
- Font family should include all styles used in the PDF.
- Do not assign font attributes such as bold, italic, underline, etc., within page composition application, such as Quark or InDesign.

Art, including vector graphics and raster images

- Intense vector graphics, especially those with graduated or radial fills, should be avoided. Each vector object in an art element will be transformed into an individual SWF object, resulting in a very large file, a slow download and a poor user experience. The highly-optimized, low-resolution single-page PDFs that are generated by the eText Content Manager during ingestion for use with the Pearson iPad eText app must be 2 MB or less after processing, and intense vector graphics often result in iPad PDFs that are bigger than the maximum 2 MB permitted.
- Vector-based graduated fills for banner or subhead artwork should be avoided because those fills often do not render correctly, leaving gaps between the strokes in the transformed SWFs.
- Strokes and rules should have a minimum weight of 1.0 pt.
- Color and grayscale raster images should have a maximum resolution of 300 dpi and a minimum resolution of 266 dpi.
- Bitmapped images should have at least 800 dpi resolution and should be saved as a grayscale image. One-bit (black/white) bitmapped images should be avoided because they do not render well.
- Shadow effects within InDesign should be avoided.

Transparency (for InDesign composition)

- Wherever possible, transparency should be preserved, because this will help prevent the “trace” or “ghost” lines often seen with when the PDF is flattened.
- Place objects above all sources of transparency, on a separate layer.
- If flattening is necessary, use the highest-quality flattener settings.

Low-Resolution eText Reference PDFs

A set of low-resolution reference PDFs for QA can now be automatically generated during the eText ingestion process and is no longer a file submission requirement.