


DuraFlex Installation Procedure

v1.20

Prerequisites

Configure the PC to synchronize the system clock using a time server, so that log file timestamps match across the system. See "Synchronize clocks on all PCs" below.

Installation

1. Copy the installer folder onto the target machine (don't run it from a mapped drive: the InstallerResources XCOPY commands will receive a UNC path and will fail).
2. Run the NavigatorHHR installer. Some of the Server and Client configuration steps listed below will already have been completed in the installed files.
3. Run the installer for the spectrophotometer. The X-Rite i1Studio installer is provided in the `Additional items for installation` folder.
4. Launch the Server.
 - Ensure Web Server (XiWebServer.exe) is running; correct the port number as required by logging into Navigator Server as Administrator and accessing 'Configure Web Server...' under 'Server Settings...'.
 - Note: if you set the Web Server to run on a port other than 81, the installed shortcuts will need to be hand-modified to use the selected port.
 - XiFlow Debug Log will run and may be minimized (it will then launch minimized next time).
5. Open DFE in the web browser, using the DFE shortcut in the Start menu, desktop, or `User Resources\Xitron Shortcuts` folder.
6. Open DCE via the 'Settings' button in DFE.
7. In the Server, log in as Administrator and make the System Device
 - Create a 'DuraFlex' system device. Enter the IP address or network name for the PESM. See 'Configuring for the press' below for how to obtain this.
 - Start the thread. The DuraFlex Spooler will start.
 - Click Apply.
 - Click Advanced.
 - Click Assign Heads to PCs.
 - Under Select XiService Hosts to use, place a check in the box next to the RIP PC host name.
 - Under Assign Heads to Hosts, drag each print head in the list onto the RIP PC host name. The print heads should appear in a tree structure under the RIP PC name. 
8. Edit `C:\ProgramData\Xitron\XiShare\ThriftPorts.json`, and set the XiEventsHost value as the name of the RIP PC.
9. Launch NCE via the desktop shortcut. This will launch an index page which will detect the DuraFlex device, configure NCE for DuraFlex, and redirect to the RenderConfigs tab even before you have seen the index page. If it sees more than one System Device, it will allow you to pick one before redirecting.
10. In the Server, make Workflow Actions as required, if they do not already exist.
 - Add required Actions:
 - Stabilizer.
 - Preflight Action.
 - Ink Remap Action, in simple mode.
 - XiStep Action.
 - XiPosition Action.
 - Page Filter Action.
 - Configure it, selecting Stitching for Page Positioning.
 - Render Action.
 - Configure it, selecting the PC to use; keep Spool Folder Mode unchecked.
11. In the Client, make base Workflow. The recommended workflow for products using DFE includes the optional steps shown below.
 - Name it 'DFE'; add the following Actions:
 - Hot Folder Action:
 - Check 'Generate Thumbnails'.
 - Stabilizer (required for processing Postscript files, for instance Swatch Sheets).

- Preflight (optional)
 - Enables the Troubleshooting button on the Edit Job dialog in the Full Job Editor to allow the user to select Preflight Actions.
- Ink Remap (optional)
 - For adjusting spot colors.
- For DFE, check Pause After in whichever is the previous step.
- XiStep (optional)
 - Required for choosing a layout. Note, setting the repeat count to 0 will make XiStep do nothing.
- XiPosition (optional)
 - Required for choosing Media, Rotation, and Offsets. Much of the interface will be disabled without this step. Check the two checkboxes in the Workflow Editor for XiPosition or it will do nothing.
- Page Filter Action
 - Required for printing across two print heads. Select the name of your System Device.
- Render Action:
 - Select the System Device you created in Step 6 above (you may need to enlarge the Client window to see it).
 - In the Configuration selector, choose the RenderConfig you wish to use. If none has been pre-installed in RenderConfigs.JSON, use NCE to create one as described below.
 - Paper Profile, Screening, Rotation and Calibration may be selected, to override the settings in the RenderConfig (i.e. the Configuration selection).

Configuring for the press

- Ensure that the system is configured for a real device.
 - Edit C:\Users\user\AppData\Roaming\Xitron\Navigator\XiFlowServer.ini, set Fake=0
 - Edit C:\Users\user\AppData\Roaming\Xitron\DuraFlex\DuraFlexSpooler.ini, set Fake=0
- Obtain the PESM hostname from the label on the printhead module or by opening a command prompt, and typing `ping -a 192.168.100.200`.
- Enter the PESM hostname into the 'IP information' field of the DuraFlex Spooler configuration dialog. This should be the same value you entered for the System Device in Step 7 above.
- Enter the IP address for the Gyneas into the `%appdata%\Xitron\DuraFlex\JslConfigs.xml` file, hostAddress value. *This addresses are expected to be 192.168.1.111 and 192.168.112.1. These are the values set in the JslConfigs.xml created by Xitron's installer.*

Printing a job to the press

Use DFE to submit the job to the Server, and wait for it to complete.

Configuring to use a fake device

Edit C:\Users\user\AppData\Roaming\Xitron\Navigator\XiFlowServer.ini, set Fake=1, and specify the fake device file, for example:

```
[DuraFlex]
; -----
; 0 = Attempt to use data from a real Press.
; 1 = use faked data from the specified JSON file in %AppData%\Roaming\Xitron\DuraFlex\Fake
; -----
Fake=1
FakeDuraFlexFile=FakeDuraFlex_1_Simplex.json
FakeJobID=1
```

Add an identical section to C:\Users\user\AppData\Roaming\Xitron\DuraFlex\DuraFlexSpooler.ini.

If you are upgrading an existing DuraFlex R6 system to R7:

These instructions will help you copy the configuration settings from the old to the new system.

- Quit the Server and Client.
- Rename the existing (old) installation folder. For the sake of these instructions this is referred to as '_OLD'.
- Rename the existing DuraFlex Spooler folder (under %appdata%\Xitron).
- Run the new installer, installing to a location which does not previously exist. The rename above means this can be the default 'Navigator' folder. In addition to installing the main installation folder, the installer will update %programdata%\Xitron\XiShare and %appdata%\Xitron\DuraFlex, preserving the existing DuraFlexSpooler.ini settings.
- Copy User Resources\Utilities\DFEBackRest from the new to the _OLD system if these have different

version numbers, so as to be using the latest release.

- Important: ensure that you are using a Backup.ini file which is set to ignore the Templates folder, otherwise RenderConfig templates will be backed up and restored into your new installation, potentially overwriting newer version(s). As follows:

```
[Backup]
ignoreList = Templates
```

- Use BackRest to copy the configuration from the old to the new system:
 - In *OLD*, run *Backup.py* to create a zip with the OLD settings. When prompted for where to put the zip, navigate to the DFEBackRest folder of the system you just installed, for convenience.
 - In the new system, run the Restore.py and select the zip you just created.
- Manually copy any configuration files which were not transferred:
 - BackRest will transfer the entire Navigator\Config\RenderConfig folder. There are other configuration files under Navigator\Config which are not transferred as they are unlikely to have been changed. These will need to be transferred manually, or just configured again in the new system.
 - If the settings of any of the User Resources\Utilities items have been adjusted, these will need to be set up in the new installation.
 - BackRest will back up and restore the RIP's Renderers\NR_1\SW\Config\Calibration, Press and Profiles folders. However this may not be advisable if the file formats changed between RIP versions.
- Restore the Spooler .ini file that you backed up in the third step above.
- Start the new Server and Client, and in the workflow editor, 'Refresh Configs'.
- If it doesn't already exist in the workflow that was restored, edit the workflow and add the Page Filter Action for stitching into your workflow before the Render Action.

Synchronize clocks on all PCs

Setting Windows to use a Time Server will allow log timestamps to match across the system.

1. Open Control Panel.
2. Click on Clock, Language, and Region.
3. Click on Date and Time.
4. Click on the Internet Time tab.
5. Click the Change settings button.
6. Check that the Synchronize with an internet time server option is selected.
7. Use the drop-down menu to select a different server.
8. Click the Update now button to synchronize the time with the new server.
9. Click the Update now button to resynchronize.
10. Click OK, Apply, OK.

There is an article here with more detail: <https://www.windowscentral.com/how-manage-time-servers-windows-10>.

FAQs

- a. How is the **firewall** configured by the installers?
- b. They make the following changes to allow the Master and RIP PCs to communicate:
- c. The installer installs and runs %programdata%\Xitron\SLP\ConfigureFirewall.bat. This self-elevates and configures the firewall to allow XiMonitor, SLPD, SLPTool. It enables File and Printer Sharing, and Network Discovery. This .bat file may be re-run by hand if needed.
- d. The installer installs and runs Navigator\Utilities\ConfigureFirewall.bat. This self-elevates and configures the firewall to allow XiService and XiEvents and clrip. This .bat file may be re-run by hand if needed.
- e. Where should I put any **ICC profiles** I need to be able to select in NCE?
- f. Navigator\Config\RenderConfig\ICC Profiles.
- g. I have **problems with the Server communicating with the RIP**.
- h. Here is a list of suggestions for Support engineers.
- i. The SLPD service is used to provide PC identification. It is used by XiEvents and XiService and started automatically on user login.
- j. The installer runs "%ProgramData%\Xitron\SLP\installSLPconfig.master.bat" to create slp.conf and slp.reg in the Windows folder. It may be re-run by hand.
- k. XiEvents and XiService are used by the Navigator Server to communicate with the RIP. They are started by the Server. They can be seen in the taskbar or system tray.

- l. Ensure that XiEvents.exe, XiService.exe, and crip.exe are listed as exceptions in the firewall. This will be done automatically during installation.
- m. Try restarting slpd – in an elevated console window, `net stop slpd, net start slpd`.
- n. In XiEvents and XiService, hover over the panel to pop up a list of connected clients. (This may fail to work correctly on a PC being viewed remotely.)
- o. In %programdata%\Xitron\SLP open XiMonitor.exe. This will list all connected services. A list of connected services will be displayed, which you can left-click to see more detail. On the check that at least `service:xiservice.xitron` and `service:xievents.xitron` are listed.
- p. As an alternative to using XiMonitor, in an elevated console window, `slptool findsrvtypes *` to list connected service names. Then `slptool findsrvs <service name>` to list detail of each connected service. The XiEvents server on the Master PC and the XiService server on each PC should be listed.
- q. Restart the PC. We have encountered issues in the field which were not overcome by restarting individual components, but were resolved by restarting the PC.
- r. How can I **back up my settings**?
- s. Use BackRest (in the User Resources\Utilities\DFEBackRest) to back up most user settings. A zip file will be created with these. You may unzip this and restore settings files individually, or run Restore.py to install them all. The DuraFlex R6.0 and later installers install a Backup.ini which intentionally omits backing up the Navigator\Config\RenderConfig\Templates folder with RenderConfig templates, as these may change between releases, so you may wish to back up this folder by hand.
- t. How is the **press speed configured**?
- u. The settings for this are on the DuraFlex System Device Advanced dialog. The speed may be set individually for Y resolution 954dpi and 1600dpi. These are initially defaulted to sensible hard-coded working values and stored in the system device database. The values are prioritised thus:
- v. If the press speed in the job ticket is non-zero, that will be used; this can be set on a per-job basis via the DFE.
- w. If the value is zero, the code queries the system device for a value based on the the resolution of the job being printed.
- x. If that value is non-zero it will be used, otherwise the value retrieved from the press's job queue entry will be used.
- y. How can I set the number of copies of the Swatch Sheet to print?
- z. In the Server .ini file, set for instance
[options] SwatchSheetCopies=5

To print five copies of each swatch sheet page. This setting overrides the copy count in the job.