Render section of the CTLW Karat Output process template

The **Render** section of the CTLW Karat output process template determines the output resolution and how Prinergy handles spot colors during CT/LW output to a Karat digital press.

JTP

Select the **CTLW Output** job ticket processor (JTP) to use for rendering. **Note:** You set up JTPs in Prinergy Administrator.

Device Resolutions

This list is available when an output device format is selected in the **Output To** list. Select a resolution for the selected device in the list.

Resolution X

Select 2400 dpi or 2540 dpi.

Resolution Y

Select 2400 dpi or 2540 dpi.

Color Model

Select the process color model to use for output. The list of values varies, depending on the output format selected in the **Output To** list.

Shades

To set the number of shades of gray to output, select **1** for screened data or **256** for continuous tone data. When **1** is selected, the **Calibration & Screening** section of the refine process template is available for input.

The list of values varies, depending on the output format selected in the **Output To** list and the color model selected in the **Color Model** list.

Do Separations

Available when the output format selected in the **Output To** list supports separated output and **DeviceCMYK** is selected in the **Color Model** options.

Select if you want Prinergy to output separations. Clear this check box if you want Prinergy to output a single composite file.

Spot Color Handling

The options in this list determine how to handle spot colors on loose page output. The list of values varies, depending on the output format selected in the **Output To** list.

Select Convert to process to convert spot colors to process colors.
 Note: When Convert to process is selected, Vector Overprint Handling (in the

ColorConvert section) is automatically turned on to ensure the correct appearance of any overprinting spot colors.

- Select **Output separately** to preserve spot colors on output.
- Select **Don't output** to suppress output of spot colors.

Always Use Color Combiner to Convert Spots

This check box is available when **Output Separations Handling** is set to **Convert separations to process**.

If the input files contain overprinted spot colors, the Color Combiner, which is a plug-in to the renderer, will combine the layers and output the overprinted colors correctly. When this check box is cleared, the renderer handles the conversion of spot colors to process colors if the following conditions exist:

- Input files are composite.
- All spot colors are set to opaque in the color database. (If a spot color is not in the color database, opaque is assumed.)

If the above conditions are not met, the Color Combiner will be used, even if the **Always Use Color Combiner to Convert Spots** check box is cleared.

Always select this check box.

See About Color Combiner.

Dielines Overprint Other Content

This check box is cleared and unavailable if the **Do Separations** check box is cleared and unavailable.

Select this check box to specify whether die lines overprint other content. Clear this check box if you do not want die lines to overprint other content.

The **Dielines Overprint Other Content** check box is available for the following outputs:

- DCS Raster
- $^{\rm O}$ Kodak Approval TIFF
- LQS TIFF
- VPS
- Windows Bitmap

Anti-Aliasing

Select this check box to enable anti-aliasing, and then in the **at Ratio** list, specify a ratio for anti-aliasing.

Anti-aliasing is a technique of improving the appearance of output by minimizing the "stair step" effect on rasterized output. It does so by rendering to a higher resolution than the intended output, and then downsampling to the intended output. This generates "averaged" pixels which softens the "stair step" effect on low-resolution output. The ratio value for antialiasing refers to the factor used to determine the intermediate resolution. A higher ratio results in higher quality, but can have an effect on output speed. For example, if the output is a 300 DPI 8-bit TIFF, and the anti-alias ratio is 4, Prinergy will render an intermediate output at 1200 DPI (4 x 300 DPI), and then downsample to the user-requested 300 DPI. Anti-aliasing is only available for 8-bit (256 shade) output.

Fail if font problems detected

Select this check box to fail the output process if a file has missing fonts. **Note:** This feature is not available for vector outputs (PDF, PS2, PS3, EPS, DCS Vector, PDF /X-1a, PDF/X-3, CT/LW, and DELTA).

Ignore Embedded Fonts in Marks Files

Select this check box if you want Prinergy to ignore embedded fonts in a marks file and to look for the fonts in the system fonts folder.

Important: You must install the fonts in %ServerName%%AraxiHome% \AdobeExtreme\bin\fonts, or the output will fail.

Convert Text to Paths

This check box converts fonts to outlines before a file is RIPed.

This option was added in Prinergy 3.0 when the CPSI 3016 RIP was included with Prinergy. This option helped situations where the 3016 RIP failed to process the fonts on certain jobs. This option has limited usefulness now, but is included as a potential workaround in rare cases where fonts are not rendered correctly by the RIP. It is not recommended that you enable this on on a permanent basis. When using this option for specific jobs, it is recommended that you ensure that both proofs and plates are output with this option.

Note that when you select the **Convert Text to Paths** check box, you will have text appear fatter on low-resolution proof output. You can overcome this appearance problem by either:

- Rendering to a higher resolution, if rendering to 1-bit output, such as Virtual Proofing System
- $^{\circ}~$ Using anti-aliasing, if rendering to contone output

Note: This check box is only available for raster output formats (.VPS, .TIFF, and so on).

Overlay Versioned Content

This check box applies to Layered PDF Versioning. For information, see the *Versioning* chapter in this guide.

Versioning Proof Mapping Color

This box applies to Layered PDF Versioning. For information, see the *Versioning* chapter in this guide.

Kodak Approval

Densities

Type an integer between -22 and +22. For more information, see your Approval documentation.

CT/LW

CT Resolution

Type a resolution value in dots per inch (dpi) for the continuous tone (CW) files created during refine.

Note: 304.8 dpi = 12 dpm

LW Resolution

Type a resolution value in dots per inch (dpi) for the line work (LW) files created during refine.

Note: 2032.0 dpi = 80 dpm

Border Handling

Select the resolution at which the borders of overlapping images should be rendered:

- Borders to CT: Render borders at the resolution specified in the CT Resolution box. If two images overlap, the transition from one continuous tone (CT) image to the next may appear jagged.
- Borders to LW: Render borders at the resolution specified in the LW Resolution box. This improves the resolution of the overlap area but increases processing time and size of the output file.
- Borders to Smart Edge: Improves the appearance of CT-to-CT borders and ensures that the number of line work (LW) colors is not increased.

Output Kind

Select the format to which you want to output. You can output:

- CT/LW Job Only
- TIFF/IT Job Only
- CT/LW and TIFF/IT Jobs
- CTAndLW
- AllToCT

Force Vignette to CT

Select to convert gradations to the continuous tone (CT) layer and to convert gradations created as PostScript Level 2 to PostScript 3 (to obtain high-quality gradations when converted to CT data).

Converting to CT results in less banding and better quality images than converting to line work (LW). Converting to CT also adds noise to the resulting CT layers, creating a smoother image.

Note: If you clear this check box, some vignettes are still converted to CT data—for example, PostScript Level 2 gradations.

Force LW Vignette to CT

Select to convert the vignettes (gradations and blends) that AVR (Automatic Vignette Recognition) identifies to the continuous tone (CT) layer.

AVR recognizes a vignette as an image with a color difference (C, M, Y, or K) of 6% or less.

An output file in which blends are converted to CT is smaller than an output file in which blends are converted to line work (LW).

Screen Grabs

Select the resolution at which you want screen captures to be rendered:

- Grabs to CT: Renders screen captures at the resolution specified in the CT Resolution box.
- Grabs to LW: Renders screen captures at the resolution specified in the LW Resolution box.

СТ Туре

Select the CT (continuous tone) type that you want to output:

- NativeCT: Renders CT to the Kodak native (Whisper) CT format. This format supports up to four separations CMYK and up to 256 shades per separation.
 Note: A Native CT file is given a .ct extension.
- HandshakeCT: Renders CT to the Kodak CT Handshake format. This format supports up to four separations CMYK and up to 256 shades per separation.
 Note: A Handshake CT file is given a .ch extension.
- NewCT: Renders CT to the Kodak extended CT format that supports spot colors, up to 32 separations, and up to 256 shades per separation.
 Note: A New CT file is given an .nct extension.

LW Type

Select the LW (line work) type that you want to output:

- NativeLW: Renders LW to the Kodak native (Whisper) LW format. This format supports up to four separations CMYK and up to 248 colors.
 Note: A Native LW file is given an .1w extension.
- HandshakeLW: Renders LW to the Handshake LW format. This format supports up to four separations CMYK and up to 248 colors.
 Note: A Handshake LW file is given an .lh extension.
- NewLW: Renders LW to the Kodak extended LW format. This format supports up to 32 separations CMYK and up to 64,000 colors.
 Note: A New LW file is given an .nlw extension.

Make CT same size as Linework file

Select to insert 1-pixel DeviceCMYK CT images in the upper-left and lower-right corners of the media box on PDF pages. The resulting CT layer:

- Is the same size as the LW layer
- Has all DeviceCMYK process colorants

This check box is available only when:

- **Output To** at the top of the process template is set to **CT/LW (CTLWOutput)**.
- Output Kind in the CT/LW area of the Render section is set to TIFF/IT Job Only or CT/LW and TIFF/IT Jobs.

TIFF/IT Suffix

TIFF/IT FP

When outputting to TIFF/IT, specify the file name ending for the final page (FP) file. Type the file name suffix, which can include characters before the extension—for example, _FP.tif.

TIFF/IT CT

When outputting to TIFF/IT, specify the file name ending for the continuous tone (CT) file. Type the file name suffix, which can include characters before the extension—for example, __CT.tif.

TIFF/IT LW

When outputting to TIFF/IT, specify the file name ending for the line work (LW) file. Type the file name suffix, which can include characters before the extension—for example, $_LW.tif$.

TIFF/IT HC

When outputting to TIFF/IT, specify the file name ending for the high-resolution contone (HC) file. Type the file name suffix, which can include characters before the extension—for example, _HC.tif.

Note: High-resolution contone (HC) files are line work files with more than 256 colors.