

## **FFPS Cyclic Page Exception Programming via PostScript**

### **Summary:**

This feature enables the User to create [Cyclic Stock Programming](#) for jobs that require multiple stocks through the use of an [INI](#) file. The INI file created is a Queue attribute that uses PostScript to insert Paper Stock Programming requests using the Color Stock Attribute for the Cyclic Page sequences defined by the User. The INI file requires the PostScript [showpage](#) operator for identifying which pages to apply the “custom” stock programming to. This solution can be used with the following incoming PDL's: [PostScript](#), [PDF](#) (which is currently being converted to PS by the FFPS SW), and [PPML](#) (which is currently being converted to PS by the FFPS SW).

This feature can be used on both Monochrome and Color products and is available in the [7.0 SP-2 \(72.93.25\)](#) Spar release or Newer. A GUI solution that enables Cyclic Page Exception Programming on a Queue is planned for a future release of FFPS Software.

### **Implementation:**

The first step in this solution is to create the INI files. In order to do this, an iterative script needs to be run that requires the User to input specific “Stock” and “Cycle” information. The script will use these inputs and three template files to create and install an INI file for the User based on them. The script will also prompt the User to enter a name for the INI file. The name will appear in the Initialization File menu on the Queue in the PDL Settings tab. DO NOT use spaces or special characters in the name created for the INI file. Also, do not add the .ini extension to the filename as this will be done automatically by the script.

The name of the INI creation script ([installINI](#)) and each of the template files are located in the [/opt/XRXnps/bin](#) directory. You must be root in order to run the script. The script provides three different template options:

1. Install an ini file
2. Create and Install a Cyclic ini file
3. Remove an ini file

The user will select option 2 to proceed with generating a Cyclic INI file that can be used for Page Exception Programming of Media in a job.

The user can create an INI (initialization file) file based for each of the Page Exception Programming needs below:

1. Simplex Media Switching Every other Page
2. Duplex Media Switching Every other Page
3. Cyclic Media Switching

The first two use cases are self explanatory. The User is prompted to enter the name of the INI, the Primary Media Color (ie. White) and the Secondary Media Color (ie. Blue). *Plex Programming is NOT inserted into the PostScript Datastream via the INI file.* Plex Programming is defined by the User either in Job Properties, Queue Properties, a Xerox job ticket, or perhaps in the PDL (ie. PostScript). The INI file will key off the [showpage](#) PostScript operator for where to insert the change in color Media attribute. NOTE: the Color entered in the INI file needs to MATCH (it is case sensitive) the Paper Stock color programmed in the FFPS GUI.

### Example 1: Creating an INI file for Simplex Media Switching Every other Page.

The text highlighted in blue below represents the User Inputs the CreateCyclicIni script requires. You must be logged in as root in order to run the INI creation script.

```
Houston# cd /opt/XXnps/bin  
Houston# installINI
```

Listed below are three types of .ini files this script is capable of creating.

- 1: Creates an initialization file for SIMPLEX Media Color switching where every other sheet requires a different stock.  
Example: Sheet 1 = Primary Media Color, Sheet 2 = Secondary Media Color
- 2: Creates an initialization file for DUPLEX Media Color switching. where every other sheet requires a different stock.  
Example: Sheet 1 = Primary Media Color, Sheet 2 = Secondary Media Color
- 3: Creates an initialization file that will insert one or two Media Changes within a record,  
where a record is the total number of pages before the sequence is repeated  
Example: Sheet 1 = Primary Media Color  
cycle N = Secondary Media Color

Enter a number from the selection:

1

Enter primary Media Color

White

Enter secondary Media Color

Blue

Enter a descriptive name for the .ini file

Simplex\_Blue

Done. Please restart the FFPS SW.

After the System comes up from the Restart, the Simplex\_Blue option will be visible in the Queue Mgr – PDL Settings - Initialization File Menu. See the screen snap following example 3.

## Example 2: Creating an INI file for Duplex Media Switching Every other Page.

The text highlighted in blue below represents the User Inputs. You must be logged in as root in order to run the INI creation script.

```
Houston# cd /opt/XXnps/bin
Houston# installINI
```

Listed below are three types of .ini files this script is capable of creating.

- 1: Creates an initialization file for SIMPLEX Media Color switching where every other sheet requires a different stock.  
Example: Sheet 1 = Primary Media Color, Sheet 2 = Secondary Media Color
- 2: Creates an initialization file for DUPLEX Media Color switching. where every other sheet requires a different stock.  
Example: Sheet 1 = Primary Media Color, Sheet 2 = Secondary Media Color
- 3: Creates an initialization file that will insert one or two Media Changes within a record,  
where a record is the total number of pages before the sequence is repeated  
Example: Sheet 1 = Primary Media Color  
cycle N = Secondary Media Color

Enter a number from the selection:

**2**

Enter primary Media Color

**White**

Enter secondary Media Color

**Red**

Enter a descriptive name for the .ini file

**Duplex\_Red**

Done. Please restart the FFPS SW.

After the System comes up from the Restart, the **Duplex\_Red** option will be visible in the Queue Mgr – PDL Settings - Initialization File Menu. See the screen snap following example 3.

Example 3: Creating an INI file for a Cyclic stock change involving a secondary stock for one or more page ranges within a Record.

Understanding the nomenclature for use with Cyclic programming is important.

**start page**: this value represents which page the cyclic stock is to **begin** on. A page can be thought of as an image and is always referred to as simplex (ie. you can't have a duplex image).

**end page**: this value represents which page the cyclic stock is to **end** on.

**record**: this value represents how many pages (images) are in one "record". This value tells the INI file to reset it's "showpage counter" to 1 after the INI file "counts" the number of "showpage's" in the job equal to the value you have entered for the record.

In this example, we wish to have the INI reset to page 1 every 40 pages (or 20 duplex sheets). We will request the INI file to insert Blue stock programming on pages 11 through 14. The actual output would be as follows: a total of 20 duplex sheets are printed, sheets 1-5 are on White stock, sheets 6 and 7 are on Blue stock, and sheets 8-20 are on White stock.

```
Houston# cd /opt/XXnps/bin
Houston# installINI
```

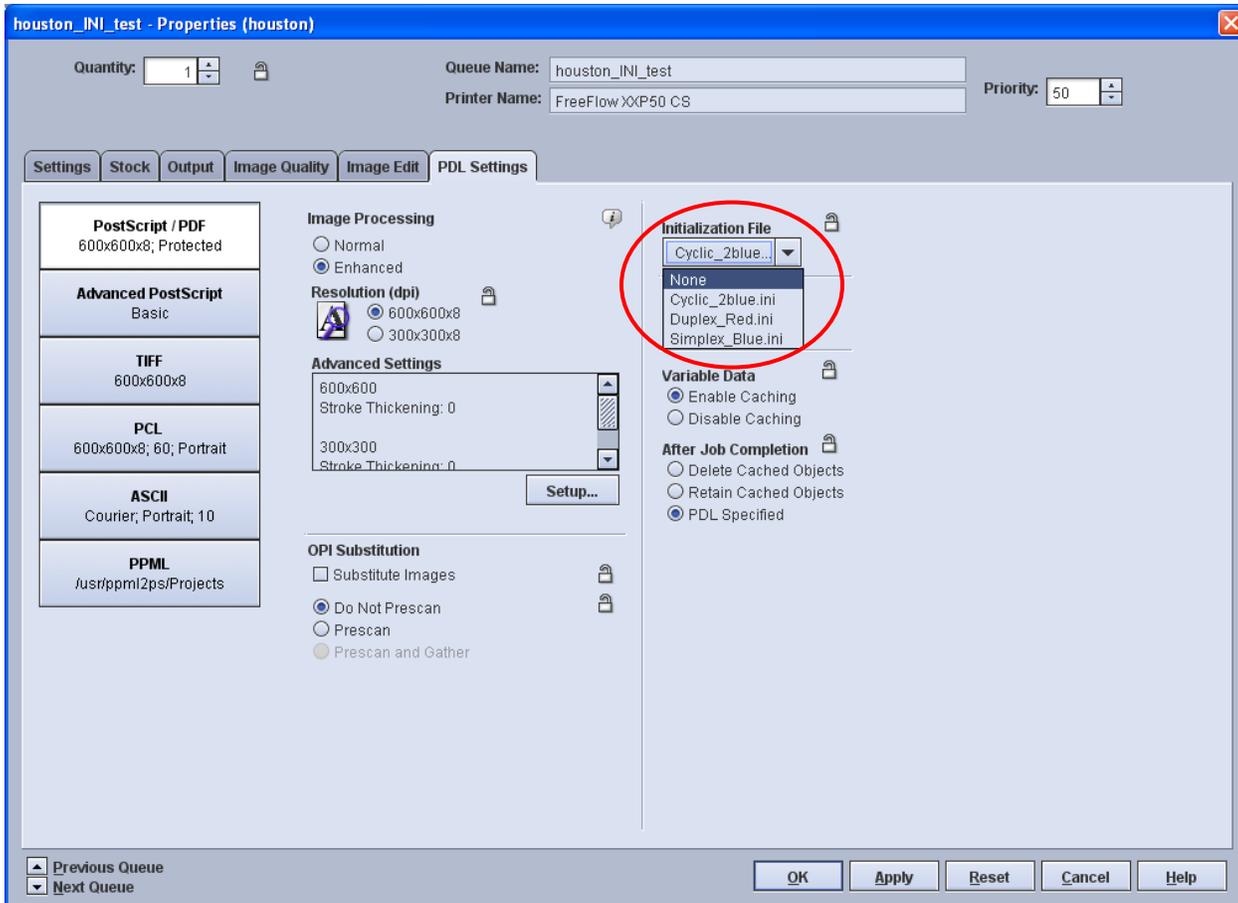
Listed below are three types of .ini files this script is capable of creating.

- 1: Creates an initialization file for SIMPLEX Media Color switching where every other sheet requires a different stock.  
Example: Sheet 1 = Primary Media Color, Sheet 2 = Secondary Media Color
- 2: Creates an initialization file for DUPLEX Media Color switching. where every other sheet requires a different stock.  
Example: Sheet 1 = Primary Media Color, Sheet 2 = Secondary Media Color
- 3: Creates an initialization file that will insert one or two Media Changes within a record,  
where a record is the total number of pages before the sequence is repeated  
Example: Sheet 1 = Primary Media Color  
cycle N = Secondary Media Color

```
Enter a number from the selection:
3
Enter primary Media Color
White
Enter secondary Media Color
Blue
Are there 1 or 2 cycles
1
Enter start page of first (Secondary Media) cycle
11
Enter end page of first (Secondary Media) cycle
14
Enter record size
40
Enter a descriptive name for the .ini file
Cyclic_2blue
Done. Please restart the FFPS SW.
```

After the System comes up from the Restart, the **Cyclic\_2Blue** option will be visible in the Queue Mgr – PDL Settings - Initialization File Menu. See the screen snap following example 3.

## Queue Properties – PDL Settings – Initialization File menu



**Limitations:** these limitations below are all “setpagedevice” workflow limitations. Since the INI solution is based on “setpagedevice”, the same limitations apply.

- Do NOT program any Paper Stock Programming in Job Manager or Queue Manager OVR for Stock programming. All stocks required for the job need to be identified in the PostScript data stream in order for the INI solution to work correctly.
- Do NOT send a job from a Xerox Driver or Xerox Submission client with Paper Stock Programming. These clients will place a Job ticket on the job that will include Stock Programming that will take precedence over stock programming added by the INI file.
- Do not use the INI solution for jobs that require different stock sizes within them.
- The INI solution cannot be used for Dynamic stock programming. A cyclic or repeating pattern is required.
- The INI file cannot be used in combination with FFPS Imposition.