

# DuraLink R3 Installation Procedure

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v1.9

Note: see the section 'If you are upgrading an existing R3 system, using an installer rather than an updater' at the foot of this document, if applicable.

## Requirements

RIP Manager dongle or dongle upgrade code to enable RIP Manager Version 8 or later and Render Action.

## Installation

1. Copy the installer folder onto the target machine (don't run it from a mapped drive or the InstallerResources XCOPY commands to get a UNC path will fail).
2. Run the NavigatorHHR installer.
3. Launch the Server.
  - Log in as Administrator.
  - In Server Setup → Server Settings, ensure Web Server (XiWebServer.exe) is running; modify the port number if required.
  - Note: if you set the Web Server to run on a port other than 80, 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).
4. In the Server, log in as Administrator and make the System Device
  - Create a system device of type "DuraLink v2".
  - Enter the IP address or network name for the PESM.
  - Enter the name of the device, for instance 'DuraLink'.
  - Start the thread. The DuraLink Spooler will start, and the configuration will be read from the press.
  - Press 'Advanced'
    - Notice that the Press Head Count (i.e. the total number of stripes per stage on the press) and Duplex Press indicator have been automatically set.
    - '# RIPs per PC'.
    - '# Threads per RIP' (suggested starting point: 4).
    - For the above two settings to be honored, RIP Farm Mode must be checked in the Render Action (we will do that in Step 9 below).
    - Details for each printbar on each stage will be displayed.

Advanced Configuration

Memory per RIP: 3000

# RIPs per PC: 8

# Threads per RIP: 4

Page Timeout (secs): 600

Max # PHMs per PC: 12

Stage	Printb...	Acti...	Color	Screen
Front				
1	Yes	Yes	Cyan	C
2	Yes	Yes	Magenta	M
3	Yes	Yes	Yellow	Y
4	Yes	Yes	Black	K

OK Cancel

- If the press configuration is single color, with two printbars of the same color, the Advanced Configuration dialog will have a checkbox for enabling Double Color Interleave Mode.

Advanced Configuration

Memory per RIP: 3000

# RIPs per PC: 4

# Threads per RIP: 4

Page Timeout (secs): 600

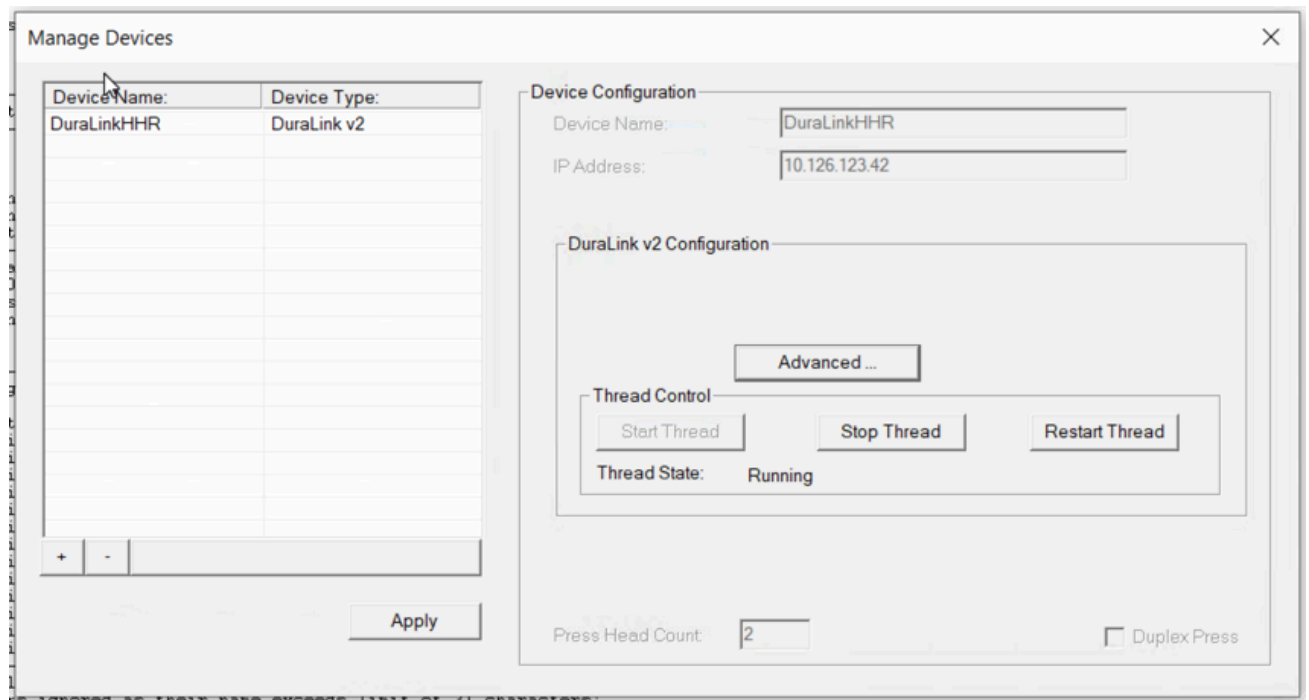
Max # PHMs per PC: 12

☐ Double Color Interleaved Mode

Stage	Printb...	Acti...	Color	Screen
Front				
1	Yes	Yes	Black	K
2	Yes	Yes	Black(2)	K

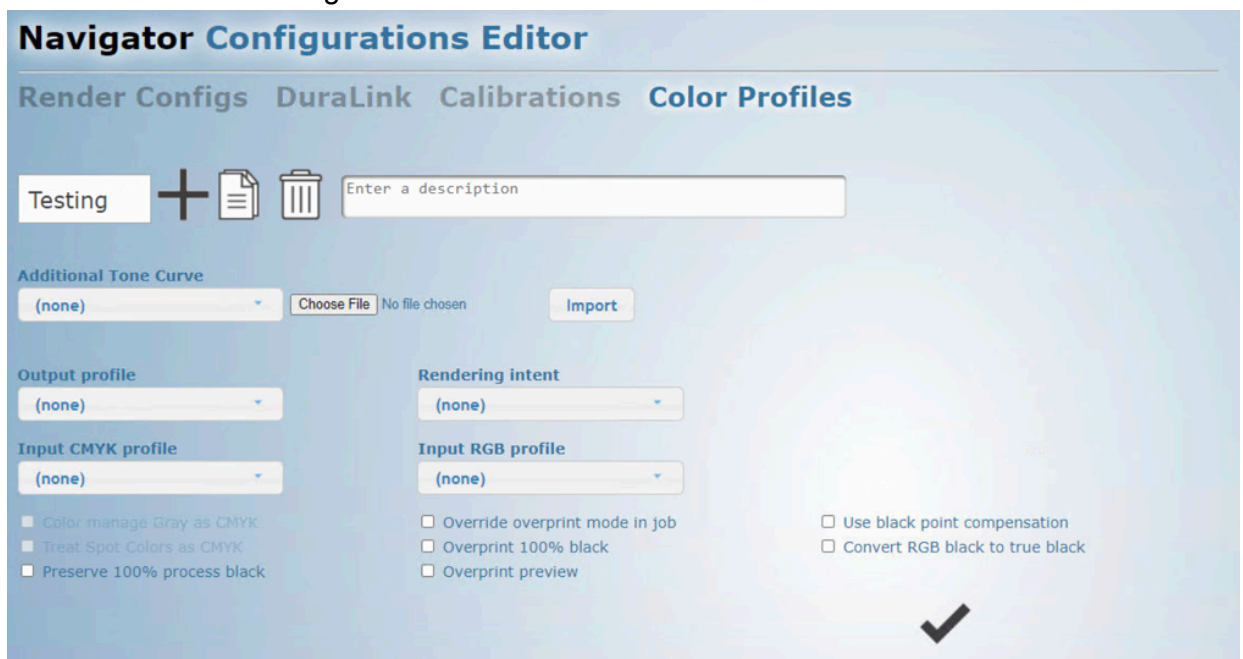
OK Cancel

- Select the checkbox if you wish to use this mode.
  - In the 'Screen' column, check that the correct color assignment has been made for each printbar. If you need to change a Screen entry, double-click it to display a selector. For double color mode, you may use different screen selections for two black printbars.
- Click Apply.



5. Launch Navigator Configurations Editor (NCE) via the desktop shortcut. This will launch an index page which will detect the DuraLink v2 device, configure NCE for DuraLink, and redirect the browser 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. There is also a suitable shortcut in `User Resources\Xitron Shortcuts`. In NCE:

- On the Color Profiles tab:
  - '+' to add a Color Setup.
  - Enter a name for it.
  - Optionally add a description.
  - You can leave the settings at the defaults.



- On the RenderConfigs tab:

- '+' to add a RenderConfig.
- Enter a name for it.
- Optionally add a description.
- Select Calibration '(none)'.
- Select Color Profile, the one you made above.
- The Manual Calibration checkbox does not apply to DuraLink.

The screenshot shows the 'Render Configs' tab in the 'Navigator Configurations Editor'. At the top, there are four tabs: 'Render Configs', 'DuraLink', 'Calibrations', and 'Color Profiles'. Below the tabs, there is a header area with a text input field containing 'NickTest', a plus icon, a document icon, a trash icon, and a text input field for 'Enter a description'. The main configuration area includes several settings: 'Calibration' set to '(none)', 'Color Profile' set to 'Testing', 'Rotation' set to '0', 'Horizontal Scale' set to '100 %', 'Vertical Scale' set to '100 %', 'Harlequin Variable Data' checkbox (unchecked), 'Manual Calibration' checkbox (unchecked), and 'Number of Copies' set to '1'. At the bottom left, it says 'Version 2.25'. A large checkmark icon is visible in the bottom right corner.

- On the DuraLink tab:

- Select a resolution.
- Select a screen pattern.
- Select CCT Name '(none)'.
- Press the checkmark button to save. (The settings on the current tab will also be saved when you select a new tab.)

The screenshot shows the 'DuraLink' tab in the 'Navigator Configurations Editor'. At the top, there are four tabs: 'Render Configs', 'DuraLink', 'Calibrations', and 'Color Profiles'. Below the tabs, there is a header area with a text input field containing 'NickTest'. The main configuration area includes several settings: 'Resolution (DPI)' set to '790', 'Screen' set to 'HDS Medium', 'CCT Name' set to '(none)', 'Feathered' checkbox (unchecked), and 'Stitch Overlap Trim' set to '10 micrometres'. A large checkmark icon is visible in the bottom right corner.

6. In the Server, make Workflow Actions as required, if they do not already exist.

- Add Actions:
  - Preflight Action (optional).
  - Stabilizer Action.
  - Page Filter Action.
  - Ink Remap Action, in simple mode (optional).
  - XiStep Action (optional).
  - XiPosition Action (optional).
  - Render Action.

7. Set up the RenderConfig. The system will have been installed for CMYK output.

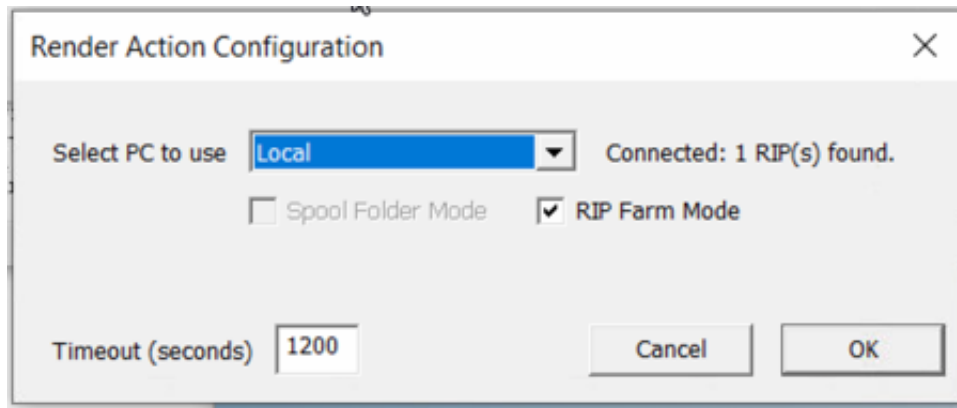
- If the press is monochrome:
  - In the installed folder, open `Navigator\Config\RenderConfig\Templates\Duralink`
  - Duplicate and rename `_template - monochrome` to `_template`, overwriting the existing one.
  - If you have already output a job, open `Navigator\Config\RenderConfig` and remove the RenderConfig file which has the name of the RenderConfig you set up in NCE.
- If the press has limited color channels, for instance M and Y only:
  - In the installed folder, open `Navigator\Config\RenderConfig\Templates\Duralink`
  - Duplicate and rename `_template - CMYK` to `_template`, overwriting the existing one.
  - Edit it and search for the SeparationDetails line. This will contain `/CompositeColorNames [ /Cyan /Magenta /Yellow /Black ] ]`.
  - Delete the inapplicable color names and save the file.
  - If you have already output a job, open `Navigator\Config\RenderConfig` and remove the RenderConfig file which has the name of the RenderConfig you set up in NCE.

1. Configure the Page Filter Action:

- In the Server, Server Setup → Manage Workflow Actions...
- Edit Page Filter Action, Configure.
- Select the Page positioning.
  - If this is a stitching system (multiple heads treated as a wide printer), select 'Stitching'.
  - Or if this is a transactional system (one page to be printed per head), select Slit and Merge or Multi Stream depending on document stacking preference.

2. Configure the Render Action:

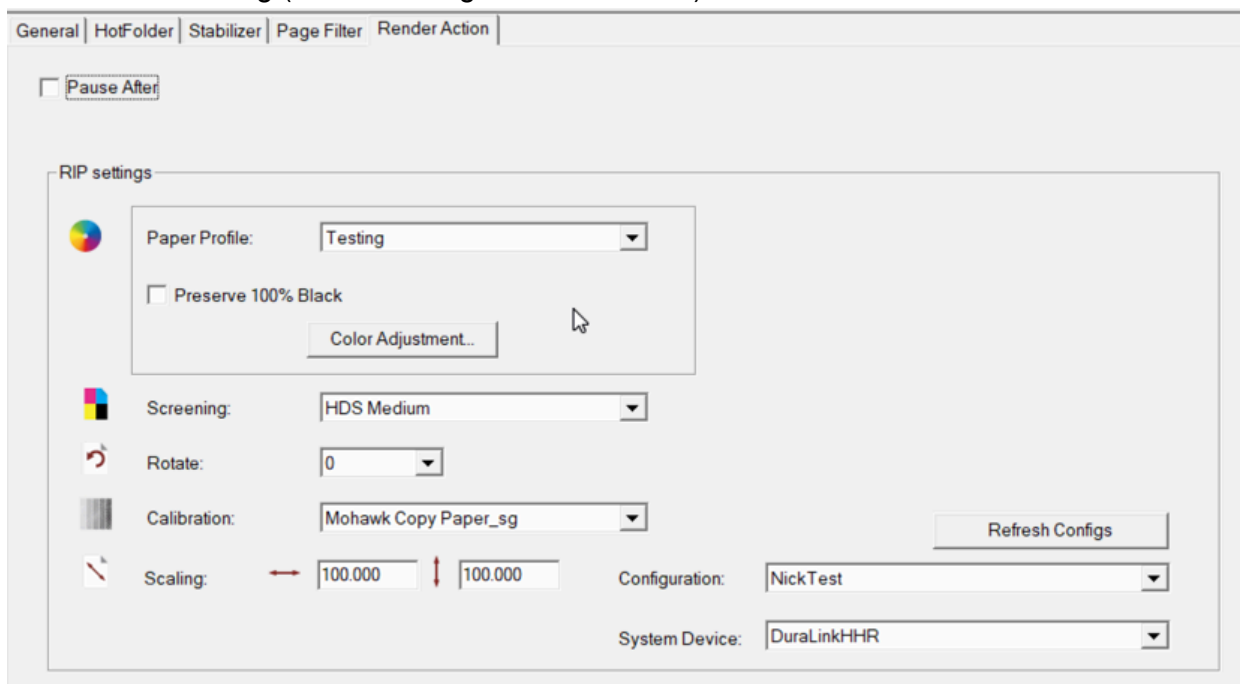
- In the Server, Server Setup → Manage Workflow Actions...
- Edit Render Action, Configure.
- Select PC to use: Local.
- Check 'RIP Farm Mode' -- this will allow multiple RIPs to be used in parallel.



3. Start the Navigator Client, log in and make the base Workflow:

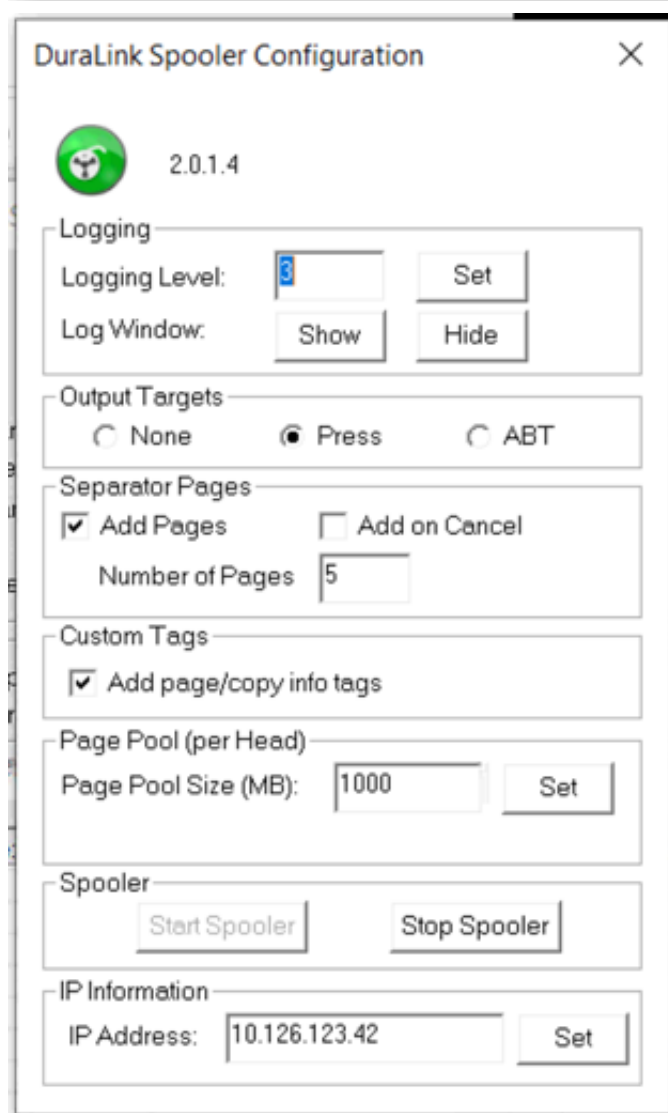
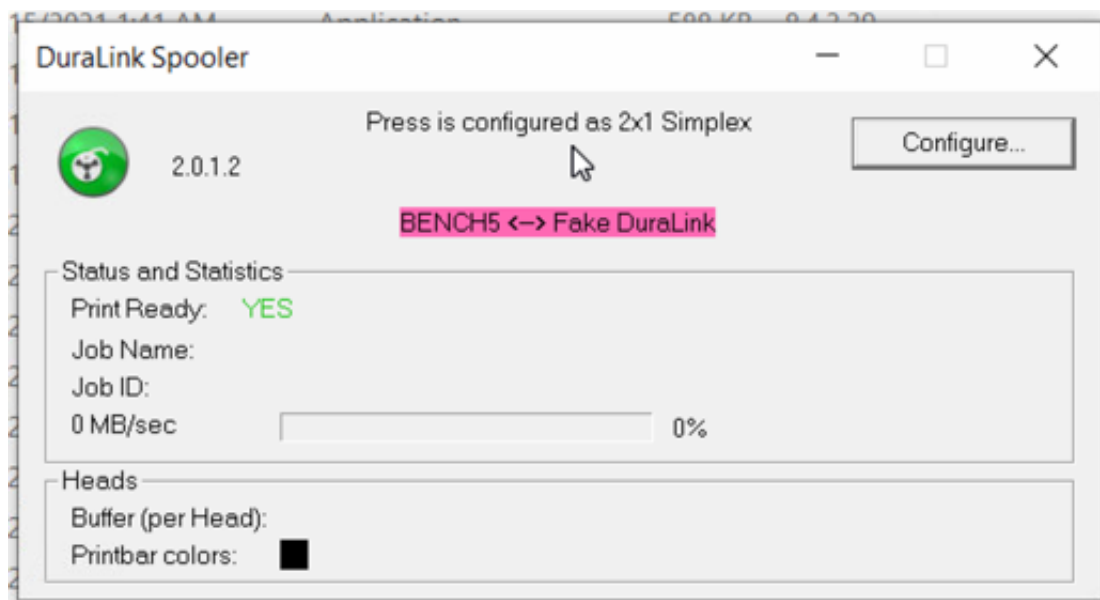
- Name it 'One'; add the following Actions; the editing operations below are all in the Navigator Client Workflow Editor (pencil button).
  - Hot Folder Action:
    - Check 'Pause After'.
  - Stabilizer:
    - Select Job Options: Digital Press (Transactional)
    - Select Output Type: PDF.
  - Preflight (optional):
    - Enables the Troubleshooting button on the Edit Job dialog in the Full Job Editor to allow the user to select Preflight Actions.
  - Page Filter Action:
    - Select the System Device you made in Step 4.
  - Ink Remap (optional):
    - For adjusting spot colors.
  - Pause (optional)
  - 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.

- Check the two checkboxes in the Workflow Editor for XiPosition, or it will do nothing.
- Render Action:
  - Any settings in this dialog which are also in NCE will override them.
  - Select the System Device you created in Step 4 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).



## Configure the Spooler

- Enter the IP address for the Gyneas into the `%appdata%\Xitron\DuraLinkSpooler\JslConfigs.xml` file, hostAddress values. *This address is expected to be 192.168.1.111. This is the value set in the JslConfigs.xml created by Xitron's installer.*
- Set the port values to those of the Gynea.
- Enter the IP address or network name for the PESM into the 'IP information' field of the DuraLink Spooler configuration dialog (this is the same value you entered for the System Device above).
- In the Output Targets pane, select 'Press'.
- In the Separator Pages section, specify whether blank pages should be produced between jobs; the number of pages, and whether to suppress them for cancelled jobs.
- To add custom tags with the page and copy number, select "Add page/copy info tags". The tag will be displayed by the press control software.
- Refer to 'Configuring to use a fake device' below; check that the two .ini files have `Fake = 0`.



## Printing a job to the press

Use Navigator Client to submit the job to the Server, 'One' workflow, and wait for it to complete.



## Additional configuration

Items required below will be found in the `Additional items for installation` folder.

### Python

Run the Python 3.x installer and select the following options:

- "py launcher"
- "Associate files with Python (requires the py launcher)"
- "Add Python to environment variables"

This will already have been done on PCs supplied by Xitron.

### ODC

To allow calibration and usage of ODC:

- Edit `C:\NavigatorDuraLinkTest\User Resources\Utilities\ODC tools\ODC.ini`.
- In the `[XiSharePaths]` section, specify the path to the XiShare folder for each of the RIP PCs in the system, guided by the example. Remove any of the example paths lines which do not apply.
- In the `[DMI]` section, set the url to the IP address of the DMI, e.g. `url = 10.126.123.56`.
- In the `[Workflow]` section, specify the name of your workflow, as in the example, to if you wish to stop MakeCalibrationChart prompting with a choice of workflows.

### Postflight

To allow reports on the configuration of this system and the most recent job to also contain details of the DuraLink software revisions:

- Run the DDC installer, `MemjetDlsDeploymentConsole_<version>.msi`.
- Edit `C:\NavigatorDuraLinkTest\User Resources\Utilities\Postflight\Postflight.ini`
  - Set DDChostIP to the IP address or name of the PES.
- Postflight may be run from `User Resources\Utilities\Postflight`; it will create a report and open it in the web browser.

### Configuring to use a fake device (only for testing in the absence of a press)

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

```
[DuraLink]
; -----
; 0 = Attempt to use data from a real press.
; 1 = use faked data from the specified JSON file in %appdata%\Xitron\FakeNxM
; -----
Fake=1
FakeDuraLinkFile=FakeNxM_2x4_Simplex - SD.xml
FakeJobID=1
```

- Add an identical section to `%appdata%\Xitron\DuraLinkSpooler\DuraLinkSpooler.ini`.
- In the Output Targets pane of the Spooler, select Press.

## If you are upgrading an R3 existing system, using an installer rather than an updater:

- Quit the Server and Client.
- Rename the existing (old) installation folder. For the sake of these instructions this is referred to as '\_OLD'.
- Run the new installer, installing to a location which does not previously exist. The rename above means this can be the default 'NavigatorDuraLink' folder. In addition to installing the main installation folder, the installer will update `%programdata%\Xitron\XiShare` and `%appdata%\Xitron\DuraLinkSpooler`, preserving the existing Spooler 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.
- 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.
- Start the new Server and Client, and in the workflow editor, 'Refresh Configs'.