creo SERVERS

User Guide

English

IC-309m Print Controller, Powered by Creo Server Technology, for the Konica Minolta monochrome bizhub presses

Version 1.0

731-02145A-EN RevA

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EMC requirements

EMC requirements	
United States	FCC 47CFR part 15: 2005, subpart B class B
Canada	ICES-003: 2004 issue 4, class B
European EMC standards	
Radiated Emissions	EN55022:2006+A1:2007:Class A

EN 55022 and EN 55024 Statements

This product is compliance in accordance with the application of Council Directive 2004/108/EC, Article 4a. Conformity is declared by the application of EN 55022 Class A (CISPR 22) and EN 55024.

WARNING: This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take appropriate measures.

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Creo equipment complies with the requirements in part 15 of the FCC Rules for a Class B digital device.

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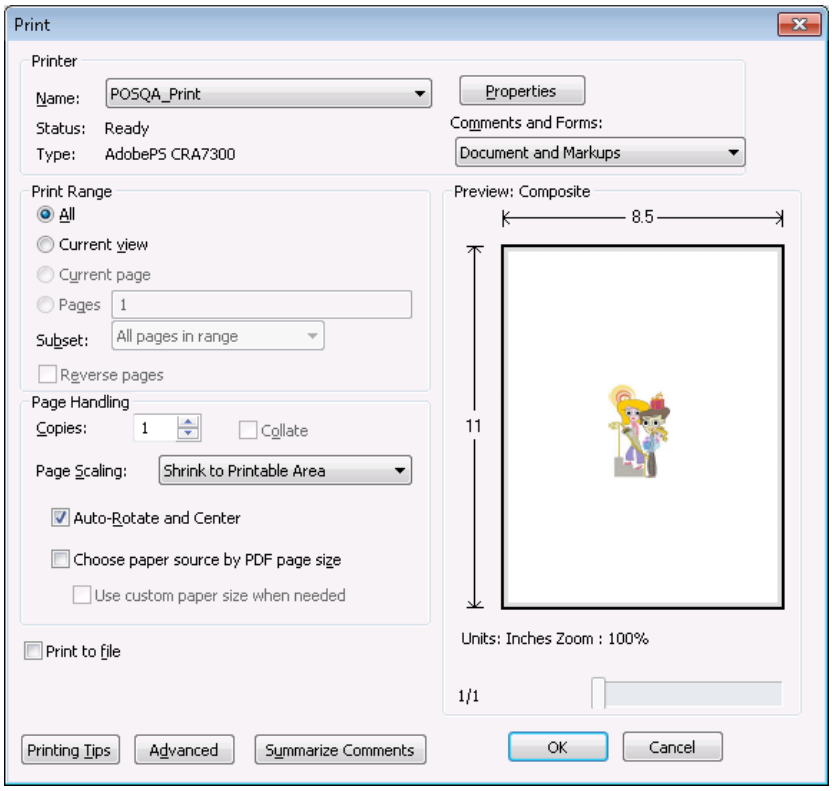
Printing this guide

Change the paper size to print this document on any printer.

1. Open the PDF file in Adobe Acrobat.
2. From the **File** menu, select **Print**.
   The **Print** dialog box appears.



3. Select the desired paper size, for example, A4 or letter.
4. In the **Page Scaling** list, select **Fit To Printable Area** or **Shrink To Printable Area**.

   Note: The names in the **Page Scaling** list vary according to the version of the Adobe Acrobat software.
5. Click **OK**.
   This document is printed to the selected paper size on your printer.

What's new?

The IC-309m print controller supports these new features and enhancements:

- Auto preflight—A preflight is automatically generated for each job that is imported to the IC-309m print controller
- Smart gallop—The **Gallop** option is selected by default, and enables processing while printing
- Fast Pack—adds parallel processing
  - Adds one RIP mode
  - Job can be processed with multiple RIPs
  - Multiple short jobs can be processed simultaneously

  Note: This pack is optional. A dongle is required.
- Finishing sets for cut-and-stack imposition method
- Incoming queue—Provides improved job management and analysis
- Job slug in Job Preview tool
- PDF/VT support
- Optimized processing of jobs with page ranges
- Extended page exceptions support—For example, mix-plex
- Dynamic page exceptions editing
- Thumbnail preview during imposition programming
- Edit location of crop marks
- Perfect bound imposition method—Nested saddle-stitch
- Step-and-continue imposition method—Reading order
- Perfect bound imposition method—Sets per sheet
- Stacking mode for VDP—Saddle-stitch and Perfect Bound imposition methods
- Folded signature imposition method
- Enhanced Trans Pack

  Note: This pack is optional. A dongle is required.
  - Integrated bidirectional IPDS printing support
  - Dual mode—Switch between IPDS and File Submission modes

- AFP file format support (FSM mode)
- CMOCA—Supports full color management for AFP/IPDS

System overview

The IC-309m print controller, powered by Creo Server Technology, for the Konica Minolta monochrome bizhub presses is an on-demand prepress system that runs on a Microsoft Windows Embedded Standard 7 (WES) SP1 operating system and uses advanced prepress technologies to drive the Konica Minolta monochrome bizhub presses.

The IC-309m print controller enables you to print from computers running the Microsoft Windows operating system, Apple Mac OS X operating system software, and The Open Group UNIX client workstations. Using raster image processor (RIP) technology, the IC-309m print controller performs pre-RIP preflight on each file that is imported to the IC-309m print controller and converts image files in page-description language (PDL) formats (for example, Adobe PostScript, PDF, and variable data printing formats) to a suitable ready-to-print (RTP) format for direct high-quality digital printing. The IC-309m print controller also streamlines the printing process by allowing you to print with preset workflows.

The IC-309m print controller submits jobs to the printer in PDF format using JDF/JMF protocol. IC-309m preset workflows and full bidirectional JDF/JMF communication between the IC-309m print controller and the printer enables maximum efficiency and streamlining of the printing process.

The IC-309m print controller enables the efficient printing of flyers, brochures, pamphlets, catalogs, short-run trials, and print-on-demand publications. When installed as a fast network printer with the IC-309m print controller, the printer prints at the full-rated speed of 125 (Konica Minolta monochrome bizhub presses) black and white A4 (210 mm x 297 mm) or Letter (8.5 inches x 11 inches) simplex pages per minute, on different media types and weights.

The IC-309m print controller combines RIP functionalities, automation, control tools, and special hardware development capabilities with Windows-based architecture.

If you have the Trans Pack, the IC-309m print controller supports transactional printing using the IPDS workflow including bidirectional communication with an IPDS host. You can configure the IC-309m print controller to either:

- File submission mode, which enables you to print from any computer, import and process all the supported file formats, apply and edit the job parameters, and manage your files.
- IPDS mode, which enables you to process and print IPDS jobs from the IPDS host computer. In IPDS mode you can apply and edit the IPDS printer parameters.

Hardware and software components

The IC-309m print controller includes:

- Creo hardware, including the dedicated interface (fusion) board
- Off-the-shelf hardware
- DVD-RW drive with DVD burning software
- The following software:
  - IC-309m print controller software
  - Windows Embedded Standard 7 (WES) SP1 x64 operating system
  - Adobe Acrobat 10 and PDF 1.7
  - Enfocus PitStop Edit 11
  - Microsoft Internet Explorer 8

Supported formats

The IC-309m print controller supports the following file formats:

- PostScript (composite files) (levels 1, 2, and 3)
- Adobe PDF (versions 1.2 through 1.7)
- EPS
- Creo VPS (Variable Print Specification)
- PPML (Personalized Print Markup Language)
- PPML.zip
- PPML/VDX
- TIFF/IT
- Pre-separated postscript files
- PDF/VT - PDF/VT1 and PDF/VT2
- JDF/JMF
- XPS
- AFP—part of the Trans Pack

- JPEG
- TIFF—supports TIFF 6.0 files saved with sliced internal data structure, regardless of the BPP (Bits per Pixel) and compression method. Includes support for multi-page TIFF

Action Pack

This pack is optional. To activate the features in the software you need to install the dongle that is supplied with the pack.

This pack includes the following features:

- Enfocus PitStop Edit
- Global Reusable Elements Management tool
- Imposition Template Builder
- Exception Mapping and Rules Set—Dynamic Exceptions (SPD)
- Folded signatures
- Mark sets

Fast Pack

This pack is optional. To activate these features in the IC-309m print controller software, you need to install the dongle included in the pack.

This pack includes the following features:

- Additional RIP process mode
- Keep job in original order
- Parallel RIP at job level
- Parallel RIP at page level
- Smart/Full Gallop

Preps Pack

This pack is optional. To activate these features in the IC-309m print controller software, you need to install the dongle included in the pack.

This pack enables you to build custom signatures, and define where marks or groups of marks are placed on a sheet. In addition, there is an interactive job ganging option.

Installing the Preps Pack

To activate the features in the Preps Pack, install the dongle that is supplied with the pack.

1. Log on to your computer as an Administrator.
2. Obtain the software files. The `Preps_7-0-0_Win_Installer.exe` file is available on the DVD.
3. Insert the DVD, and double-click the `.exe` file.
4. Click **Install** and follow the on-screen instructions until the installation is complete.
5. When the iKey driver window appears, type your license key to complete the installation.

Trans Pack

This pack is optional. To activate these features in the IC-309m print controller software, you need to connect the dongle included in the pack.

The Trans Pack enables transactional printing using the Intelligent Printer Data Stream (IPDS) workflow including bidirectional communication with an IPDS host.

You can configure the IC-309m print controller to work in either:

- **File submission mode**—enables you to print from any computer, import and process all the supported file formats, apply and edit the job parameters, and manage your files. This includes Advanced Function Printing (AFP) file format support, which enables you to import, process, and print AFP files directly in file submission mode.
- **IPDS mode**—enables you to process and print IPDS jobs from the IPDS host over bidirectional and secured communications.

Turning on the IC-309m print controller

1. Turn on the monitor.
2. Turn on the printer.
3. Open the door on the front of the IC-309m print controller, and push the power control button.
   The power indicator on the front panel lights up, and the Windows operating system logon screen appears.

The IC-309m print controller splash screen appears, followed by the workspace.

Note: If the workspace does not automatically appear, open the application from the Windows **Start** menu. By default, the Windows screen saver is off.

See also:

Preferences window on page 139

Turning off the IC-309m print controller

1. From the **File** menu in the workspace, select **Exit**.

   Note: Alternatively, if you want to exit the Workspace only (and not shut down the Creo server), select **Exit Workspace**. This is useful when you make a change to the settings that require you to close and open the Workspace, for example, when customizing the font size in the user interface. To restart the Workspace, right-click on the Creo server icon in the system tray and click **Start**.

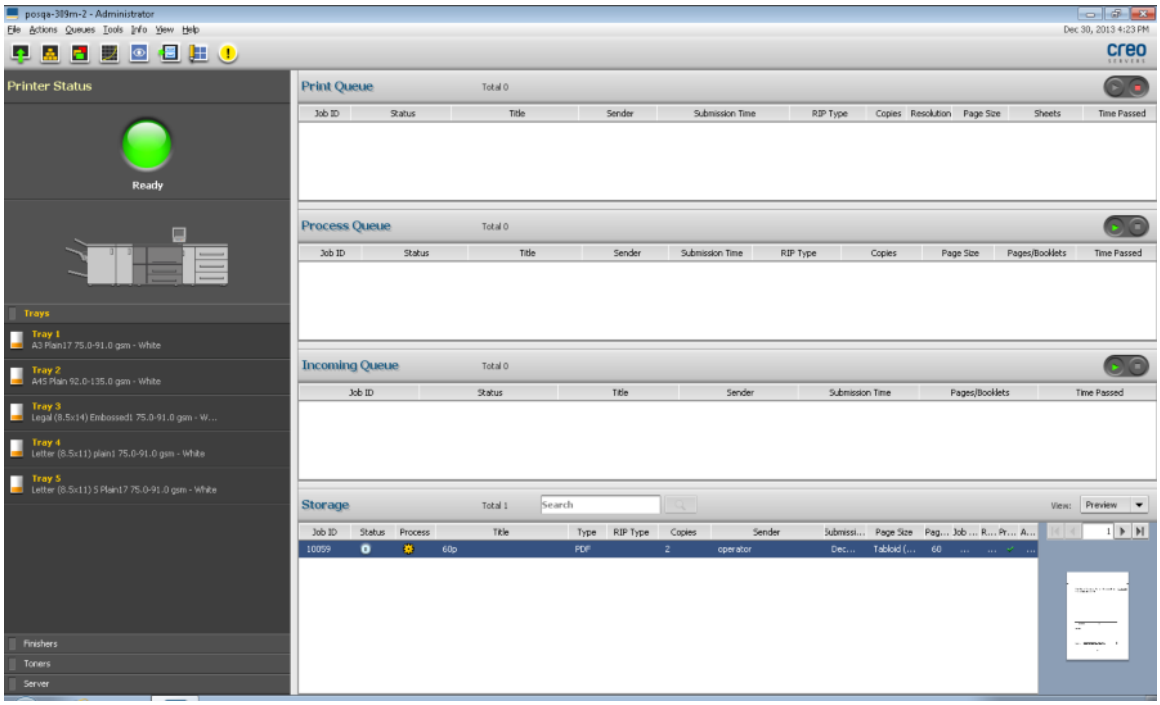
   A confirmation message appears.
2. Click **Yes**.
   The IC-309m print controller software closes. This may take a few minutes.

   Note: If you move the cursor over the server icon on the taskbar, the following tooltip appears: **Creo Server is Stopping. Please Wait**.
3. Verify that the IC-309m print controller icon does not appear on the taskbar.
4. From the Windows **Start** menu, select **Shut Down**, and click **OK**.

Overview of the workspace

The workspace automatically appears when you start the software .

Note: When the IPDS workflow mode is selected, certain features and options are not available in the workspace.

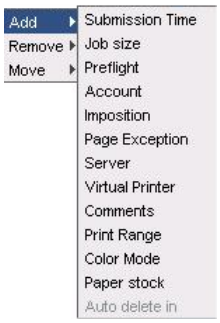


The workspace contains different areas that enable you to monitor your job during the process and print stages. In addition, the workspace includes tools and options that enable you to fully customize and manage your server and jobs.

Workspace area	Description
Toolbar	 Consists of shortcut buttons to commonly used tools and windows such as Import window, Resource Center, Spot Color Editor, Gradation, Job Preview, Archive, Imposition Template Builder, and Alerts. In addition, you can customize the toolbar area by adding, removing, and rearranging toolbar buttons from the repository in the Toolbar customization window. **Note:** The icons that appear vary according to the optional packs in use.

Workspace area	Description
Printer Status pane	The Printer Status pane displays information about the current printer status—for example, Printing, Ready, Warming up. The printer icon changes according to the configuration of the printer and the finishing devices connected.
Resource details	Click **Input Trays**, **Finishers**, **Toners**, or **Server** to display information about the size and type of paper in each tray, the connected finishing devices, the available toner, status of consumables, and disk space and network details. The **Server** area provides network, workflow mode (either **IPDS** or **File Submission Mode**) and disk space details. In IPDS workflow mode, the **IPDS Connection Status** appears, that is, **Disconnected** or **Connected**. **Note:** You can change the workflow mode in the Preferences window. Under **Server**, you can also view the date when the printer was last calibrated. Progress bars display information about incoming and outgoing jobs. Details about the status of the system and image disks, for example, the amount of available disk space on each disk, are shown. In addition, the date of the last calibration (if applicable) and the data cables connected is shown. In IPDS mode, you can click **Abort Job** to abort all the IPDS jobs in the queues. The jobs and RTP files are deleted. If you need to disconnect from the IPDS host, click **Disconnect**. If there is a problem with one of the printer components or with the server, a red indicator appears in the printer icon and next to the relevant component—for example, if a tray is empty.

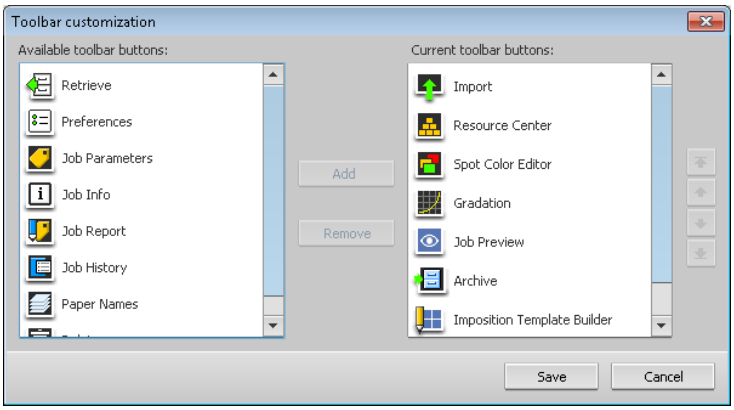
Workspace area	Description
Incoming Queue, **Process Queue** and **Print Queue**	The **Incoming Queue** area lists all incoming jobs. This queue is available by selecting the **Full View** option from the **View** menu. The **Process Queue** area lists the files to be processed. After a file has been processed successfully, it moves either to the **Print Queue** area or to the **Storage** area.  Indicates that the queue is ready for processing or printing.  Indicates that the queue is suspended. You need to release the queue in order to process and print the jobs in this queue. **Note:** When a queue is suspended you can open and edit the job parameters of a job, unless the job is active or printing in the print queue. A preflight check is automatically executed on files running in the incoming queue. This checks for the existence of external files/ elements (high resolution files), SPD/dynamic exceptions, page size, and AFP resources. If the auto preflight passes and you then want to check for other resources (for example, fonts or spot colors), you should run a full preflight check as described in *Verifying the content of the job*. If the job fails, the preflight check it is moved to the **Storage** area and marked with a red X (failed) in the **Preflight** column. **Note:** If a job fails the preflight check, you can view the preflight report by right-clicking on the job and selecting **Preflight Report**. For more information, see *Viewing and printing a preflight report*.

Workspace area	Description
Storage area	The **Storage** area contains jobs that were: • Successfully printed • Held, aborted, or failed during processing or printing • Sent directly from the client workstation, or imported into the **Storage** area There are three different views available in the **Storage** area: **List**, **Preview**, and **Gallery**. Icons in the **Process** column indicate the following processing information: • : The file requires processing • : The file was partially processed • —The file was fully processed You can modify the columns and information that is displayed in the **Storage** area. Right-click on a column in the **Storage** area and select the column that you want to add or remove.  in addition, the **Storage** area displays a thumbnail of the selected job. **Note:** Selecting **Copies** enables you to change the number of copies for that job and submit it for printing without opening and editing the job parameters.

Customizing the workspace toolbar

Add shortcut buttons to the workspace toolbar, remove buttons from the toolbar, and rearrange buttons on the toolbar.

1. From the **Tools** menu, select **Toolbar customization**.



2. Perform any of the following actions:
   - To add a button to the toolbar, select the button from the **Available toolbar buttons** area and click **Add**.
   - To remove a button from the toolbar, select the button from the **Current toolbar buttons** area and click **Remove**.
   - To move a button to a different position on the toolbar, select the button in the **Current toolbar buttons** area, and then click any of the following sorting icons:
     - : Moves the toolbar button to the first position (on the left end of the toolbar)
     - : Moves the toolbar button one position to the left
     - : Moves the toolbar button one position to the right
     - : Moves the toolbar button to the last position (on the right end of the toolbar)

3. Click **Save**.
   The workspace toolbar displays your latest changes.

Customizing the user interface font size

Select a font size for the user interface that accommodates the resolution of your monitor.

1. From the **File** menu, select **Preferences**.
2. Click **UI Customization**.
3. In the **Font size** area, select a font size.
   The **Preview** area displays a phrase showing the font sample.
4. Click **Apply**.
5. When a message appears telling you to exit and restart the software, click **OK**.
6. Click **Save**.

Next: For the new settings to take effect, exit and then restart the workspace.

2 Setting up your computer for printing

Setting up your computer—overview

Printing Methods

Methods for printing with the IC-309m print controller:

- Submit the job to one of the IC-309m print controller virtual printers. The job is spooled, analyzed, and then processed or printed (according to the selected job flow of the virtual printer). If you use this method, you can print from any software (for example, Adobe Acrobat) and use any file format from any Windows and Mac computer.
- Drag the job to a hot folder. The job is spooled, analyzed, and then processed or printed (according to the selected job flow of the corresponding virtual printer). If you use the hot folder method, you can print most PDL files (for example, PostScript, PDF, EPS, Variable Print Specification, and PPML).
- Drag Microsoft Office files to a special hot folder and then submit the files for printing.

Network printers

To print your file using a IC-309m print controller virtual printer, you first need to install the virtual printer as a network printer on your computer.

After you install a network printer on your computer, you can submit files for printing. By default, the network printers are installed with the Print Driver software. You can change the default settings of the network printer to use the PPD parameters instead of the Print Driver software.

The IC-309m print controller supports printing from the following operating systems:

- Microsoft Windows Server 2008, Microsoft Windows Server 2003, Microsoft Windows 7, Microsoft Windows Vista, and Microsoft Windows XP

The IC-309m print controller provides default network printers, referred to here as virtual printers.

A virtual printer contains preset workflows that are automatically applied to all print jobs processed with that virtual printer. The default virtual printers are published on the network with specific parameters set for processing and printing.

The default virtual printers are:

- **Print**—Files sent to this printer are automatically processed and immediately sent to the printer for printing.
- **Process**—Files sent to this printer are automatically processed and stored in ready-to-print (RTP) format in the **Storage** area. Later, you can submit an RTP job for printing, or change the parameters of the job and resubmit it for processing or printing.
- **Store**—Files sent to this printer are spooled to the **Storage** area and wait until you submit them for processing and printing. The files remain in PDL format (such as PS, PDF, VPS, and PPML).
- **Print&Delete**—Files sent to this printer are processed and printed. After the job is printed successfully, the RTP is deleted.

Print Driver software

Use the print driver software to set job parameters when you are submitting a job to the IC-309m print controller from any application in your computer. The Print Driver software provides a graphical user interface that is similar to the IC-309m print controller job parameters window. The software is automatically installed on a Windows computer when you set up a network printer.

Note: On a Mac computer, you must install the Print Driver software manually.

In the Print Driver window, you can perform the following actions:

- Define or change job parameters regardless of whether your computer is connected to the server.
- Lock a job for secure printing.
- Save a set of parameters. Sets are useful when you want to print different jobs with the same parameters, or if you want to reprint a job.
- Retrieve a saved set of parameters.
- Check the status of the printer.
- Define PostScript parameters for the job.
- Preview imposition layout.

Note: Custom imposition templates, including the pre-defined Folded Signature imposition templates, cannot be previewed from the Printer Driver software.

Setting up printing on a Windows computer

Adding a network printer to Windows Server 2008/2003/XP

To print from a Windows computer, you first need to add an IC-309m print controller virtual printer to your client workstation.

Tip: Following are some shortcut tips for setting up a printer. The full procedure is detailed below.

- Locate the IC-309m print controller in **My Network Places**, and then double-click on the network printer you want to install. The network printer is automatically installed on your computer and appears in the list of printers.
- If you know the name of your IC-309m print controller, click **Start** > **Run**, and then type `\\server name`. The IC-309m print controller opens showing a list of all the network printers. Double-click on the network printer you want to install.

1. From the **Start** menu, select **Settings** > **Printers and Faxes**. The Printers and Faxes window appears.
2. In the **Printer Tasks** area, select **Add a printer**.

   Note: Your computer might have slightly different wording from what appears in this task.

   The Add Printer Wizard appears.
3. Select **Next**.
4. Select **A network printer, or a printer attached to another computer**, and click **Next**.
5. Select **Browse for a printer**, and click **Next**.
6. Find the IC-309m print controller, and double-click it to display the list of network printers.
7. Select the desired printer, and click **Next**.
8. When a message appears, click **Yes**.
9. Select **Yes** if you want to set this printer as the default printer on your computer, otherwise, select **No**, and click **Next**.
10. Click **Finish** to close the wizard.

The IC-309m print controller network printer is added to your printer list. In addition, the Print Driver software and PPD file are automatically copied.

Adding a network printer to Windows 7/Vista

To print from a Windows computer, you first need to add an IC-309m print controller virtual printer to your client workstation.

Tip: Following are some shortcut tips for setting up a printer. The full procedure is detailed below.

- Locate the IC-309m print controller in **My Network Places**, and then double-click on the network printer you want to install. The network printer is automatically installed on your computer and appears in the list of printers.
- If you know the name of your IC-309m print controller, click **Start** > **Run**, and then type `\\server name`. The IC-309m print controller opens showing a list of all the network printers. Double-click on the network printer you want to install.

1. From the **Start** menu, select **Devices and Printers**.
2. Select **Add a printer**.
3. In the Add Printer wizard, select **Add a network, wireless or Bluetooth printer**.
4. Select **The printer that I want isn't listed**.
5. In the **Select a shared printer by name** box, type the IC-309m print controller name, and click **Next**.
6. Click **Next**.
7. Select whether you want this to be the default printer, and then click **Finish** to complete the setup.

The IC-309m print controller network printer is added to your printer list. When you add a network printer, the Print Driver software and PPD file are installed on your computer.

Loading the Print Driver software for the first time

Requirements:

A network printer must be defined on your Windows-based computer.

Load the Print Driver software after installing a network printer so that the IC-309m print controller will be ready for printing.

1. Open a file with its corresponding application—for example, open a PDF file in Adobe Acrobat.
2. From the **File** menu, select **Print**.
   The **Print** dialog box appears.
3. Select one of the network printers—for example, **Print** and click **Properties**.
   A message tells you that the software is loading.

   Note: This process might take a few minutes.

   After the software loads successfully, click **Finish**. The job parameters window appears.
4. Close the job parameters window and the Print Dialog box to complete the installation of the Print Driver.

The network printer is set up for printing using the Print Driver software.

Shortcut for adding a printer

1. From the **Start** menu, select **Run**.
2. In the **Open** box, type \\, followed by the host name or IP address of the Creo server, and click **OK**.
   The server window opens.
3. Double-click the icon for the desired network printer.

The IC-309m print controller network printer is added to your printer list.

Deactivating the Print Driver software

The Print Driver software is active by default. Deactivate the Print Driver software if you want to access the PPD file parameters.

1. Perform one of the following actions:
   - For Windows Server 2008/2003/XP, from the Windows **Start** menu, select **Settings** > **Printers and Faxes**
   - For Windows 7/Vista, from the Windows **Start** menu, select **Devices and Printers**
2. Right-click the network printer icon for which you want to deactivate the Print Driver, and do one of the following:
   - For Windows 2008/2003/XP, select **Properties**
   - For Windows 7/Vista, select **Printer properties**
3. Click the **Print Driver** tab.
4. From the **Enable enhanced user interface** list, select **off**.
5. Click **Apply**.
6. Click **OK**.

Removing the Print Driver software

Perform this procedure if you need to upgrade to a later version of the Print Driver software.

Requirements:

All applications must be closed before removing the Print Driver software.

1. From the Windows **Start** menu, select **Run**.
2. In the **Open** box, type `\\`, followed by the host name or IP address of the server, and click **OK**.
   The server window opens.
3. Navigate to `\Utilities\PC Utilities\Driver Extension`.
4. Perform one of the following:
   - If you are using Windows XP, double-click **DEX_Uninstaller.exe**
   - If you are using Windows Vista or Windows 7, right-click **DEX_Uninstaller.exe**, and select **Run as Administrator**.

The Print Driver software is removed.

Downloading fonts

Use the `HF_FontDownLoader` hot folder, located in `D:\HotFolders`, to install new or missing fonts to the IC-309m print controller fonts directory.

The `HF_FontDownLoader` hot folder can be used with the following operating systems:

- Windows Server 2008
- Windows Server 2003
- Windows 7
- Windows Vista
- Windows XP
- Mac OS X 10.6 (64 bit) and later

You can drag the required fonts from the computer to the `HF_FontDownLoader` hot folder. In the Resource Center, you can set a default font and delete fonts.

Note: You can only copy fonts if the font license permits.

Setting up a TCP/IP Printer in Windows 7

Set up a TCP/IP printer on a Windows 7 computer.

1. Open the Devices and Printers window.
2. In the Devices and Printers window, select **Add a printer**. The Add Printer Wizard appears.
3. Select **Add a local printer**.
4. Select **Create a new port**, and from the **Type of port** list, select **Standard TCP/IP Port**.
5. Click **Next**.
   If you have Print Services for UNIX installed on your computer, you can also select **LPR Port** from the **Type of port** list.
6. In the **Hostname or IP Address** box, type the exact name of the IC-309m print controller (the name is case-sensitive). You can leave the **Port Name** as is.
7. Clear the **Query the printer and automatically select the driver to use** check box.
8. Click **Next**.
9. In the **Device Type** area, select **Custom**, and then click **Settings**.

10. For **Protocol**, select **LPR**.
11. Under **LPR Settings**, set the values as follows:
    a. For **Queue Name**, type the exact name of the network printer to which you want to send jobs for printing—for example, `CCS_Print`.
    b. Select the **LPR Byte Counting Enabled** check box.
12. Click **OK**, and then click **Next**.
13. Click **Have Disk**.
14. Click **Browse**, and locate the `OEMSETUP.INF` file in the `\\<server_name>\Utilities\PC Utilities\Printer Driver\Printer driver application\US-Letter` or `Europe-A4` folder.
15. Select the file, and click **OK**.
16. Click **Next**.
17. In the **Printer name** box, delete the default printer name and type the printer name exactly as it appears in the Resource Center—for example, `%Server Name%_Print`.
18. Click **Next**.
19. Make sure that **Do not share this printer** is selected, and click **Next**.
20. Clear the **Set as default printer** check box.
21. Click **Finish**.
22. In the Devices and Printers dialog box, right-click the newly created printer, and select **Printer Properties**.
23. Click the **Print Driver** tab.
24. Click the **Server Hostname**, and type the host name of the Creo server.
25. Click **Apply**, and then click **OK**.
26. When you send a job to print via the Print Driver software, note that the Print Driver is **Online**.

You have successfully installed a network printer for the IC-309m print controller and are ready to start printing.

Setting up printing in Mac OS X

Installing the Print Driver software in Mac OS X 10.6 (64 bit) and later

During the installation of the Print Driver software, the PPD file is automatically copied to your computer.

Notes: Starting from Mac OS X Lion (10.7) computers, some features in different DTP applications require the Oracle Java Runtime Environment (JRE). Starting from Lion, OS X does not provide a Java Runtime by default. Current IC-309m print controller installers and applications were built before these changes to Mac OS X and assume that Java is installed. If Java runtime isn't installed, the following issues can occur in DTP applications:

- Features are missing or behave improperly
- The software doesn't start
- Prompts to install Java Runtime occur
- Applications hang or quit

If you are working with Mac OS X Lion and Creo server remote tools, make sure that Java Runtime is installed on your computer. Follow the Java installation procedure on the Apple site, http://support.apple.com/kb/DL1421. This will ensure that the Creo server tools work correctly.

1. From the **Go** menu, select **Connect to Server**.
2. In the **Server Address** box, type your server address, and click **Connect**.
3. In the **Connect as** area, select **Guest**.
4. Click **Connect**.
5. Select **Utilities** and click **OK**.
6. Select the `Mac Utilities` folder.
7. Double-click the `IC-309m_ColorServerPrintDriverInstaller.dmg` file.
8. Double-click the `IC-309_ColorServerPrintDriverInstaller` icon. The Welcome screen appears.
9. Click **Continue**.
10. In the message window, click **Continue**.
11. In the Software License Agreement window, click **Continue**.
12. Click **Agree** to agree to the terms and continue with the installation procedure.

13. In the **Select Destination** area, select the destination volume in which you want to install the Print Driver software, and click **Continue**.
14. Click **Install**.
15. Type your login name (if necessary) and password, and click **OK**.
16. Click **Close**.

The Print Driver software and PPD are installed.

Note: If you deactivate the Print Driver software, you can still use the PPD because it has already been installed.

Defining a printer with the Print Driver software in Mac OS X 10.6 (64 bit) and later

Requirements: The following information must be available:

- IP address or computer name of your IC-309m print controller
- Name of the network printer that you want to use with the Print Driver software

1. On your Mac computer, using the Apple icon, open the System Preferences window and double-click **Print & Scan**.
2. In the Print & Scan window, click **+**.

   Note: You can also define your printer using the **Default** option.
3. In the Printer Browser window, click the **IP Printer** tab, and enter the following information:
   - In the **Address** box, type the address of your server.
   - In the **Queue** box, type the name of the network printer that you want to use with the Print Driver software—for example, `CreoCS_Process`.
   - In the **Name** box, type a name for the printer.
   - In the **Print Using** list, select **Other**.
4. Navigate to `Library / Printers / PPDs / Contents / Resources / en.lproj`, select either `Europe-A4` or `US-Letter`, and then select the `IC-309m.PPD` file.
5. Click **Open**.
6. Click **Add**.
   The network printer is defined with the PPD file.

7. In the Print & Scan window, double-click the network printer.
8. Click **Printer Setup**.
9. Click **Utility**.
10. Click **Open Printer Utility**.
11. In the **Enable Enhanced User Interface** list, make sure that **On** is selected.
12. In the **Server Hostname** box, type the IP address of the server or the server name.
13. Click **Apply**, and then click **OK**.

Removing the Print Driver software in Mac OS X

Perform this procedure if you need to upgrade to a later software version of the Print Driver software.

Requirements:

All applications must be closed.

1. From the **Go** menu, select **Connect to Server**.
2. In the **Server Address** box, type your Creo server host name or address, and click **Connect**.
3. In the **Connect as** area, select **Guest**.
4. Click **Connect**.
5. Select **Utilities**, and then click **OK**.
6. Select the `Mac Utilities` folder.
7. Double-click the `CCSUninstall.dmg` file.
8. Double-click the `CCSUninstall.app` file.
9. Close all the running applications on your Mac computer, and then click **OK**.
10. Select the suitable Creo printer driver, and then click **OK**.
11. If necessary, type your name and password, and then click **OK**.
12. Click **OK**.

The Print Driver software is removed. You can now upgrade the Print Driver software.

Note: After you upgrade the software, you need to reinstall the network printers.

3 Printing a file in Windows and Mac OS

Printing a file to the IC-309m print controller

Requirements:

A network printer must be defined on your Windows and Mac computer.

1. Open a file with its corresponding application—for example, open a PDF file in Adobe Acrobat.
2. From the **File** menu, select **Print**.
3. In the **Name** list, select the desired network printer—for example, **<server_name>_Print**.
4. (Optional) To modify job parameters:

Option	Description
Windows	Click **Properties**.
Mac	Select **Special Features**, and then click **Job Parameters**.

   a. Modify the parameters.

   b. Click **OK**.

5. In the Print dialog box, click **OK**.

The file is sent to the IC-309m print controller where it is processed and printed.

Using a hot folder to print

Use hot folders to automate your workflow and save time by simultaneously submitting multiple files for printing.

You can use hot folders to process and print files from any computer. The following procedure can also be followed on a Mac computer.

1. On your Windows desktop, double-click the **My Network Places** icon.
   In Mac OS X, from the **Go** menu, select **Connect to Server**.

2. Locate the IC-309m print controller, and double-click it.
   A list of all the shared folders, hot folders, and printers appears.
3. Double-click the desired hot folder—for example, `HF_Print`.

   Tip: You can drag the hot folder icon to your desktop to create a shortcut to the hot folder for future use.
4. Drag the desired files to the hot folder.

All the files are processed and printed automatically, according to the hot folder workflow.

Password protect jobs

Control the printing of sensitive data by locking and password-protecting a job on your computer.

Requirements:

- A IC-309m print controller network printer must exist on your client workstation.
- The printer status on the IC-309m print controller must be in **Ready** mode.

Using the Print Driver software, you can apply a password to a job that was created in any application. Whoever prints or reprints the job must use the password to unlock it and release it for printing.

1. On your computer, open a file—for example, a PDF file.
2. From the **File** menu, select **Print**.
3. In the Print dialog box, in the **Name** list, select the name of the network printer that you want to submit your file to.
4. Click the **Properties** button.
   The Print Driver window appears.
5. In the Print Driver window, click the **Lock** button  .
   The Secure Printing dialog box appears.
6. In the **Password** box, type a password consisting of four digits —for example, `9999`.

   Note: The password must consist of exactly four numeric characters.
7. Click **OK**.
   The job is password-protected, and nobody can print it without using the password.

8. In the Print Driver window, click **OK**.
   The password-protected job is submitted to the network printer, which sends it to the IC-309m print controller for processing and printing.
9. In the **Print Queue** area, right-click the password-protected job that you want to print, and select **Release to print**.
   The Secure Printing dialog box appears.
10. In the **Password** box, type the password that was defined for this job.
11. Click **OK**.
    The job is unlocked and printed. When the printing is finished, the job is automatically deleted.

4 Processing and printing from the Creo server

File processing

The IC-309m print controller features the Adobe PDF Print Engine (APPE) RIP as a complementary workflow to the Configurable PostScript Interpreter (CPSI) RIP, enabling you to use the RIP that is appropriate for each job. The APPE RIP is particularly useful for files that need transparencies and overprint handling. APPE RIP information is added to the job history and workspace.

By rendering PDF content natively, at its highest level of abstraction, and by relying on JDF to capture job ticket and process control information, the print workflows powered by the APPE enable designers and print production professionals to keep PDF content device-independent throughout the workflow.

The main benefit of the APPE RIP is that complex designs and effects, including transparencies, can be reproduced reliably. Designers and printers can make late-stage edits in PDF files more easily and configure PDF jobs for printing on different types of output devices and presses.

The APPE RIP applies to PDF files only, all other files are rendered with the CPSI RIP.

One of the advantages of using a PDF workflow is that you can work with embedded ICC profiles. The IC-309m print controller includes APPE RIP support for both CMYK and RGB embedded ICC profiles.

The IC-309m print controller is compatible with PDF/X-1a, PDF/X-3, PDF/X-4, PDFX4P, and, PDFX5G. PDF/X files are a subset of PDF files whose standard provides for the exchange of final print-ready pages. Using PDF/X-compliant files eliminates the most common errors in file preparation (for example, fonts that are not embedded, incorrect color spaces, missing images, and overprinting or trapping problems).

See also:

Services tab in the job parameters window on page 134

Importing and printing a job

You can import a job in any of the following circumstances:

- When a page-description language (PDL) file—for example, PDF or PostScript—is created on a computer that is not connected to the IC-309m print controller
- When a PDL file is located on a folder on the network or on external media, such as a USB flash drive
- When the desired file resides locally on the IC-309m print controller

1. From the **File** menu, select **Import**.
2. In the Import window, in the upper list, select the desired file or files and click the **Add** button.

   Notes:

   - To select several files, click them while holding down the Shift or Ctrl key; to select all the files, press Ctrl+A. If desired, add the same file more than once.
   - To remove a file, select the desired file in the Import window, in the lower list, and click the **Remove** button.

   The selected file or files appear in the lower list.
3. From the **Virtual printer** list, select a printer.
4. Click **Import**.
   All files in the lower list are sent to the IC-309m print controller to be analyzed, and then processed, printed, or stored as defined in the selected virtual printer.

Resubmitting a job

Resubmit a printed job after editing the job parameters or to print more copies of your job.

➢ In the **Storage** area, right-click the job that you want to resubmit for printing, and select **Submit**.
If you select an RTP job, it is submitted to the **Print Queue**; if you select any other kind of job, it is submitted to the **Process Queue**.

Note: Some RTP jobs might require reprocessing after you edit certain parameters.

Resubmitting several jobs via a virtual printer

Apply a modified set of parameters to selected jobs, and then resubmit the jobs for processing and printing.

Requirements: A virtual printer must already have been created that contains the modified workflow for the jobs that you want to resubmit

1. In the **Storage** area, select the jobs that you want to resubmit via the virtual printer.
2. Right-click the selected jobs, and select **Resubmit to**.
3. Select the virtual printer that you created.
   The selected jobs are sent for reprocessing and printing.

   Note: The original jobs are not deleted.

Printing copies of a job

Reprint more copies of a job directly from the **Storage** area without opening the job parameters window.

1. Right-click on a column heading in the **Storage** area.
2. Select **Add** > **Copies** to add copies to the **Copies** column in the **Storage** area.
3. Select the job, and in the **Copies** field type the number of copies that you want to print.
4. Press Enter.
5. Drag the job to either the **Process Queue** area or **Print Queue** area.

Job Editor tool

The Job Editor tool enables you to edit and adjust non-VDP jobs before they are processed.

By right-clicking a job in the **Storage** area, you can open the Job Editor tool and view thumbnails of each page in your job and then perform basic editing tasks such as:

- Replacing specific pages of your job with pages from another job
- Merging one or more jobs with another job

Note: The Job Editor tool always creates a new PDF file, combined with all the operations that have been applied by it, such as: merging jobs and replacing pages. Edited jobs with other than PDF formats cannot be saved to their original file type and will be saved as PDF type.

Merging jobs

Create a new job by merging one or more jobs with your job.

Note: You cannot perform this procedure remotely.

1. In the **Storage** area, right-click one of the jobs that you want to merge and select **Job Editor**.
   The Job Editor displays thumbnails of the selected job.
2. Click **Merge an Entire Job**.
   The Merge dialog box appears, listing all the non-VDP jobs in the **Storage** area.
3. Click the job that you want to merge and perform the following actions:
   To select multiple jobs, use the `Ctrl` key.
   a. In the **Insert** list, select **Before** or **After**.
   b. Specify where to insert the designated job, either before or after the first page, last page, or a specific page.
4. Click **Merge**.
   The jobs are merged and the page numbers are updated accordingly.
5. Click **Save as**.
6. Type a new name for the merged job.
7. Click **OK**.
   Your new job is saved.

Replacing specific pages in your job

Replace specific pages in your job with pages from another job.

Requirements: The job that includes the pages that you want to replace need not have the same page size and orientation as the job you are editing.

1. In the **Storage** area, right-click the job whose pages you want to replace and select **Job Editor**.
   The Job Editor displays thumbnails of the selected job.
2. Click **Replace Specific Pages**.
   The Replace dialog box appears and displays the list of all non-VDP jobs in the **Storage** area.
3. Click the job that includes the replacement pages.
4. In the **Replace pages** boxes, type the page numbers of the pages that you want to replace.
5. In the **With pages** boxes, type the page numbers of the replacement pages.
6. Click **Replace**.
7. Click **Yes** to replace the pages.
8. Click **Save as**.
9. Type a new name for the job.
10. Click **OK**.
    Your new job is saved.

Proofing a job

Before printing your job, it is important to check the job and make sure that it will print correctly. Proofing your job can reveal problems such as missing fonts, wrong colors, incorrect imposition or positioning. If a problem is found, you can modify your job before it is approved and sent for printing.

The IC-309m print controller provides you with the following proofing options:

- Job Preview tool—Open and preview an RTP job from the IC-309m print controller **Storage** area.
- Export an RTP file as a PDF file.
- PDF preview—Use Adobe Acrobat software to open and preview jobs from the IC-309m print controller **Storage** area.

See also:

Job Preview tool on page 36
Exporting an RTP file on page 36

Job Preview tool

The Job Preview tool enables you to preview partially RIPed and fully RIPed jobs.

The preview displays the final printed sheets and includes raster data and layout data. The Job Preview tool includes three main areas:

- **Preview** area—Displays the rasterized pages in your job, page orientation, crop marks and fold marks, and enables you to use magnification tools to zoom in on areas of the sheet and verify color, trapping, or overprinting
- **Layout** tab—Displays the actual layout and structure of the printed sheets, booklets, or imposed job, and provides information about the sheet—for example, sheet size and trim size
- **Run List** tab—Displays thumbnails of your job and enables you to navigate to the various pages in the job

Finding the K values of a specific area

Use the **Color Density** tool in the Job Preview window to find out the CMYK values of a specific area on the page.

A processed job must be displayed in the Job Preview window.

1. In the Job Preview window, click the **Color Density** button.
2. Move the pointer to the location on the page where you want to measure the color values and click.
   The K dot percentage values and spot color K equivalent values appear as a tool tip.

Export for Proof

The Export for Proof option enables you to create a PDF file that can be exported and used as a soft proof. The exported file is composed from the RTP data of the job. Only RTP files can be exported. The exported file includes all the defined job parameters and files exactly as they would be printed in the resulting PDF.

Exporting an RTP file

Export an RTP file, and convert it to PDF format.

Requirements:

A processed file must be in the **Storage** area.

Note: You cannot export partial RTP files for proofing.

1. Select an RTP job in the IC-309m print controller **Storage** area.
2. Right-click the job and select **Export for Proofing**.
3. Select if you want to export **Pages**, **Booklets** or **All**. If you selected **Pages** or **Booklets**, enter the page or booklet numbers and/or ranges separated by commas.

   Note: If you select an imposed job, you are asked to enter the number of **Sheets** instead of the number of **Pages**.
4. Click **OK**.
5. In the Export For Proofing dialog box, locate the folder in which you want to save the file, and click **Save**.

The PDF file can be printed on any printer.

Verifying the content of the job

When you import a job, the IC-309m print controller automatically performs a preflight check (in the incoming queue) on the external components of the job and displays the results in the Preflight report window.

The following job components are checked:

- High-resolution images or the incorrect links to the high-resolution images folder
- Fonts
- Spot colors that are not defined in the IC-309m print controller spot color library
- Dynamic exception commands for a file that was submitted via a dynamic page exceptions virtual printer
- AFP resources

  Note: The IPDS workflow is available only with the Trans Pack.

If the job passes the preflight check, the **Preflight** column in the **Storage** area displays a green check mark. If the job fails the preflight check, a red X is displayed.

The preflight report is a job-related report that provides information about the status (missing or found) of key job components prior to processing and enables you to correct your files accordingly. You can review the report and resolve the missing components, and thus save processing time without error or failed messages constantly appearing.

If all key components are found in the preflight check, the job is processed and printed according to the job flow that you selected.

If the test fails (missing key elements are detected), the job is returned to the **Storage** area with the preflight report available for inspection.

Performing an extended preflight check

Checks the status of additional key components before the job is sent for printing.

You cannot perform a preflight check on PDF files that are locked or protected. If you attempt to do so, a message appears stating that the file is encrypted.

1. Open the job parameters window of the job on which you want to perform a preflight check.
2. Select **Services**, and then select **Preflight**.
3. Select the **Run extended preflight check** check box.
   By default, **Inspect the main file only** is selected. (Checks the status of the main file only, including fonts, high resolution images, and spot colors, before the job is sent for printing.)
4. Select **Inspect the main file and the external elements** If you want a check for spot colors and fonts in the external elements to be included in the preflight check.
5. Click **Submit**.

The results of the preflight check are displayed in a preflight report.

Viewing and printing a preflight report

The preflight report is a job-related report that provides information about the status (missing or found) of key job components prior to printing and enables you to correct your files accordingly.

If more than one preflight check is run on a job, the latest preflight report overrides the previous one.

1. In the **Storage** area, right-click your job, and from the menu, select **Preflight report**.
2. In the Preflight Report window, click the desired report option —for example, **HiRes**—to see the results for that option.
3. (Optional) To print the report, click **Print**.
4. (Optional) To export the preflight report, perform the following actions:
   a. Click **Export** and browse to the desired location.
   b. Click **Save**.
5. Click **Close**.

Preflight report window

The Preflight Report window is opened by right-clicking your job and selecting **Preflight report**.

Preflight options	
Fonts	The heading area lists the number of found and missing fonts. The report body lists the names of fonts that are found in the file, or are missing from the **Font Library**. The **Source** column indicates whether the font is embedded in the file or was found in the **Font Library**.
Spot Colors	The heading area lists the number of spot colors as well as the number of spot colors missing from the dictionary. The report body lists both the missing spot color names (spot colors not found in the spot color dictionary), and the found spot color names (spot colors found in the spot color library). The **Color space** column displays the alternative color space of the spot color. **N/A** indicates that an alternative color space is not defined in the file, or the color space is not relevant. If the spot color is **Missing**, the original CMYK values that are embedded in the PostScript file are displayed in the **Values** column. If the spot color is **Found**, the CMYK values that are in the spot color dictionary are used and no values are displayed in the **Values** column.
Exceptions	Lists the dynamic page exception commands found in the file
External files	Lists the missing and found high-resolution images. If wrong links to the high-resolution images folder exist, these are also listed.

Preflight options	
AFP resources	Lists the missing AFP resources and the found AFP resources in the file.

Indicators	
Found	Appears when all of the files are found for the selected option.
Missing	Appears when key components in the job are not found.
Not preflighted	Appears if no items were found for the resource, or if the resource was not searched for in the file, due to not selecting the extended preflight check.
Warning	Appears if you need to be aware of the item in the report.

Show list	
All	Displays both missing and found options.
Found	Displays options that are found.
Missing	Displays options that are missing.

Submitting urgent jobs

When a job is urgent, you can submit it for processing or printing and run it before other jobs.

If you submit a rush job for processing while another job is being processed, the latter job pauses temporarily but retains its running status. When the rush job finishes processing and moves to the print queue, the processing of the paused job continues.

If you submit a rush job for printing while another job is being printed, the rush job moves to top of queue and begins printing after current job is complete. .

Running a job immediately

Submit an urgent job for processing, and run it before other jobs.

Requirements:

The job must be waiting in a queue or in the storage area. If the job is active, this option is not available.

- In the queues or **Storage** area, right-click the job and select **Run Immediately**.
  The job appears with the rush status indicator at the top of the appropriate queue and runs immediately.

Secure printing overview

The IC-309m print controller enables you to protect sensitive data and control its printing.

Following are some of the options available:

- The Disk Wipe utility enables you to work in a more secure environment, by permanently removing data left by files that you have deleted.
- Password Protect Jobs (set in the Print Driver software)
- Deletion policy (set in the Preferences window)

See also:

Preferences window on page 139

5 Managing jobs

Archiving and retrieving jobs

To keep enough disk space free, archive jobs and their related files to an external server and then delete them from the **Storage** area. You can retrieve archived jobs and files later for further use.

Archiving is a method of backing up and storing a job that enables you to increase the available space on your disk. A cabinet file (a compressed file) that contains all the files related to the archived job is created at the selected location. Jobs are archived with the information in its job parameters and its Job History windows. It is also most useful to archive jobs that are repetitive. For example, when the same job is run every month.

Note: The IC-309m print controller archives large jobs to several cabinet files.

When retrieved, the archived job retains the original job name, not the name assigned when archived.

Archived jobs are an important tool for reporting and resolving problems as they contain all the information for the service personnel.

Archiving a job

Archive a job so that more disk space becomes available.

Requirements:

A folder for storing the archived job.

1. In the **Storage** area, right-click the job that you want to archive and select **Archive**.
2. Locate the desired destination folder for the archive, and then click **Save**.
   A cabinet file (a compressed file) that contains all the files related to the archived job is created at the selected location.
3. Delete the job from the **Storage** area.

Retrieving a job

You can only retrieve jobs that have been archived.

When you retrieve a job, the archived job retains the original job name, and not the name assigned when archived. The files related

to the job (for example, PDL) are also retrieved and the cabinet file is not deleted.

You can retrieve more than one job at a time.

1. From the **File** menu, select **Retrieve from archive**.
2. Locate the archived job under its archive name, and select the related cabinet file.
3. Click **Add**.
   The selected job appears in the lower list.
4. Click **Retrieve**.
   The selected job appears at the top of the list in the **Storage** area.
5. In the Job History window, verify that the file has been successfully retrieved.

Forwarding a job to another Creo server

Requirements:

- The job that you want to forward must be in the **Storage** area.

The same software version need not be running on both IC-309m print controllers. If the same software version is running on both IC-309m print controllers, the entire job is forwarded. If the same software version is not running on both IC-309m print controllers, only the PDL is forwarded, not the entire job

1. In the **Storage** area, right-click the job, and select **Forward to** > **Other**.
2. In the **Host name / IP Address** box, type the name or IP address of the server that you want to forward the job to.
3. Click **Find**.
4. Select one of the following:
   - **Send to Storage**—to send the job to the selected server's **Storage** area.
   - **Send to print**—to send the job to the selected server's **Print Queue**.
5. Click **Send**.

   Notes:

   - You cannot forward a job if the operator password was changed on the destination IC-309m print controller. From the source IC-309m

print controller, select **Start** > **Run** and connect to the destination IC-309m print controller. Log on using the new operator password.

- You cannot forward a job to another IC-309m print controller if files have never been RIPed on the destination IC-309m print controller. This might occur in rare instances—for example, if you reinstall the system or format image disks.

Duplicating jobs

Requirements:

The job to be duplicated must be in the **Storage** area.

➢ In the **Storage** area, right-click the job, and select **Duplicate**. The selected file is duplicated and is given the name of the original job followed by the suffix `_dup`.

Note: If you duplicate an RTP job, the duplicated job is in its original format.

Accounting Viewer

The Accounting Viewer presents information about all of the jobs successfully printed via the IC-309m print controller.

The accounting report is in the form of a tab-delimited file and contains detailed information about the printed job. You can filter and sort information in the report and print it. You can also export the report to a spreadsheet application—for example, Microsoft Excel—where you can manipulate the data. By default, all of the jobs handled during the past 90 days are listed.

This report includes various types of information, such as the following:

- The job's size
- The processing time
- The number of pages in the job
- The number of pages printed. This data is based on the job's original input and the parameters that were set in the job parameters window.

You can access the Accounting Viewer from the **Info** menu.

Customization of the Accounting Viewer

There are two ways to customize the Accounting Viewer table:

- Show, hide, and move columns. This is a quick way to customize the table. Changes that you make to the table are not saved permanently.
- Create a customized accounting view that you can edit and save.

Show, hide, and move columns in the Accounting Viewer table

A quick way to customize the Accounting Viewer table is to show, hide, or move columns.

➢ Perform any of the following actions:

- To move a column to another location in the table, drag the column to where you want it.
- To hide a column, right-click any column in the table, select **Hide**, and then from the list of columns that are currently displayed, select the column that you want to hide.
- To display a column, right-click any column in the table, select **Show**, and then from the list of columns that are currently hidden, select the column that you want to display.

Creating a customized view in the Accounting Viewer

Create an accounting view for specific needs by selecting columns in the Accounting Viewer and saving your selections as a customized view.

1. From the **Info** menu, select **Accounting**.
   The Accounting Viewer window appears.
2. Next to the **View** list, click the browse (**...**) button.
3. In the Views window, click **Add** (+).
4. In the **View name** box, type a name for the view that you want to add.
5. In the **Based on** list, select the view that you want to base the new view on.
6. Click **OK**.
   The new view is added to the **Views** area, and the names of the columns on which the view was based appear selected.
7. Select the columns that you want to display in the new view.
8. Using the arrow buttons, move the names of the columns up and down until the columns are arranged the way you want them.

9. Click **OK**.

You can select the customized view in the Accounting Viewer, in the **View** list.

Record deletion from the Accounting Viewer table

There are two ways to delete accounting records from the Accounting Viewer table:

- **Clear all**—Click the **Clear all** button in the Accounting Viewer.
- **Clear Accounting Log**—This is a quick way to delete all of the accounting records without having to open the Accounting Viewer.

Deleting records from the Accounting Viewer table

Delete records from the Accounting Viewer in either of two ways.

1. Perform one of the following actions:

What do you want to do?	Here's how to do it
Open the Accounting Viewer and delete all accounting records	**a.** In the IC-309m print controller workspace, from the **Info** menu, select **Accounting** > **Accounting Viewer**. **b.** Click **Clear all**.
Delete accounting records without opening the Accounting Viewer	In the IC-309m print controller workspace, from the **Info** menu, select **Accounting** > **Clear accounting log**.

2. In the Clear all accounting data dialog box, click **Yes**.

Exporting the accounting log

Export and save the accounting log in a specified location.

Requirements:

Create a folder for exporting the accounting log.

The accounting log includes all of the columns, listed in the original order and sorting. The data that you export is not deleted from the accounting report (that is, it will still be displayed in the Accounting Viewer). After you save the file, you can manipulate the data in a text editor, or in a spreadsheet application—for example, Microsoft Excel.

1. From the **Info** menu, select **Accounting**.
2. In the Accounting Viewer, filter the information as desired.
3. Click **Export**.
4. Locate the folder in which to save the report.
5. (Optional) Change the file name.
6. From the **Files of Type** drop-down list, select the file type to export.
7. Click **Export**.

Click **Print List** to print the accounting information (filtered and sorted) to any connected printer.

Job report

The Job report window contains all of the information from the job parameters window for a specific job. The Job report window presents the job parameters in a single window that can be printed or exported as a text file.

Display the Job report window by right-clicking a job in the **Storage** area and selecting **Job report**.

Click **Print** to print the job report to any printer.

Exporting the job report

The job ticket report contains all of the information from the Job Parameters window (including Job Parameters window title bar data). The Job Ticket report presents the job parameters on a single sheet and may be exported.

1. In the **Storage** area, right-click the desired job, and select **Job report**.
2. Click **Export** to export the report as a text file.
3. Locate the folder in which to save the report.
4. In the **File name** box, type a name for the file.
5. Click **Save**.

The job report is saved as a text file in the specified location.

6 Managing color

Color management on the IC-309m print controller

Color management is a series of steps taken to ensure that colors are accurate and repeatable when transferred from one device to another. These steps enable you to reproduce the color conceived by a graphic artist or photographer as closely as possible on a monitor, a proof, or the sheet.

Although the IC-309m print controller drives monochrome printers, it uses these same color management steps to take the input color space and convert it into the printer's black color space..

The IC-309m print controller enables you to use these tools to adjust and improve the color quality in your jobs:

- Spot Color Editor, which enables you to edit the CMYK values of every spot color in the Spot color dictionary.
- Gradation Tool, which enables you to create and edit gradation tables to perform tone corrections on your printed output.

IPDS and AFP color management

Note: The IPDS workflow is available only with the Trans Pack.

When you are working in IPDS mode, the IPDS data is handled according to the Color Management Object Content Architecture (CMOCA), as defined by the AFP Color Consortium (AFPCC).

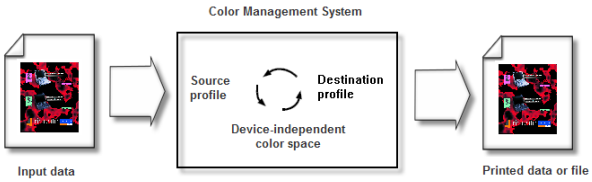
The IC-309m print controller applies color management options for each IPDS data object according to the Color Management Resources (CMR) that are included in the IPDS data stream.Although the IC-309m print controller drives monochrome printers, it still applies color management options for each IPDS data object according to the Color Management Resources (CMR) that are included in the IPDS data stream.

This also applies to AFP files processed in file submission mode.

Note: You can override the CMOCA settings and make additional adjustments to the color settings in the IPDS printer setting or in the AFP tab of the virtual printer.

Profiles

Profiles are used to reproduce color from one device's color space to another device's color space in a consistent manner. They provide the necessary information to convert color data between device-dependent color spaces and device-independent color spaces. You use profiles to color-manage your system.



A source profile defines the RGB or CMYK color space of the object's source, providing information such as the white point, gamma, and type of phosphors used. A destination profile defines the gamut of an output device, such as a printer. The IC-309m print controller uses a device-independent color space to translate between the source color space and the black color space of the output device, which you cannot change.

Managing profiles

The Profile Manager enables you to import and manage source profiles on the IC-309m print controller.

Importing a source profile

Import a source CMYK or RGB profile to emulate other devices or color spaces.

1. From the **Tools** menu, select **Resource Center**.
   The Resource Center window appears.
2. In the **Resource** list, select **Profile Manager**.
3. Click the **Import** button.
   The Import Source ICC Profile window appears.
4. In the **Source profile** area, click the **Browse** button.
5. Locate and select the required source profile, and then click **Open**.
   The new emulation name is displayed in the **Emulation name** box.
6. (Optional) Change the name of the emulation.
7. Click **Import**.

8. Click **Close** to close the Resource Center.
   The new source ICC profile is added to the **Color flow** tab in the job parameters window.

Spot Color Editor overview

A spot color is a specially mixed ink that you can use to reproduce colors that are difficult to reproduce with CMYK inks.

Individual job pages can contain RGB, CMYK, and spot color elements.

The IC-309m print controller Spot Color Editor enables you to edit the values of every spot color in the spot color dictionary. The IC-309m print controller in turn translates these CMYK values to K values only.The edited spot color is saved in a custom dictionary. When the IC-309m print controller identifies a spot color in a job, it looks for the name of the spot color in the Spot Color Library according to the settings in the Job Parameters for that specific job. If the setting for spot colors in the Job Parameters file is:

- **Spot Library**—The IC-309m print controller looks for the name of the spot color in the Spot Color Library in the following sequence:
  - Custom global library
  - Predefined global library
  - Original CMYK File values
- **Original CMYK File values**—The IC-309m print controller uses the Original CMYK File values.

Note: Some PANTONE colors in the PANTONE PLUS color dictionary have the same name as PANTONE colors in the legacy PANTONE color dictionary. Therefore, in the Spot Color Editor the word **Plus** was added to PANTONE PLUS color names to help you distinguish between colors in the two libraries. In the job parameters windows, there is an option to select the **PANTONE Plus library** or the **Legacy PANTONE library**.

See also:

Adding a spot color - Global Library on page 52
Editing a spot color - Global Library on page 52
Deleting a spot color - Global Library on page 53
Protecting specific colors on page 53
Monochrome tab in the job parameters window on page 122

Adding a spot color - Global Library

1. From the **Tools** menu, select **Spot Color Editor**.
2. In the Spot Color Editor dialog box, click **Add**.
3. Type the new color name as it is in the original file.

   Note: The spot color names are case sensitive and should match the names that appear in the original file.
4. Change the **CMYK** values, displayed on the right side of the Spot Color Editor window, as required.
5. Click **Save**.
6. Click **Close**.

The new color is added to the custom dictionary.

If you created a new spot color for an RTP job, re-RIP the job before printing.

Editing a spot color - Global Library

1. From the **Tools** menu, select **Spot Color Editor**.
2. Perform one of the following actions:
   - In the **Color** list, search for the desired color.
   - In the **Spot color library** list, select the color dictionary that contains the color that you want to edit.

     Note: Use the PANTONE C dictionary if you are working with an application such as Adobe InDesign.
3. Select the required color.
   The color's CMYK values and color preview appear on the right side of the Spot Color Editor window.
4. Change the CMYK values as required.
5. Click **Apply**.
   The new color is added to the custom dictionary.
6. Click **Close**.

Deleting a spot color - Global Library

You can delete spot colors from the custom color dictionary.

1. From the **Tools** menu, select **Spot Color Editor**.
2. Select the **Spot color** tab.
3. In the **Spot color library** list, select **Custom Dictionary**.
4. From the list of custom colors, select the color that you want to delete.
5. Click **Remove**.
6. Click **Yes** to delete the color.
7. Click **Close**.

Protecting specific colors

Using the Spot Color Editor, you can protect specific colors—for example, official logos or company colors—to help produce color fidelity and color consistency between devices. When you define a specific color as an RGB, CMYK, or gray spot color and enter a fixed CMYK target for it, the IC-309m print controller treats the selected color as a spot color and protects it. The IC-309m print controller in turn takes the protected color and translates it to a K value.

Protecting an RGB color as a spot color

The RGB spot workflow applies to graphic and text elements.

1. From the **Tools** menu, select **Spot Color Editor**.
2. In the Spot Color Editor dialog box, click the **Protect RGB** tab.
3. Click **Add**.
4. In the **Color name** box, type a name for your color.
5. In the **RGB source values** column and the **CMYK target values** column, type the desired values, or select a spot color from **Entire Predefined List**.
6. Click **Save**.
7. On the **Protect RGB** tab, select the color.
   The color information appears.
8. If necessary, in the **Corrected** column, adjust the CMYK values.
9. Click **Apply**.

10. To apply this to your job, in the job parameters window, in the **Color** tab, select **Protected Colors**, and then select the **Use protected RGB values** check box.

Protecting a gray color as a spot color

The gray spot workflow applies to graphics and text elements.

1. From the **Tools** menu, select **Spot Color Editor**.
2. In the Spot Color Editor dialog box, click the **Protect Gray** tab.
3. Click **Add**.
4. In the **Color name** box, type a name for your color.
5. In the **Gray source value** column and the **CMYK target values** column, type the desired values, or select a spot color from **Entire Predefined List**.
6. Click **Save**.
7. On the **Protect Gray** tab, select the color.
8. If necessary, in the **Corrected** column, adjust the CMYK values.
9. Click **Apply**.
10. To apply this to your job, in the job parameters window, in the **Color** tab, select **Protected Colors**, and then select the **Use protected gray values** check box.

Protecting a CMYK color as a spot color

The CMYK spot workflow applies to graphic and text elements.

1. From the **Tools** menu, select **Spot Color Editor**.
2. In the Spot Color Editor dialog box, click the **Protect CMYK** tab.
3. Click **Add**.
4. In the **Color name** box, type a name for your color.
5. In the **CMYK source values** column and the **CMYK target values** column, type the desired values, or select a spot color from **Entire Predefined List**.
6. Click **Save**.
7. On the **Protect CMYK** tab, select the color.
8. If necessary, in the **Corrected** column, adjust the CMYK values.
9. Click **Apply**.

10. To apply this to your job, in the job parameters window, in the **Color** tab, select **Protected Colors**, and then select the **Use protected CMY values** check box.

Color adjustment with the Gradation Tool

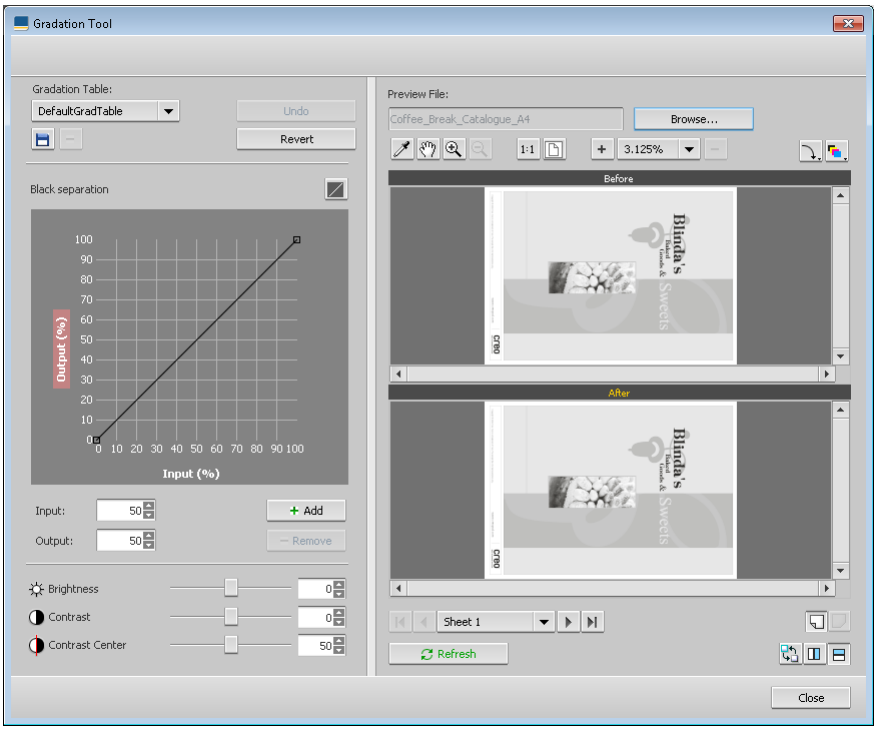
Sometimes you need to perform tone corrections when you print a job. You can use the Gradation Tool to create and edit gradation tables, and then apply these tables to your printed output. Before you send your job to print, preview your processed job in the Gradation Tool window, and check the effect of your gradation tables on your job. Changes in gradation can include changes to the brightness and contrast .

The default gradation table, **DefaultGradTable**, serves as a baseline and consists of a 45° gradation curve, with brightness and contrast set to 0 and contrast center set to 50.

Creating and editing a gradation table

Correct gradation, brightness, and contrast in RTP files, and preview your changes before you send your job to print.

1. From the **Tools** menu, select **Gradation**.
2. Next to the **Preview File** box, click **Browse**.
3. Select the job that you want to preview, and then click **Open**. The Gradation Tool window appears with the **Before** and **After** views displaying your job.



4. Click the curve in the graph to add a point, and then drag the point to modify the separation.
   The value appears in the **Input** or **Output** boxes.
5. To remove a point on the curve, select the point and then click **Remove**.
6. To reset the gradation curve to a 45° curve, click **Reset**.
7. To revert to the original gradation settings, click **Revert**.
8. To remove the last change you made to the gradation graph, click **Undo**.
9. To edit the brightness or contrast, move the slider.
10. To view gradation changes in your job, click **Refresh**.
    Changes are automatically applied to the displayed image in the **After** view.

    Note: When you change gradation table definitions in the Gradation Tool and click **Refresh**, you can see that the changes have affected the image in its entirety. Despite what you see in the **After** view, changes made to the gradation tables do not affect spot colors.
11. Click **Save**.
12. In the **Table name** box, type the name of the new gradation table.
13. Click **OK**.

The gradation table is saved and added to the **Gradation Table** list on the **Color Adjustments** tab in the job parameters window.

7 Production workflows

Printing using imposition

Imposition overview

Imposition is the process of positioning page images on a sheet of paper so that when a printer or digital printing press prints the sheet, the page images will be in the right order. It is part of the process of producing finished documents.

In addition to page images, you can add various marks to the sheets to aid the production process. These marks show where the paper should be folded or trimmed.

Imposition does not affect the content of the individual page but rather affects only the placement of the page images on the sheet. Imposition is a combination of content and layout. The content consists of the pages that should be printed, and the layout is the location of the page on the sheet, along with the page's printing marks, crop marks, and fold marks.

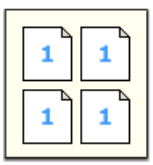
Note: You can impose IPDS jobs by creating an IPDS virtual printer with the appropriate imposition settings.

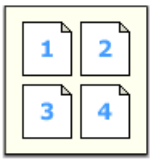
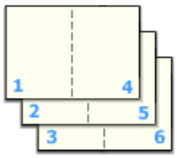
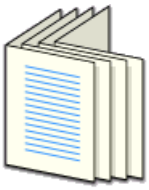
See also:

Imposition tab in the job parameters window on page 114

Imposition methods

The IC-309m print controller provides several imposition methods.

Imposition method	Description
Step and repeat 	This method is the most efficient one when you want to print multiple copies of the same image and fill each sheet to capacity—for example, many business cards on one sheet.

Imposition method	Description	
Step and continue 	This method enables you to place different pages of a job on one sheet so that the sheet is filled to capacity.	
Cut and stack 	This method is used to print, cut, and stack pages while preserving a certain order. When the cut stacks are piled one on top of the other, the entire job ends up in the desired order. The cut-and-stack method is useful primarily for high-volume variable information jobs.	
Saddle stitch 	This method prints pages in a manner that is suited for saddle-stitch binding. With this binding method, sheets are folded, inserted one inside another, and then stitched or stapled along the spine, such as in a brochure or magazine.	
Perfect bound 	This method prints pages in a manner that is suited for perfect binding. Perfect binding is a book-finishing technique in which the folded sheets are gathered in order and clamped into place. A saw roughens the spine edge of the gathered pages. Glue is then applied to the spine, and the cover of the book is affixed to the glued spine. This method is used for most books.	
	Nested saddle stitch 	This sub-method of perfect bound combines the saddle-stitch imposition method and the perfect bound imposition method. As with saddle stitching, pages are grouped together and stapled or stitched across a common center fold. The saddle groups are then stacked side-by-side and glued, as with perfect binding. **Note:** This option is not applicable to VDP jobs.

Imposition method	Description
Folded signatures 	A signature is a large printed sheet of paper folded many times to form a section of a book, magazine, or pamphlet. As a unit, the signature usually contains from four to ninety-six pages, usually in multiples of four pages—for example, 4, 8, 16, 32, and so on. The size of the starting sheet depends on the number of pages in the signature.

Previewing an imposition layout

View your imposition layout and settings.

Requirements:

An imposition method must be selected.

You can open the Preview window at any time and keep it open to check your imposition settings as you select them. The Preview window displays either a schematic representation of your imposition layout or a thumbnail view of the job. The preview dynamically reflects any changes that you make.

1. Open the job parameters window for the desired job.
2. Click the **Imposition** tab, and make sure that an imposition method has been selected.
3. Click the **Preview** button.
   The Preview window appears.
   The Preview window includes the following buttons (selectable at the top of the window) that enable you to select the view you want displayed:
   - **Layout view**—shows the layout view of the imposition.
   - **Thumbnail view**—shows a thumbnail of the imposition.
   - **F**—shows the front view of the selected view (layout or thumbnail).
   - **B**—shows the back view of the selected view (layout or thumbnail).
   - **FB**—shows the front and back view of the selected view (layout or thumbnail).

   If the imposition you are previewing has more than one page, there are also buttons at the top of the window that enable you to page through the imposition.
4. After previewing, click the **Close** button.

Printing a business card job

Use the step-and-repeat imposition method to print multiple copies of the same business card on one printed sheet.

Requirements:

This example assumes that your job contains one-sided business cards that are 50 mm × 90 mm or 1.96 in. × 3.54 in., imposed on A3 or Tabloid paper.

1. Click the **suspend** button to suspend the **Process Queue**.
2. From the **File** menu, select **Import**.
3. Import your business card file to the **Print** virtual printer.
   The file is imported to the Process queue with a **Waiting** status.
4. In the suspended Process queue, double-click the business card file.
   The job parameters window appears.
5. In the job parameters window, under **Print**, select the **Paper Stock** tab.
6. Choose Paper Name, and in the **Paper size** list, select **11 x 17** or **A3**.
7. Click the **Imposition** tab.
8. In the **Imposition method** list, select **Step & Repeat**.
9. Select the **Size** tab.
   a. For **Trim size**, select **Custom**.
   b. For **H**, type `1.96` inches or `50` mm.
   c. For **W**, type `3.54` inches or `90` mm.

   A preview of the layout is displayed below.
10. For **Trim orientation**, make sure that the **Landscape** option is selected.
11. Select the **Templates** parameter, and set the values as follows:
    a. In the **Layout** list, select **Best Fit**.
       The IC-309m print controller determines how many business cards can fit on each sheet and calculates the best fit.
    b. For **Print method**, make sure that **Simplex** is selected, because your business cards are one-sided.

12. Click the **Preview** button to preview the layout.
    The Preview window appears, displaying a schematic representation of your imposition layout.The layout of three columns by eight rows appears with no imposition conflict.
13. Leave the Preview window open, and, if necessary, drag it to the right.
14. Select the **Marks** parameter.
15. In the **Marks** list, select **Crop marks**.
    The crop marks automatically appear in the Preview window and the **Margins** setting is automatically increased to accommodate the crop marks.
16. In the **Gutter** box, type `0.2` inches or `5` mm.
    The new gutter size automatically appears in the Preview window. The IC-309m print controller calculates that to accommodate a gutter of 0.2 inches or 5 mm, a layout of three columns by seven rows will best fit on each sheet.
17. Check the Preview window to make sure that no imposition conflicts appear.
18. In the job parameters window, click **Save**.
19. Release the suspended **Process Queue**.
    Your business cards are processed and printed according to the imposition settings.

Printing a saddle-stitch job

Use the saddle-stitch imposition method to print two sets of the same job on one printed sheet to save paper and production time.

Requirements:

This example assumes the following:

- Your job is an eight-page brochure, with a custom trim size of 5.27 by 3.34 inches, or 134 by 85 mm.
- Tabloid or A3 paper is loaded in the printer.

1. In the **Storage** area, double-click your job.
2. In the job parameters window, click the **Imposition** tab.
3. In the **Method** list, select **Saddle stitch**.
4. In the **Sets per sheet** list, select **2** to print two sets of your imposed job on one printed sheet.
5. Click the **Marks** parameter.
6. In the **Marks** list, select **Crop marks**.

7. Change the position of the marks on the image by adjusting the values in the **Horizontal Offset** and **Vertical Offset** boxes.
8. In the **Mark color** list, select the color for the mark.
9. Click the **Spacing** parameter.
10. In the **Spacing** area adjust the values for:
    - **Margins**
    - **Horizontal gutter**
    - **Vertical gutter**
    - **Spine**
11. In the **Custom bleed size** box, type `0.118` inches or `3` mm.
12. Click the **Preview** button.
    The Preview window appears, displaying a schematic representation of your imposition layout.
13. Close the Preview window.
14. Click **Submit**.
    Your job is processed and printed according to the imposition settings for two sets per sheet. You have used most of the sheet's space and saved on paper. You can also easily cut and staple the two brochures.

Printing a nested saddle-stitch job

Use the nested saddle-stitch imposition method to print a book.

- This example assumes that your job is a 120-page book with a trim size of 8.2 by 11.0 inches. Each booklet will include four sheets (16 pages).
- Create a finishing mark set to determine where the finisher will cut.

1. In the **Storage** area, double-click your job.
2. In the job parameters window, click **Print**, and then click the **Paper Stock** parameter.
3. In the **Paper Name** list, select the paper name for your job.
4. Click the **Imposition method** parameter.
5. In the **Methods** list, select **Perfect Bound**.

6. Select the **Nested-Saddle-Sheet per group** check box, and type `4`.

   Note: You might have blank pages in the last booklet of your job. The number of blank pages depends on how many pages are in the entire job, and how many sheets you set per group.

7. (Optional) Click **Preview** to preview the layout and page sequence of your job, and then click **Close**.
8. Click the **Templates** parameter.
9. In the **Layout** list, select **Custom**.
10. In the **Columns** list, select **2**.
11. In the **Rows** list, select **1**.
12. Click the **Marks** parameter.
13. In the **Marks** list, select **Crop & fold marks** and select the **Both sides** check box.
14. In the **Marks color** list, select a color for the marks that will be placed on the printed sheets.

    Note: If you want to place marks on a job that has a dark bleed, select white or gray for the marks color.

15. Click the **Creep** parameter.
16. In the **Creep in** area, select **Auto**.
17. Click the **Finishing** tab, and then click the **Marks and barcodes** parameter.
18. Click **Add**.
19. In the **Mark Set** column, select the mark set you created in the Resource Center.
20. To print the finishing marks on every sheet, in the **Selection Type** column, select **All**.
21. Suspend the **Print Queue** and then click **Submit** to process your imposed job.
22. In the **Storage** area, right-click your job, and select **Job Preview**.

Printing a folded signature job

Use the folded signature imposition method to print a book.

Requirements:

- This example assumes that your job is a book with a trim size of 8.2 by 11.0 inches.
- Create a finishing mark set to determine where the finisher will cut between each signature.

1. In the **Storage** area, double-click your job.
2. In the job parameters window, click the **Print** tab, and then click the **Paper Stock** parameter.
3. In the **Paper Stock** list, select the paper name for your job.
4. Click the **Imposition** tab, and then click the **Imposition method** parameter.
5. In the **Methods** list, select **Folded Signature**.
6. Click the **Templates** parameter.
7. In the **Layout** list, select **16 Pg. Booklet Type7**.
8. Click **Preview**.
9. Click **Thumbnail view**, and verify that there are no imposition conflicts.
10. Click **Close**.
11. Click the **Marks** parameter.
12. In the **Marks** list, select **Crop & fold marks** and select the **Both sides** check box.
13. In the **Marks color** list, select a color for the marks that will be placed on the printed sheets.

    Note: If you want to place marks on a job that has a dark bleed, select white or gray for the marks color.
14. Select the **Print hairline where sheet folds** check box.
15. Click the **Signature Marks** parameter.
16. In the **Mode** list, select **Auto**.

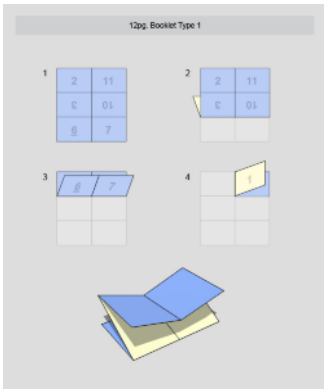
    Note: Signature marks print marks along the spine of the book, and help to assemble printed signatures for binding in the correct order.
17. Click the **Finishing** tab, and then click the **Marks and barcodes** parameter.
18. Click **Add**.
19. In the **Mark Set** column, select the mark set you created in the Resource Center.
20. To print the finishing marks on every sheet, in the **Selection Type** column, select **All**.
21. Suspend the **Print Queue** , and then click **Submit** to process your imposed job.
22. In the **Storage** area, right-click your job, and select **Job Preview**.

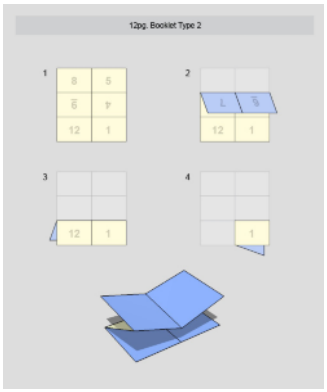
Folded signature templates

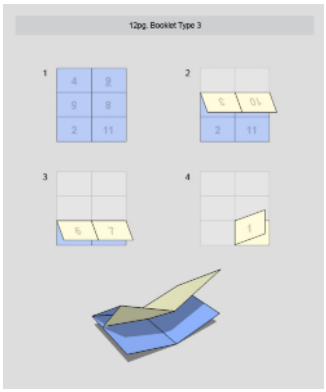
The Imposition Template Builder provides many folded signature templates.

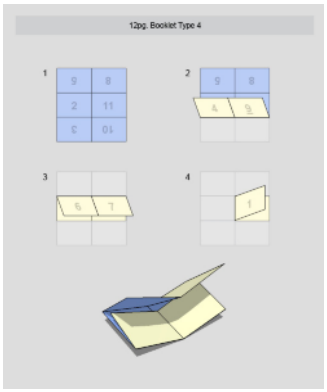
The templates that you choose determine how the signature sheet is folded.

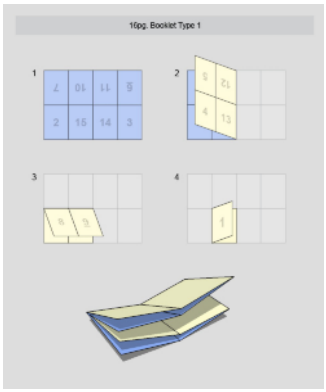
Note: When duplicating and editing a predefined folded signature template, pagination might reset after editing. Make sure that the pagination is as expected in the Imposition template viewer section.

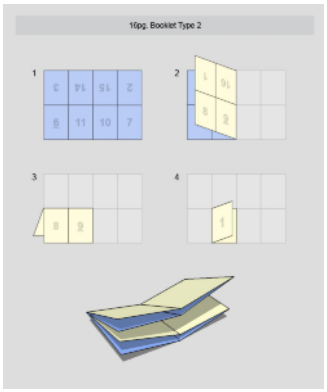


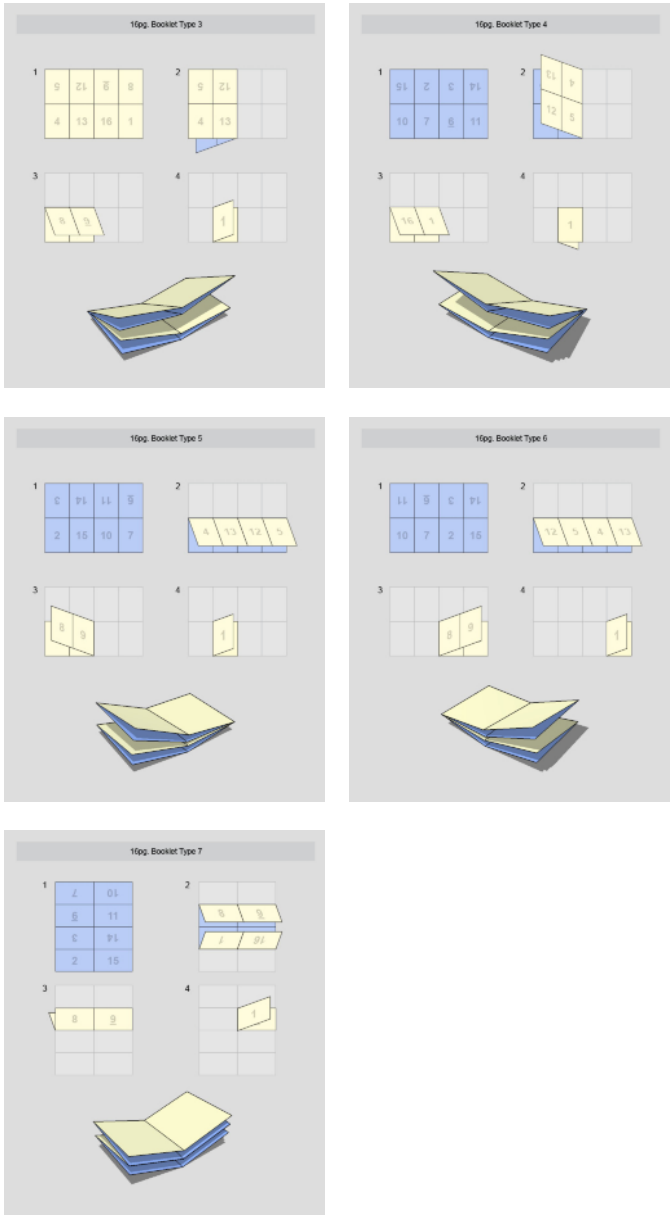












Imposition Template Builder tool

Imposition Template Builder overview

The Imposition Template Builder is available only with the Action Pack.

The Imposition Template Builder enables you to define all imposition settings without having to adjust imposition parameters in the job parameters window. After you save a template in the Imposition Template Builder, you can apply it to a specific job using the **Imposition** tab in the job parameters window. The

IC-309m print controller automatically updates the imposition settings in your job according to the selected imposition template.

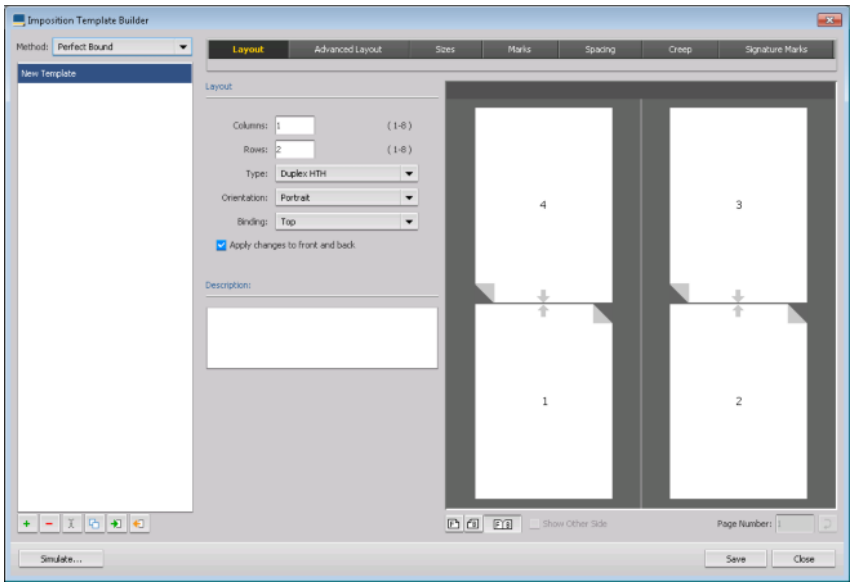
In addition, when you create a template, the IC-309m print controller publishes the list of imposition templates via JMF. Via JDF, you can then select the desired imposition template by specifying the imposition template name.

Creating an imposition template

Use the Imposition Template Builder to create an imposition template. The Imposition Template Builder is available only with the Action Pack.

The Imposition Template Builder tool enables you to select the imposition method for which you want to create a template, and then define all the parameters for the selected imposition method. There are seven tab in the Imposition Template Builder, and the options in each tab vary according to the imposition method selected. A detailed list of all the available options can be found in the section *Imposition tab in the job parameters window*.

1. From the **Tools** menu, select **Imposition Template Builder**. The Imposition Template Builder appears and displays tabs that enable you to define all of the required imposition parameters for your new template.



2. In the **Method** list, select an imposition method.
   You can select from the following methods:

   - **Saddle Stitch**—A book-finishing technique in which the pages of a book are attached through stitching or stapling in the spine fold—for example, in brochures.
   - **Perfect Bound**—A book-finishing technique in which the spine fold is trimmed and the edges of the gathered pages are roughened and glued together—for example, in hardcover books.
   - **Step and Repeat**—A technique in which multiple copies of an image are printed to fill up a large sheet. This method is used mainly for business cards.
   - **Step and Continue**—A technique in which different pages of a job are printed on one sheet according to the selected layout, so that the sheet is filled to capacity.
   - **Cut and Stack**—A book-finishing technique in which jobs are printed, cut, stacked, and bound in the most efficient manner to preserve the original sorting. A job's pages, booklets, or books are sorted in a Z-shape, (each stack of pages is sorted in consecutive order). When stacks are piled one on top of another, the entire job is already sorted up or down.
   - **Folded Signature**—A technique in which a large sheet is folded several times to form a section of a book, a magazine, or a pamphlet.

3. Click **New**.
4. Type the name of the new template, and press `Enter`.

5. In the **Layout** area, type the number of columns and number of rows that you need.

   Note: The imposition method that you select determines the number of columns and rows that you can enter. For saddle stitch and perfect bound, you can place up to 64 pages on one sheet (8 × 8). For step and repeat and step and continue, you can place up to 625 pages on one sheet (25 × 25).

6. In the **Type** list, select **Simplex** or **Duplex**.
7. In the **Orientation** list, select **Portrait** or **Landscape**.
8. In the **Binding** list, select the appropriate binding method.

   Note: Binding is available only when **Saddle Stitch** or **Perfect Bound** imposition methods are selected.

9. (Optional) In the **Description** box, type a name for the imposition template.
   The description name is the name that is used when the imposition templates are published via JMF.
10. (Optional) Depending on the imposition method and the template required for your specific jobs, you can continue defining imposition parameters in the following other tabs:

    - **Advanced Layout**
    - **Sizes**
    - **Marks**
    - **Spacing**
    - **Creep**
    - **Signature Marks**

    Note: The options in each tab varies according to the imposition method selected. A detailed list of all the available options can be found in the section *Imposition tab in the job parameters window*.

11. Click **Save**.

See also:

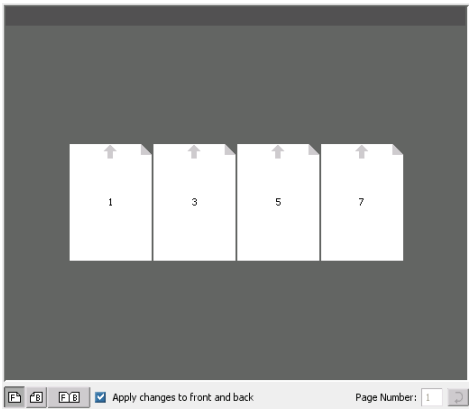
Imposition tab in the job parameters window on page 114

Imposition template viewer window

The Imposition Template Builder is available only with the Action Pack.

As you create or modify a template, you can see your template in the template viewer. As you select parameters, the template viewer dynamically changes to reflect your selections.

Note: For the Cut&Stack imposition method, a Step & Repeat pagination is displayed. When applied to a job, a correct pagination preview is displayed, in the Job Parameters window.



Buttons

Notes:

- When **Simplex** is selected, only the **Front** view is available.
- Sheet size is set on the **Imposition** tab. The sheet size that appears in the template viewer is dynamic. It changes to accommodate the parameters that you choose.

Front	Displays the front pages.
Back	Displays the back pages.
Both	Displays both the front and back pages simultaneously.
Rotate 180°	Rotates one or more pages 180°.

Rotating a page 180°

The Imposition Template Builder is available only with the Action Pack.

Use the template viewer to rotate one or more pages 180°.

1. Make sure that the **Apply changes to front and back** check box is clear.
2. Select the desired page.

   Note: To select multiple consecutive pages, click the first page, press and hold Shift, and then click the last page. Select multiple non-consecutive pages by pressing and holding Ctrl as you click each page.

   The gray arrow on each page indicates the top of the page. The page number is indicated by the number that appears on each page.
3. Click **Rotate 180°**  .

Rotating both the front and back sides of a page 180°

The Imposition Template Builder is available only with the Action Pack.

Use the template viewer to rotate both the front and back sides of one or more pages 180°.

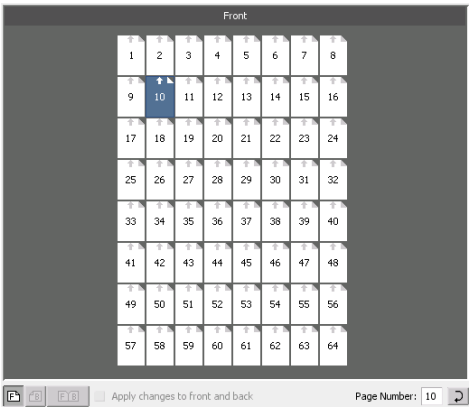
1. Select the desired page.
2. Select the **Apply changes to front and back** check box.
3. Click **Rotate 180°**  .

Changing the position of a specific page on the press sheet

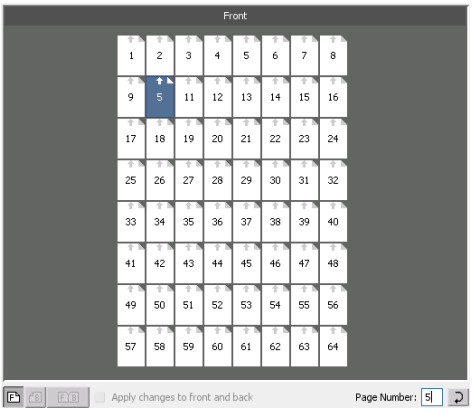
The Imposition Template Builder is available only with the Action Pack.

Use the template viewer to change the location of a page. This is often necessary when the step-and-continue imposition method is selected.

1. Click the target location that you want to move a page to. The target location turns blue.



2. Click the **Page Number** box, and type the number of the page that you want to move to the target location.
3. Press `Enter`.
   The page moves to its new location.



Note: The page that was previously in the target location is not automatically moved to another location. To retain this page, manually move it to a new location.
If you have a duplex template and the **Apply changes to front and back** check box is selected, the page number for the back side of the page also changes when you move the page to a new location.

Simulating a job with your template

Check how a job from the **Storage** area looks if you apply an imposition template to it. The Imposition Template Builder is available only with the Action Pack.

Note: The imposition template parameters are not actually applied to the job —you see only a simulation of how the job will look if this template is selected on the **Imposition** tab.

1. In the Imposition Template Builder window, click the **Simulate** button.
2. Click **Browse**.
3. Select a job, and then click **Select**.
   The parameters of the job appear with their values in the Simulate Imposition window.
4. Change the parameters as desired.
5. Click **View Simulated Job**.

The Preview window appears. A simulation of the job is displayed with the current imposition template applied.

Printing with mixed media

Mixed media overview

The IC-309m print controller enables you to print complex documents that contain paper of varying size, coating, weight, and so forth.

There are different types of mixed media jobs. A mixed media job can include commands embedded in the file, such as dynamic page exeptions, or you can manually program the media print parameters for a range of pages in a job.

Page exceptions are special pages within a job for which you assign different media print parameters. For example, you can assign different media for each chapter in a book. Inserts are blank pages of a selected media that are inserted in a job in a specified location. For example, you can add blank pages between sections within a brochure.

Dynamic page exceptions are page exceptions or inserts that are embedded in the file. These files use `setpagedevice` keys to indicate that the printer must switch media during the printing of a job. When a job is RIPed, the IC-309m print controller identifies the keys or commands and maps them to the selected types of paper. The printer then uses those types of paper for the job. The IC-309m print controller supports dynamic page exceptions for the following file formats:

- PostScript
- VPS
- PPML

The method that you choose to print these documents depends on the type of document that you want to print.

What type of document do you want to print?	Use this option in the job parameters window
Mixed size	Parameters from file
Mixed size with predefined tabs	Parameters from file
Mixed media	Exceptions
Dynamic page exceptions	Exceptions from file

Creating a rule set for mapping dynamic page exceptions

Create a set of rules that maps dynamic page exceptions to the paper stock parameters or input tray in the job parameters window. Creating rules for using dynamic page exceptions is available only with the Action Pack.

Requirements: A file with embedded `setpagedevice` keys.

The IC-309m print controller supports the following `setpagedevice` keys:

- `MediaType`

  Note: There is an option in the Preferences window to determine whether `MediaType` is automatically mapped to Media Type or to Paper Name when not using a rule set.

- `MediaColor`
- `MediaWeight`
- `PageSize`
- `MediaPosition`

1. From the **Tools** menu, select **Resource Center**.
2. In the **Resource** list, select **Exception Mapping Rules**.
   The Exception Mapping Rules window appears.
3. To create a new set, perform the following steps:
   a. Click the **Add** button.
   b. Type a name for the set.
      The new name appears in the **Sets** list.

4. Define a new rule according to the `setpagedevice` keys found in your file.

What do you want to do?	Here's how to do it
Map `MediaType`,`MediaColor`, `MediaWeight`, or `PageSize` keys to the paper stock parameters in the job parameters window.	**a.** On the **Paper Name** tab, click the **Add New Rules** button. **b.** In the Add New Rule dialog box, in the **From file** area, select the `setpagedevice` keys defined in your file. **c.** In the **Map to** area, in the **Paper Name** list, select the paper stock that you want to use for printing. **d.** Click **OK** to add the new rule to the set.
Map the `MediaPosition` key to the input tray in the job parameters window.	**a.** On the **Input Tray** tab, click the click the **Add New Rules** button. **b.** In the Add New Rule dialog box, in the **From file** area, type the media position value defined in your file. **c.** In the **Map to** area, in the **Input Tray** list, select the input tray that you want to use for printing. **d.** Click **OK** to add the new rule to the set.

5. Click **Close** to close the Resource Center.

Next: You can assign a rule set to your job in the job parameters window by selecting **Exceptions** > **Exceptions From File** > **Select Rule Set**.

Printing dynamic page exceptions

After creating a set of rules to map a file that includes dynamic page exceptions, you now need to assign the rule set to your job.

Requirements: The required paper sizes must be loaded in the trays.

1. In the **Storage** area, double-click your job.
2. Click **Exceptions**, and then click **Exceptions From File**.
3. In the **Select Rules Set** list, select the rule set that you created for your file.
4. (Optional) To verify or edit the mapping for the dynamic page exceptions, click **File mapping**.
   The File mapping results window appears. For each parameter that was defined in the file, a pass or fail icon indicates whether the mapping was successful.
5. (Optional) To edit the mapping results, perform any of the following steps:
   a. To select a different paper stock, in the **Paper ProfileName** column, click the paper name that you want to change and in the list that appears select a new paper name.
   b. To change the print method, in the **Print method** column, click the print method that you want to change and in the list that appears select a new print method.
   c. To change the tray, in the **Tray** column, click the tray that you want to change and in the list that appears select a new tray.
   d. Click **OK**.
6. Click **Submit** to send your job for printing.

Printing a file with mixed paper sizes

Print a file that includes two or more different paper sizes, or predefined tabs.

Requirements:

Note: The IC-309m print controller favors processing jobs for Long Edge Feed (LEF) paper orientation over Short Edge Feed (SEF) paper orientation, unless you specifically requests SEF. For example: when both Letter (8.5x11) (LEF orientation) and Letter (8.5x11) S (SEF orientation) are loaded, the IC-309m print controller processes the job as Letter (8.5x11), and not Letter (8.5x11) S. If you want to process the job as Letter (8.5x11) S, explicitly set Letter (8.5x11) S as the paper size in the Job Parameters window.

The required paper sizes must be loaded in the trays.

1. In the **Storage** area, double-click your job.
   The job parameters window appears.
2. Under **Print**, click **Paper stock**.
   The **Parameters from file** option is selected by default.

   Note: The IC-309m print controller automatically maps the paper sizes that are defined in the file to the paper that is loaded in the trays. The first paper size that is found in the file appears in the **Paper size** list.
3. (Optional) To verify the mapping results, click **File mapping**.
   The File mapping results window appears. For each parameter that was defined in the file, a pass or fail icon indicates whether the mapping was successful. In addition, file information, such as paper size and paper weight, appear in the **From file** column. The **Paper name** column, **Print method** column, and **Tray column** display the mapping results according to the printer resources.
4. (Optional) To edit the mapping results, perform any of the following steps:
   a. To select a different paper stock, in the **Paper name** column, click the paper name that you want to change and in the list that appears select a new paper name.
   b. To change the print method, in the **Print method** column, click the print method that you want to change and in the list that appears select a new print method.
   c. To change the tray, in the **Tray** column, click the tray that you want to change and in the list that appears select a new tray.
   d. Click **OK**.
5. In the job parameters window, click **Submit**.

Setting custom page exceptions via the job parameters window

Set custom page exceptions when you want to specify different media print parameters for a range of pages, add a front cover or back cover, or insert blank media between pages.

1. In the **Storage** area, double-click your job.
   The job parameters window appears.
2. Click **Exceptions**.
3. Click **Add (+)** and then select the type of page exception that you want to add—for example, **Front cover**.
4. In the Advanced Options window, you can define print options for the page exceptions that you are assigning to your job by performing the following steps:
   a. To specify a different print method, click **Print method**.
   b. To select a different paper name, click **Paper Stock**.
   c. To shift the position of the image, click **Image alignment**
   d. To rotate the page 180°, click **Layout**.
   e. To select different finishing options, click **Finishing**.
      Note: This option is only available when you select **Split to Sets**.
   f. Click **Save**.
   The page exceptions are added to the **Exceptions** list.
5. Click **Save** to close the job parameters window.

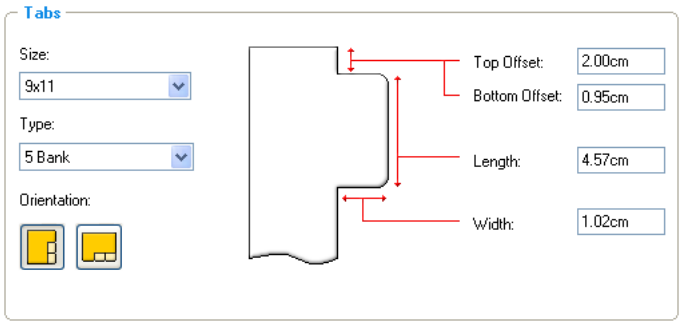
Working with the Creo Server Tabs plug-in for Acrobat

Tabs plug-in overview

The Tabs plug-in is a Creo plug-in, developed for use with Adobe Acrobat. The Tabs plug-in enables you to create and place tabs in your unprocessed job (PDF or PostScript), manage the tab and text attributes, and save a set of attributes for future use.

Tabs plug-in window

Text attributes - tabs



Tabs

Size

The size of the tabbed sheet. By default, the tab size for letter jobs is set at **9 × 11**, and for A4 jobs to **A4+**.

Type

The number and type of tabs that you can select.

Note: If you want your tabs to be reversed—that is for the lowest tab to be the first one—select one of the reverse tab options.

Orientation

Orientation of the tab.

Top Offset

The value for the distance between the upper edge of the paper and the upper edge of the uppermost tab.

Note: The units in the Tabs plug-in are set in the Acrobat Preferences dialog box.

Bottom Offset

The value for the distance between the lower edge of the paper and the lower edge of the lowest tab.

Text attributes - tabs

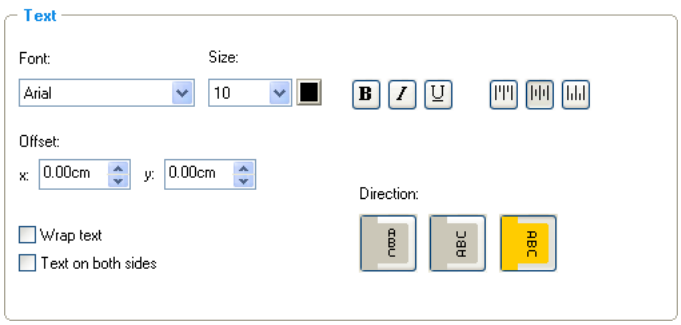
Length

The length of the tab.

Width

The width of the tab.

Text attributes - text



Text

Font

The font for the tab text.

Size

The font size for the tab text.

Color

The color of the tab text.

Bold

Bolds the tab text.

Italic

Makes the tab text italic.

Text attributes - text

 **Underline**

Underlines the tab text.

Alignment

The alignment of the tab, according to the orientation of the tab. The orientation that you select determines the alignment buttons that are displayed.

-  **Align Left Portrait**
-  **Align Center Portrait**
-  **Align Right Portrait**
-  **Align Left Landscape**
-  **Align Center Landscape**
-  **Align Right Landscape**

Offset

The value that adjusts the offset of text on the tab. The **x** value moves the text horizontally. The **y** value moves the text vertically.

Wrap text

Automatically wraps the text onto the following line when the entire text does not fit on one line.

Text on both sides

The same text appears on both sides of the tab.

Text attributes - text

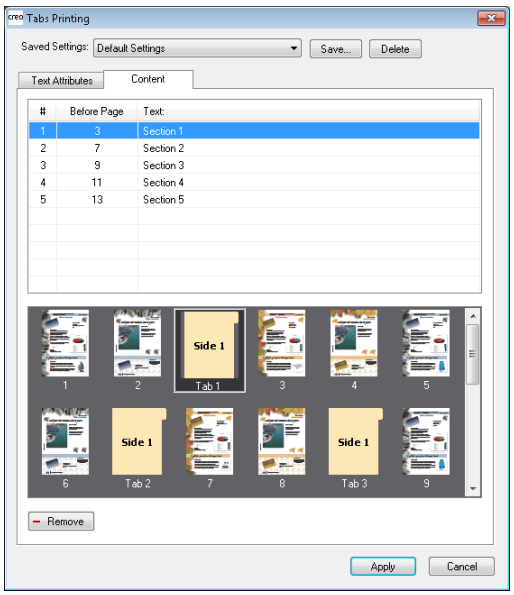
Direction

Direction of the text.

- **Vertical**
- **Counter-clockwise**
- **Clockwise**

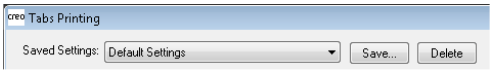
Note: The **Direction** options are available only for portrait jobs.

Content



#	The tab number.
Before Page	The page number that the tab precedes.
Text	The text that appears on the tab.

Content	
Thumbnails area	A thumbnail view of the job with page numbers and tabs indicated.
Remove	Removes the selected page or tab.

Settings	
	
Saved Settings	Lists the saved settings files.
Save	Saves the currently selected settings in a file. This settings file can be applied to other PDF or PostScript files.
Delete	Deletes the selected settings file.

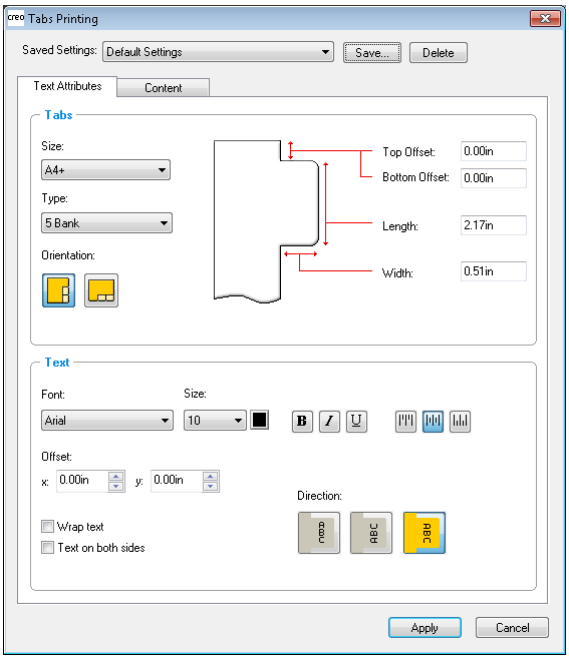
Adding tabs to a file

Requirements:

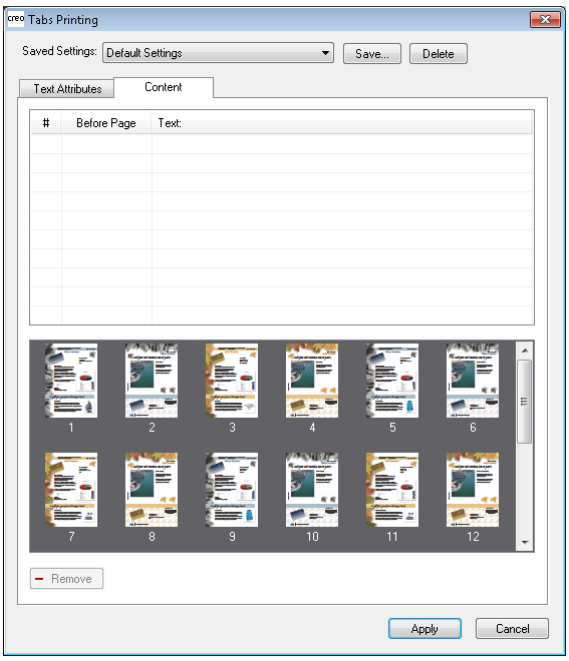
You can only add tabs to a PDF file or PostScript file.

Note: A portrait tab printing job usually requires single reverse-collated tab paper, whereas a landscape tab printing job requires single straight-collated tab paper.

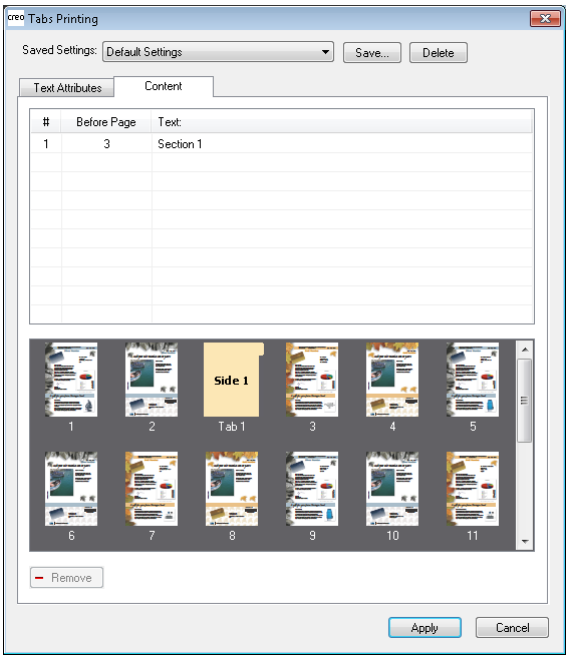
1. In the **Storage** area, right-click your unprocessed job, and select **Job Preview**.
   The job opens in Acrobat software.
2. From the **Plug-Ins** menu, select **Tabs Printing**.
   The Tabs Printing window opens, displaying the **Text Attributes** tab.



3. In the **Tabs** area, set the tab attributes.
4. (Optional) In the **Text** area, set the attributes of the text on the tabs.
5. Click the **Content** tab.



6. In the **Before Page** column, click the first cell and type the number of the page that you want the tab to precede.
7. In the **Text** column, type the text for the tab.
   The tab appears in the thumbnail area.



8. To add more tabs, repeat steps 6 and 7.
9. Click **Apply** to apply the tab settings to your document.
   The Tabs Printing window closes, and the tabs that you added become part of the document.
10. From the Acrobat **File** menu, select **Save**, and then close Acrobat.

Next:

In the job parameters window, under **Print** > **Paper Stock** select the **Parameters from file** option to print your document.

See also:

Printing a file with mixed paper sizes on page 78

Managing tabs

Changing the location of a tab

1. In the **Storage** area, right-click your unprocessed job, and select **Job Preview**.
   The job opens in Acrobat software.
2. From the **Plug-Ins** menu, select **Tabs Printing**.
   The Tabs Printing window opens, displaying the **Text Attributes** tab.
3. Click the **Content** tab.
4. In the thumbnail area, click the tab that you want to move, and drag it to the desired location.
   The tab moves to the selected location and the tab numbers are updated accordingly.

Replacing a page with a tab

1. In the **Storage** area, right-click your unprocessed job, and select **Job Preview**.
   The job opens in Acrobat software.
2. From the **Plug-Ins** menu, select **Tabs Printing**.
   The Tabs Printing window opens, displaying the **Text Attributes** tab.
3. Click the **Content** tab.
4. In the thumbnail area, right-click the page that you want to replace, and select **Replace with tab page**.
5. In the table, type the tab text.

The page is deleted from the document, and replaced with a tab page.

Inserting a tab before or after a specific page

1. In the **Storage** area, right-click your unprocessed job, and select **Job Preview**.
   The job opens in Acrobat software.
2. From the **Plug-Ins** menu, select **Tabs Printing**.
   The Tabs Printing window opens, displaying the **Text Attributes** tab.
3. Click the **Content** tab.
4. In the thumbnail area, right-click the page and select **Insert tab before page** or **Insert tab after page**.

Removing a page or tab from the file

1. In the **Storage** area, right-click your unprocessed job, and select **Job Preview**.
   The job opens in Acrobat software.
2. From the **Plug-Ins** menu, select **Tabs Printing**.
   The Tabs Printing window opens, displaying the **Text Attributes** tab.
3. Click the **Content** tab.
4. In the thumbnail area, right-click the page or tab that you want to remove, and select **Remove**.

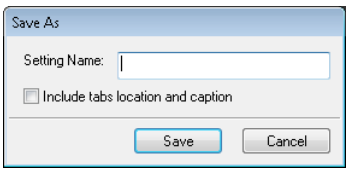
Saving the tab settings

Requirements:

You have created tabs in a PDF or PostScript file.

After creating tabs in your file, you can save the tab text attribute settings and the tab locations and captions (text on the tab).

1. In the upper part of the **Tabs Printing** window, click **Save**.



2. In the **Setting Name** box, type a name for the tab settings.
3. Select the **Include Tab location and Caption** check box to save the locations and text of the tabs that you created.
4. Click **Save**.

The setting is saved in the **Saved Settings** list.

Note: To apply this saved setting to your file, select it from the **Saved Settings** list, and then click **Apply**.

Deleting saved tab settings

1. In the **Storage** area, right-click your unprocessed job, and select **Job Preview**.
   The job opens in Acrobat software.
2. From the **Plug-Ins** menu, select **Tabs Printing**.
   The Tabs Printing window opens, displaying the **Text Attributes** tab.
3. From the **Saved Settings** list, select the desired saved settings.
4. Click **Delete**.

Working with near-line finishers

Near-line finisher overview

The IC-309m print controller supports three near-line finishers—the Duplo DC-645 slitter/cutter/creaser, Duplo DSF-2000 sheet feeder, and Duplo DSF-5000 sheet feeder. Using the IC-309m print controller, you can perform the following actions:

- Generate and print bar codes and registration marks for the Duplo DC-645 finisher. Bar codes and registration marks are generated according to the job details programmed on the finisher.
- Generate and print bar codes, corner marks, and end marks for the DSF-2000 finisher. Bar codes, corner marks, and end marks are printed on every page and are automatically created based on the following job settings:
  - Number of sets
  - Sheet ID
  - Number of sheets in one set
- Generate and print bar codes and end marks for the DSF-5000 finisher. Bar codes and end marks are printed on every page and are automatically created based on the following job settings:
  - Number of sets
  - Sheet ID
  - Number of sheets in one set

Generating a corner mark and bar code

Generate a bar code, or corner mark, and print the finishing marks for a near-line finisher.

Requirements:

The job details that you are going to use must already be programmed on the near-line finisher.

1. Open the job parameters window for the desired job.
2. On the **Finishing** tab, select **Near-line finisher**.
3. In the **Device** list, select the finisher that you want to use—for example, **Duplo DSF-2000**.

   Note: The options that appear vary according to the selected finisher.
4. To print a corner mark, select the **Generate corner mark** check box.
5. To print a bar code, select the **Generate barcode** check box.
6. In the **Position** list, select the area on the page where you want to place the corner mark and bar code.
7. In the **Side** list, select the side of the sheet where you want to place the corner mark and bar code.
8. To adjust the offset of the corner mark, in the **Corner mark offset** boxes, enter values for the horizontal offset and the vertical offset.
9. To adjust the offset of the bar code, in the **Barcode offset** boxes, enter values for the horizontal offset and the vertical offset.
10. To print an end mark, perform the following actions:
    a. Select the **End mark** check box.
    b. In the **Side** list, select the side of the sheet where you want to place the end mark.
    c. In the **Position** list, select the area on the page where you want to place the end mark.
    d. To offset the end mark from the center, in the **Offset from center** box, enter the value.
    e. In the **Mark width** box, enter the thickness of the end mark.
11. Click **Save**, and then submit your job for printing.

Next:

After your job finishes printing, place the pages in the near-line finisher.

Working in IPDS mode

IPDS overview

Note: The IPDS workflow is available only with the Trans Pack.

The Intelligent Printer Data Stream (IPDS) and the advanced function printing (AFP) format were developed to support the printing of transactional jobs with a high level of security.

In the IPDS workflow, two-way communication enables the IPDS host to send data chunks to the printer and receive information back from the printer. To maintain data security, data sent by the host is deleted immediately after being printed.

IPDS printing requires jobs in the AFP file format. AFP is a VDP format that enables databases, text, and graphic elements to be merged and displayed on the printed sheet.

There are specific IPDS printers installed to support this workflow. These IPDS printers can also be customized according to your needs.

In IPDS printing the IC-309m print controller emulates an IPDS printer with additional IC-309m print controller capabilities, such as advanced color and quality features. The IPDS printing is controlled by the IPDS host and some features on the workspace and job parameters are changed or unavailable.

Some of those features are:

- The **Storage** area is unavailable. Only the queues are visible while in IPDS mode.
- All right-click menu options in the workspace are unavailable, except for **Job Info**.
- There is no queue control because there are no pause or resume buttons.
- The queues are for display only. Management actions, such as promote jobs, demote jobs, dragging files across queues and holding/resuming the queues, are unavailable.
- Commercial jobs cannot be processed. Jobs that are sent to the IC-309m print controller, while in IPDS mode, will be held in

freeze status in the Incoming queue, until switching back to File Submission mode.

- The **Import** button and also most of the IC-309m print controller's tools such as calibration, job preview, gradation and more are unavailable. Some stay accessible, for example—the resource center, spot colors editor and job alerts.

Selecting the IPDS workflow mode

Note: The IPDS workflow is available only with the Trans Pack.

1. In the IC-309m print controller workspace, select **File** > **Preferences**.
2. Select **Workflow Mode**, and then select **IPDS**.
3. Click **Apply**.
   Your system is now ready to process and print files using the IPDS workflow.

Enabling end of job timeout

Note: The IPDS workflow is available only with the Trans Pack.

Use this setting when the last pages of a job are not printed, and the job remains in the Incoming Queue.

1. In the IC-309m print controller workspace, select **File** > **Preferences**.
2. Select **IPDS Settings**, and then select **Enable end of Job timeout**.
3. Click **Save**.

   Note: If the IPDS host does not send a Define Group Boundary, this option sets the time out to close the job on the Creo server.

Creating and editing an IPDS printer

Note: The IPDS workflow is available only with the Trans Pack.

1. From the **Tools** menu, select **Resource Center**.
2. From the **Resource** list, select **IPDS Printers**.
3. Click the **New** button to add a new printer, or the **Edit** button to edit an existing printer.

   Note: To edit an existing printer, select the required printer and then click the **Edit** button.

4. In the **Name** box, type a name for the new printer that you want to add.

   Note: You cannot change the name of the predefined IPDS printers.

5. From the **Based on** list, select an existing printer with similar settings.

   Note: This parameter cannot be changed for an existing IPDS printer.

6. Click **Edit** to change the job parameters of your new printer.

   Note: If you don't need to edit the job parameters, the settings of the new printer are taken from the printer on which it is based.

7. In **Configuration** > **IPDS tray mapping**, set the **Input tray ID number** to the target printer input tray designated for the selected job printing.

8. Click **OK**.
   The new printer appears in the IPDS printers list.

9. To activate the IPDS printer, select the IPDS printer and then click **Activate**.

Setting up the IPDS host

To print IPDS data to the IC-309m print controller you first need to set up the IPDS host.

Requirements:

Note: The IPDS workflow is available only with the Trans Pack.

This procedure is performed on the IPDS host computer.

1. Create a Print Services Facility (PSF) TCP/IP printer.
   This printer will be used as the IC-309m print controller IPDS printer.

2. Set the following options for the PSF TCP/IP printer:

   a. Enter the IC-309m print controller IP address.

   b. Enter 5001 for the TCP/IP IPDS port of the IC-309m print controller.

IPDS printer parameters

Note: The IPDS workflow is available only with the Trans Pack.

You can create new IPDS printers based on the two default printers for customizing your workflow. For each IPDS printer you can set the following parameters:

- Configuration
- Print

- Quality
- Monochrome

See also:

Configuration parameters on page 95
Print parameters on page 97
Quality parameters on page 99
Monochrome parameters on page 100

Configuration parameters

Note: The IPDS workflow is available only with the Trans Pack.

Parameter	Option	Description
Setup	**Setup**	Provides the following options: • **Emulation**—This option defines the characteristics of the IPDS printer emulated by the IC-309m print controller. When the host inquires to determine which IPDS printer is connected, the IC-309m print controller reports this value to the host in a device reply. Certain emulations are used for more than one printer. The default option is **4322**. This is used for the majority of emulations, including that of the IBM 4400 Thermal Printer as well as all other IBM Infoprint printers not listed explicitly in this option. The **IPDS Resolution** can be set to 240, 300, 480, or 600 dpi for the **4322** emulation. **Note:** For many of the emulations, the resolution is limited by the printer, and the **IPDS Resolution** is ignored. • **IPDS Resolution**—This option specifies the press supported resolution. You can select: **Auto**, **240**, **300**, **480**, or **600**. • **Valid printing area**—Select **Border**, **Move**, **Edge**, or, **Fit** • **Report to host on**—To control the exceptions and intervention reporting, select from the following options: ◦ **VPA Exception** ◦ **Undefined character exception** ◦ **Intervention required**
	IPDS data traces	Enables you to **Save IPDS traces**.
General Defaults	**Default code page**	The selected code page is used as the default character encoding for the job, unless the IPDS stream already contains a code page.

Parameter	Option	Description
	Default font	The selected font is used as the default font for the job, unless the IPDS stream already contains the fonts.
	Default font size	Enables you to set the default font size for the default font.
	Font substitution	Provides the following options: • **Relaxed**—The IPDS host reports few exceptions • **Strict**—The IPDS host reports when a font combination that is requested by the IC-309m print controller is invalid.
IPDS trays mapping	**IPDS trays mapping**	Provides the following options: • **Input tray ID** • **Output tray ID**
Resource capture	**Resource capture**	Provides the following options: • **Capture fonts** • **Capture data objects**
Layout	**Cut sheet emulation**	Provides the following options: • **Use cut sheet emulation**, provides the following options: ◦ **Auto (According to host)**—Settings are automatically taken from the IPDS host. ◦ **On**—The cut sheet option is always turned on regardless of the settings on the IPDS host. ◦ **Off**—The cut sheet emulation is turned off regardless of the settings on the IPDS host. • **Emulation method**—Determines the direction and rotation of each sheet. **Note:** This is applicable whether you have selected cut sheet emulation on the IC-309m print controller or if the IPDS host initiates the cut sheet emulation. • **Partition offset X/Y**—Determines the partition offset on each axis, X and Y.
	Banner page handling	Enables you to specify that the job contains a banner page. If the job is defined to print with a banner page (first information sheet) then the banner page is printed on a separate sheet. The banner page does not affect the page order of the job.
	Rotate 180	Enables you to specify the rotation of the image on the printed sheet. You can apply 180 degrees rotation independently to both the front and back sides.

Parameter	Option	Description
BCOCA adjustments	**1D BCOCA (barcode) adjustments**	Provides the following options: • **Bar reduction**—Enables you to select the reduction value. You can enter positive numbers from 1 -10. • **Space reduction**—Enables you to select the reduction value. You can enter positive numbers from 1 -10.
	2D BCOCA (barcode) adjustment	**Element reduction**—Enables you to select the reduction value. You can enter positive numbers from 1 -10.
PDF overlay	**Path for PDF overlay**	Provides the following options: • **Front PDF overlay**—Enables you to locate a PDF file that will be used to overlay the front page. • **Back PDF overlay**—Enables you to locate a PDF file that will be used to overlay the back page. **Note:** For wide configuration presses, you can print 2-up and N-up. The PDF overlay is applied per page, and must be designed in the page size. For 2-up, the PDF overlay is placed twice on the sheet.
Advanced Settings	**Render IO overlays before page content**	Selecting this option enables the overlays included in the Include Object (IO) command to be rendered prior to other elements on the page, thus ensuring the expected print results.
	Print white IOCA image as	Provides the following options: • **Opaque**—Any elements that are under the white IOCA image will not be visible. • **Transparent**—Any elements that are under the white IOCA image will be visible. • **Transparent only on back**—Only on back side any elements that are under the white IOCA image will be visible. • **Transparent only on front**—Only on front side any elements that are under the white IOCA image will be visible.
	Support font modification	Font modification parameters alter the appearance of a typeface. By default, the following font modification parameters are defined: double high, italics, double strike, bold and double wide. If this option is not selected, font modification does not take place

Print parameters

Note: The IPDS workflow is available only with the Trans Pack.

Parameter	Option	Description
Marks and barcodes	**Marks and barcodes**	Enables you to add a mark set that was defined in the Resource Center, and define on which sheets the marks appear. Provides the following options: • **All**—Prints the marks on each sheet in your job • **Repetition**—Prints the marks according to the frequency that you define—for example, if you set the repetition to 3, the marks will be printed every third sheet • **Sheet Range**—Prints the marks according to the sheet range that you defined. Provides the following options: ◦ Type a range of sheets with a hyphen between the starting and ending numbers in the range—for example, `1-5` ◦ Type a range of sheets with a hyphen or comma between the starting and ending numbers, and where the last sheet=n • `1,n` (first and last sheets) • `n-1` (the sheet before last) • `n-<integer>` (the integer stands for the number of sheets before the last sheet) **Note:** The sheet range option is applicable to finishing marks, registration marks and barcodes. To find out how to define marks and barcodes, see the section on using mark sets.
Image alignment	**Image alignment**	Position of the image relative to the defined printable area: • **Left**—Printed image is aligned to the top left side of the printable area • **Right**—Printed image is aligned to the top right side of the printable area • **Center**—Image is placed in the center of the printable area
	Custom offset	Enables you to place the image according to the custom x and y values that you type. **Front - X(Width), Y(Length)** **Back - X(Width), Y(Length)**
	Align back with front	Enables you to apply the front settings to both the front and back.
Delivery	**Face up**	Delivers the job face up

Parameter	Option	Description
	Face down	Delivers the job face down

Quality parameters

Note: The IPDS workflow is available only with the Trans Pack.

Parameter	Option	Description
Quality	**Image quality**	Provides the following options: • **Normal**—Processes the image in the job according to the standard resolution of the printer. • **High**—Improves the quality of low resolution images in a job. Image quality is the ability to maintain the same detail and smoothness at different degrees of enlargement. The **Image quality** option is especially useful when your PostScript file includes several images of differing quality—for example, images scanned at different resolutions, rotated, or downloaded from the Internet.
	Image compression quality	Enables you to control the quality of JPEG images in your job. Provides the following options: • **Normal** • **High**
	Improve text/line in Image	Significantly improves the text and line quality in your job. In some cases, images in the PDL file contain data that belong to the text and graphics layer, such as screen captures and high resolution rasterized text. The IC-309m print controller is able to identify such images and convert them into text and graphics. Select from the following options: • **Auto** • **On** • **Off**
	Smooth gradients	Blends artificial (or synthetic) vignettes and gradients in natural images.
	Transparency flattening quality	Improves the quality of transparencies that are flattened in PDF files.
Overprint	**Black overprint (apply to Object Containers)**	Ensures that black text prints cleanly within a tint or picture area. The text appears in a richer, deeper black, with the underlying CMY values equal to those of the printed background.

Parameter	Option	Description
Resolution	**Resolution**	Enables you to set the resolution for the job when printed. Select either 600 dpi (fine) or 1200 dpi (very fine).
Screening	**Screening Method**	Converts images, graphics and text into information that can be printed (halftone dots). The human eye “smooths out” this information, which seems visually consistent with the original picture. Thus, the more lines per inch, the more natural the image appears. Screening is achieved by printing dots in numerous shapes or lines in an evenly spaced pattern. The distance between the screen dots or lines determines the quality of the image. Printers can work with constant amounts of toner and still produce a wide range of colors when you use screening. The darker the color, the larger the dot. To print an image on a digital printer or press, the Creo server needs to digitally approximate the grayscale values with different distributions of pixels. This process is commonly referred to as halftoning. Digital halftoning begins by sampling the original image at the same number of dots per inch as the printer and constructing digital halftone cells.

Monochrome parameters

Parameter	Option	Description
CMOCA settings	**CMOCA Policy**	Enables you to **Override CMOCA settings** that are contained in the file.
	CMOCA defaults	Enables you to adjust the AFP color settings. Provides the following options: • **Use tone transfer curve settings** • **Use ICC profiles embedded in objects container data** **In case Audit profiles is equal to instruction profile**: • **Use direct path** • **Perform Color Management**
Profile	**CMYK source profile**	Enables you to select a CMYK source profile.

Parameter	Option	Description
	CMYK rendering intent	All printers, monitors, and scanners have a gamut or range of colors that they can output (or view in the case of a scanner). If a color needs to be output and is outside the gamut of the output device, it must be mapped or approximated to some other color that exists within the gamut. Rendering intent compresses out-of-gamut colors into the color capability of the printer you are using. When working with ICC profiles, it is important that you select the rendering intent that best preserves the important aspects of the image. Each rendering method specifies a CRD for color conversions. Provides the following options: • **Auto**—Select this option when your file includes different objects on the same page—for example, a presentation that includes JPEG pictures, text, and Excel graphs. A different rendering intent is automatically applied to each type of object (image, text, and graphic). If RGB images and CMYK graphic elements are on the same page, the RGB images will use the perceptual rendering intent, while the CMYK graphic elements will use the relative rendering intent. **Note: Preserve pure CMY colors** is not affected by this rendering intent option. • **Relative**—This is the default option for CMYK. This rendering intent maps some closely related colors in the input color space to the closest possible color in the output color space. This mapping reduces the number of colors in the image. • **Absolute**—Select this method for representing "signature" colors (colors that are strongly identified with a commercial product). Colors that fall inside the output color space are represented very accurately. • **Saturation**—Select this method for artwork and graphs in presentations. In many cases, this option can be used for mixed pages that contain both presentation graphics and photographs. **Note:** Select **Saturation** to achieve smoothness when you print RGB vector graphics (non image graphics). • **Perceptual**—This is the default option for RGB. Select this method when working with realistic images such as photographs, including scans and images from stock photography CDs. All or most

Parameter	Option	Description
		colors in the original images are changed, but the relationship between the colors does not change.
	RGB source profile	Enables you to select an RGB source profile.
	RGB rendering intent	Provides the following options (for information on each option, see the descriptions of the CMYK rendering intent options in this table): • **Auto** • **Relative** • **Absolute** • **Saturation** • **Perceptual**
Adjustments	**Brightness**	Controls the brightness level for the job. The options range from **Lightest**, which makes the job 15% lighter to **Darkest**, which makes the job 15% darker. **Brightness** is generally used to make last-minute adjustments to the job after proofing. By changing the **Brightness** setting, you can control how light or dark your output appears.
	Contrast	Controls the difference between the light tones and the dark tones in your image. The options range from **Less**, which makes the job 10% lighter to **More**, which makes the job 10% darker. **Contrast** is generally used to make last-minute adjustments to the job after proofing. By adjusting the Contrast setting, you can control the difference between the light tones and the dark tones in your image.
	Gradation	Provides the following predefined option: • **None**—The printer applies maximum dry ink coverage. This is the default setting. The **Gradation** parameter also includes a list of the gradation tables created in the IC-309m print controller Gradation Tool window. Each gradation table contains specific settings for brightness and contrast. When you select your predefined gradation table, your job is adjusted according to the specific table's settings.

Parameter	Option	Description
Spot color	**Spot color**	Provides the following options: • **Spot library**—Applies the CMYK values that are defined in the spot color dictionaries. You can edit these values using the Spot Color Editor tool. The supported spot color dictionaries are: HKS, DIC Color Guide, Pantone, Pantone GOE, Pantone Plus, and TOYO. Refer to the Spot Color Editor window for the complete list. • **Original CMYK file values**—Uses the CMYK values from your file. **Use legacy spot library**—Uses the Pantone color library to print a file that includes a spot color instead of the Pantone Plus color library. Select from: • **Use PANTONE Plus library** • **Use legacy PANTONE library**
	Highlight colors	Enables you to select the IPDS highlight color based on either the **IPDS color mapping table** or from the **Spot library (highlight)**.
	Indexed CMR color	Enables you to select the indexed CMR colors based on the **CMR color mapping table** or from the **Spot library (indexed)**.
	OCA colors	CMYK color equivalents for IPDS OCA colors can be decided from the following options: • **Spot library** • **IPDS RGB equivalent** • **IPDS CMT or spot library** • **IPDS CMT or IPDS RGB equivalent**
Protect	**CMYK**	**Note:** If you protect RGB, gray, or CMYK colors, all colors in the job that include the same color combination as the protected color will also be protected. Provides the following options: • **Preserve black color**—Preserves pure black during transformation. • **Use protected CMYK values**—Retains CMYK colors as defined in the Spot Color Editor.
	RGB	**Use protected RGB values**—Retains RGB colors as defined in the Spot Color Editor .
	Device gray	**Use protect gray values**—Retains gray colors as defined in the Spot Color editor.

Working with Job Definition Format

About Job Definition Format

Printing is a manufacturing process that involves countless steps and people, multilevel dependencies between processes, and various resource types and tools. It entails the transfer of information between multiple entities, obtaining approvals, and delivering final work products. Job Definition Format (JDF) is the bridge that helps to automate these processes and enable printing companies to deliver a quality final product on time.

JDF works in tandem with a counterpart format known as the Job Messaging Format (JMF). JMF provides the means for production components of a JDF workflow to communicate with system controllers and administrative components. It relays information about the progress of JDF jobs and gives management information systems the active ability to query devices about the status of processes being executed or getting ready to be executed

The IC-309m print controller consumes and executes JDF jobs in which the JDF includes job ticket parameters such as contact information, number of copies, and media information. The IC-309m print controller is capable of writing and returning JDF information after job completion, upon specific requests in the JDF file (Target Route). Job costing can be calculated from this information. In addition, the IC-309m print controller supports JMF when JDF jobs request it specifically (Audit Pool). It sends a JMF signal each time the status of the JDF job changes, a mechanism that is useful for job tracking.

Submitting pages from Prinergy using basic JDF instructions

1. In Kodak Prinergy Workshop, in the Job Manager window, select one or more files in the **Input Files** area.

   Note: You can also insert refined pages.

2. Select a Loose Page Output process plan and, depending on your workflow requirements, set the output format to either **Vector PDF** or **Raster PDF**.

3. In the Loose Page Output window, select **Include JDF for Digital Print**.

4. Select your device, and then select job settings that you want to apply, for example, the number of copies and media type.

5. Click **Browse** next to the **PDF path** box, and locate the jobuploads folder on the IC-309m print controller.

6. Click **Browse** next to the **JDF path** box, and locate the path to the hot folder on the IC-309m print controller.

8 Variable data printing jobs

Variable data printing jobs

Variable data printing (VDP) is a form of on-demand digital printing that produces customized or personalized documents targeted to a specific individual. Within a single document design, elements such as text, graphics, and images differ from one printed page to the next based on recipient information garnered from a database. These documents can include bills, targeted advertising, and direct mailings.

A VDP job is composed of booklets, which are personalized copies of a document. Each page in a booklet is constructed as a collection of individually RIPed elements that can differ from booklet to booklet, including text, graphics, images, and page backgrounds. These elements are self-contained graphical entities that can be line art, text, RIPed images, or a combination thereof. There are two types of elements in VDP jobs:

- Unique elements, which are used only once for a specific individual or purpose. An individual's name is an example of a unique element.
- Reusable VDP elements, which can be used more than once in different pages, booklets, or jobs. A company logo is an example of a reusable element.

VDP document formats

The IC-309m print controller can process VDP jobs that are in one of the following file formats:

- Variable Print Specification (VPS)
- Personalized Print Markup Language (PPML)
- PDF/VT
- Variable Data Exchange (VDX)

Variable data printing (VDP) jobs are created using VDP authoring programs that support Variable Print Specification formats. Most VDP authoring programs can convert VDP files to conventional PostScript files, which can also be processed by the IC-309m print

controller although less efficiently than Variable Print Specification files. Each authoring program creates VDP code that instructs the RIP where to place the VDP elements, and each authoring program does so in a slightly different manner.

The format you choose can be a stand-alone format that covers all aspects of document design, data management, and text capture, or it can be an extension of an existing program that enables you to create VDP documents and VDP jobs.

Variable Print Specification

The Variable Print Specification (VPS) file format was developed by Creo. It is an extension of the PostScript language. The file format is comprehensive and can cover a complete range of VDP documents.

A Variable Print Specification job consists of the following components:

- Booklet—A personalized copy of a document within a single print run. Pages or elements within a page can vary from booklet to booklet.
- Reusable elements—Self-contained graphical entities that can be line art, text, raster images, or a combination of these types. Reusable elements are represented in PostScript and can be stored as EPS files when appropriate. Reusable elements include clipping and scaling instructions as well as the image data.
- Inline elements—Unique information that is drawn from a database and is embedded in the sub-job. This data prints only once for individual booklets.

PPML

Personalized Print Markup Language (PPML) is an XML-based print language developed by some of the world's leading manufacturers of print technology for the high-speed reproduction of reusable page content. It is an open, interoperable, device-independent standard that makes use of personalized print applications. Various vendors have created software that can generate PPML files.

The IC-309m print controller supports PPML formats and enables you to process PPML jobs efficiently and import jobs in various VDP formats to the IC-309m print controller.

PPML has a hierarchical structure. Document components are separated from their submission file and can be organized and stored at different levels of the hierarchical structure.

About PDF/VT file formats

The PDF/VT file format is designed to enable variable document printing (VDP) in a variety of environments. PDF/VT documents contain the final content elements and associated metadata, but not any variables or templates. The predecessor standard ISO 16612-1:2005 specified the PPML/VDX formats based on PDF 1.4. However, this older standard was missing several PDF features and relied on constructs external to PDF. The modern standard PDF/VT is based on the PDF/X-4 and PDF/X-5 standards and supports PDF 1.6 features including transparency, layers, and ICC-based color management. In addition to the requirements of PDF/X, the PDF/VT standard adds supplementary features to PDF to meet the requirements of high-volume personalized printing. PDF/VT enables high-performance rendering (RIPing) of digital print files by adding efficient resource management to PDF.

As PDF/X includes color management features and support for ICC color profiles, PDF/VT inherits the same features.

The IC-309m print controller supports the following PDF/VT file formats:

- PDF/VT1
- PDF/VT2
  - PDF/X4
  - PDF/X4p
  - PDF/X4pg
  - PDF/X5g

Deleting reusable elements

Variable data printing (VDP) elements that are no longer in use take up valuable disk space on the IC-309m print controller. To free up disk space, you can delete the reusable elements that you no longer need.

The IC-309m print controller caches reusable elements per job, and displays a list of the cached elements in the **Reusable Elements management** area in the Resource Center. Reusable elements are cached as PDL elements.

Note: The Reusable Elements Management tool is only available with the Action Pack.

1. From the **Tools** menu, select **Resource Center**.
2. In the **Resource** list, select **Reusable Elements management**.
   Your VDP jobs are listed in the left pane. In the right pane, all of the reusable elements that are associated with your job are listed.
3. Select the elements that you want to delete, and then click **Delete**.

9 Job parameters

Print tab in the job parameters window

Edit print parameters for your job.

Parameter	Option	Description
Paper stock	**Paper stock**	Provides the following options: • **Parameters from file**—Maps the paper parameters according to one of the following options: ◦ Paper name available in the trays ◦ Auto rule set ◦ Custom rule set Clicking **File mapping** displays the mapping results and enables you to edit the parameters. • **Paper name**—The available paper names listed in the paper name library. Clicking **....** enables you to select a predefined paper name from the Resource Center window and check that the paper name is loaded in the printer ◦ **Paper size**—The available paper sizes **Note:** If the selected paper stock and size are not loaded in one of the connected trays, the current job is held until the appropriate set is available. The job receives an **on hold** status indicator, and a message appears in the Message Viewer window. Other jobs can be printed while jobs are held.. ◦ **Media Type**—The media type that you want to use. When the default setting, **Use Printer settings** is selected, your job is printed on the media type that is defined on the printer. ◦ **Weight**—The media weight that you want to use. When the default setting, **Use Printer Settings** is selected, your job is printed on the paper weight that is defined on the printer. ◦ **Color**—Enables you to print your job on colored paper. ◦ **Punched**—Enables you to print your job on pre-punched paper. • **Tray**—The specific paper stock that you want to use is loaded in this tray
	Tab kick-out	**Kick out unused tabs**—Enables you to select the sub-tray in which to send unused tabs

Parameter	Option	Description
Copies and pages	**Number of copies**	The number of copies that you want to print. **Note:** For step-and-repeat imposed jobs, the number of copies is defined according to pages or sheets.
	Print range	The print range that you want to print: • **All** • **Front side** • **Back side** • **Pages** You can select specific pages, booklets, or page ranges and can specify the pages or booklets to be printed as follows: • By typing one or several numbers separated by commas and no spaces—for example, `1,3,5`. • Type a range of pages or booklets with a hyphen between the starting and ending numbers in the range—for example, `1-5`, or `1-3,5`. **Note:** For imposed jobs, **pages** changes to **sheets.**
Print method	**Print method**	Provides the following options: • **Simplex**—Single-sided printing • **Duplex head to head**—Two-sided printing for book-style hard copies (usually used with portrait jobs). • **Duplex head to toe**—Two-sided printing for calendar-style hard copies (usually used with landscape jobs).
Layout	**Scaling**	Provides the following options: • **Manual**—Increases or decreases the image size according to the percentage that you enter. **Note:** The default option, **100%**, prints the original image size. Scaling is not applied. ◦ **Do not affect imposition marks**—Scales the page without changing the location of the imposition marks • **Fit to output sheet size**—Fits the image to the selected paper size. **Note:** You can also use the **Fit to output sheet size** option to scale the layout for imposed jobs.

Parameter	Option	Description
	Rotate 180º	Rotates your job by 180°. Provides the following options: • **All pages** • **All front pages** • **All back pages** • **All landscape pages** • **All portrait pages**
Image alignment	**Image alignment**	Position of the image on the sheet: • **Left**—Printed image is aligned to the top left side of the sheet • **Right**—Printed image is aligned to the top right side of the sheet • **Center**—Image is placed in the center of the sheet
	Custom offset	Enables you to place the image according to the custom x and y values that you type. **Front - X(Width), Y(Length)** **Back - X(Width), Y(Length)**
	Align back with front	Enables you to apply the front settings to both the front and back.

Imposition tab in the job parameters window

Set and apply imposition settings to your job.

Parameter	Option	Description
Imposition method	**Method**	Provides the following options: • **None**—Imposition parameters are not available, and the thumbnail viewer does not display an image. This is the default option. • **Step & Repeat**—A technique in which multiple copies of an image are printed to fill up a large sheet. This method is used mainly for business cards. **Note:** The number of copies is defined according to pages or sheets. • **Step & Continue**—A technique in which different pages of a job are printed on one sheet according to the selected layout, so that the sheet is filled to capacity. • **Cut & Stack**—A book-finishing technique in which jobs are printed, cut, stacked, and bound in the most efficient manner to preserve the original sorting. A job's pages, booklets, or books are sorted in a Z-shape, (each stack of pages is sorted in consecutive order). When stacks are piled one on top of another, the entire job is already sorted up or down. ◦ **Stack size**— Enables you to define the number of sheets to place in the printer's stacker tray, according to the limitation of the finisher present on the site. **Note:** The **Stack size** parameter splits the job into several logical parts. When requesting multiple copies for such jobs, each logical part of the job is printed according to the requested number of times, instead of the entire job completely. • **Saddle Stitch**—A book-finishing technique in which the pages of a book are attached through stitching or stapling in the spine fold —for example, in brochures. ◦ **Sets per sheet**—Enables you to select the number of sets of the job to print on the defined printable area. ◦ **Stacking mode for VDP**—For VDP jobs only. This option enables you to print two or more different booklets on the same sheet. The booklets are arranged in the Cut & Stack method. • **Perfect Bound**—A book-finishing technique in which the spine fold is trimmed and the edges of the gathered pages are roughened and glued together—for example, in hardcover books. ◦ **Sets per sheet**—Enables you to select the number of sets of the job to print on the defined printable area. ◦ **Stacking mode for VDP**—For VDP jobs only. This option enables you to print two or more different booklets on the

Parameter	Option	Description
		same sheet. The booklets are arranged in the cut-and-stack method. ◦ **Nested Saddle - Sheet per group**—A book-finishing technique that combines the saddle-stitch imposition method and the perfect bound imposition method. As with saddle stitching, pages are grouped together and stapled or stitched across a common center fold. The saddle groups are then stacked one on top of another and glued, as with perfect binding. • **Folded Signature**—A technique in which a large sheet is folded several times to form a section of a book, a magazine, or a pamphlet.
	Preview	Enables you to view either a thumbnail view or a layout view of your imposition layout and settings. You can open the Preview window at any time and keep it open to check your imposition settings as you select them. The Preview window dynamically reflects any changes that you make.
Size	**Trim size**	The size of the finished, trimmed document. For custom trim sizes, you must specify a width and height. **Tip:** If you set the trim size smaller than the page size set in the DTP application, the data will be cropped. Setting a larger trim size results in a larger border on the printed page.
	Trim orientation	Displays the orientation, portrait or landscape, for the selected trim size. If the wrong orientation is selected, the job might be cropped as a result.
	Preview	Enables you to view either a thumbnail view or a layout view of your imposition layout and settings. You can open the Preview window at any time and keep it open to check your imposition settings as you select them. The Preview window dynamically reflects any changes that you make.
Templates	**Layout**	Provides the following options: • **Custom**—Enables you to specify how many pages to place horizontally (**Rows**) and vertically (**Columns**) in a custom layout. **Note:** Templates that are created or imported via the Imposition Template Builder are also available. • **Best Fit**—Automatically calculates the most suitable number of columns and rows. **Note:** This option is not available for the saddle-stitch and perfect bound imposition methods.

Parameter	Option	Description
	Print method	Provides the following options for how the document will be printed: • **Simplex** **Note:** This option is not available for the saddle-stitch and perfect bound imposition methods. • **Duplex HTH** • **Duplex HTT**
	Binding selection	**Note:** This option is available only if the imposition method is either **Saddle stitch** or **Perfect bound** and the template is 2 x 1, 2 x 2, 4 x 2, or 4 x 4.
	North south	Places pages 180 degrees from each other, on the same side of the imposed sheet. Use this option when a step-and-repeat 2 x 1 or 1 x 2 template is selected.
	Rotate 90 deg	Rotates the entire template 90 degrees to the right, enabling you to correct imposition conflicts.
	Folding Preview	Enables you to preview the folding steps for the folded signature predefined templates.

Parameter	Option	Description
Marks	**Marks**	Provides the following options: • **None**—Does not apply any marks on the imposition layout for the printed job. • **Crop marks**—Prints the lines that indicate where the sheet should be cropped to the trim size. **Notes:** ◦ If you want to use crop marks that were incorporated in the DTP application, make sure that enough space is left around your page in the PostScript file so that the page prints with crop marks. ◦ If your job already includes crop marks incorporated in the DTP application, you do not need to add crop marks here. If you do add crop marks, both sets of crop marks can be printed. • **Fold marks**—Prints the lines that indicate where the sheet should be folded. This option is available only when the imposition method is set to **Saddle stitch** or **Perfect bound**. • **Crop & fold marks**—Prints the lines that indicate where the sheet should be cropped and folded. This option is available only when the imposition method is set to **Saddle stitch** or **Perfect bound**. • **Both Sides**—Prints the marks on both sides of the page. • **Horizontal offset**—Enables you to move the horizontal mark up or down. • **Vertical offset**—Enables you to move the vertical mark to the left or to the right. • **Marks color**—Prints the marks in either **Black**, **White** or **Gray**. • **Print hairline where sheet folds**—Enables you to print a very thin black line on the folding lines in your job. • **?**—Provides a visual reference for the spacing and marks parameters when you click the question mark icon. **Preview**—Enables you to view either a thumbnail view or a layout view of your imposition layout and settings. You can open the Preview window at any time and keep it open to check your imposition settings as you select them. The Preview window dynamically reflects any changes that you make.

Parameter	Option	Description
Signature marks	**Mode**	Enables you to print a mark on the front or back of a folded signature. Signature marks help in assembling printed signatures for binding in the correct order. Provides the following options: • **Off**—Signature marks are not selected. • **Auto**—Automatically calculates the position and offset of the mark. Enables you to determine the amount of black toner used for printing the signature mark. • **Custom**—Enables you to define the signature marks for printing according to height, width, type, and the number of marks.
	First Mark Position	**Note:** This option is available only when the signature mark mode is set to **Custom**. Enables you to specify the position of the first signature mark.
	Mark Offset	**Note:** This option is available only when the signature mark mode is set to **Custom**. Enables you to specify the offset between signature marks.
	Black Color	Enables you to determine the amount of black toner used for printing signature marks.
Spacing	**Margins**	Determines the space between the edge of the pages and the edge of the sheet on which the pages are printed. **Notes:** • Margin settings should suit the finishing equipment and requirements. • Confirm the binding parameters with your binder when planning your sheet.
	Horizontal gutter	Determines the horizontal space between pairs of pages (according to the trim size) on a sheet. When the pages are folded into a booklet, the gutter allows space for trimming. The value that you enter depends on the paper size and imposition method that you choose.
	Vertical gutter	Determines the vertical space between pairs of pages (according to the trim size) on a sheet. When the pages are folded into a booklet, the gutter allows space for trimming. The value that you enter depends on the paper size and imposition method that you choose.

Parameter	Option	Description
	Spine	**Note:** This option is available only when the imposition method is set to **Perfect Bound**. Determines where the signatures are joined at the center fold and then stitched or bound. The value that you enter depends on the paper size that you choose.
	Gap Between Sets	**Note:** This option is available only when the imposition method is set to **Saddle Stitch** or **Perfect Bound** and the **Sets per Sheet** option is set to more than 1. Controls the gap between sets of saddle-stitch booklets placed on one sheet.
	Bleed	• Extends part or all of the printed image beyond the trimming boundary. • Ensures that an inaccurate cutting will not leave undesired white space at the edge of the page. • Produces sharp page boundaries with color that extends all the way to the edge of the page. The value that you enter depends on the paper size and imposition method that you choose. You can select **Maximum bleed** or enter a **Custom bleed size**. **Notes:** • You cannot extend the bleed beyond the sheet fold lines. Bleed does not affect the position of a crop. • Bleed must be defined in your DTP application in order for the IC-309m print controller to be able to apply bleed options.
	?	Enables you to view help on spacing and marks.
	Preview	Enables you to view your imposition layout and settings. You can open the Preview window at any time and keep it open to check your imposition settings as you select them. The Preview window dynamically reflects any changes that you make.

Parameter	Option	Description
Creep	**Creep**	**Note:** Creep is only available when imposition is set to **Saddle stitch**, or when the Nested Saddle option is selected for the **Perfect Bound** imposition method. Creep is used to compensate for the physical shift of the inner sheets of a saddle stitch booklet. Set the size of the page shift from or towards the spine. Provides the following options: • **Creep in** ◦ **Auto**—Automatically sets a value based on the paper's weight. ◦ **Custom**—Enables you to set a custom creep in value. • **Creep out**—Enables you to set a creep out value (negative or positive value).
	Preview	Enables you to view your imposition layout and settings. You can open the Preview window at any time and keep it open to check your imposition settings as you select them. The Preview window dynamically reflects any changes that you make.

See also:

Imposition overview on page 59

Quality tab in the job parameters window

Apply settings to improve the quality of image, graphics, and text elements in your job.

Parameter	Option	Description
Quality	**Image quality**	Provides the following options: • **Normal**—Processes the image in the job according to the standard resolution of the printer. • **High**—Improves the quality of low resolution images in a job. Image quality is the ability to maintain the same detail and smoothness at different degrees of enlargement. The **Image quality** option is especially useful when your PostScript file includes several images of differing quality—for example, images scanned at different resolutions, rotated, or downloaded from the Internet.

Parameter	Option	Description
	Image compression quality	Enables you to control the quality of JPEG images in your job. Provides the following options: • **Normal** • **High**
	Improve text/ line in Image	Significantly improves the text and line quality in your job. In some cases, images in the PDL file contain data that belong to the text and graphics layer, such as screen captures and high resolution rasterized text. The IC-309m print controller is able to identify such images and convert them into text and graphics. Select from the following options: • **Auto** • **On** • **Off**
	Smooth gradient	Blends artificial (or synthetic) vignettes and gradients in natural images.
	Transparency flattening quality	Improves the quality of transparencies that are flattened in PDF files.
Overprint	**Black overprint**	Ensures that black text prints cleanly within a tint or picture area. The text appears in a richer, deeper black, with the underlying CMY values equal to those of the printed background.
	PostScript overprint	Uses the overprint information that exists in the PostScript file. This option also determines whether the DTP application's PostScript overprint settings are retained in the RIP.
Resolution	**Resolution**	Enables you to set the resolution for the job when printed. Select either 600 dpi (fine) or 1200 dpi (very fine).
Screening	**Screening Method**	Converts images, graphics and text into information that can be printed (halftone dots). The human eye “smooths out” this information, which seems visually consistent with the original picture. Thus, the more lines per inch, the more natural the image appears. Screening is achieved by printing dots in numerous shapes or lines in an evenly spaced pattern. The distance between the screen dots or lines determines the quality of the image. Printers can work with constant amounts of toner and still produce a wide range of colors when you use screening. The darker the color, the larger the dot. To print an image on a digital printer or press, the Creo server needs to digitally approximate the grayscale values with different distributions of pixels. This process is commonly referred to as halftoning. Digital halftoning begins by sampling the original image at the same number of dots per inch as the printer and constructing digital halftone cells.

Monochrome tab in the job parameters window

Although the IC-309m print controller drives monochrome printers, you apply various color settings and options to improve the color quality of your job when the job is processed.

Parameter	Option	Description
Profile	**CMYK source profile**	Enables you to select a CMYK source profile.
	CMYK rendering intent	All printers, monitors, and scanners have a gamut or range of colors that they can output (or view in the case of a scanner). If a color needs to be output and is outside the gamut of the output device, it must be mapped or approximated to some other color that exists within the gamut. Rendering intent compresses out-of-gamut colors into the color capability of the printer you are using. When working with ICC profiles, it is important that you select the rendering intent that best preserves the important aspects of the image. Each rendering method specifies a CRD for color conversions. Provides the following options: • **Auto**—Select this option when your file includes different objects on the same page—for example, a presentation that includes JPEG pictures, text, and Excel graphs. A different rendering intent is automatically applied to each type of object (image, text, and graphic). If RGB images and CMYK graphic elements are on the same page, the RGB images will use the perceptual rendering intent, while the CMYK graphic elements will use the relative rendering intent. **Note: Preserve pure CMY colors** is not affected by this rendering intent option. • **Relative**—This is the default option for CMYK. This rendering intent maps some closely related colors in the input color space to the closest possible color in the output color space. This mapping reduces the number of colors in the image. • **Absolute**—Select this method for representing "signature" colors (colors that are strongly identified with a commercial product). Colors that fall inside the output color space are represented very accurately. • **Saturation**—Select this method for artwork and graphs in presentations. In many cases, this option can be used for mixed pages that contain both presentation graphics and photographs. **Note:** Select **Saturation** to achieve smoothness when you print RGB vector graphics (non image graphics). • **Perceptual**—This is the default option for RGB. Select this method when working with realistic images such as photographs, including scans and images from stock photography CDs. All or most colors in the original images are changed, but the relationship between the colors does not change.

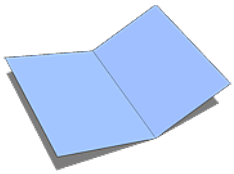
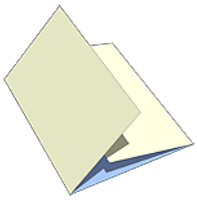
Parameter	Option	Description
	RGB source profile	Enables you to select an RGB source profile.
	RGB rendering intent	Provides the following options (for information on each option, see the descriptions of the CMYK rendering intent options in this table): • **Auto** • **Relative** • **Absolute** • **Saturation** • **Perceptual**
Adjustments	**Brightness**	Controls the brightness level for the job. The options range from **Lightest**, which makes the job 15% lighter, to **Darkest**, which makes the job 15% darker. **Brightness** is generally used to make last-minute adjustments to the job after proofing. By changing the **Brightness** setting, you can control how light or dark your output appears.
	Contrast	Controls the difference between the light tones and the dark tones in your image. The options range from **Less**, which makes the job 10% lighter to **More**, which makes the job 10% darker. **Contrast** is generally used to make last-minute adjustments to the job after proofing. By adjusting the Contrast setting, you can control the difference between the light tones and the dark tones in your image.
	Gradation	Contains a list of gradation tables that were created in the IC-309m print controller Gradation Tool window. Each gradation table contains specific settings for brightness and contrast. In addition to the gradation tables created in the IC-309m print controller, the following default gradation table is available: • **None**—Applies maximum dry ink coverage. This is the default setting. When you select your predefined gradation table, your job is adjusted according to the specific table's settings.

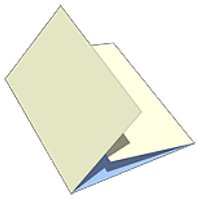
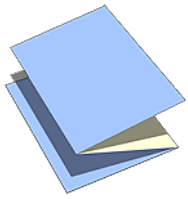
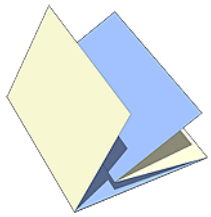
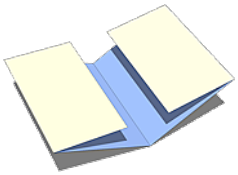
Parameter	Option	Description
Spot color	**Spot color**	Provides the following options: • **Spot library**—Applies the CMYK values that are defined in the spot color dictionaries. You can edit these values using the Spot Color Editor tool. The spot color dictionaries supported are: HKS, DIC Color Guide, Pantone, Pantone GOE, Pantone Plus, and TOYO. See the Spot Color Editor window for the complete list. • **Original CMYK file values**—Uses the CMYK values from your file. • **When using PANTONE spots**—Enables you to select which PANTONE library to use for your PANTONE spots. Provides the following options: ◦ **Use PANTONE Plus library** ◦ **Use legacy PANTONE library**
Protect colors	**CMYK**	**Note:** If you protect RGB, gray, or CMYK colors, all colors in the job that include the same color combination as the protected color, will also be protected. Provides the following options: • **Preserve black color**—Preserves pure black during transformation. • **Use protected CMYK values**—Retains CMYK colors as defined in the Spot Color Editor.
	RGB	**Use protected RGB values**—Retains RGB colors as defined in the Spot Color Editor.
	Gray	**Use protected gray values**—Retains gray colors as defined in the Spot Color Editor.

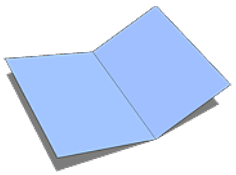
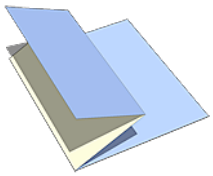
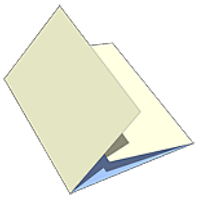
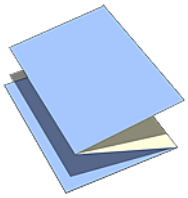
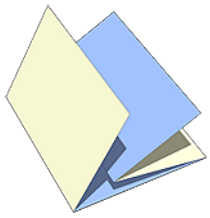
Finishing tab in the job parameters window

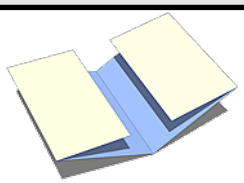
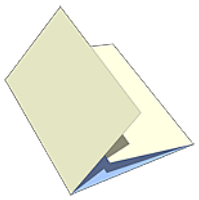
Apply these settings to specify how to finish your job.

Parameter	Option	Description
Finishing		Lists the available finisher options. This list depends on the modules that are installed on the printer.
	Stapler sub tray	**Multi hole punch**—This option is available only if the multi hole punch module is connected.

Parameter	Option	Description
	Stapler Main tray	• **Staples** ◦ **None** ◦ **Rear** ◦ **Front** ◦ **Dual** • **Multi hole punch**—This option is available only if the multi hole punch module is connected. • **Offset**
	Stapler Fold tray	• **Fold type** ◦ **Multi half fold**  ◦ **Multi tri-fold-in**  **Center staples**—Staples the center of the booklet

Parameter	Option	Description
	Multi fold sub tray	• **Fold type** ◦ **Tri-fold-in**  ◦ **Tri-fold-out**  ◦ **Double parallel fold**  ◦ **Gate fold**  • **Punch**—The values vary according to the type of punch unit connected. The number of holes is 2, 3, or 4.

Parameter	Option	Description
	Multi fold main tray	• **Fold type** ◦ **Half fold**  ◦ **Z fold**  ◦ **Tri-fold-in**  ◦ **Tri-fold-out**  ◦ **Double parallel fold**  ◦ **Gate fold**

Parameter	Option	Description
		 • **Punch**—The values vary according to the type of punch unit connected. The number of holes is 2, 3, or 4.
	Multi Tri-fold-in	
	Saddle stitch sub tray	**Multi hole punch**—This option is available only if the multi hole punch module is connected.
	Saddle stitch main tray	• **Center Staples**—Staples the center of the booklet • **Trim**
	Stacker Sub Tray	**Multi hole punch**—This option is available only if the multi hole punch module is connected.
	Stacker Main Tray	• **Multi hole punch**—This option is available only if the multi hole punch module is connected. • **Offset** • **Sample print**—Enables you to print extra pages to an easily accessible output tray during a long print job and verify that the printer is performing as expected. For example, when a job is currently printing to a closed elevator (such as, 1000 pages to an output tray that cannot be opened until the entire job is completed), you can use the sample print function to print a separate page or finished output set to an open output tray to verify the output. If the output is unsatisfactory, you can take corrective action.
	Perfect binder sub tray	**Multi hole punch**—This option is available only if the multi hole punch module is connected.

Parameter	Option	Description
	Perfect binder main tray	The perfect binder provides the following options: • **Pull Cover from**—Enables you to select the tray that contains the paper on which the cover will be printed • **Cover content** ◦ **Blank/Preprinted**—Cover is not printed as part of the job ◦ **Compose from file (Simplex)**— Front and back covers are part of the file and should be composed and printed on the outside of the cover sheet ◦ **Compose from file (Duplex)**— Front and back covers are part of the file and should be composed and printed on the outside and inside of the cover sheet ◦ **Print (Simplex)**—Front and back covers are included on the same page in the file and are printed on the outside of the cover sheet ◦ **Print (Duplex)**—Front and back covers are included on the same page in the file and are printed on the inside and the outside of the cover sheet • **Cover orientation**—Enables you to select the print orientation of the cover when cover content is **Print (Simplex)** or **Print (Duplex)** • **Spine** ◦ **Blank**—Prints a blank spine ◦ **From file**—Prints the spine content contained on the first page of the file • **Binding** ◦ **Left** ◦ **Right** ◦ **Top** ◦ **Bottom** **Notes:** Make sure you follow these actions when you load pre-printed covers into feed trays: ◦ Left Binding—Trays 1, 2, or 3--Load cover face down, top of cover must point to rear of machine ◦ Left Binding—Bypass, Cover tray, PI1, PI2--Load cover face up, top of cover must point to rear of machine ◦ Right Binding—Trays 1, 2, or 3--Load cover face down, top of cover must point to front of machine ◦ Right Binding—Bypass, Cover tray, PI1, PI2--Load cover face up, top of cover must point to front of machine

Parameter	Option	Description
		• **Trim** • **Priority Print** • Clicking **Shift Settings** enables you to shift the image on your cover horizontally and vertically.
Print order	**Collation**	**Collated**—Prints a complete copy of the job before the first page of the next copy is printed.
	Delivery	Sets the print order from back to front. • **Face up**—Delivers the job face up. • **Face down**—Delivers the job face down.
	Print order	Provides the following options: • **1 to N**—Prints a complete copy of the job from the first page to the last page. • **N to 1**—Prints a complete copy of the job from the last page first in the stack, to the first page, last in the stack.
Near-Line Finisher	**Device**	Enables you to select one of the near-line finishing devices, Duplo DC-645, DSF-2000, or DSF-5000. • Duplo DC-645 finisher cuts, slits, and creases documents using registration marks and barcodes. **Note:** A barcode is used only if you want to use a preset job number. Otherwise, you can select it manually on the Duplo DC-645. • DSF-2000 finisher is a sheet feeder that is configured with a barcode reader. • DSF-5000 finisher is a sheet feeder that is configured with a barcode reader.
	Inverter	Select **Inverter** when processing a stack in which the first page is face down and on the bottom of the stack. **Note:** Clear **Inverter** for a stack whose first page is face up on the bottom of the stack.
	Generate registration mark	Select **Generate registration mark** to print registration marks on sheets.

Parameter	Option	Description
	Generate corner mark	Select **Generate corner mark** to print correct corner marks on sheets. The long line is parallel with the lead edge of a sheet and the short line is perpendicular to the lead edge of a sheet. The SCC measures distance both horizontally and vertically. Based on measured distance, SCC manages slit positions, cut positions, and crease positions. The Reference position is the start point to measure the Finished size and the Crease position. **Note:** When the CCD Scanner is not active, the actual corner of each sheet is the starting point to measure distance.
	Generate barcode	Select **Generate barcode** to place the barcode in any corner of the page with offsets and in front or back side of the sheet. Type the distance in mm. **Note:** The IC-309m print controller allows you to place the registration mark and barcode in any corner of the page with offsets (in-track and cross track).
	Position	Generates a barcode in the following location of the page: Top right, **Top left**, **Bottom right**, and **Bottom left**.
	Side	Select the side where the barcode will be generated. Select **Front side** or **Back side**.
	Registration line offset	**Paper width direction**—the whole registration mark is placed within 3 mm -20 mm from the right edge. **Note:** This option is available for the DC-645.
	Corner mark offset	The corner mark is placed in a range of 0 - 25 mm (horizontal and vertical distance). **Note:** This option is available for the DSF-2000.
	Barcode offset	Paper feed direction—The whole barcode should be within 3 mm- 20 mm from lead edge Paper width direction: The whole barcode should be within 25 mm - 60 mm from the right edge.
	End mark	The Duplo DSF-2000 includes an end mark detector that can detect collation and paper feed errors, and prevents binding errors.

Parameter	Option	Description
Marks and barcodes		Enables you to add a mark set that was defined in the Resource Center, and define on which sheets the marks appear. Provides the following options: • **All**—Prints the marks on each sheet in your job. • **Repetition**—Prints the marks according to the frequency that you define—for example, if you set the repetition to 3, the marks will be printed every third sheet. • **Sheet Range**—Prints the marks according to the sheet range that you defined. Provides the following options: ◦ Type a range of sheets with a hyphen between the starting and ending numbers in the range—for example, `1-5`. ◦ Type a range of sheets with a hyphen or comma between the starting and ending numbers, and where the last sheet=n. • `1,n` (first and last sheets) • `n-1` (the sheet before last) • `n-<integer>` (the integer stands for the number of sheets before the last sheet) **Note:** The sheet range option is applicable to finishing marks, registration marks and barcodes. If **Sheet Range** is selected and a range is not entered, the job will not be submitted/ saved.
Slip Sheet	**Slip sheets between copies**	Prints slip sheets with your job. If a job is collated, the slip sheets are printed between sets. If a job is not collated, the slip sheets are printed between groups. • **Same as job**—Uses the same paper stock that is defined for the job. • **Paper Name**—Enables you to select the paper name on which to print the slip sheet. ◦ **Paper size**—Select the desired paper size. • **Tray**—The tray in which the specified paper stock is loaded. • **Frequency**—Determines how often to print a slip sheet. after each copy or after each 6 copies, and so on. The default is set to 1.

Exceptions tab in the job parameters window

Add and delete page exceptions and inserts

Parameter	Option	Description
Exceptions		**Note:** When imposition is enabled, the range is indicated in sheets, otherwise it is indicated in pages. Define the type of exception for your job. • **Page range**/**Sheet range**—Type the range of /sheets for the exception. • **Sets range**—Type the range of sets for the exception programming. **Note:** This option is only available for jobs that are split to sets in the **Services** tab. • **Front cover** or **Back cover**—Select one of the duplex options to print the first two (or last two) pages of the job as the cover page (back cover). **Note:** If the imposition type is **Saddle Stitch**, select **Cover** to print both a front and back cover page on a different media type. Select **Middle sheet** to print the internal sheet on a different media type. • **Inserts**—Select **Before** or **After** and type the page number that will precede or follow the insert. Then, in the **Quantity** box, type the total number of inserts you want to add.
	Advanced options	Enables you to define print options for the page exception that you are assigning to your job. Provides the following options: • **Range**—Enables you to specify the page range. • **Print method**—Enables you to specify a different print method. • **Paper stock**—Enables you to select a different paper stock and tray. • **Image alignment**—Enables you to shift the position of the image. • **Layout**—Enables you to rotate the image 180°. • **Finishing**—Enables you to select a different finishing options for the selected set range. **Note:** This option is only available for jobs that are split to sets in the **Services** tab.

Parameter	Option	Description
Exceptions from File		Provides the following options: • **Select Rule Set**—Enables you to select a rule set, which was created for a file that includes dynamic page exceptions, and assign the rule set to your job. • **File mapping** —Enables you to verify that the dynamic page exceptions in your file were mapped correctly to the paper stock parameters or to the input tray and if necessary edit the mapping results

See also:

Printing dynamic page exceptions on page 77
Setting custom page exceptions via the job parameters window on page 79

Services tab in the job parameters window

Set parameters that will facilitate your job workflow. For example, you can set workflow policies and activate a workflow to decrease processing time for certain files.

Parameter	Option	Description
Banner Page	**Print banner page**	The banner page contains job-related information such as the job title, sheet size, number of pages or sets, and the sender name. Provides the following options: • **Same as job**—Enables you to print the banner page on the same paper stock that is being used for printing the job. • **Paper name**—Enables you to select a different paper name on which to print the banner page. ◦ **Paper size**—The available paper sizes. • **Tray**—Enables you to select the tray that is loaded with the paper stock on which to print the banner page.

Parameter	Option	Description
Job flow	**Job flow**	Defines the flow that the job associated with this job ticket follows when submitted to the IC-309m print controller Provides the following options: • **Print**—RIPs, prints, and stores the PDL files in the Storage area (unless the **Job Deletion** parameter is set to **Delete printed jobs from storage**). • **Process**—RIPs and moves the PDL files to the **Storage** area as RTP jobs. • **Store**—Places the PDL files directly into the **Storage** area without processing them.
	Gallop	Enables you to start printing a long job, usually VDP, while the job is still being spooled and processed.
	Native PDF workflow	Processes PDF files natively using the Adobe PDF Print Engine (APPE). The APPE RIP ensures that complex designs and effects, including transparencies, are reproduced quickly and correctly. Provides the following options: • **Use APPE RIP**—Uses the APPE RIP for PDF files. All other file types are processed using the CPSI RIP.  —This icon appears in the **RIP Type column** in the IC-309m print controller workspace and indicates that APPE RIP is used.
Job Deletion	**Delete printed jobs from storage**	Removes jobs from the **Storage** area after printing is completed. You can select whether to delete the **RTP and original file** or the **RTP only (keep original file)**.
	Delete failed jobs from storage	Removes failed jobs from the **Storage** area while other jobs are being processed or printed. You can select whether to delete the **RTP and original file** or the **RTP only (keep original file)**. **Notes:** • The **Delete failed jobs from storage** option retains enough free disk space for the duration of the print run and only affects the sub-job. • The associated Variable Print Specification file is also deleted. • If you select **Delete failed jobs from storage** and **RTP and original file**, the RTP data and the PDL file (PostScript, PDF, EPS, Variable Print Specification, or PPML) is deleted.
Font substitution	**Use default font / Use font emulation**	**Use default font** is applied with CPSI RIP. **Use font emulation** is applied with APPE RIP.
Optimizations	**PostScript optimization**	Significantly decreases the processing time for PostScript jobs with repeated elements by applying a workflow intended for PostScript jobs.

Parameter	Option	Description
	PDF optimization	Significantly the decreases processing time for PDF jobs with repeated elements by applying a workflow intended for PDF jobs.
Job slug	**Job name**	Prints the name of the job in the margin of the sheets.
	Sheet number and side (front/back)	Prints the sheet number and side (front or back) in the margin of the sheets.
	Date and time	Prints the date and time in the margin of the sheets.
	ISO conformance level	Prints the ISO conformance level in the margin of the sheets—for example, Validation Print according to ISO 12647-7.
	Printer description	Prints the name and model of the printer in the margin of the sheets.
	Creo server description	Prints the name and model of the server in the margin of the sheets.
	Colorant and media	Prints details about the loaded paper in the margin of the sheets.
	Screening	Prints the images, graphics and text that has been converted to halftone dots.
	Comment	Enables you to add comments containing up to 30 characters.
Preflight	**Run Preflight**	Checks the status of the main file only (default), including fonts, high resolution images, and spot colors, before the job is sent for printing. If required, you can select to include the external elements in the check. Your job is RIPed and the missing components are identified. • **Run extended preflight check**— Performs an extended preflight inspection of the files running in the incoming queue. Clear this check box if you only want a basic preflight check to be performed on files running in the incoming queue. A basic preflight check validates that external elements and AFP resources are missing. ◦ **Inspect the main file only**—Checks the status of the main file only (default). ◦ **Inspect also external elements**—Includes external elements in the preflight check, and checks for spot colors and fonts in those external elements.

Parameter	Option	Description
Split to sets	**Split to sets**	Splits static jobs, such as PostScript, PDF, or large VDP jobs that do not have a booklet structure into booklets. **Notes:** • This option is not applicable for VDP jobs that already have a booklets structure. • The **Split to Sets** parameter splits job into several logical parts. When requesting multiple copies for such jobs, each logical part of the job is printed according to the requested number of times, instead of the entire job completely.
	Fixed size sets	**Number of pages per set**—The desired fixed number of pages per booklets. **Note:** If the specified number of pages per booklet is not sufficient to produce complete booklets and there is a remainder of pages, the last pages will form a booklet that contains less pages than specified.
	Custom size sets	The number of pages per booklet that can be of varying sizes. Click **+**(Add) to add the desired booklet sizes. Click the **Apply** button after defining the booklets. The software calculates the ranges and defines the remaining booklets (if necessary) to close the job.
APR/OPI	**Enable APR/ OPI**	Select this option to support APR and OPI.
Job info	**Job title**	Displays the original name of the file related to this job.
	Sender	Displays the user name of the system from which this job originated.
	Account	Displays the account number of a specific customer or group.
	Recipient	Displays the name of the customer.
	Job comments	Displays special instructions that you want to include in your job.
	Job link	Displays the relevant URL for the linked elements of a JDF job.

Summary tab in the job parameters window

View all of the information from the job parameters window for a specific job.

Parameter	Option	Description
Job summary		Provides a summary of the job parameters in a single window. Click the **Export** or **Print** buttons to export or print a summary of the job parameter settings.

10 Setting up your Creo server

Preferences window

Manage your system and resources. The Preferences window is available from the **File** menu.

Most of these settings are configured when the system is set up for the first time. You should consult with the site administrator before changing any of the server and network settings.

Option	Description
Workflow Mode **Note:** This tab is only visible with the Trans Pack.	Enables you to select from the following options: • **IPDS**—the system processes and prints files using the IPDS workflow. • **File Submission Mode**—the system processes and prints files using the File Submission workflow **Note:** In IPDS mode, certain features and options in the workspace are not available.
Server Setup	Displays the computer name (host name) of the IC-309m print controller and the current date and time. The IC-309m print controller is configured at the factory with a default generic computer name (host name). **Note:** The computer name can be 250 characters long, but the shared name in your network may be cut to the first 15 characters of, due to the NetBIOS ComputerName limitation.
Network Setup	Displays the available network settings. Clicking **Change** enables you to adjust these settings.

Option	Description
Remote Tools Setup	Provides the following options: • **Enable WebViewer**—Enables you to use the Web Viewer to connect from your computer to the IC-309m print controller via the network. • **Enable Remote Connection**—Enables you to open an actual workspace for a selected server on your computer and import jobs, print jobs, preview jobs, and perform certain workflows. Several users can connect to the same server simultaneously from different remote workstations. Clicking **Remote Connections Viewer** enables you to view a list of the available remote connections. **Note:** If you change any of the above settings, restart the IC-309m print controller software for the changes to take effect.

Option	Description
Security	If the **Auto log on** check box is selected, you can open the workspace automatically as an operator without logging on each time. **Notes:** • You can log on as an operator or as a guest if neither the **Auto log on** check box nor the **Disable guest connection** check box are selected. You must enter a password. • The security options don't change how you log on to Windows. • The access options you select also apply when you log on via the Remote Site Manager. • When connecting from Remote Site Manager to several servers, the user type (Operator or guest) must be the same for all connected servers. Provides the following options: • **Administrator**—Enables the user to access all features and settings on the IC-309m print controller. • **Operator**—Enables the user to operate the IC-309m print controller and configure the general settings in the Preferences window. • **Guest**—Enables you to import your job through an existing virtual printer, make changes to the job parameters, and view the workspace. As a guest, you are not allowed to modify settings in the Preferences window, modify jobs that don't belong to you, or modify settings in virtual printers that you didn't create. • **Disable guest connection**—Prevents guest users from accessing the IC-309m print controller. **Disk wipe**—By permanently removing data left by files that you have deleted, the Disk Wipe utility enables you to work in a more secure environment. The utility eliminates the contents of your deleted files by scanning all of the empty sectors on both the system and image disks, and replacing them with zeros. Non-empty sectors are left untouched. The Disk Wipe utility automatically starts every time you quit the IC-309m print controller software. **Note:** Make sure that Symantec Norton Utilities software is not installed on the system, because the Disk Wipe utility does not function properly with this software.
Image Disks	Enables you to adjust the system disk threshold in order to set the minimum free disk space required to process files.

Option	Description
Configuration Backup	Enables you to back up your system configuration to a local hard drive or network drive, and then restore the configuration later.
IPDS Settings **Note:** This tab is only visible with the Trans Pack.	**Enable end of Job timeout**—If the IPDS host does not send a Define Group Boundary, this option sets the time out to close the job on the IC-309m print controller. If the job is not closed the last pages are not printed and the job never ends.
SMS and Mail Accounts	Enables you to configure your mail SMTP server account, SMS SMTP server account, and add users that will receive email and text message notifications about the press' status.
Localization	Displays local settings on your system, including the region, units of measure, and user interface language. You can change each of these settings by selecting an option from the menus. **Note:** After selecting the language of your choice, the `For these changes to take effect, you must exit the Creo Server application, and then restart the computer` message appears. You need to exit the Creo Server application and then restart your computer.
Deletion policy	Provides the following options: **Deletion policy** • **Automatically delete jobs from storage**—Enables you to select how often, in days or hours, you want jobs to be deleted from the **Storage** area. The default setting holds the jobs in the **Storage** area until you manually delete them **Held Jobs** • **Delete held jobs after**—Enables you to select how often, in hours, you want held jobs to be deleted. **Delete global elements** • **Delete elements after all related jobs are deleted**—Deletes elements that are not referenced by any job.

Option	Description
Print Queues Manager	Provides the following options: **Job batching policy**: • **Enable job batching**—Prints jobs that have similar attributes one after another, without pausing between jobs. • **Disable job batching**—Enables the printer to pause between jobs that have similar attributes. **Held jobs policy** • **Bypass held jobs**—Bypasses held jobs in the Print queue **Note:** This option moves the next job to the top of the print queue and saved valuable production time. • **Don't bypass held jobs**—Stops the job from printing from the Print queue. **Note:** This option preserves the original order of the files in the queue. **Job order** • **Keep original job order**—Processes jobs in the process queue, one after another, in the order in which they were submitted to the queue. As soon as the first job finishes processing, it moves to the print queue. **Note:** This option is only available with the Fast pack.
Messages	**Accounting log setup**—Enables you to set the number of days after which you can overwrite messages. The default setting is 90 days.
JDF Outputs	Creates JDF output for JDF jobs that do not have a specified target path. If a JDF job has a specified target path, JDF output is always created. The IC-309m print controller receives the JDF job ticket via hot folders, returns JDF output with job accounting information, and submits JMF (Job Messaging Format) signals with the job's status. **Note:** If you type the file's URL in the **HTTP URL** box, the system will submit JMF signals with the job status whenever the job status of every job in the system changes.

Option	Description
General Defaults	Provides the following options: • **Default Image Size** —Enables you to select the default page size to be used when the system is unable to determine the page size of the imported job. • **Default archive path**—Enables you to set the default path that is displayed when you archive jobs. • **Job Title Recognition (Use when Printing via LPR)**: ◦ **Use PostScript internal name**: Uses the internal file name that the print driver found in the PostScript file. ◦ **Use files name**: Uses the job's given file name. Selecting this option ensures that the job appears in the queue with the name last given by the user. • **Default resolution for images without resolution**— Enables you to set the resolution of images that do not have a resolution. • **SPD Keys**— Determines the way SPD key media type is handled by default (when a rule is not defined). You can select from the following options: ◦ **Map Media Type to Paper Profile** ◦ **Map Media Type to Media Type**
UI Customization	Enables you to select a font size for the IC-309m print controller user interface that accommodates the resolution of your monitor. Provides the following options: • **Small** • **Medium** • **Large**

Setting up e-mail and text message accounts

Set up accounts to receive predefined e-mail and text message notifications about the status of the press.

Requirements:

To be able to receive text messages, contact an SMS provider that offers services for SMS transit and register for an SMS account.

1. From the **File** menu, select **Preferences**.
2. Click **SMS and Mail accounts**.
3. In the **Mail SMTP Server** box, type the IP address of your site's SMTP mail server. For more information, consult your site administrator.
4. (Optional) If you have an SMS account, in the **SMS SMTP Server** box, type the SMTP server address of your SMS provider.
5. To add a user, perform the following actions:
   a. Under **Users**, click **+**.
   b. In the **User name** box, type the name of the user.
   c. Click **OK**.
   d. In the **Mail Address** box, type the user's e-mail address.
   e. In the **Mobile Phone Address** box, type the user's mobile phone address—for example, `phone.username@supplier_address.com`.
6. In the list of messages, perform one of the following actions:
   - To send all notifications, select the **All messages** check box.
   - To send specific notifications, select each message that you want to send.
7. In the list of users, perform one of the following actions:
   - To send notifications to all users, select the **All users** check box.
   - To send notifications to specific users, select the name of each user who should receive notifications.
8. Click **Save**.

   Note: If you want to deactivate the services for a short period of time—for example, to perform maintenance procedures—clear the **Enable Services** check box in the Preferences window. All of your settings will be saved.

Setting up a virtual printer

Virtual printers

The IC-309m print controller provides several default virtual printers (network printers).

Virtual printers are used for automating workflows, which then define job streaming. A virtual printer contains preset workflows that are automatically applied to all print jobs processed with that virtual printer. Because there is no need to reset job settings for each job, printing is more efficient.

The default virtual printers are:

- **Print**
  Files sent to this printer are automatically processed and immediately sent for printing.
- **Process**
  Files sent to this printer are automatically processed and stored in ready-to-print format in the **Storage** area. Later, you can submit the job to print, or change the parameters of the job and resubmit it for processing or printing.
- **Store**
  Files sent to this printer are spooled to the **Storage** area and wait until you submit them for processing and printing. The files remain in PDL format (such as: PS, PDF, VPS, and PPML).
- **Print&Delete**
  Files sent to this virtual printer are automatically processed, printed and then deleted.

In addition to using the default virtual printers, you can create a virtual printer, and edit a virtual printer's settings.

Adding and editing a virtual printer

Add a new virtual printer and then edit job parameters of the virtual printer.

When you add a new virtual printer, you can specify if it is published on the network and if the virtual printer parameters override the PPD parameters.

1. From the **Tools** menu, select **Resource Center**.
2. In the **Resource** list, make sure that **Virtual Printers** is selected.
3. Click **New**.
4. In the **Name** box, type a name for the new printer that you want to add.
5. From the **Based on** list, select an existing printer with similar settings.
6. The **Publish on the network** check box is selected by default. Clear the check box if you do not want to publish the printer on the network.

7. (Optional) Select the **Override PPD parameters** check box if you would like the virtual printer settings to override the parameters set in the PPD file.
8. (Optional) In the **Comments** box, type any comment regarding the virtual printer parameters.
9. Click **Edit** to change the job parameters of your new virtual printer.

   Note: If you don't edit the job parameters, the settings of the new virtual printer are taken from the printer on which it was based.
10. Click **Save** to save your changes in the job parameters window.
11. Click **OK**.

The new printer appears in the virtual printer list.

Restoring the settings for a default virtual printer

Restore a default virtual printer's parameters to the factory settings.

1. From the **Tools** menu, select **Resource Center**.
2. In the **Resource** list, make sure that **Virtual Printers** is selected.
3. Select the default virtual printer whose settings you want to restore.
4. Click **Restore Defaults**.
5. When the Restore Virtual Printer message appears, click **Yes**. The factory settings for the virtual printer are restored.
6. Click **Close**.

Removing a virtual printer

The four default virtual printers cannot be deleted.

1. From the **Tools** menu, select **Resource Center**.
2. In the **Resource** list, make sure that **Virtual Printers** is selected.
3. From the virtual printer list, select the virtual printer that you want to delete, and then click **Remove**(-).
4. Click **Yes**.

Best practices for maximizing performance

Maximize performance for all file types.

Performance will be improved for files whose job parameters include the following settings:

- **Delete printed jobs from storage** check box and **Delete failed jobs from storage** check box are selected.
- **Gallop** is selected.
- **Print order** is 1-N.
- **Cut and stack** imposition method is not active.

Using mark sets

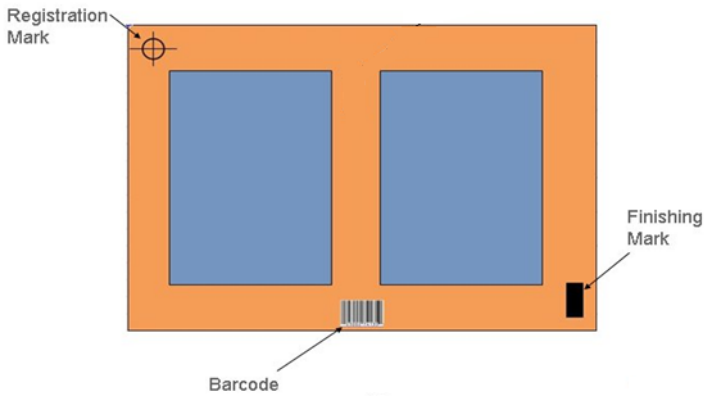
Mark sets

A mark set enables you to place a set of predefined marks, which are used for finishing purposes, on the printed sheet.

The type of marks and the position of these marks determine how an inline or offline finisher finishes your job—for example, where the finisher cuts, staples, punches, and folds the printed sheet. When you create a mark set, you need to define attributes for each of the selected mark types. You can define the position, height, width, and so on, for a mark.

The IC-309m print controller provides three types of marks:

- Registration marks—These marks are an image of a registration cross hair target that is printed in CMYK
- Finishing marks—Square or rectangular marks that are used by finishing devices
- Barcodes—Printed using black separation, customized barcode marks—for example, for page numbers— are used by various finishing devices



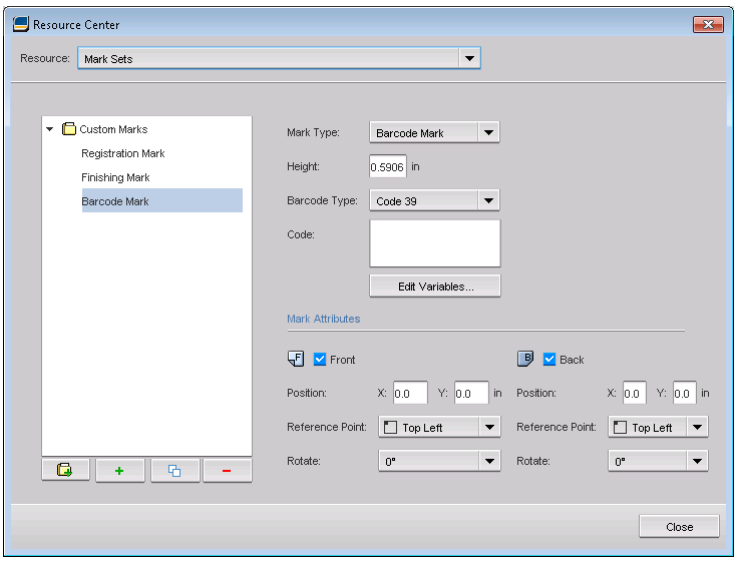
Once you save a mark set, you can apply it to your job via the job parameters window.

Creating a custom mark set

Create a custom mark set for your job.

The IC-309m print controller includes a set of predefined marks. These marks can not be edited or deleted.

1. In the Resource Center window, from the **Resource** list, select **Mark Sets**.



2. To create a new mark set, click **Add Mark Set** .
   A new mark set is created and assigned the name **Mark Set** (by default).
3. Type a name for the mark set, and then press Enter.
4. Click **Add Mark Type** (+). to view the types of marks that you can add to the mark set.
5. Add the marks that you want to be printed and edit the options accordingly. You can later go back and change the settings if required.

The new mark set is added to the list of mark sets. You can apply these mark settings in the job parameters window by selecting **Finishing** > **Special Marks**.

Note: When you enable the **Align Back to Front** option, the mark on the back side overlaps the mark on the front side.

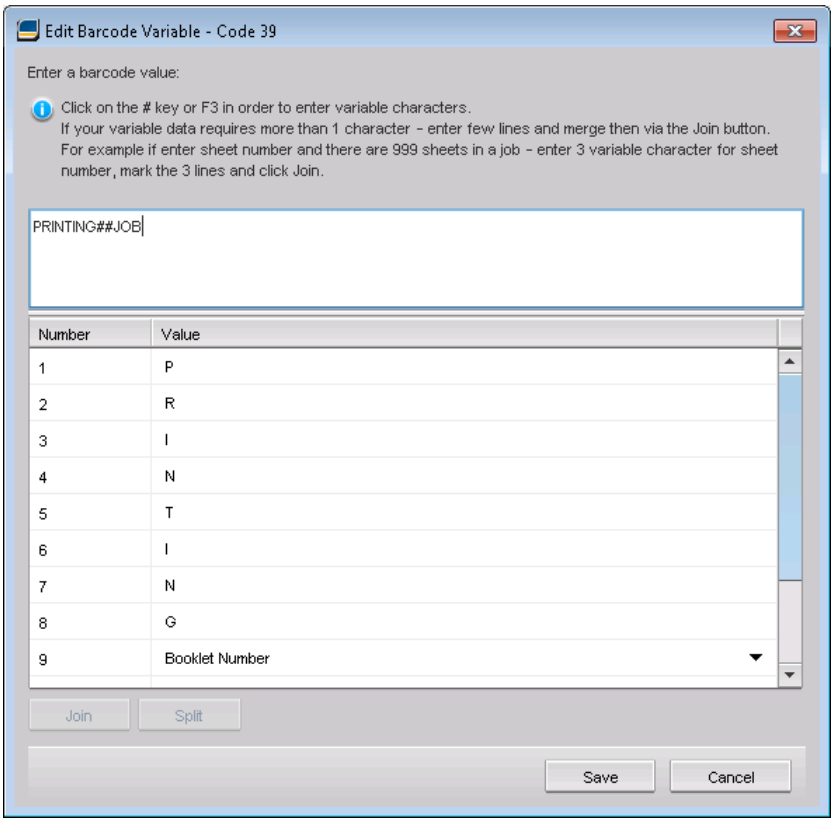
Adding a barcode

Add a barcode to a mark set, and define the barcode data code in the Resource Center window.

The IC-309m print controller provides four predefined types of barcodes:

- Code 39—An alphanumeric barcode of up to 50 characters.
- EAN-8—A numeric barcode of up to eight numbers. Seven numbers are custom numbers that you select and one number is determined by the barcode engine.
- Interleaved 2 of 5—A numeric barcode of up to 50 numbers.
- DataMatrix—An alphanumeric barcode of up to 2,000 characters.

1. From the **Tools** menu, select **Resource Center**.
2. In the **Resource** list, make sure that **Mark Sets** is selected.
3. Select a mark set, and then either click **Add Mark Type** or click to select an existing mark.
4. In the **Mark Type** list, select **Barcode Mark**.
5. In the **Height** area, type the height of the barcode that you want to add.
   You cannot change the barcode's width.
6. In the **Barcode Type** list, select the barcode that you want to add.
7. Click **Edit Variables**.
   The Edit Barcode Variable window appears.



8. In the **Enter a barcode value** area, type the barcode value according to the requirements of the type of barcode that you selected.
9. Define variable information for a barcode—for example, the total number of booklets or the sheet number—by performing the following actions:
   a. Type the number sign **#** where you want to define a variable.
   b. In the table, select the barcode number, and select the variable information that you want the barcode to include.
   c. (Optional) For variable information consisting of two or more digits, merge two or more adjacent barcode numbers by selecting the rows and clicking **Join**.
   d. Click **Save**.
   The barcode appears in the **Code** box Resource Center window.
10. Select the sheet on which you want the barcode to appear (the **Front** check box or the **Back** check box), or select both check boxes if you want the barcode to appear on both sides.
11. Type the x-coordinate and y-coordinate that indicate the position of the barcode on the sheet.
    0,0 indicates the beginning of the sheet.

12. Select a reference point for the x-coordinate and y-coordinate that you defined for the barcode position.
13. (Optional)To rotate the barcode on the sheet, select a value.

Next: You can assign a mark set to your job in the job parameters window by selecting **Finishing** > **Marks and barcodes**.

Maintaining your settings

Backing up the configuration

You can back up your configuration to a local hard disk, or DVD.

Note: It is recommended that you back up your configuration to external media before reinstalling the operating system and software.

1. From the **File** menu, select **Preferences.**
   The Preferences window appears.
2. In the **Preferences** window, under **Administrator**, select **Configuration Backup**.
3. In the **Configuration backup** area, click **Browse**.
   The Save dialog box appears.
4. Locate the folder you want to back up.
5. Enter the file name.

   Note: It is recommended that you use the current date as part of the file name.
6. Click **Save**.
7. In the **Configuration backup** area, click **Start Backup**.
   After a few moments, the backup complete message appears.

   Note: The last path is saved and displayed to the path box. If the backup was made to external media, the displayed path will be the default: `c:\ic-309m\General\Configuration`.
8. Click **OK**.
9. Click **Save** to close the Preferences window.

Restoring the configuration

Requirements:

Make sure that you have previously backed up your configuration.

The configuration file extension is `.cnf`.

Note: Restore can only be implemented for the same software version.

1. From the **File** menu, select **Preferences.**
   The Preferences window appears.
2. In the **Preferences** window, under **Administrator**, select **Configuration Backup**.
3. In the **Restore configuration** area, click **Browse**.
   The Open dialog box appears.
4. Locate the folder in which you backed up the configuration.
5. Select the file, and then click **Open**.
6. Click **Start Restore**.
7. Select the categories that you want to restore, and click **OK**.

All custom tables and sets—for example, new virtual printers— are added to the system when you restore the configuration.

Tools for maintaining your system

The IC-309m print controller includes a number of tools to help you maintain your system. The available tools include:

- **Formatting the Image Disk**: Formats the image disks and performs system recovery.
- **Disk wipe**: Enables you to work in a more secure environment, by permanently removing data left by files that you have deleted.
- **Auto update tool**: Enables you to install software updates. These updates include the latest service packs, Windows hot fixes, and related patches for your IC-309m print controller.

11 Working with Creo server tools

Remote Site Manager overview

The Remote Site Manager enables a site manager to monitor the status of the IC-309m print controller and other Creo servers connected to printers on a network. It also enables you, the site manager, to operate these servers from a remote computer.

The Remote Site Manager software includes the following tools:

- The Remote Workspace tool—Allows users to open an actual workspace for a selected server on their computer and import jobs, print jobs, preview jobs, and perform certain workflows. Several users can connect to the same server simultaneously from different remote computers.
- The EZ Connect tool—Allows users to view updated printer status information.

Note: You can run the Remote Site Manager on your desktop while you use other applications on your computer. The Remote Site Manager does not disrupt server activity.

Activating the remote tools

Set up a network connection between a Windows computer and the IC-309m print controller.

You need to select the **Enable the Remote Connection** parameter in the Preferences window to connect remotely to the IC-309m print controller.

1. On the IC-309m print controller, from the **File** menu, select **Preferences.**
   The Preferences window appears.
2. Under **Administrator**, select **Remote Tools Setup**.
3. In the **WebViewer setup** area, select **Enable Webviewer**.
4. In the **Remote workspace setup**, select **Enable Remote Connection**.

   Tip: In this area, you can view Connection Status and how many clients are connected.
5. Click **Remote Connections Viewer** to see the list of connections.

6. Click **Save**.

Installing the Remote Site Manager in Windows

Install the Remote Site Manager so that you can add servers, monitor their status, and obtain information about the printer, all from your computer.

1. On your desktop, click **Start** > **Run**.
2. In the Run dialog box, type the exact name of the server where the Remote Site Manager is located, as follows `\\<server_name>`.
3. Click **OK**.
4. In the `\Utilities\PC Utilities` folder on the IC-309m print controller, locate the `Remote_Site_Manager.exe` file.
5. On your computer, double-click the `Remote_Site_Manager.exe` file.
6. During the installation process, if a Windows Security message appears about installing X-Rite device software, click **Install**.
   The Remote Site Manager is installed on your computer. The **Remote Site Manager** icon appears on your taskbar after the application is started.
7. Click **OK**.

The Remote Site Manager appears under `Start > Programs > Creo Server > Remote Site Manager`.

Installing the Remote Site Manager in Mac OS X 10.6 (64 bit) and later

Install the Remote Site Manager so that you can add servers, monitor their status, and obtain information about the printer, all from your computer.

1. From your computer, navigate to the `\\<server name>\Utilities\Mac Utilities` folder on the Creo server.
2. Double-click the `Remote_Site_Manager.dmg` file.
   The Remote Site Manager is installed on your computer. The **Remote Site Manager** icon appears on your taskbar after the application is started.
3. Click **Close**.

A shortcut to the Remote Site Manager appears in the path `Applications\Creo_Server_Tools\Remote_Site_Manager`.

Adding Creo servers to the Remote Site Manager

Using the Remote Site Manager software, set up servers via the Remote Site Manager Setup window. You can add up to 15 Creo servers.

1. On the taskbar, right-click the **Remote Site Manager** icon.
2. From the menu that appears, select **Setup**.
   A message notifies you that you need to add a server before using the **EZ Connect** tool.
3. Click **OK**.
   The Remote Site Manager Setup window appears.
4. In the Remote Site Manager Setup window, click **Add**.
5. In the **Hostname/IP** box, type the exact name of the server that you want to add—for example, `Server1`.
6. In the **Display Name** box, type a name of your choice for the server.
7. Click **Add**.
   Your new server appears in the Remote Site Manager Setup window.
8. Click **Save**.
   Your new server's name is added to the menu that appears when you right-click the **Remote Site Manager** icon.
9. To add another server, repeat steps 4-8.

Using the EZ Connect tool to view the printer status

Requirements: Before you can use the EZ Connect tool, you must add a server.

1. On the taskbar, right-click the **Remote Site Manager** icon.
2. In the menu that appears, select **EZ Connect**.
   The EZ Connect window appears.
3. Check the status of the printer that is connected to the selected server.

Removing the Remote Site Manager in Windows

Requirements:

Note: You must exit both the Remote Site Manager and the Remote Workspace applications before you uninstall the Remote Site Manager.

➢ On your desktop, click **Start** > **Programs** > **Creo Server** > **Remote Site Manager** > **Uninstall V1_0**.

Removing the Remote Site Manager in Mac OS X

Requirements:

Note: You must exit both the Remote Site Manager and the Remote Workspace applications before you uninstall the Remote Site Manager.

➢ To remove the Remote Site Manager and the remote Workspace applications, delete the following folders:

- `<installation_disk>\Applications \Creo_Server_Tools\Remote_Site_Manager`
- `<installation_disk>\Library\Application Support \Creo_Server_Client_Tools\Remote_Site_Manager`
- `<installation_disk>\Library\Application Support \Creo_Server_Client_Tools\Remote_Workspace`

Remote Workspace overview

The Remote Workspace tool opens an actual workspace for the selected server and enables you to import jobs, print jobs, and perform the following workflows:

- View and manage jobs
- View printer information
- Set job parameters

Notes:

- The Remote Site Manager enables you to view and control multiple workspaces of available servers on the network.
- On a Mac computer, Eclipse help is not available when you access a IC-309m print controller via the remote workspace.
- When changing settings in the Preferences window from the Remote Workspace application, the settings apply to the IC-309m print controller, and not to the client session of Remote Workspace.

See also:

Connecting to the Remote Workspace on page 158

Connecting to the Remote Workspace

Requirements: Make sure that you have activated the remote connection option on the IC-309m print controller.

1. On the taskbar, right-click the **Remote Site Manager** icon.
2. In the menu that appears, select one of the servers.
   The Remote Workspace window of that server appears.

Overview of the Web Center

The Web Center is a web page that provides online information and can be accessed from a Windows or Mac computer. You can connect to the Web Center with the Internet Explorer 5.0 (or later) and Apple Safari browsers.

The Web center enables you to:

- Download remote client tools and printer drivers
- View related documentation
- Find links to related vendors or products
- Connect to the printer's web user interface in the **Remote UI** link.

Connecting to the Web Center

Note: To connect to the Web Center from a client workstation, you must first enable the remote connection in the preferences of the IC-309m print controller.

1. Open any web browser, for example, **Internet Explorer**.
2. In the address field type: http://<server name>—for example, if the IC-309m print controller station name is server_1, type http://server_1.
   The IC-309m print controller Web Center appears.

Office Hot Folder tool

The Office Hot Folder tool enables you to automate the printing of Microsoft Office files when you work remotely. You can drag Microsoft Office files to a hot folder and then submit the files for printing on the Creo server.

The following Microsoft Office versions are supported:

- Microsoft Office XP
- Microsoft Office 2003
- Microsoft Office 2007
- Microsoft Office 2010

Installing the Office Hot Folder tool

Requirements:

Microsoft Office must be installed on your computer in order to work with Office Hot Folder tool.

1. On the IC-309m print controller, locate the `D:\Utilities\PC Utilities` folder.
2. Double-click the `Office_HF.exe` file.
   The Office Hot Folder tool is installed on your computer, the **Office HF** icon appears on your taskbar, and the Office Hot Folder tool appears. All network printers that are currently on your computer appear in the window.
3. Right-click this icon to perform the following actions:
   - **Open**: Open the Office Hot Folders tool and create and manage hot folders
   - **Start**: Activate file processing in the tool
   - **Stop**: Deactivate file processing in the tool
   - **Refresh**: Restart the tool
   - **Exit**: Shut down the tool

Creating an Office hot folder

Requirements:

The Office Hot Folder tool must be open.

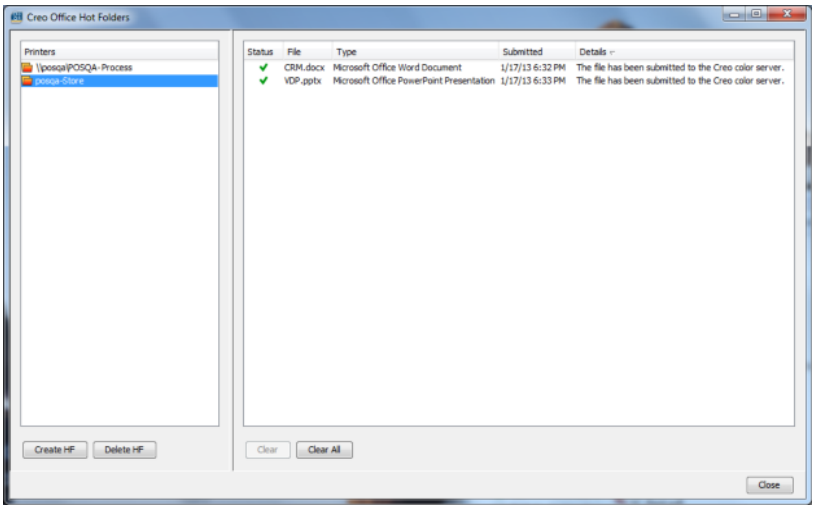
1. In the Office Hot Folder tool, in the **Printers** pane, select the virtual printer for which you want to create a hot folder.
2. Click **Create HF**.

You can now print Microsoft Office files through this hot folder.

Using the Office Hot Folder tool to print

Requirements: One of the Microsoft Office 2003, 2007, or 2010 file formats must already be submitted to one of the hot folders set up in the Office Hot Folder tool:

1. In the Creo Office hot folders window, select the hot folder that you want to use to submit your file.
2. Drag the file to the hot folder.



Your file is automatically processed and printed according to the hot folder workflow.

Remote Job Ticket software

Remote Job Ticket overview

The Remote Job Ticket software enables you to create a Job Definition Format (JDF) file. This JDF file contains a set of printing parameters (job ticket) and may also include the path to a file to be printed using those parameters.

Note: If you assign a file to a job ticket, make sure that the file location can be accessed by the Creo server.

This software can be installed and used on Windows or Mac OS X computers.

Because you work on a remote computer, you don't need to be connected to a Creo server to create a job ticket. You can assign a job ticket to any of the supported file types.

With the Remote Job Ticket software you can:

- Create a job ticket
- Open a job ticket
- Load job parameters from a selected server
- Send a job to print using a job ticket that you created

Note: Custom imposition templates, including the pre-defined Folded Signature imposition templates, cannot be previewed from the Remote Job Ticket software.

Language settings

The Remote Job Ticket software displays the language of your computer's Windows operating system. To ensure that the language that the Remote Job Ticket software displays and the language of the job parameters window that you work with are the same, set the language of your computer's operating system to the same language as the Creo server that you are creating the job ticket for.

Installing the Remote Job Ticket software in Windows

1. From your computer, navigate to the `\\<server name>\Utilities\PC Utilities` folder on the Creo server.
2. Double-click the `Remote_Job_Ticket.exe` file.

The Remote Job Ticket software opens. A shortcut to the Remote Job Ticket software appears under **Start** > **Programs** > **Creo Server** > **Remote Job Ticket** > **Remote Job Ticket V1_0**.

Installing the Remote Job Ticket software in Mac OS X

1. From your computer, navigate to the `\\<server name>\Utilities\Mac Utilities` folder on the Creo server.
2. Double-click the `Remote_Job_Ticket.dmg` file.
3. Double-click the Remote Job Ticket package to install the software on your computer.

The Remote Job Ticket software is installed on your computer.

Creating and managing job tickets

Creating a job ticket in Windows

1. From the **Start** menu, select **Programs** > **Creo Server** > **Remote Job Ticket** > **Remote Job Ticket V1_0**.
   The Remote JT window opens.
2. To add a server, perform the following actions:
   a. From the **Tools** menu, select **Use JT Settings From** > **Setup**.
   b. In the Setup window, click **Add**.
   c. In the **Server Name** box, type the name of the server that you want to add.
   d. In the **IP/Host Name** box, type the IP address or the host name of the server.
   e. Click **Add**.
      The job ticket settings for the server are loaded.
   f. In the Setup window, click **OK**.
3. From the **Tools** menu, select **Use JT Settings From** and in the list that appears, click the server that you just added.
   The following message appears if unsaved changes were made to the current open job ticket:
   `Are you sure you want to change the displayed server without changing the template?`
4. Click **Yes**.
5. Set the required job parameters.
6. Click **Save As**.
7. In the **Save JDF** dialog box, type a name for the job ticket, and click **Save**.

The job ticket is saved in the path defined in the Preferences window. The default path for Windows 7 is `C:\ProgramData\Creo_Server_Client_Tools\Creo_Server_JT\V1_0\Creo_Server_JT\Creo_Server_JT_IC-309m_1\servers\FactoryDevice\JT files\IC-309m`.

See also:

Adding a server on page 167
Removing a server on page 167
Renaming a server on page 167
Defining a new location for saved job tickets on page 167

Creating a job ticket in Mac OS X

1. From the Applications folder, navigate to `/Creo_Tools/Remote_Job_Ticket/` and double click the **Remote_Job_Ticket** icon.
   The Remote JT window opens.
2. To add a server, perform the following actions:
   a. From the **Tools** menu, select **Use JT Settings From** > **Setup**.
   b. In the Setup window, click **Add**.
   c. In the **Server Name** box, type the name of the server that you want to add.
   d. In the **IP/Host Name** box, type the IP address or the host name of the server.
   e. Click **Add**.
      The job ticket settings for the server are loaded.
   f. In the Setup window, click **OK**.
3. From the **Tools** menu, select **Use JT Settings From** and in the list that appears, click the server that you just added.
   The following message appears if unsaved changes were made to the current open job ticket:
   ```
   Are you sure you want to change the displayed server without changing the template?
   ```
4. Click **Yes**.
5. Set the required job parameters.
6. Click **Save As**.
7. In the **Save JDF** dialog box, type a name for the job ticket, and click **Save**.

The job ticket is saved in the path defined in the Preferences window.

Loading job parameters from a selected server

Requirements: The server from which you want to load job parameters must be in the Remote Job Ticket list of servers.

1. From the **Tools** menu, select **Use JT Settings From**.
2. In the list that appears, click the server from which you want to load job parameters.

A check mark appears next to the selected server, and the Remote Job Ticket software loads the appropriate job parameters window.

Submitting a file with job ticket for printing

Requirements: You can only submit a file for printing with a job ticket that contains the required job parameters.

1. In the Remote Job Ticket software main window, click **Submit**.
2. In the **Name** box, type the name of the job ticket.
3. Click **Browse**.
4. In the Browse dialog box, locate the file that you want to print using the job ticket, and click **Open**.
5. Click **Submit**.

The file is sent to the Creo server and is printed according to the settings defined in the job ticket.

Submitting files from Prinergy Workshop via Digital Submit to the Creo server

Requirements: Make sure you have added a Creo server to the Kodak Prinergy.

1. In **Job Finder**, select the **Jobs** view to view the list of available jobs.
2. Double-click the job that you want to send to the Creo server. The Job Manager window appears.
3. In the Job Manager window, right-click the file located in the **Input Files or Pages** area, and then select **Send to Digital Direct**.
   The Process Info window appears and then the Submit to Digital Print window opens.
4. Set the **Order Quantity**.
5. Select the **Press Settings** tab.
6. Select the digital press that you want to print the file to.
7. Click **Choose** and select the JDF template that contains the settings for your job.
8. Click **Edit**, to adjust these settings.
   The Remote JTwindow appears.

9. Click **Save**, and then close the Remote JT window.

   Note: When you edit and save Creo server job parameters settings from within Prinergy, the settings are applied only to your current job and not saved for future jobs.

10. From the Submit to Digital Print window, click **Submit** to send the file to be processed and printed.

    Note: Select **Submit to Press Immediately**, to send the file as soon as you click **Submit**. Otherwise, the file will be sent at the scheduled time.

Printing from the Prinergy software

Requirements: The Prinergy software must be running.

1. In the Prinergy Job Manager window, in the **Pages** area, select the job that you want to print, and drag it to the Loose Page Proof template.
2. In the Start Process dialog box, select **Edit Process Template**.
3. In the Loose Page Proof template dialog box, click the **Include JDF for Digital Print** tab.
4. In the **Device Selection** list, select **Creo Server**.
5. In the **PDF Path** box, type `\\<Creo server name>\<any shared folder on the Creo server>`.

   Note: It is recommended that you use the **JobUploads** shared folder.

6. In the **JDF Path** box, type `\\<Creo server name>\<any hot folder on the Creo server>`.
7. In the **Select JDF Templates** area, click **Browse**.
8. In the File Browser dialog box, select the required JDF file, and click the **Select <JDF_file_name>** button.
9. Click **OK**.
10. In the Start Process dialog box, click **OK**.

The job is printed with the settings defined in the JDF file.

Adding a server

1. From the **Tools** menu, select **Use JT Settings From** .
2. Click the **Add** button.
3. In the **Server Name** box, type a name for the server that you want to use.
4. In the **IP / Host Name** box, type the IP address or host name of the server that you want to use.
5. Click **Add.**
6. Click **OK**.

The new server appears in the list.

Removing a server

Requirements: The **Remove** button is available only if the list of servers contains more than one server.

1. From the **Tools** menu, select **Use JT Settings From** .
2. Under **Server Name**, select the server that you want to remove.
3. Click the **Remove** button.
4. In the confirmation message window, click **Yes**.
5. Click **OK**.

The selected server is removed from the list.

Renaming a server

1. From the **Tools** menu, select **Use JT Settings From** > **Setup**.
2. Under **Server Name**, double-click the server that you want to rename.
3. Type a new name for the server, and press Enter.

   Note: The name of a server must be unique.
4. If a server with the same name already exists, you are prompted with a message. To replace the existing server, click **Yes**.
5. To close the Setup dialog box, click **OK**.

Defining a new location for saved job tickets

1. From the **Tools** menu, select **Preferences**.
   The Preferences dialog box appears displaying the default location of the saved job tickets.

Note: If you have already changed the location, the **Default JDF Location** box displays the location that you selected previously.

2. In the **Default JDF Location** box, click **Browse** and select the desired location.
3. Click **OK**.
4. In the Preferences dialog box, click **OK**.

Job tickets that you create from now on are saved in the new location.

Updates

The update feature

You use the **Check for Updates** feature to check if a new version of the Remote Job Ticket software is available, or if the job parameters settings of the server selected on the Remote Job Ticket changed.

The following types of resources are examples of information that may be updated:

- Paper names
- Gradation tables
- Imposition templates

Checking for updates

1. From the **Help** menu, click **Check for Updates**.
   The Remote Job Ticket software must be connected to a server when checking for updates.
2. One of the following occurs:
   - If a newer version of the Remote Job Ticket software is available, or a new set of parameters is available for the currently loaded server, an update process begins. At the end of the process, click **Close**.
   - If a new version of the software is not available, and there are no new parameters to be loaded, then in the Update message, click **Close**.

A new version of the Remote Job Ticket software, and/or a new set of job parameters available on the loaded server, is installed on your computer.

Removing the Remote Job Ticket from Windows

- On your desktop, click **Start** > **Programs** > **Creo Server** > **Remote Job Ticket** > **Uninstall Remote Job Ticket V1_0**.

Removing the Remote Job Ticket from Mac OS X

Requirements:

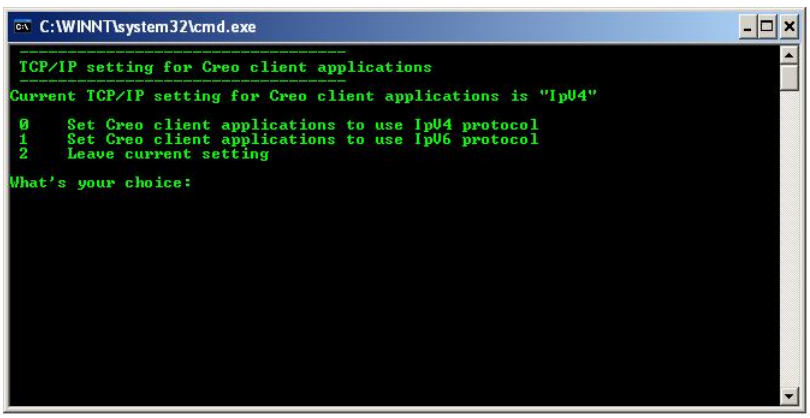
Note: You must exit the Remote Job Ticket software before you can uninstall it.

- Delete the following folders:
  a. `/Applications/Creo_Server_Tools/Remote_Job_Ticket`
  b. `Library/Application Support/Creo_Server_Client_tools/Creo_Server_JT`

Changing the Network settings to TCP/IPv6 on a remote computer

This procedure describes how to change the Network settings from TCP/IPv4 to TCP/IPv6 on a remote computer.

1. On the remote computer, from the **Control Panel**, uninstall the **Remote Job Ticket** application.
2. From the remote computer, navigate to the `\\<server name>\Utilities\PC Utilities` folder on the Creo server.
3. Double-click the `Remote_Job_Ticket.exe` file.
   The Remote Job Ticket software opens. A shortcut to the Remote Job Ticket software appears under **Start** > **Programs** > **Creo Server** > **Remote Job Ticket** > **Remote Job Ticket V1_0**.
4. From the `\\<server name>\Utilities\PC Utilities` folder on the Creo server, double click the `Set_IpV4_IpV6_Protocol.bat` file
   The following dialog box appears:



5. Type `1`.
6. On the remote computer, change the Network settings to support TCP/IPv6.
7. Reboot the remote computer.
8. Reconnect the Remote Job Ticket application and continue the set up as usual.

12 Troubleshooting

Job History window

The Job History window lists all of the messages generated during the workflow of the selected job. You can view the job title and owner (the user name of the system from which the job originated) near the top of the window.

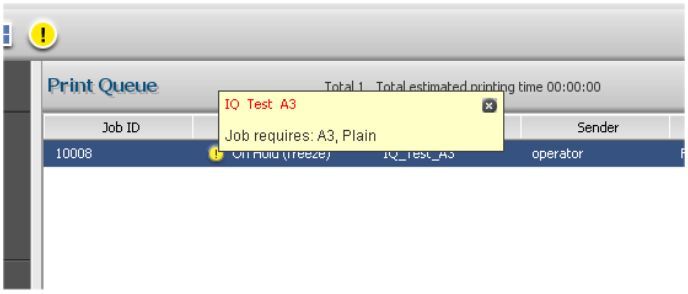
Job Information	
Job title	The job's file name.
Sender	The user that sent the file to print.
Show	Click one of the icon types (Information, Warning, or Error) to view or not view (toggle) those message types in the Job History window.
Type	There are three types of messages: • Information • Warning • Error
Date & Time	The date and time on which the message was emitted (the time stamp).
Stage	The stage in the workflow—for example, System or Process.
Message	The message text.

Handling alerts and jobs

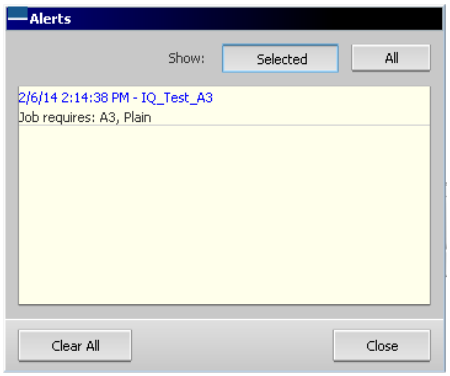
If your job has failed or is frozen, you can view an alert message about the failed or frozen job.

1. In the workspace, do one of the following:
   - In the **Print Queue**, click the frozen icon that appears next to the frozen job.
   - In the **Storage area** click the failed icon that appears next to the frozen job.
   - Select the job with the failed or frozen icon and then click the **Alert** button on the toolbar.

   If you click the frozen or failed icon, a message appears detailing the problem.



   If you click the **Alert** button on the toolbar, the Alerts window appears.



2. Close the alerts information.
3. If a job was frozen, follow the directions in the alert message to correct the situation (incorrect or missing paper stock or finisher).

Aborting a job

Requirements: A job that is processing or printing.

- Right-click the running job in one of the queues, and select **Abort** and then click **Yes**.
  The job moves from the queue to the **Storage** area. The **Aborted** status is assigned to the job, and the next job in the queue starts running.

Resume printing

Resume printing an aborted job.

- Right-click the aborted job in the **Storage** area, and select **Resume printing**.
  The job continues printing from the last page that was printed.

Alerts window

In the Alerts window you can view system alerts, and alerts for the selected job.

Alert window options	
Show Selected	Displays the alert for the selected job in the queues or **Storage** area.
Show All	Displays the system alerts and the alerts for all jobs.
Clear All	Clears all of the alerts from the window.

Printing system messages

Print a list of system messages from the Message Viewer window.

1. From the **Info** menu, select **Messages Viewer**.
2. Filter and sort the message list as desired.
   - Click any message type icon—for example, **Error**  —To filter out such messages.
   - Click a column header to sort the list by that column.
3. Click **Print List**.
   The Print window is displayed.
4. Set the printing options as desired, and click **OK**.

The data is printed according to the current filtering and sorting.

13 Glossary

absolute colorimetric

A method of color matching during the translation of files from one device to another. The absolute colorimetric method refers to the use of device-independent color space.

amplitude-modulated (AM) screening

A type of halftone screening in which the size of the dots varies but the spacing between dot centers is constant. For darker areas, the dots are bigger, and for lighter areas, they are smaller.

Automatic Picture Replacement (APR)

Technology in which two versions of a file are created—a high-resolution file and a low-resolution file called PSImage. You use the latter file for positioning and manipulating images in DTP software. The high-resolution file automatically replaces the low-resolution version during the RIP process.

bitmap file format

A file format in which graphics are represented by a series of pixels. The file name extension is .bmp.

booklet

In a variable information (VI) job, a personalized copy of a document. A booklet can consist of several pages, but the entire document is targeted at a specific individual or address. VI jobs contain elements that differ from booklet to booklet, including text, graphics, pictures, and page backgrounds.

bounding box

In a PostScript file, the smallest rectangle that encloses all of the graphic elements. The bounding box is specified by two sets of coordinates.

brightness

The amount of light reflected from a surface, regardless of the hue or saturation of color. In print reproduction, the reflectance of the paper affects brightness.

cache

To store data after it has been accessed so that future access will be faster.

click charge

A fee that vendors charge for each printed or copied page. Click charges are part of the maintenance agreement between the vendor and the customer.

CMYK

A color representation scheme (or color space) in which cyan, magenta, yellow, and black are combined to create full-color images.

colorant

A pigment, dye, phosphor, or other such substance that produces a color. Colorants are like building blocks of colors—for example, green is composed of cyan and yellow, so cyan and yellow can be considered colorants that make up the color green.

color cast

The predominance of a particular color that affects the whole image in the original, proof, or reproduction. A color cast is due to an excess of a color pigment or light. It is most obvious in gray and near-gray areas.

color channel

A single color, such as red, green, or blue.

color correction

The process of improving or altering the color components of an image to compensate for deficiencies in printing inks, to solve problems in the color separation itself, or to fulfill a customer's request for modification.

color gamut

The range of possible colors that can be represented in a given circumstance, such as within a given color space or by a certain output device.

color management

A process that aims to control the representation of colors across a variety of output devices so that the colors that are generated appear consistent. Color management is based on the coordination of three processes: device calibration, device characterization, and conversion from one color space to another.

color mapping

A color-correction method used to convert an input file's color space to a target's color space.

color profile

A description of the range of colors that a device can produce. A color profile makes it possible to convert the color space of one device (such as inkjet printer) to another device (such as a computer monitor).

color rendering dictionary (CRD)

A three-dimensional lookup table for transforming all process color models.

color space array (CSA)

A three-dimensional or four-dimensional lookup table that contains data for translating a device-dependent color space into a device-independent L*a*b* color space.

composite mode

A mode of operation in which all the color information associated with a particular page is described on one page of a PostScript file. During RIP, the file is separated into process colors and spot colors, one file for each color. This mode of operation is the fastest and most efficient in most cases.

contrast

The ratio between the light tones and the dark tones in an image. If you increase the contrast, highlights become lighter while shadows become darker.

conventional screening

A method of screening in which an image is broken down into a series of dots of varying sizes that are placed in a rigid grid pattern. Color images are separated into the four process colors, and individual screens of color are created and then skewed at angles to reproduce the image in print.

creep

The extension of middle pages of a folded signature slightly beyond outside pages. Shingling compensates for creep.

CT file format

A four-color (CMYK) continuous-tone (or *contone*) raster file format. Gradient tones and continuous-tone data are sometimes converted to CT format.

database

A software module that holds site configuration information, edition plan information, and the current state of each process and planned item. At least one workstation at each site must have a database installed.

DCS (desktop color separation)

An EPS format containing five files: four of the files contain the separated color information for each of the CMYK colors and the fifth is a low-resolution composite file for use in electronic page layout. DCS1 format has five separate files. One file acts as the preview and the other four contain the information for printing the different channels of CMYK color.

DCS-2

A desktop color separation (DCS) file with additional files that contain spot color information.

densitometer

An electronic instrument which measures the optical density of film or reflective media. A transmission densitometer is used to measure films while a reflection densitometer is used to measure photographs and ink laydown on press sheets.

density

A measurement of the ability of light to be absorbed by an ink and paper combination. A darker tone has a higher density than a lighter tone.

density range

The range of density from highlight to shadow on a film negative or positive or on the printed image. It is calculated as the mathematical difference between the densities of the darkest and the lightest tone values.

device

An individual occurrence of a physical device that reproduces an image. Devices have a type and a customer-specified name. Because the declaration of a device does not include its operating conditions—such as ink selection, type of screening, and paper—you cannot measure the color response of a device on its own. (In ICC terminology, the declaration of a device does include its operating conditions.)

device-independent color space

A color space based on human perception of color, measured using a colorimeter or spectrophotometer. The color space is independent of the color capabilities of any specific device. An example is CIELAB. A device-independent color space may be used as an intermediate color space when converting from one color space to another, for example, from CMYK to RGB.

device link profile

A one-way link or connection between two color imaging devices. Such a one-way link can be between devices such as a scanner and a printer, a scanner and a color monitor, or two printers. Using device link profiles helps shorten the conversion path in certain applications and saves computing time.

device profile

A type of ICC profile that represents the relationship between colorant tint values of a device and the resulting color. It has two sets of color mapping tables: one set maps device colorant tint values to the profile color space while the other set maps the profile color space to device colorant tint values.

dot area

The percentage of an area covered by halftone dots, ranging from no dots at 0 percent to a solid ink density at 100 percent. The size of a single dot is stated in a percentage of the area it occupies.

dot gain

A printing effect which results in dots being printed larger than they should be. It occurs as a result of ink spreading on the printed page, and if not compensated for, can lead to an image appearing too dark.

element

Any item within a job—including an input file, page, page set, signature, surface, or separation.

frequency-modulated (FM) screening

A method of creating halftones where the spots are all the same size, but the frequency or number of dots changes in a given area. There are more dots in a dark area and fewer in a light area.

frozen job

A job for which the appropriate paper stock is not available: for example, the correct paper type, size, or weight.

gravure printing

A printing method in which the image is engraved through a screen below the surface of a cylinder. The ink is transferred to paper when pressed to the cylinder. Gravure is used for very long print runs and on many substrates.

gray balance

The values for yellow, magenta, and cyan that produce a neutral gray with no dominant hue when printed at a normal density.

gray component

The amounts of CMY in a color which result in neutral gray, based on the lowest separation value of the color.

gray component replacement (GCR)

A method for reducing the CMY amounts that produce the gray component in a color, without changing the color hue.

halftone screen

On halftone output, the fine grid that positions the halftone dots.

job flow

The job parameter settings of selected virtual printers, which are automatically applied to all jobs printed using those virtual printers. These settings determine how a sent or imported file is processed. For example, a file sent to a virtual printer with a Process & Print job flow will be RIPed, printed, and stored in the Storage Folder. A file sent to a Process & Store job flow virtual printer will be RIPed and stored, without printing.

job ticket

A hidden file that is created when you associate an input file with a particular template. The job ticket contains all the instructions for processing the input file.

L*a*b*

A device-independent color measurement system that measures Lightness (or Luminance) and two color coordinates, A (red/green) and B (blue/yellow). It may be used as an intermediate color space used when converting from one color space to another (for example, from CMYK to RGB).

long-edge first (LEF)

A printer page orientation where pages are delivered to the printer with the long edge of the paper going in first.

lookup table (LUT)

A two or three-dimensional array of values that stores information about specified input-output relationships. When an input value is

known, the system can automatically determine the correct output value. For example, the system can find the required dot size for a given set of printing conditions based on the stored gray level. Color setups can be saved in color tables (color transformation tables), which is one of the many kinds of LUTs.

PDF/X

Abbreviation for Portable Document Format eXchange. An exchange format for sending pages between a page preparation site and a printing site. PDF/X is a subset of the full PDF specification.

PPD (PostScript Printer Description)

A file specification set by Adobe Systems, Inc. It contains output-device-specific information, including fonts, line screens, offset margins, supported page sizes, and so on.

pre-separated file

A PDF, PostScript, or TIFF file that contains a separate page for each color in a document. A standard process color job would have four pages—one for each process color. A job with spot colors would have a page for each spot color and a page for each process color.

printer description file

A PPD file or PDF file that Apple Macintosh software uses to prepare pages and documents for specific output devices.

process

An action initiated on a file—for example, refining a PostScript file, copying a file from one folder to another, or outputting a TIFF file to plate.

process colors

The four ink colors that are used to reproduce full-color images: cyan, magenta, yellow, and black (CMYK). Combinations of CMYK are used to reproduce many colors of the spectrum.

PSImage

A low-resolution EPS file that is part of the Automatic Picture Replacement (APR) workflow. You use PSImage files to position images in page layout. You can create and edit a PSImage file in various applications, such as PSImage Exporter in Adobe Photoshop, Copydot Toolkit, and oXYgen software. If you edit a PSImage file (for example, you add a mask or a clipping path), the workflow software applies your changes to the high-resolution file and automatically replaces the PSImage file during the RIP process.

relative colorimetric

A method of color matching. When translating colors from one device to another, it retains the colors that fall within the range of both devices.

RGB

Abbreviation for the additive primaries—red, green, and blue. These colors are the predominant colors in the visible light spectrum that the human eye can detect. The RGB colors are used, for example, in video monitors, scanners, and other devices in which the light is direct and not reflected.

rich black

A black area to which layers of other inks, referred to as support screens or booster colors, have been added to make the color as dark as possible.

RTP (ready-to-print) job

A job that has been RIPed and is in the appropriate format for printing. You can submit RTP jobs for reprinting without reprocessing them.

screen angle

The angle at which a halftone screen is set for printing halftones. Proper screen angles minimize moiré patterns.

shadows

The darkest part of an image (original and reproduction). A shadow has densities near the maximum. In a reproduction, shadows are printed with dot areas between 80 percent and 100 percent.

sheet

Both surfaces of one printed press sheet.

short-edge first (SEF)

A printer page orientation where pages are delivered to the printer with the narrow edge of the paper going in first.

slug

The text added to one side of the printed layout. The slug contains information about the job and its settings. Also referred to as *label* or *caption*.

SMB (Server Message Block)

SMB, also known as *CIFS (Common Internet File System)*, is a protocol for sharing files, printers, and other resources between computers.

smooth scaling

The ability to maintain the same detail and smoothness with different degrees of enlargement. Smooth scaling allows you to scale up low-resolution images without creating a jagged appearance.

source profile

The specifications for how the CMYK and RGB values in a file should be interpreted as an actual color when displayed or output through a given device.

spine trim size

The space between adjacent pages on a printed sheet.

spot color

A special ink color, not included in the process color set, that is used to specify the color of a graphic design element.

spot color library

A collection of spot colors for which spotless color recipes are sought. A spot color library contains one or more spot colors. Each spot color includes a name and a CIELAB color space.

step and repeat

The procedure of copying the same image by stepping it in position both horizontally and vertically according to a predetermined layout.

stochastic screening

A digital screening process that converts images into very small dots of equal size and variable spacing. Also referred to as *frequency-modulated (FM) screening*.

substrate

Any printing surface to which ink will adhere. Also referred to as *stock*.

TIFF

Acronym for Tagged Image File Format. TIFF is a file format used to describe, store, and exchange bitmap images. TIFF is cross-platform, highly flexible, and capable of saving a wide variety of image types, including photographs and illustrations. Most page makeup and image editing software supports TIFF.

TIFF/IT-P1

Acronym for Tagged Image File Format for Image Technology, Profile 1. A file format that is similar to TIFF/IT, but provides a minimized set of options that allows simpler implementation when the full set of TIFF/IT options is not required.

tint

The percentage value assigned to a dot.

trapping

A printing technique in which adjacent printed colors are slightly overlapped to ensure that white space does not appear between the colors.

variable print specification

Formal language designed for effective production of variable information documents.

vector drawing

The geometric system used to define lines and curves in computer graphics. It is most often used for line drawings.

virtual printer

A printer that contains preset workflows that are automatically applied to all print jobs processed with that virtual printer.

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