# Submitting Digital Files to Quad



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# Introduction to Imaging Workflows

# ALL-DIGITAL WORKFLOWS

Welcome to Quad, the industry leader in the development of all-digital workflows. In 1998 Quad was the first web offset printer to embrace a 100-percent digital computer-to-plate workflow for imaging plates.

This manual provides the information necessary to submit digital files for our prepress workflows. We offer three basic categories of digital workflows based on file type

# 1. Plateready file workflow

All plateready files undergo a standard preparation process we refer to as "Handle & Prepare." See chapter 2 & 3, "Quad's Handle & Prepare Process for All Jobs" and "Quad's Optimization Processes," for more information.

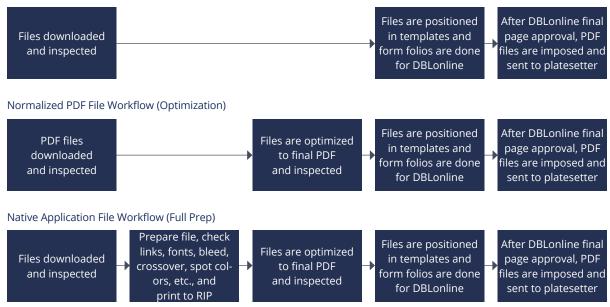
# 2. Normalized PDF workflows

All submitted PostScript and normalized PDF files undergo our optimization process to create streamlined PDF files compatible with any prepress workflow and output device. These files also undergo our standard "Handle & Prepare" process. See chapter 2 & 3, "Quad's Handle & Prepare Process for All Jobs" and "Quad's Optimization Processes," for more information.

# 3. Workflows for native application files

Imaging provides full prep prepress services for clients submitting QuarkXPress and Adobe InDesign files, including conversions, digital page assembly, retouching, color manipulation, silhouetting and special effects, and proofing. These files undergo our "Handle & Prepare" process and our optimization process. For more information, please see chapter 2 & 3, "Quad's Handle & Prepare Process for All Jobs" and "Quad's Optimization Processes," for more information. See "Guidelines for Preparing Digital Files for Quad" in chapter 4.

# The diagram below shows the basic differences in digital workflows based on supplied file types







# Quad's Handle & Prepare Process for All Jobs

# PREPARING PAGE FILES FOR PRINTING

All incoming page files, including plate ready files, undergo prepress production steps that we call "Handle & Prepare."

Quad is committed to meeting or exceeding the level of quality that is present through our whole Handle & Prepare process. Creation of SOP's, daily continuous improvement meetings, and root cause analysis are all tools that allow for consistency of product and process across our global platform

#### HANDLE & PREPARE STEPS

- 1. Receive the page files digitally via FTP, SIP Portal, Kodak Insite, email or third party file transfer sites.
- 2. Download the files onto a network server.
- Impose files in a single-page template. This creates a digital reader PDF for DBLonline, and separated preview files.
- 5. Inspect ripped preview files.
- 6. Association/Pagination are made on DBL Online for final approvals. (i.e., associating file names to the imposition number or utilizing supplied Pagination/File Grid).
- 7. Files are released to platemaking after final page approval on DBLonline.

# Quad's Optimization Process

Our all-digital workflows are based on optimized PDF files. All non-plateready files from clients, including "normalized" PDF files often considered as plateready, undergo an "optimization" conversion to create streamlined PDF files that are compatible with any prepress workflow and output device. In addition to normalized PDF files, imaging will optimize PostScript files and current versions of QuarkXPress and Adobe InDesign.

The Quad optimization process converts incoming files into industry-standard PDF/X-1a files, which will process efficiently through any workflow system with maximum security and reliability. Optimization allows our prepress specialists to adjust the PDF file for any output requirement. Our optimization process is a critical step to ensure the files move efficiently through our workflows and print correctly on press.

Quad cannot guarantee the accuracy, integrity, and stability of page files unless they undergo our optimization process.

# NORMALIZATION

Most digital prepress vendors use a traditional digital workflow in which incoming data files, including PDF files, are normalized, which means they are converted into standard PDF files for further processing in a dedicated RIP or workflow. Many normalized PDF files are NOT plateready and cannot be printed without problems. The bottom line is that an incorrect page reproduced during a press run could result in a great financial burden.

# QUAD OPTIMIZATION

During optimization, incoming files are pre-flighted to check for common errors. Our verification software confirms that the file includes all necessary elements and instructions. The file is then "optimized," removing layers, flattening transparencies, down-sampling images, setting overprints and creating traps based on content or print platform.

The instructions contained in each Quad-optimized PDF file support consistent and reliable file output with any workflow.

The ONLY exceptions to our optimization process are what we consider plateready files. This includes PDF/X-1a and PDF/X-4 files exported using our downloadable settings and then processed with one of these certified rips: DALIM TWIST, Kodak Prinergy and Esko Automation Engine. ALL other PDF files (such as those exported from InDesign and QuarkXPress) are required to undergo our optimization process. All incoming files, including plateready files, also go through our standard "Handle & Prepare" process before platemaking.

Download instructions and importable output presets at: http://www.quad.com/prepress-tools/



# Guidelines for Preparing Digital Files for Quad

Quad is a Global leading prepress provider, and is capable of processing many different digital file types.

#### SUBMITTING PDF FILES

A PDF 1.3 PDFX-1A, which is optimized or created using DALIM TWIST, Kodak Prinergy, or Esko Automation Engine, is the preferred file format for both Offset and Gravure printing.

A PDF 1.6 PDF/X-4 is the preferred file type if sending files for Print and Multi Media. They should be built only with CMYK , and no layers

PDF files created with a RIP other than DALIM TWIST, Kodak Prinergy, or Esko Automation Engine, must go through our Optimization process.

If a PDF 1.4 and above is created, transparency remains live, and it needs to be flattened by the RIP during our Optimization process.

If you supply a flattened proof but an unflattened PDF file of the page or ad, then the flattener that created the proof must perfectly match our flattener or there may be different output results.

#### PDF/X-1a for Print-Only Clients

Print-only clients should submit flattened PDF/X-1a files.

Download instructions and importable presets: InDesign CC, CS6, CS5 & CS4 Export to PDF/X-1a

QuarkXPress 2016, 2015, 10, 9, & 8 Export to PDF/X-1a

#### PDF/X-4 for Print / Multi-Media Clients

If you are supplying PDFs for print and multi-media, PDF/X-4 is required. Our settings differ from the standard in that they do not allow layers and require only CMYK color space for images.

Download instructions and importable presets: InDesign CC, CS6 & CS5.5 Export to PDF/X-4

QuarkXPress 2016, 2015, 10, 9, & 8 Export to PDF with Live Transparency

#### All PDF files MUST have:

- $\cdot$  All fonts embedded
- Page geometry defined and consistent (trim, bleed, and media/art boxes)
- Correct color space for all elements (CMYK, named spot color, grayscale)
- Spot colors named consistently with alternative color as CMYK

- If your Spot color has a second hit "BUMP" separation it must be named as such: Pantone name[space]
  BUMP (all caps). Example: PANTONE 804 C BUMP
- Color and Grayscale image resolution between 225 and 300 ppi
- · Bitmap image resolution between 600 and 1200 dpi

#### PDF files CANNOT have:

- RGB, LAB, ICC-based color
- Form fields
- Interactive elements such as movies, sounds, buttons, hyperlinks and annotations.
- OPI comments
- Layers
- Transfer functions
- Actions and Javascript
- Security settings or Encryption
- Spot/PMS colors(unless intended to print)

# INDESIGN, QUARK AND ACROBAT PDF'S PDFs exported from InDesign and QuarkXPress are not plate-ready files. These and other normalized

PDF files and PostScript files are accepted, but also must undergo our optimization and Handle & Prepare processes to create plateready files (see chapters 2 & 3).

Download instructions and importable output presets at: (http://www.quad.com/prepress-tools/)

14-0050 QG CM TechSpec\_Submitting Digital Files\_2020.pdf

#### NATIVE PAGE FILE APPLICATIONS

Quad accepts native Macintosh and PC page files created using the most current released versions of Adobe InDesign and QuarkXPress. Native InDesign pages and QuarkXPress are processed in a traditional prepress workflow. Proofs are then forwarded to the client for approval.



#### Page construction guidelines

- PDFs should be created as single pages, built to trim size.
- If supplying spreads, they should be set up as Reader Spreads (Facing Pages in Native applications).
- Elements that bleed off the page must be extended 1/8" over the edge of the page on all three outer edges.
- If using any Printer Marks, placement should be at least an 1/8" beyond Final Trim.
- The correct Live Image or Type Safety should be set up based on how its printing. Contact your CAM or Sales for proper settings.
- In constructing pages that will have versions, contact your ISR for specifications for options on how to best build and supply these files.
- InDesign and QuarkXPress offer built-in options for clipping paths. Special care should be taken to ensure that the desired embedded path (from Photoshop) is selected and active.
- OPI workflows used within InDesign's and Quark's transparency functions may require special consideration. Contact your Quad ISR for testing prior to submitting final files.
- All Photoshop images should be 300 dpi (or double the line screen) and either CMYK or grayscale. Black and white line art should be in bitmap, .psd or TIFF format.
- If using a spot colors (PMS). They should be named exactly the same in all page files and linked image files.
- For variable text, please colorize in a custom spot color named "Variable." Make this spot color 100C, 0M, 100Y, 0K.

#### **TEXT & LINEWORK**

- Avoid 100% four color type (This would equate to 400% total density which is non compliant)
- Any text or rules that are 4/c can result in bad registration and color variation throughout the run.
- Thin lines, fine serifs and lightweight or very small type should be restricted to one color. Reproduce all colored type with a minimum of colors.
- Reverse type and line art should not be less than 7 point or 1/2 point rules. Reverse type should use dominant color (usually 70 percent or more) for the shape of letters. Where practical, and not detrimental to the appearance of the job, make the type in subordinate colors slightly larger to minimize register problems on the production press. Small type and fine serifs should not be used for reverse type. The surrounding tone must be dark enough to ensure legibility.

- Overprinted (surprinted) type should not be less than .004" (1/3 point rule) at the thinnest part of a character or rule. When type is to be overprinted, the background should be no heavier than 30 percent in any one color and no more than 90 percent total in all four colors for legibility.
  - Trapping and overprinting may require special consideration. Based on various factors, Quad uses process settings which automatically overprint only occurrences of 100% K. If you want a black object to knockout, create a color that includes at least 1% CM & Y along with 100% K.
- Use InDesign's "Package" and QuarkXPress's "Collect for Output" feature when preparing files for output. These assist in gathering corresponding art, image files and fonts needed for processing.

#### LAYER ORDERING

- Depending on the design complexity of your pages and whether you work in a high-res or low-res workflow, a layering strategy can help you and Quad/Imaging work more efficiently and yield the most consistent results.
- In general, all body text should be placed on the topmost layer of the page's stacking order or on its own layer using the Layer Palette.
- Using the Layers Palette, a specific solution for a more complex page may be similar to this example:
- 1st Layer: Folio versions (topmost)
- · 2nd Layer: Tag info such as directions
- 3rd Layer: Body text
- 4th Layer: Variable text
- 5th Layer: Images and Art
- 6th Layer: Rules and Lines
- 7th Layer: Tints, Backgrounds and Shadows (bottom)

# GUIDELINES SPECIFIC TO VECTOR ART PROGRAMS

• Do not supply final page files as Adobe Illustrator. Instead, place the CMYK .ai or .eps file into InDesign or Quark.

# GUIDELINES SPECIFIC TO GRAVURE PRINTING

 A dot smaller than five percent cannot be reproduced on press consistently and will result in a salt-and-pepper pattern.



# 5. Everything Else You Need to Know About Submitting Files

# GUIDELINES SPECIFIC TO DIE CUTS, SPOT UV & TEXTURIZED SPOT UV

- Contact your ISR or CAM. The Die Line ordering process is a 10-business day requirement before earliest press start.
- The shape needs to be built as a vectored artwork; preferably created in Adobe Illustrator.
- The **DIE CUT** shape should be built as a 1pt stroke and should be colored 100% process black.
- The **SPOT UV** shape should be a 100% Spot color and named SPOTUV.

# FONTS

For font related questions, please reach out to your Quad Imaging Service Representive.

# PANTONE COLORS

The Pantone® Process Guide Coated SWOP tint book should not be used for accurate representation of web offset printing when using anything less than a #3 sheet. The Pantone Process Guide book itself is printed on a #1 sheet @ 175 linescreen. Physical and optical gains and trap values are visibly different on proof and press

# TOTAL AREA COVERAGE BASED ON PAPER STOCK

The basis weight should based off the proper paper stock that is printing on press. See References below

**Uncoated and newsprint stocks:** 240 percent total area coverage maximum.

- Supercalendered stock: 260 percent maximum.
- · Lightweight coated stock: 280-300 percent maximum.
- Heavier coated stock (50lb. and above): SWOP requires a maximum of 300 percent and 325 percent for small image areas carrying no significant detail.

NOTE: If images will be reproduced by both Offset and Gravure, then they should adhere to SWOP, which is 300 percent.

For more info on color and Inc coverages, see https:// services.idealliance.org/ItemDetail?iProductCode=PRTGUID E\_20.03D&Category=DOWNLOAD&WebsiteKey=da18dc52-54ea-4f5c-9e16-c24969f7c24c

# SUBMITTING TRANSPARENCIES, ARTWORK, DIGITAL IMAGES

If you are submitting digital images or artwork/ transparencies for scanning, please provide the following information on **each** image.

- The scan name should be no more than 10 characters. If you plan to archive images, it may be helpful to use a unique naming convention. Your Quad ISR can provide more information about naming conventions.
- If an image needs to be silhouetted, please indicate "SILO" on the laser proof and/or transparency.
- If an image or artwork requires special effects, such as drop shadows, please indicate it on the laser proof and/ or transparency.

# PREPARING DIGITAL PHOTOGRAPHY IMAGES

Please see "How To Create and Supply Digital Images" at: (http://www.quad.com/prepress-tools/)

Important Note: Digital photographers who have not yet worked with Quad should submit test files at least 30 days before production begins. We will use the test files to:

- Check color and sharpness
- Ensure that we receive workable files
- Verify the RGB to CMYK conversion



#### NETWORK OPTIONS AND FILE TRANSFERS

Quad maintains a wide variety of network and connectivity options for our clients. Transmitting digital page files to Imaging via the Internet or a Wide Area Network connection saves time and supports late content changes. Contact your ISR to set up – this requires 48 hours lead time.

# Quad/Disk

Our Quad/Disk file transfer Smartool enables you to send and receive low-res or high-res files with ease on either a Mac or PC. Using Quad/Disk

In order that file transfer methods are completely understood, please discuss file transfers with your Customer Service Representative or Salesperson before production begins. We want to be clear on the file transfer method to be used, which Imaging facility will receive the data, etc.

NOTE: Internet-based client Smartools require clients to have an Internet connection of at least 768K.

#### Network options

**Internet:** Quad maintains highspeed ethernet lines to the Internet for FTP or Quad/Disk transfers, and client Smartool access. Quad/Disk is an AFP share accessible through the Internet. NOTE: Connection speeds on the Internet can vary.

#### Non-network file transfer

Third party sites- We are able to receive files from non Quad housed FTP sites. For Ex. WeTransfer, DropBox

**PDF Manager/SIP Portal**, is a tool that allows a customer to simply and much faster upload of the PDF's to Quad. In the process, it automatically preflights(based on agreed upon parameters) and then delivers the files to your Quad Prepress team. This is accessible through the customer home page:

https://connect.qg.com/Dashboard/

If it is not accessible, please contact your Sales person or your CAM to get it set up.

#### FLIP BOOKS

All pages need to be supplied rotated with the correct orientation as to how the supplier wants them to print.

#### NAMING CONVENTIONS

Name each file in a consistent format with no illegal characters to clearly identify: page/folio, issue date, and version information.

Ex: "Folio\_Issue Date\_Version"- Preferred method for Retail "Folio\_Version\_Issue Date"- Preferred method for Mag/Cat

Covers for Mag/Cat should be named like below;

CV1 = Front Cover CV2 = Inside Front Cover CV3 = Inside Back Cover CV4 = Back Cover

Versions;

CV1N = Cover 1 - Newstand

CV1S = Cover 1 - Subscriber

If the intent is to print with a Spot/PMS, you must name your files with an \_PMS on the end of the file name. Ex." 01\_090120\_PMS"

#### CONTACT US

If you have concerns about any of these guidelines, please contact your Imaging Service Representative. This will prevent delays and additional costs.

These guidelines do not take into account the many special situations that can occur with today's high-tech prepress production processes. We pride ourselves on our flexibility and customer responsiveness, so if you require special arrangements or procedures in order to submit your files, please contact your Imaging Service Representative or your Imaging Sales Representative.



