

# Xerox® Versant® 180 Press

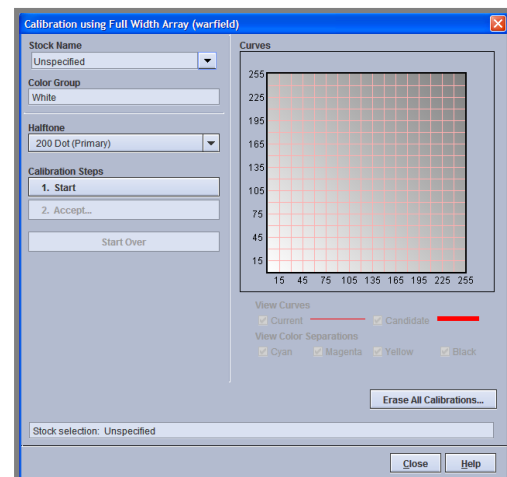
## Calibration & Profiling

### on FreeFlow® Print Server

## Calibrating the Print Server

### To calibrate using the Inline Spectrophotometer (ILS):

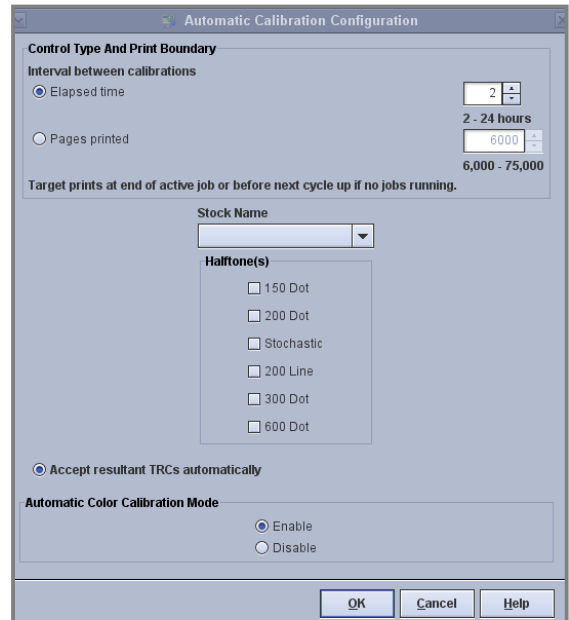
1. If not already loaded in a tray, load the paper that you want to use for calibration. The paper should be one that you use most often, or a centerline paper. If you changed the stock in the tray, program the new stock.
2. Log onto the press control panel as System Administrator.
3. Before performing a print server calibration, first run the Density Uniformity Adjustment from the Tools menu on the print engine. This best practice ensures that the density settings are optimum for the press.
4. Log onto the print server as System Administrator.
5. From the *Color* drop-down menu at the FreeFlow Print Server, select **Calibration Preferences**. Then select the **Inline Spectrophotometer** radio button for the *Calibration Instrument*.
6. Click **OK** to accept the changes and close the Preferences window.
7. From the *Color* drop-down menu select **Calibration** (or click the Calibration shortcut icon if you have one).  
The *Calibration using Inline Spectrophotometer* window opens.
8. From the *Stock Name* field, select the **loaded stock** that you want to calibrate on.
9. From the *Halftone* drop-down menu, select the **line screening** you want to use. This is generally 200 Dot, which is the default.
10. Click **1. Start**.
11. A dialog box opens to give you options of when to print calibration targets. Select **Now** and then **OK**.
12. You will need to wait several minutes, while the print server prints and measures the calibration targets. When the process completes, the calculation results display on a graph. This graph shows the mathematical curves that will be used to adjust your printer's data.
13. Click **2. Accept** to apply the new calibration data, and **OK** to the confirmation message.
14. Click **OK** on the dialog box that reads: *Calibration data has been saved*.
15. Click **Close** and then **Yes** to exit the calibration function.



## Setting up Automatic Calibration for the Print Server

To set calibration to run automatically using the ILS:

1. Select **Calibration** from the Color menu.
2. At the bottom of the window, select **Enable** for Automatic Color Calibration Mode.
3. Select the radio button for either **Elapsed time** or **Pages printed**. If you elect to use time, set a number of hours from 2 to 24. This will be the time between automatic calibrations. If you elect to use pages, enter the number of pages printed before each automatic calibration.
4. For Stock Name, select the **loaded stock** that you want to use for the calibrations.
5. Select the **Halftone(s)** that you want to use for the calibrations.
6. Select the radio button for **Accept resultant TRCs automatically** if you want the process to be fully automatic. Otherwise, if not selected, a widow will open after each calibration to show the proposed calibration adjustments in graph form and ask the operator to accept or not accept the calibration results.
7. Click **OK** to initiate the setup and close the window.



## Calibrating using the Press Scanner

If you do not have an Inline Spectrophotometer on your system, use the following steps to perform a calibration using the scanner:

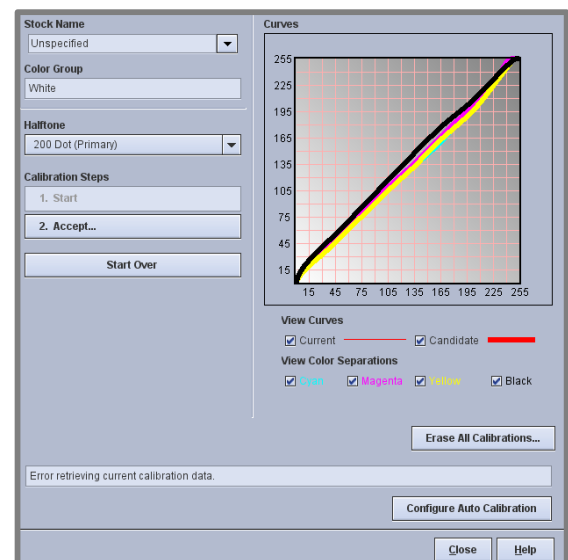
1. If not already loaded in a tray, load the paper that you want to use for calibration. You must use 8.5 x 11" (A4) paper for Scanner Calibration. The paper should be one that you use most often, or a centerline paper. If you change the stock in the tray, program the new stock.
2. Log onto the print server as System Administrator.
3. From the *Color* drop-down menu at the FreeFlow Print Server, select **Calibration Preferences**. Then select the **Scanner** radio button for the *Calibration Instrument*.
4. Click **OK** to accept the changes and close the Preferences window.
5. From the *Color* drop-down menu select **Calibration** (or click the Calibration shortcut icon if you have one). The *Calibration using Scanner* window opens.
6. From the *Stock Name* field, select the **loaded stock** that you want to calibrate on.
7. From the *Halftone* drop-down menu, select the **line screening** you want to use. This is generally 200 Dot, which is the default.
8. Click **1. Start**.
9. Three items will print: a target for you to place on the Scanner, a test print using the *previous* calibration settings, and an instruction sheet.
10. Follow the steps on the instruction sheet. You will enable Color Space Settings on the control panel, set up the Scanner, place the printed target onto the Document Glass face down, and finally press the **Start** button.
11. The system will measure the target, make adjustment calculations, and print a test page similar to the one initially printed. However, this new test page is created using the new settings.

12. Compare the before and after test prints to determine if you are satisfied with the calibration measurements.
13. At the server, select **OK** if satisfied, or **Cancel** if not satisfied. If not satisfied, perform the procedure again.

## Calibrating using a Hand-held Spectrophotometer

Use the following steps to perform a calibration with the optional X-Rite spectrophotometer:

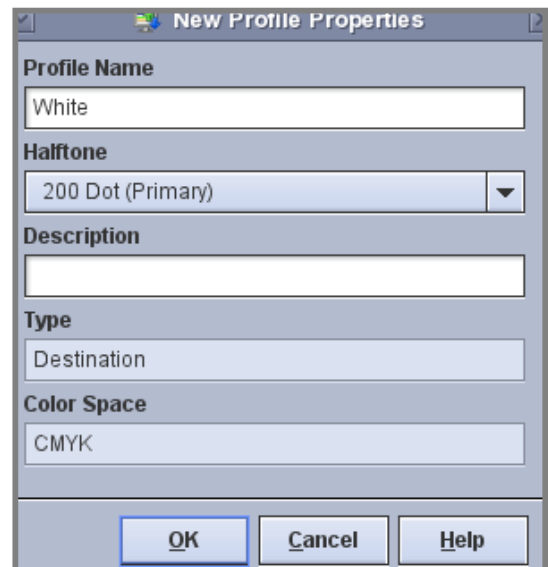
1. Log on as System Administrator.
2. If necessary, load the stock that you want to use for calibration into a press tray. You should calibrate on your most commonly used stock, or a centerline stock that has a mid-range weight and coating for your type of printing. If you loaded new stock, program the tray for the new stock.
3. From the *Color* drop-down menu select **Calibration** (or click the Calibration shortcut if you have one). The Calibration window opens.
4. From the Stock Name field, select the **loaded stock** that you want to calibrate on.
5. From the Halftone drop-down menu, select the **line screening** you want to use. This is generally 200 Dot, which is the default.
6. Click **1. Print Target....**  
A message window opens to tell you that the target will be printed and then the Measure button will become available.
7. Click **OK** to the message.
8. When the **2. Measure** button becomes available, select it.
9. Follow the steps on the screen:
  - a. Verify that the cable is connected.
  - b. Set the device on its cradle.
  - c. Press the **Measure** button and hold in for two seconds.
  - d. Click **Next** when the device is calibrated.
  - e. Place the printed target onto the backer board.
  - f. Place the target on the measuring guide and align the cutout with Strip 1.
  - g. Click **Next**.
  - h. Set the measuring device over the white area on the left or right end of Strip 1.
  - i. Press the **Measure** button and **hold it in** until the light is activated (two seconds).
  - j. Continue to hold the button in as you **slide the device slowly across Strip 1**, and reach the white area at the end of the strip. Then release the button.
  - k. Repeat steps h, i and j for all 13 strips.  
After scanning the 13 strips, a “Calibration complete” message displays.
10. Click **OK**. The calculation results display on a graph. This graph shows the mathematical curves that will be used to adjust your printer's data.
11. Click **Accept** to apply the new calibration data.
12. Click **OK** on the dialog box that opens.
13. Click **Close** and then **Yes** to exit the calibration function.



## Creating Profiles with the Inline Spectrophotometer

### To create a new destination profile using the ILS:

1. Load the stock for which you want to create a profile in a paper tray. If you use US Letter or A4 size paper, it must be loaded long edge feed (LEF).
2. Program the paper tray for the stock that you loaded.
3. At the print server, log on as System Administrator.
4. Before creating a profile, first run the Density Uniformity Adjustment from the Tools menu on the print engine. This best practice ensures that the density settings are optimum for the press.
5. From the *Color* drop-down menu at the FreeFlow Print Server, select **Calibration Preferences**. Then select the **Inline Spectrophotometer** radio button for the *Calibration Instrument*. This should be selected by default, but it may have been changed by the last person who calibrated. Selecting this preference changes the procedures on the Calibration screen.
6. Click **OK** to accept the changes and close the Preferences window.
7. From the *Color* drop-down menu select **Associations**. The Associations window opens. This window provides a list of stocks that have been programmed as Temporary or stocks in the Stock Library.
8. Locate the stock that you loaded to be used for the profile. Click the **<Trays>** column twice to sort by tray to find the stocks loaded. The loaded stock will show the tray that you loaded paper in next to its name.
9. Right-click on the stock and select **Color Profile > New Profile Family**. The New Profile Family window opens.
10. Click **1. Setup**. The New Profile Properties window opens.
11. For Profile Name, enter a meaningful **name for the profile** so that it can later be recognized for selection. For example, a part number, paper type, paper color or tint and date.
12. Select a **Halftone** from the drop-down menu. 200 Dot is the default.
13. Optionally enter a **Description** for the profile, such as stock the profile can be used with.
14. Under Options, you can **Apply to All Halftones** or **Apply Only to Selected Halftone**. The default is Apply Only to Selected Halftone.
15. Click **OK**.
16. Click **2. Start** and then **OK** to the message that opens. The profiling process begins. The press prints test targets, measures them and creates a profile based on the measurements. When complete the Finish button becomes available.
17. Click **Finish** and **Yes** to "Exit Profile Mode".
18. Verify that your new profile exists on the server. From the Color drop-down menu, select **Color Profiles**. The newly created profile will be listed with the name you provided.



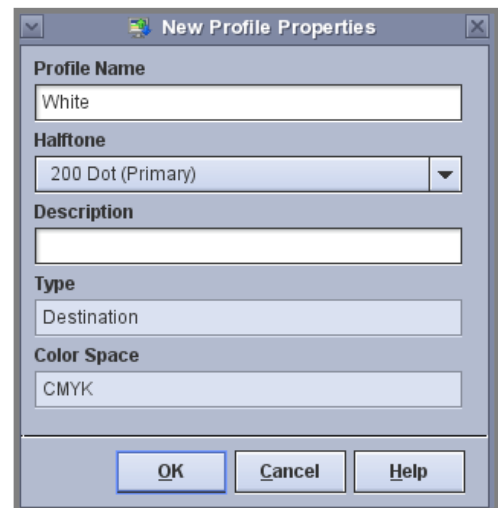
The screenshot shows the 'New Profile Properties' dialog box. It has a title bar with a standard window icon and a question mark icon. The dialog contains several fields and a dropdown menu. The 'Profile Name' field is a text box containing the word 'White'. The 'Halftone' field is a dropdown menu showing '200 Dot (Primary)'. The 'Description' field is a text box. The 'Type' field is a dropdown menu showing 'Destination'. The 'Color Space' field is a dropdown menu showing 'CMYK'. At the bottom of the dialog are three buttons: 'OK', 'Cancel', and 'Help'.

## Profiling using a Hand-held Spectrophotometer

To create a destination profile using the optional X-Rite spectrophotometer:

1. Log on as System Administrator.
2. Load the stock for which you want to create a profile in a paper tray. If you use US Letter or A4 size paper, it must be loaded long edge feed (LEF).
3. If required, program the paper tray for the stock that you loaded.
4. From the *Color* drop-down menu select **Associations**.  
The Associations window opens. This window provides a list of stocks that have been programmed as Temporary or stocks in the Stock Library.
5. Locate the stock that you loaded to be used for the profile. Click the **<Trays>** column twice to sort by tray to find the stocks loaded. The loaded stock will show the tray that you loaded it in next to its name.
6. Right-click on the stock and select **Color Profile > New Profile Family**.  
The New Profile Family window opens.
7. Click **1. Setup**.  
The New Profile Properties window opens.
8. For Profile Name, enter a meaningful **name for the profile** so that it can later be recognized for selection.  
For example, a part number, paper type, paper color or tint and date.
9. Select a **Halftone** from the drop-down menu.  
200 Dot is the default.
10. Optionally enter a **Description** for the profile, such as stock the profile can be used with.
11. Click **2. Print Targets...**  
A window opens to let you print at:
  - End of Current Job (default)
  - End of Current Copy
  - Now

You can also select a quantity other than the default of 5. You can generally accept these defaults.
12. A message window opens to tell you that the target will be printed and then the Measure button will become available. Click **OK** to the message.
13. When the **3. Measure...** button becomes available, select it.
14. Follow the steps on the screen:
  - a. Verify that the cable is connected.
  - b. Set the device on its cradle.
  - c. Press the **Measure** button and hold in for two seconds.
  - d. Click **Next** when the device has been successfully calibrated.
  - e. Place the printed target onto the backer board.



- f. Place the measuring guide on the target and align the cutout with Strip 1.
  - g. Click **Next**.
  - h. Set the measuring device over the white area on the left or right end of Strip 1.
  - i. Press the Measure button and hold it in until the light is activated (two seconds).
  - j. Continue to hold the button in as you slide the device slowly across Strip 1, and reach the white area at the end of the strip. Then release the button.
  - k. Repeat steps h, i and j for all 33 strips.
  - l. When you have scanned all the strips, a message displays:  
“Please wait (about a minute)...Creating color profile.”
15. When the “Profile creation complete” message displays, click **OK**.
  16. Click **Finish**.
  17. Close all screens.
  18. Verify that your new profile exists on the server. From the Color drop-down menu, select **Color Profiles**.  
The newly created profile will be listed with the name you provided.

## Applying Destination Profiles on FreeFlow Print Server

To select the new profile for a job or queue:

1. Select **Queue Manager** from the *Queue* drop-down menu, or click the Queue Manager shortcut icon if you have one. The Queue Manager window appears.
2. From Queue Manager, double-click the **name of the queue** to which you want to apply the profile.
3. Select the **Image Quality** tab.
4. Click the **Color Management** button.
5. For *Destination Profile*, on the right of the window, select the **profile** from the drop-down list. When you create profiles using paper from the Named Stock Library, you should select **Use Stock Profile** from this menu. This selection will automatically associate profiles with the stock, so that any time the stock is used, the correct profile is automatically applied.
6. Click **OK**.  
A destination profile is now set for this queue.  
You can also select a profile for a specific job from **Job Properties > Image Quality > Color Management**.

