Xerox

Calibration and Profiling on Xerox® FreeFlow® Print Server with the Full Width Array

Xerox® Versant™ 2100 Press
Xerox® Color 800/1000 Presses
Xerox® FreeFlow® Print Server

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Calibration Using the Full Width Array

About Calibration

A digital press may drift from its original color output due to general use, changes in temperature and humidity, and changes in paper. When you calibrate, you bring the press back to its original quality output. Calibrating your system is the easiest way to manage your color output. It's quick and it effectively removes any color variations that occur over time. 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.

How often should you calibrate? You'll need to get a feel for the best frequency for your press. In general, if you are printing high volumes of color, you'll probably find it beneficial to calibrate once each day. At a minimum, you should calibrate at least once a week.

Color calibration ensures consistent quality for all print jobs. If you do nothing more than calibrate frequently and print with the default color settings on your server, you will achieve high-quality color output.

Calibration Procedure

Calibration with the Full Width Array is easy. This option saves you time because the press will print and automatically scan the targets and adjust settings without you having to manually use a spectrophotometer. Follow these steps:

1. 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 at the Stock Library Manager.

2. From the **Color** drop-down menu at the FreeFlow Print Server, select **Calibration Preferences**.
   Then select the **Full Width Array** 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, compared with using a spectrophotometer. Click **OK** to accept changes and close the Preferences window.

From the Color drop-down menu select Calibration (or click the Calibration shortcut icon if you have one). The Calibration using Full Width Array window opens.
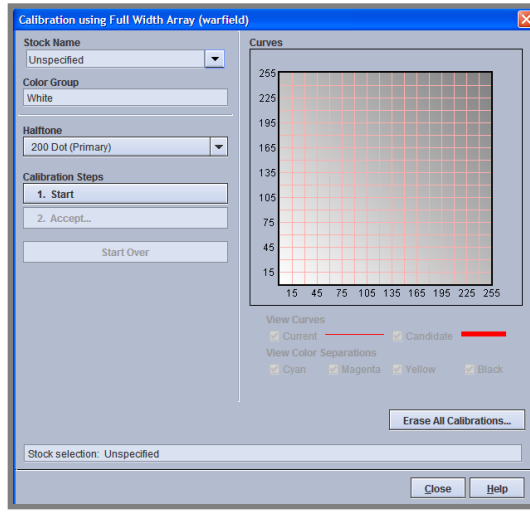
3. From the **Stock Name** field, select the **loaded stock** that you want to calibrate on.

4. From the **Halftone** drop-down menu, select the **line screening** you want to use. This is generally 200 Dot, which is the default.

5. Click **Start**

   A dialog box opens to give you three options of when to print Calibration Targets:

   – End of Current Job

   – End of Current Copy

   – Now

   Generally, you won't be printing when you calibrate, but if a long job is running and the color appears to be drifting, you can request a calibration before the job completion. Using this option, the job is paused and you can correct the color quality for the rest of the run.

6. When the **Calibration Complete** message pops up on the server screen, 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.

7. Click **Accept** to apply the new calibration data.

8. Click **OK** on the dialog box that opens.

9. Click **Close** and then **Yes** to exit Calibration.

This completes the calibration. As you work with your printer, remember that color calibration is the foundation of good color management. It's the single most important thing you can do to maintain quality.

Profiling Using the Full Width Array

About Destination Profiles

Colors can look different when printed on different stocks, especially stocks that have a different gloss or a different color. When a destination or "output" profile is created for each of these different stocks, the system develops a map so that the output colors will match a known standard. The mapping is written into a profile for the type of media and line screening used.

Once created, the destination profile is applied based on the media used in a job. The profile automatically adjusts the output color for a job so that the color is accurate for the media being used. Profiles ensure accurate and consistent color across different media as well as the same media used at different times. Because they replicate color from a known standard such as GRACoL or SWAP, they also ensure accurate and consistent color across output from different presses.

Profiling Procedure

Creating destination profiles with the Full Width Array is easy. This option saves you time because the press will print and automatically scan the targets and adjust settings without you having to manually use a spectrophotometer. Follow these steps:

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. At the Stock Library Manger, program the paper tray for the stock that you loaded.

3. From the **Color** drop-down menu at the FreeFlow Print Server, select **Calibration Preferences**.
   Then select the **Full Width Array** 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. Click **OK** to accept changes and close the Preferences window.

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.
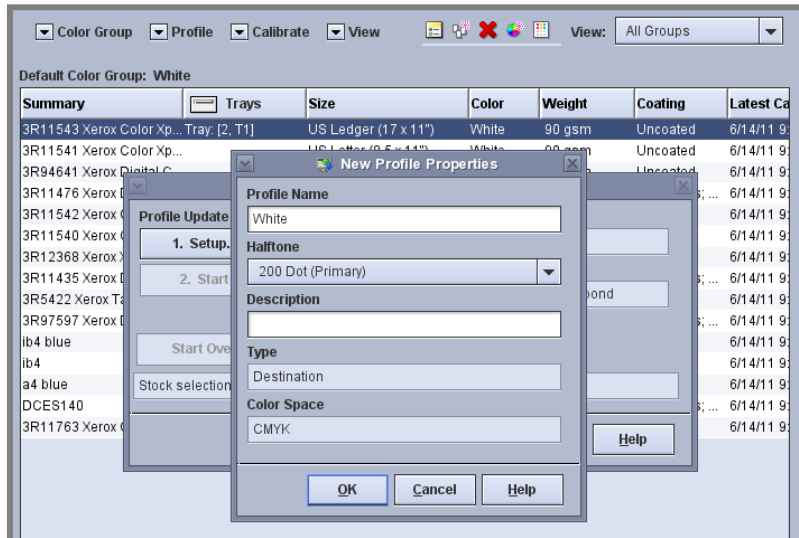
8. For Profile Name, enter a meaningful **name for the profile** so that it can later be recognized for selection. For example, a part number, paper type, paper color or tint and date.

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 **OK**.

12. Click 2. **Start**.
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.

13. Click **Finish**.

14. Click **Yes** to "Exit Profile Mode."

15. 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.