

## Installing Aspen R8 on a two-head system

Document v1.1 2Jun16.

### Requirements

Aspen installer R8 or later.

ABTtoTIFF.exe.

Python 3 installer, if using ConvertABTsToTIFF.py (or do the conversion manually).

StitchTiff.exe.

FakeBorrego folder (if a two-head printer is not available).

Aspen v2 R8 quick start v1.0.docx.

Aspen v2 XEncrypt code.

### Procedure

#### If you don't have a two-head printer

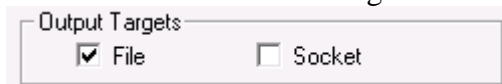
1. For testing a two-head stitching system in the absence of a printer, set up as follows:

1.1 Copy the FakeBorrego folder into

C:\Users\\AppData\Roaming\Xitron\durangospooler

on PC 1 and PC 2. You'll need to create this path as you have not run the installer yet.

1.2 On PC 1 and PC 2 Configure Durango to output to File instead of Socket.



1.3 On PC 1 double-click "FakeBorrego.exe - DescansoStitched.cmd" to run Fake Borrego as Descanso on Port 82.

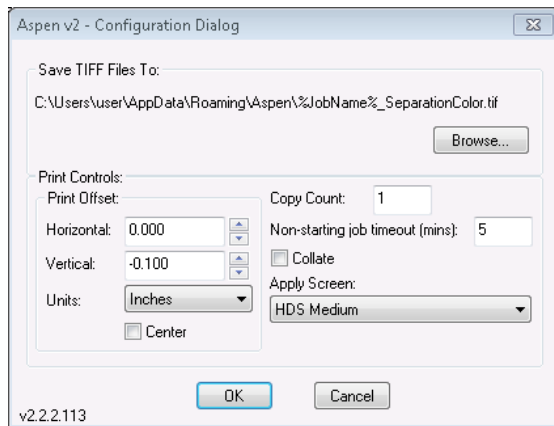
1.4 On PC 1 and PC 2 double-click "FakeBorrego.exe - Stitched.cmd" to run Fake Borrego as Y\_CMK to Port 81.

#### Install a single-head two-RIP system on PC 1

2.1 Follow the Aspen 2-head Quick Start, "Aspen v2 R8 quick start.docx" to install a single-head system on PC 1.

2.2 In the Navigator Server 'Manage Devices' dialog, set the IP address and port number of the Descanso, and check the 'Is a Descanso' box.

2.3 You may have noticed the 'Center' checkbox on the Aspen plugin configuration dialog as shown below. There is no need to check this even if centering, as this setting is overruled by the centering control on the Page Filter Action configuration dialog in a two-head stitching system.



## Install two RIPs on PC 2

3. On PC 2, run the Aspen installer to install a RIP as 'RIP only'; select the option 'Remote RIP (in Navigator workflow).

4. On PC 2 use the Multi-RIP Utility to duplicate instance 0 to instances 1 and 2 and then clear instance 0. This is very similar to Step 2.3 in the Aspen v2 QuickStart.

## Replicate the master RIP settings into the other RIPs on PC 1 and PC 2

5. Run XiRemote Master and Servant on PC 1. Run XiRemote Servant on PC 2.

6. Use XiRemote to duplicate RIP instance 1 on PC 1 over RIP instance 2 on PC 1 and over both RIP instances on PC 2 as follows:

6.1 On PC 1 XiRemote Master, click the 'Add' button to add PC 2. Make sure that none of the RIPs on either PC have dialogs left open other than the base 'Navigator - SOAR' dialog showing the RIP log.

6.2 On PC 1 XiRemote Master, ensure that no PCs are in the list of PCs; select 'Copy RIP configuration' from the drop-down list selected (so the command will apply to all of them); press the 'Run Command' button to duplicate the RIP settings. The RIPs will automatically be stopped before the copies are done, and restarted afterwards.

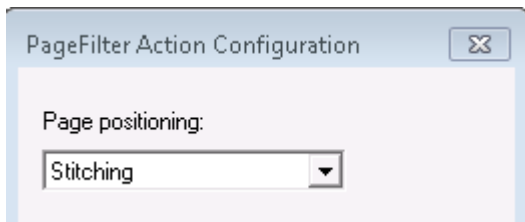
## Configure RIP Manager to use the RIPs on PC 2

7. On PC 1, add RIP Actions to Navigator Server for the two RIPs on PC 2 as RIP\_21 and RIP\_22. Similar to step 2.4 in the Aspen v2 R8 QuickStart, but enter Base name of PC(s): SW2, and set First PC Index to 2.

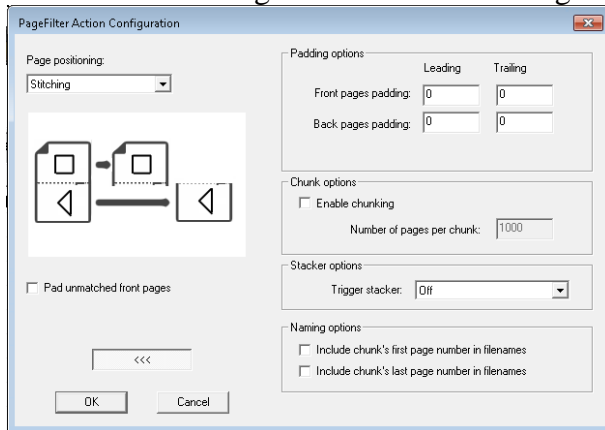
*If the ordering of the installation were different, and the Actions were added at the end, the Multi-RIP Action configuration tool could be used to create all SRA/SOA/DRO Actions on all PCs in one go, as long as the PCs had names such as SW1, SW2, ... with a common base name and identification digit.*

## Complete the configuration

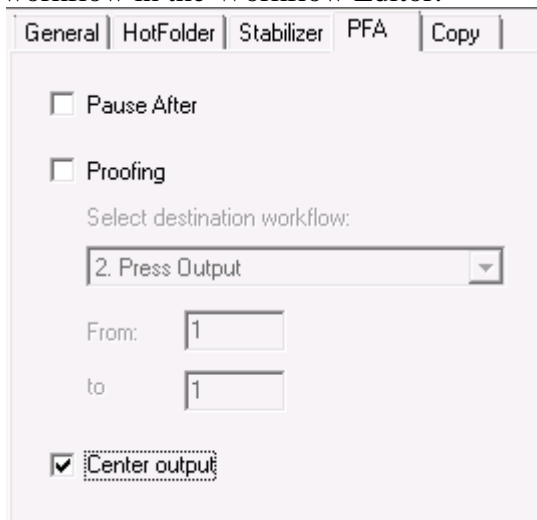
8. Edit the Page Filter Action on the Server and set it to Stitching Mode:



Make sure Chunking is turned off in the Page Filter Action Chunk options:



8.1 Optionally turn on the Center output control for the Page Filter Action in the File Prep workflow in the Workflow Editor:



If this control is unchecked, jobs will be left-justified. This Center output control takes precedence over the Center control in the Aspen v2 plugin device dialog.

8.2 In the Server's Manage Devices dialog, set the Press Head Count to 2 and Apply.

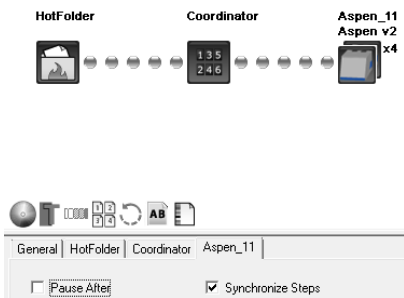
9. Configure the Press Coordinator Action:

9.1 In the Client, Duplicate the Press Output workflow and name it Press Stitched Output.

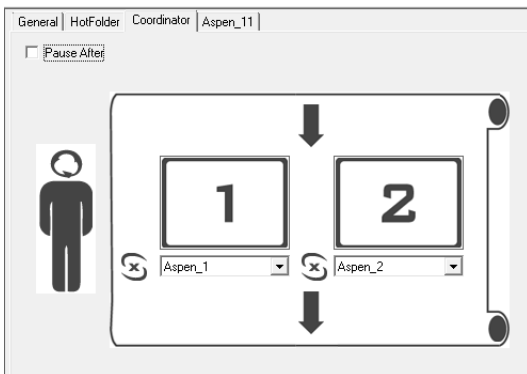
9.2 Add a Press Coordinator Action before the Direct Output Step

9.3 Add two more Direct Output steps to the Press Stitched Output workflow, and use the Synchronize checkbox and Configure RIPs button to add the rest of the steps for all of the RIPs.

## 2. Press Stitched Output



9.4 Configure the Press Coordinator Action to match the newly added RIP platforms in the workflow. If the heads are not available, check that you did Step 8.2 above, and restart the Server.



10. In the Client, Edit the File Prep Workflow and change the Copy Action destination to the Press Stitched Output workflow.



### If you have a two-head printer

11.1 On PC 1 start Navigator Server. The two RIPs on both PC 1 and PC 2 will launch.

11.2 On each PC, one of the RIPs will launch Durango spooler to the fake Borrego on Port 81. (The other RIP(s) won't launch it as it's already running.)

11.3 Output jobs which are wide enough to span the gap between the left and right print heads, and check that they are correctly aligned.

END

### If you don't have a two-head printer

11. For testing a two-head stitching system in the absence of a printer, set up as follows:

11.1 On PC 1 start Navigator Server. The two RIPs on both PC 1 and PC 2 will launch.

11.2 On each PC one of the RIPs will launch Durango spooler to the fake Borrego on Port 81. (The other RIPs won't launch it as it's already running.)

12. Output jobs and check that they will be correctly stitched on a two-head printer:

12.1 On PC 1 and PC 2 Install Python 3.x if not already available on the PC.

12.2 On PC 1 and PC 2 Copy the ConvertABTsToTIFF.py script to the C:\Temp\Durango folder, and double-click it to run. (or convert ABT files to TIFF manually). It will run continuously and monitor the folder; any .abt files it sees will be converted to TIFF and moved into a folder named 'Done'.

13. Recombine the left- and right-head TIFF images and stitch them together. This simulates the action of the printer, overlaying the left and right images, with overlap, into a single image:

13.1 Gather the TIFF files from : \Temp\Durango\Done to a folder on PC 1.

If you wish to automate this gathering, Near the top of the ConvertABTsToTIFF.py script, you can set TIFFfolderPath to something other than '.' to have the TIFF files from a RIP-only PC moved to a shared Durango folder on the RIP Manager PC, ready for processing by StitchTIFF.

13.2 On PC 1 Run StitchTiff.exe.

Press 'Select the source folder' and select the folder containing your TIFF images.

The left and right TIFF file menus will be populated with the set of image names.

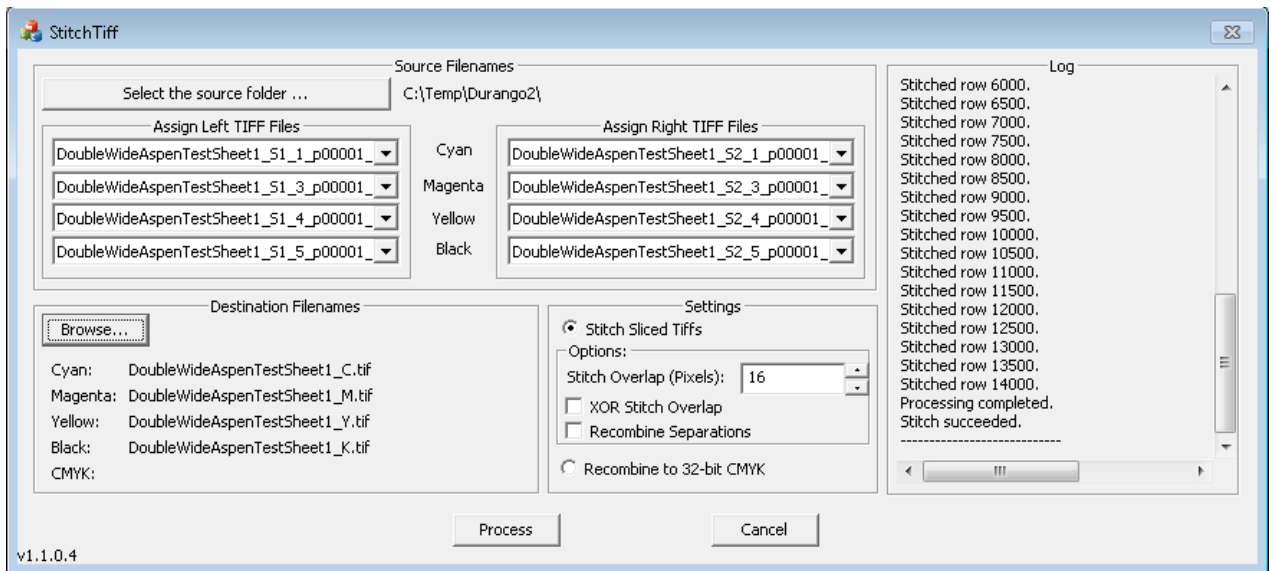
Select the images to combine, in the left and right hand side 'Assign' boxes.

Select 'Stitch Sliced TIFFs'.

Select the Recombine Separations checkbox.

Enter the Stitch Overlap (Pixels) you used when preparing the images, e.g. 448.

In the Destination Filenames section, Browse to a folder where you wish to place the stitched images.



13.3 Press the 'Process' button to stitch the TIFF images together to single recombined TIFF image; carefully inspect result has no misalignment. If instead you do not have the Recombine Separations checkbox, the output will be a stitched TIFF image for each color channel.

13.4 For checking alignment, there are alternative screen patterns available in the 'XitronTeamFolder\Projects\Memjet\Stitching\Aspen R8\Screens for Xitron testing\XiShare\Dithers' folder: TESTCoarse27648 and TestHDSMedium. To use these, copy these folders to 'C:\ProgramData\Xitron\XiShare\Dithers\' and select them in the Aspen v2 settings dialog in the RIP. The HDS Fine\_Feathered\_Compensated and HDS Medium\_Feathered\_Compensated screen patterns have white vertical lines every twenty pixels, so you can zoom into the resulting stitched file, and count the pixels to ensure that after stitching the lines still occur every twenty pixels across the head boundary.

*The Troubleshooting guide, which used to be here, is now available as a separate document.*