Tutorial **CNC Router Cutter Integration Note**

This document explains how to drive a 'Cyborg (Excitech) E2' router with the cutter front-end application 'CamBam'. The steps to drive other 'CNC Routers' are very similar. You have to download the latest 'CNC Router' resources and sample files from '[Asanti_4.0_CutterResources](#)' and extract the zip file.

1. Import the CNC Router Cutter

1. Open the 'System Overview', select a digital printer and double click the 'Finishing Hub' Resource.
2. Context click in the 'Cutters' and choose 'Import'
3. Locate the 'CNC Router' cutter in '...\Asanti_4.0_CutterResources\CNC Router\Cutter' and click 'Open'.
   Choose to 'overwrite' if the cutter already exist.
4. Unlock 🔒 the 'Finishing Hub' and click the "Result delivery" tab.
5. The default export directory is set to:
   \\$SYSTEMCOMPUTER\FinishingRoot\$CUTTER.

   - $SYSTEMCOMPUTER is a variable and will be replaced by the hostname of your Asanti Server.
   - $CUTTER is a variable and will be replaced by the cutter name.

6. The default file name convention for the cutting file is set to: $JOB_Sheet $SHEET

   - $JOB is a variable and will be replaced by the job name.
   - $SHEET is a variable and will be replaced by the number of the print layout.

7. Format 'EPS' must be set and the content must be rotated 270°.
8. 'Post-process files' is enabled with a set of options to convert the EPS file to a DXF file which can be used for the 'Cyborg (Excitech) E2' router with the cutter front-end application 'CamBam'.
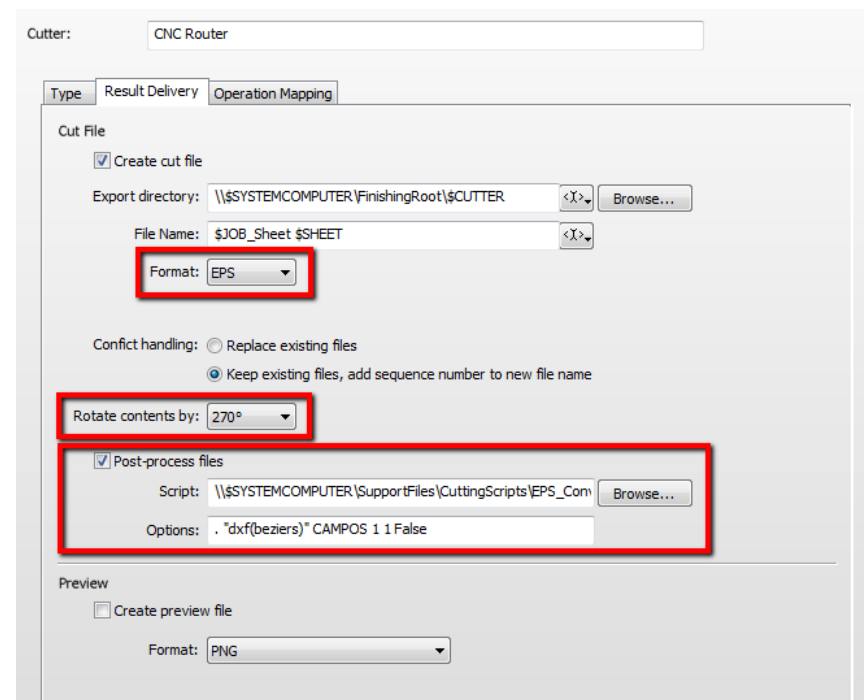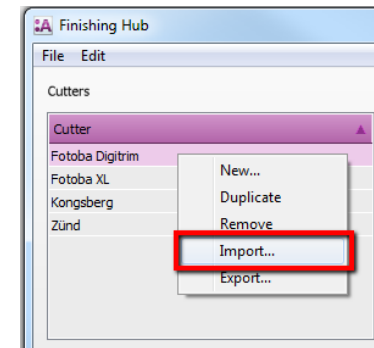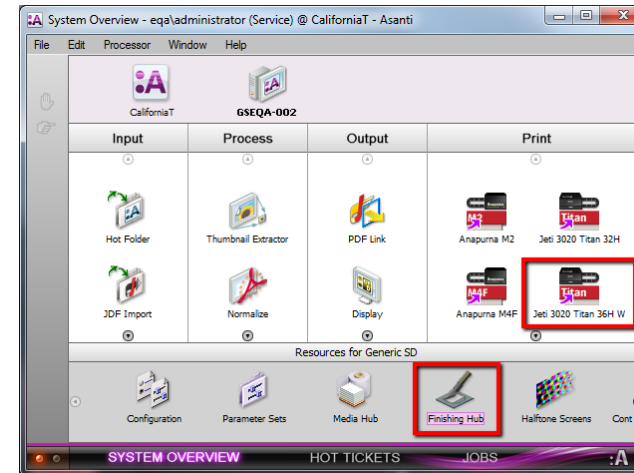
Cutter Type	Cutter Model	Cutter Front End	Options
Cyborg (Excitech)	E2-2040C	CamBam 1.0 Rel 12	. "dxf(beziers)" CAMPOS 1 1 False
AXYZ	Pacer Cadet	Pacer XMC-E 3.23.1.6	. "dxf(beziers)" 8 1.0 0.5 False
Harmuth	Vertiform3000	PENTA-NC V2	. "dxf(beziers)" regmarks 1 0.5 False

9. Click the "Operation Mapping" tab.
   When there are 'Finishing Operations' enabled and missing (red italic), go to the next step.

2. Import the CNC Router Operations

1. In the 'Finishing Hub', context click in the 'Finishing Operations' and choose 'Import'
2. Locate the finishing operations in '...\Asanti_4.0_CutterResources\CNC Router\Finishing Operations', select all operations and click 'Open'.
3. Choose to 'overwrite' if the finishing operation already exists.

4. Select the 'Tool0' operation and set it 'Use as Default'.

5. Select the 'CNC Router' cutter again and click the "Operation Mapping" tab. The finishing operations in Asanti now correspond with the tool names and colors used in the cutter front-end application. You can adjust them if needed.

6. Close the 'Finishing Hub'.
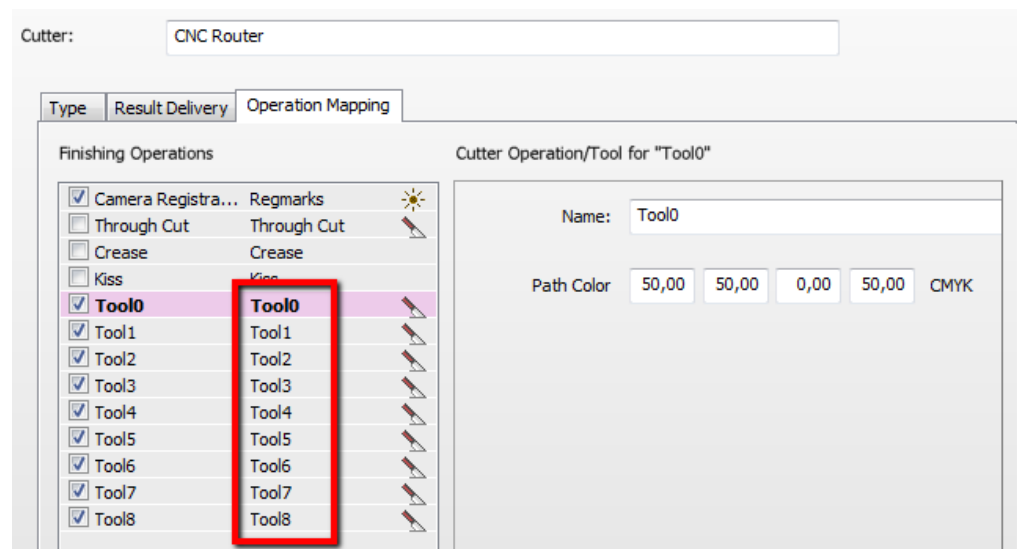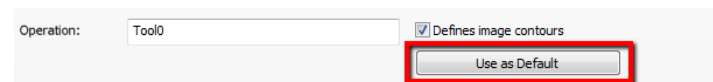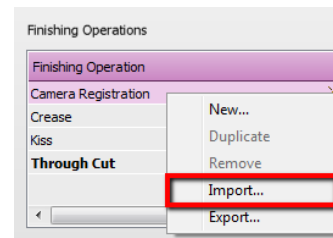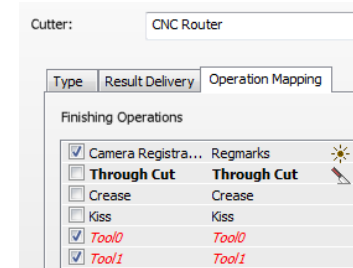
3. Import the CNC Router Mark Sets

1. Open the 'System Overview, select the 'Impose' Task Processor and double click the 'Mark Engraver' Resource
2. Click the cog wheel to import the 'Mark Sets'
3. Locate the mark sets in '...\Asanti_4.0_CutterResources\CNC Router\Mark Sets' and click 'Open'.
4. Choose to 'overwrite' if the mark set already exists
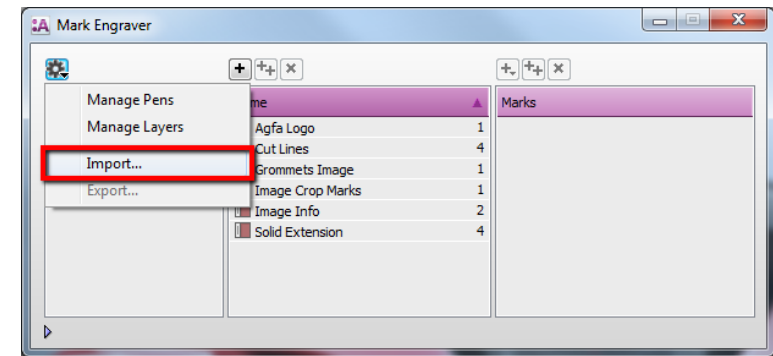
5. Click the 'Sheet Marks' category

   The 'CNC Router' Mark Set contains the registration marks and will automatically be used when you select the CNC Router cutter in your job.

   Unlock 🔒 the 'Mark Engraver' if you want to change the settings or conditions of these mark sets.

6. Close the 'Mark Engraver'.
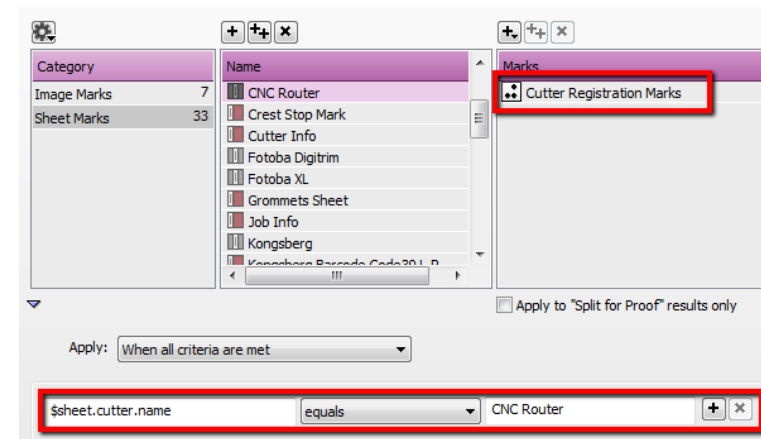
4. Create a job

1. In the 'Jobs' window, select File menu > New Layout Job.
2. Open the 'Finishing Inspector'.
3. Select Cutter 'CNC Router', select 'Finishing Margins' e.g. iCut Corner Marks, between 10.
4. In the 'Images panel' click '+'.
5. Locate the sample files in '…\Asanti_4.0_CutterResources\CNC Router\Sample Files' and click 'Open'.
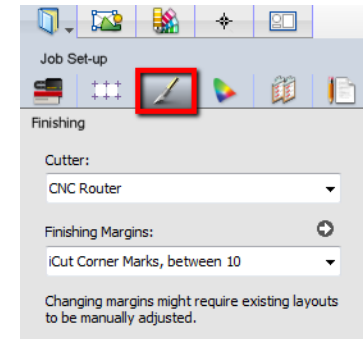
6. Select the image in the 'Images panel'.
7. Open the 'Image Inspector' (Alt+2)
8. You can see that all spot colors (content element) in this sample file are automatically assigned to corresponding finishing operations e.g. Tool0 is assigned to Tool0. If this is not the case, context click a content element and choose 'Add' or 'Edit' to assign a spot color to the correct finishing operation.
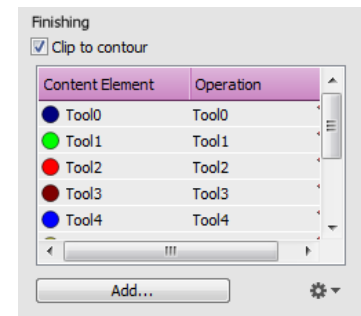
9. Drag the image from the Images panel to the Sheet.
10. Verify if the Cutter Registration Marks are automatically placed.
11. Submit job, choose for Print files: 'Make and send to printer' and for Cut Files: 'Make and send to cutter'.
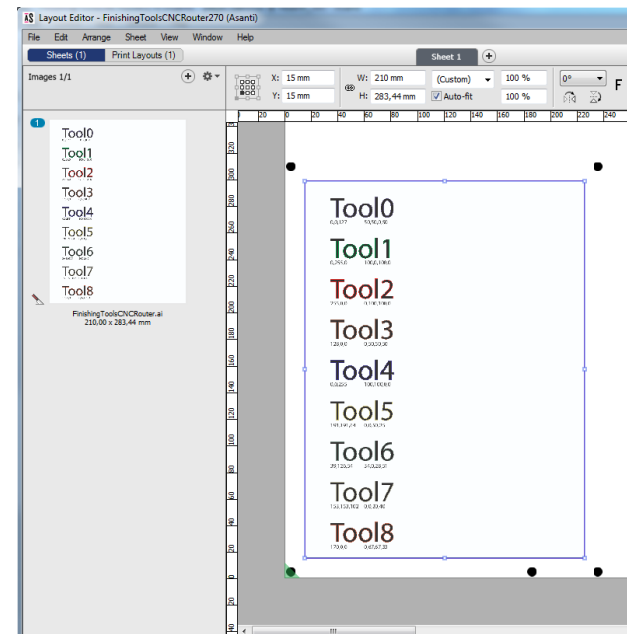
Import DXF file in CamBam

1. Start CamBam
2. To import a DXF file, select File menu > Open.
3. Browse to the export directory of Asanti "\\$SYSTEMCOMPUTER\FinishingRoot\$CUTTER" , select the DXF file and 'Open'