

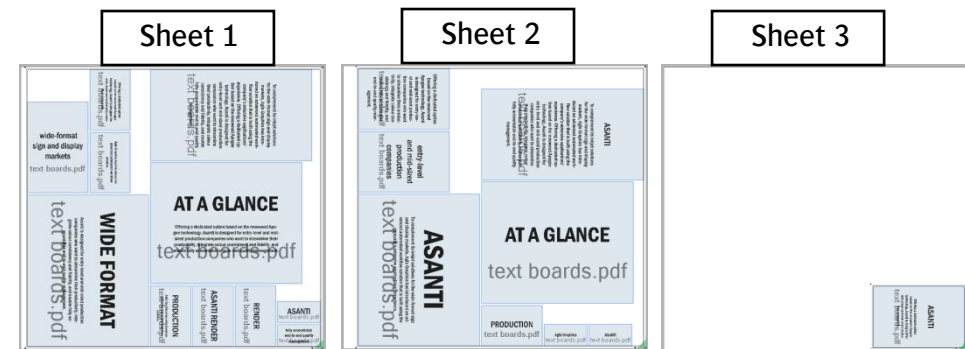
# Auto-Layout

This tutorial demonstrates how to Auto Layout a job.

Download the Asanti Sample Files via the Asanti Client (Help > Asanti Online > Download Sample Files).

## 1. Create a guillotine cut-able job

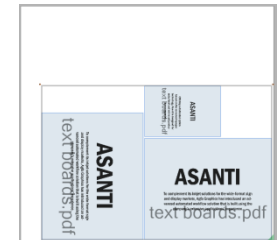
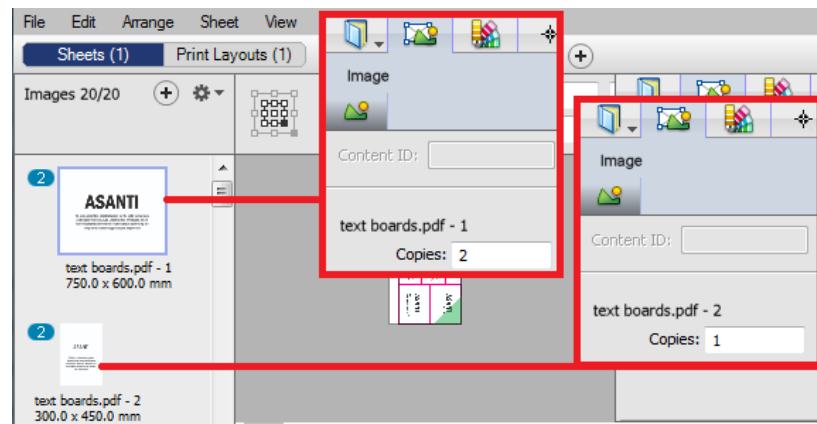
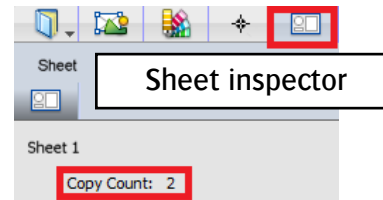
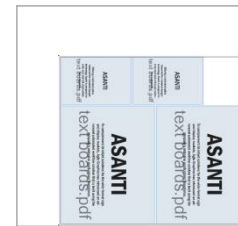
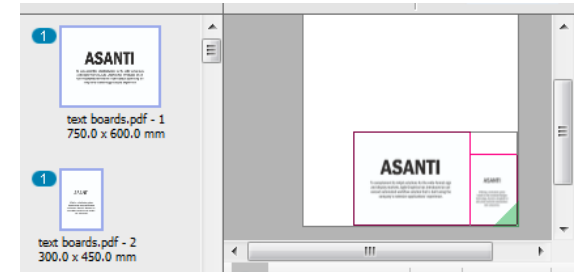
1. Select File > New Layout Job.
2. Select a printer.
3. In the Image panel add the image: text boards.pdf.
4. Select Sheet > Auto Layout Images (CTRL+N).
5. Choose these settings:
  - Media size 1400x1400mm
  - Copy count: 1
  - Layout type: Guillotine cuts
  - Rotation: Any angle
  - Optimize for: Minimal waste
  - Finishing margins: "iCut Corner Marks, between 5"
6. Click the button "Auto Layout 20 Image(s)".
  - Each image is placed 1x.
  - 3 Sheets are used
  - All sheets can be cut with a guillotine cutter.
  - Guillotine cutting is the fastest Auto Layout type.
7. Submit job, select Print Files: "Hold".



NOTE: Placement of images on the sheets can be different from screenshots in this tutorial.

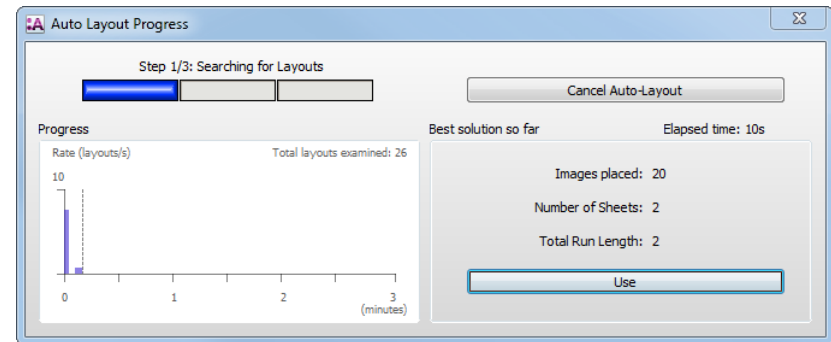
## 2. Use copy counts

1. Select File > New Layout Job.
2. Select a printer.
3. In the Image panel add the image: text boards.pdf.
4. Select images 1 and 2 in the Images panel.
5. Select Sheet> Auto Layout Images and choose the following settings: Media size 1400x1400mm; Finishing margins: "iCut Corner Marks, between 5".
6. Click "Auto Layout 2 Image(s)". The 2 images are placed.
7. Select images 1 and 2 in the Images panel.
8. Select Sheet > Auto Layout Images and set Copy Count to 2.
9. Click the button "Auto Layout 2 Image(s)".  
The selected images are placed 2 times on the sheet.
10. Select images 1 and 2 in the Images panel.
11. Select Sheet > Auto Layout Images and set Copy Count to 4.
12. Click the button "Auto Layout 2 Image(s)".  
The selected images are placed 2 times on the sheet. The sheet will be rendered once but must be printed 2 times on the digital press; this is visible in the Sheet inspector.
13. Select image 1 in the Image panel.  
In the Image inspector set number of copies to 2.
14. Select image 2 in the Image panel. Set number of copies to 1.
15. Select images 1 and 2 in the Images panel.
16. Select Sheet > Auto Layout Images; the Copy Count Field in the Auto Layout window indicates "(mixed)".
17. Click the button "Auto Layout 2 Image(s)".  
Image1 is placed twice, image 2 once.
18. Submit job, select Print Files: "Hold".



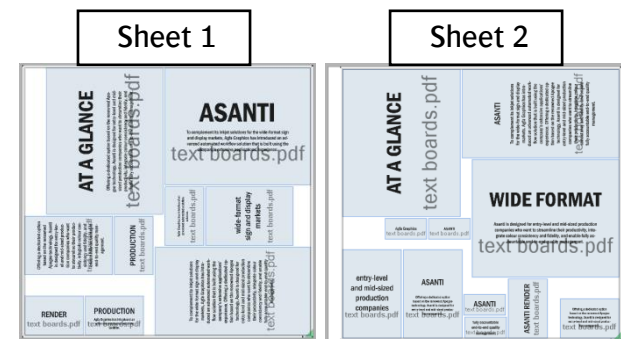
### 3. Create a Rectangular Nesting job

1. Select File > New Layout Job.
2. Select a printer.
3. In the Image panel add the image: text boards.pdf.
4. Select Sheet > Auto Layout Images and use the following settings: media size 1400x1400, copy count 1, Layout type: Rectangular Nesting, finishing margins “iCut Corner Marks, between 5”.
5. Click the button “Auto Layout 20 Image(s)”. The progress dialog shows the details of the best solution found so far:
  - 20 images placed: Total amount of images that will be printed.
  - 3 sheets: number of sheets that will be created in the layout editor.
  - RunLength 3: number of sheets that will be printed on the Digital Printer.



Asanti searches for a better solution as long as you leave the progress window open.

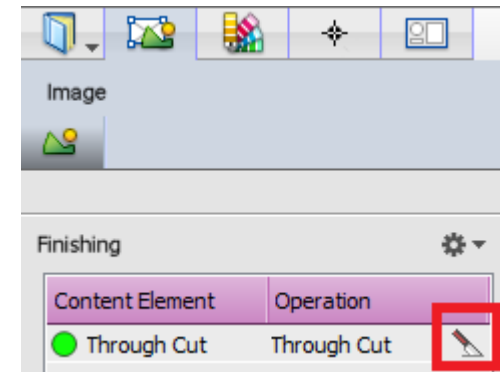
6. Wait until the progress window indicates that the images fit on 2 sheets (e.g. after 5 seconds); click the “Use” button to accept and use the current best solution.
  - Each image is placed 1x.
  - Sheets can be cut with an x-y cutter but not with a guillotine cutter.
  - Rectangular Nesting could fit the images on 2 sheets while the Guillotine cuts Auto Layout type required 3 sheets.
  - Rectangular Nesting is sometimes slower than Guillotine cut Auto Layout type.
  - Submit job, select Print Files: “Hold”.



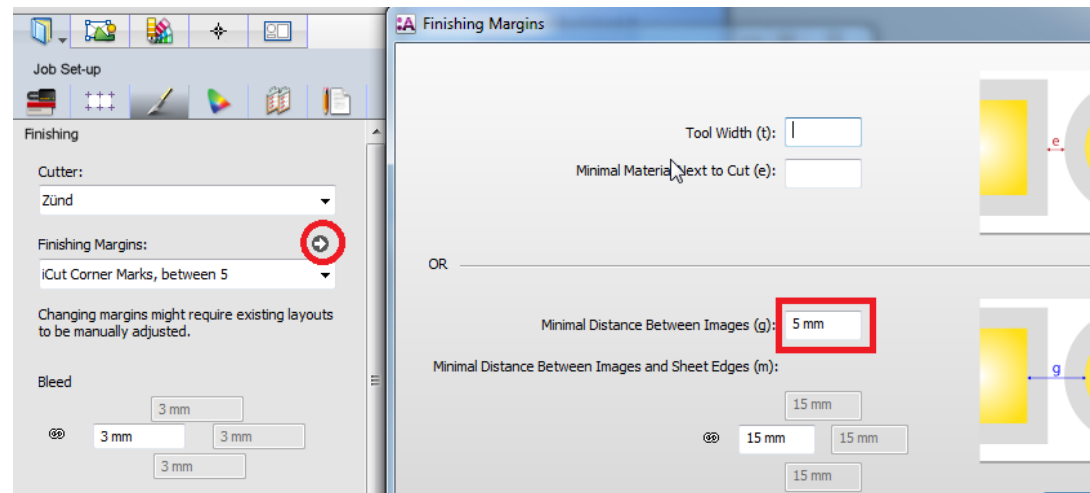
#### 4. Create a True-Shape Nesting job

1. Select File > New Layout Job.
2. Select a printer.
3. In the Image panel add the images: Asanti Box.pdf and Cleaning Product CMYKWhite.pdf.
4. In the Image panel, select Cleaning Product CMYKWhite.pdf.
5. Select the Image inspector, the finishing settings show that spot "Through cut" is assigned to Finishing Operation "Through cut". The operations with a knife icon will be used as path for the true shape nesting.
6. Select Sheet > Auto Layout Image.
7. Enter the following settings:
  - Media size 1600x1600mm
  - Copy count: 80
  - Layout type: True-Shape Nesting
  - Finishing margins: "iCut Corner Marks, between 5"
8. Click "Auto Layout 1 Image(s)". The images are nested using the Through Cut color path as shape.
9. Select Cleaning Product CMYKWhite.pdf in the Images panel.
10. Select Sheet > Auto Layout Image.
11. Choose Layout type: Rectangular Nesting.
12. Click "Auto Layout 1 Image(s)". Click stop optimizing after a few seconds.

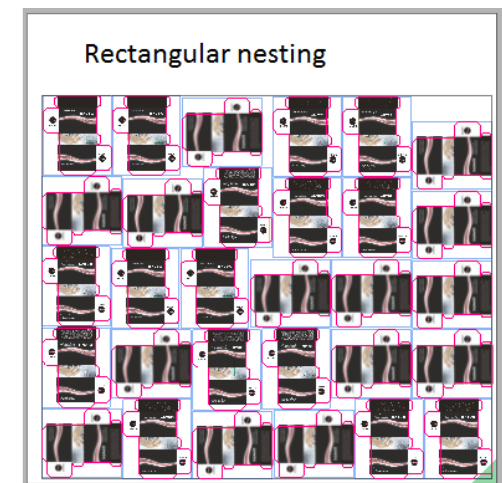
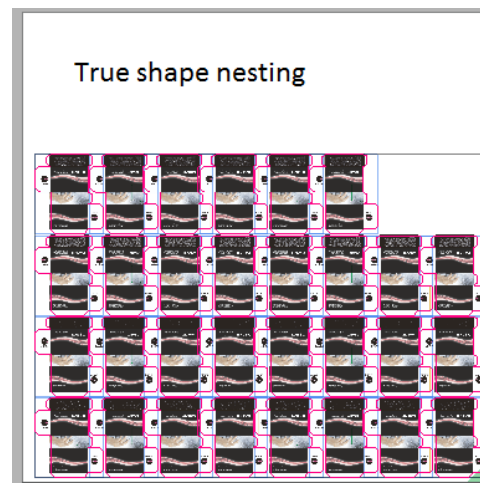
The Through Cut shape is close to rectangular. Because of this, the media usage is almost the same for True-shape nesting and Rectangular Nesting. With an irregular shape, the difference in media usage will be bigger. On the other hand, in some cases, Rectangular Nesting is much faster than True-Shape Nesting.



13. Select the Asanti Box.pdf image in the Images panel.
14. Select the Image inspector, the Finishing settings show that spot "Through Cut" is assigned to Finishing Operation "Through Cut".
15. Select Sheet > Auto Layout Image, set Copy Count to 30 and use Layout Type True-Shape Nesting.
16. Click "Auto Layout 1 Image(s)".  
The images are nested. The distance between the different Through Cut paths is minimum 5 mm.  
(Job Set-Up>Finishing inspector>Finishing margin>Minimal Distance Between Images).



17. Select Asanti Box.pdf in the Images panel.
18. Select Sheet > Auto Layout Image and choose Rectangular Nesting as Layout Type.  
Rectangular nesting produces a result with more media loss.
19. Select Edit > Undo Auto-Fit to revert back to True-shape Nesting.  
Submit job, select Print Files: "Hold".



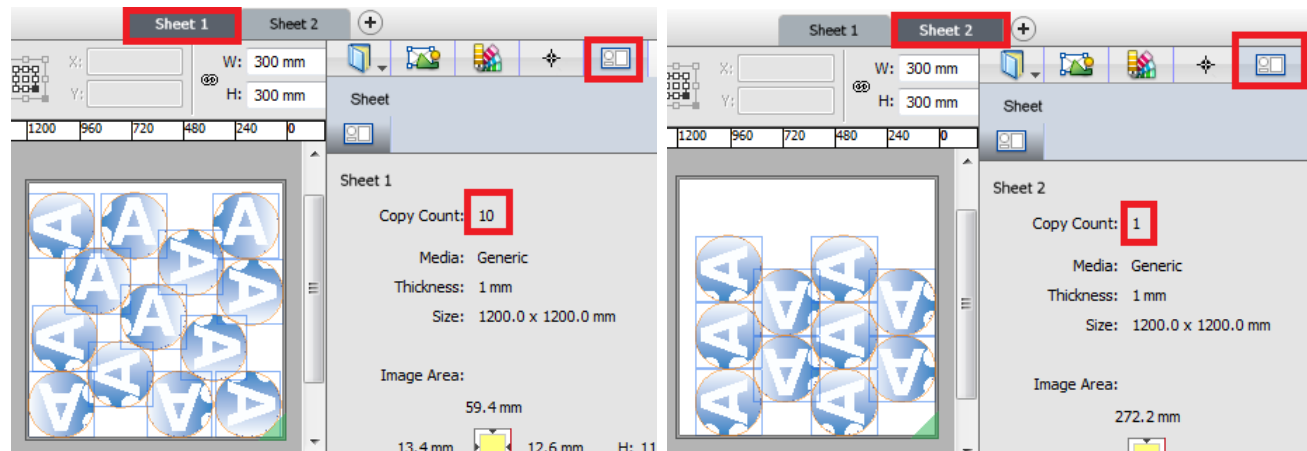
## 5. Use Auto Layout Optimize options

*Optimize for minimal waste*

This option creates an Auto Layout solution with optimal usage of media.

1. Select File > New Layout Job.
2. Select a printer.
3. In the Image panel add the image: "Circle of Asanti.pdf".
4. Select Sheet > Auto Layout Image.
5. Enter the following settings:
  - Media size 1200x1200mm
  - Copy count: 140
  - Layout type: True-Shape Nesting
  - Optimize for: Minimal waste
  - Finishing margins: "iCut Corner Marks, between 5"
6. Click "Auto Layout 1 Image(s)".
7. Wait a few seconds until the Total Run Length is set to 11 sheets. Click "Use" to accept the current solution.
8. After a few seconds click "stop optimizing". 2 Sheets are created.
9. Select sheet 1. Select the Sheet Inspector, sheet 1 must be printed 10x.
10. Select Sheet 2. Sheet 2 must be printed 1x. After printing the job you will have exactly 140 printed images.

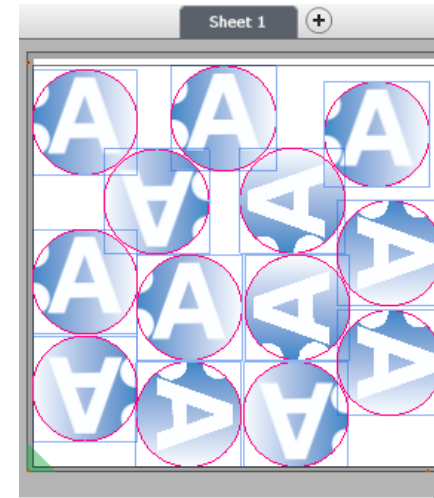
*Actual sheet copy counts can be different from this tutorial (e.g. sheet 1: 1x and sheet 2: 10x).*



*Optimize for minimal sheets*

This option creates a solution with fewer different sheet layouts, possibly this will result in less efficient media use. With this option you can specify an allowed % overrun.

1. Select Sheet > Auto Layout Image.
2. Enter the following settings:
  - Optimize for: Minimal sheets
  - Allow overrun: 20% (allowed overrun = 20% of 140 copies)
3. Click “Auto Layout 1 Image(s)”.
4. Wait a few seconds until the run length is set to 11 sheets. Click Use to accept the current solution.
5. After a few seconds click “stop optimizing”.  
1 sheet is created.
6. Select sheet 1. Select the Sheet Inspector, sheet 1 must be printed 11x. 13 images are placed on the sheet. When printing the sheet 11 times, you will have  $11 \times 13 = 143$  printed images. This gives an overrun of 3 printed images.

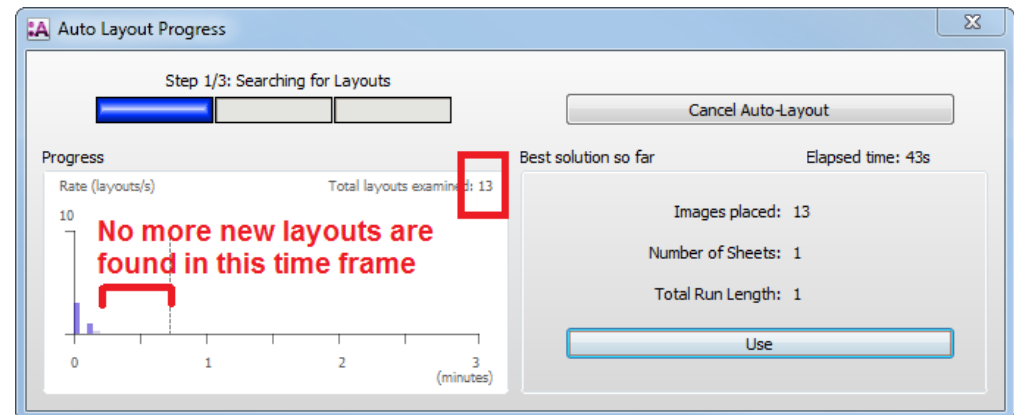


Print 11x

*Optimize for Single sheet*

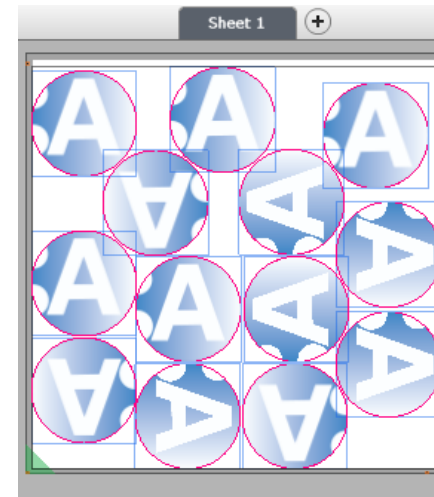
Creates a solution on a single sheet if possible. This strategy puts as many image copies on 1 sheet regardless of the image copy counts. The copy counts of the images is used as a ratio if there are multiple images with different copy counts. The copy counts of the images also determine how many times this single sheet needs to be printed.

1. Select Sheet > Auto Layout Image.
2. Enter the following settings:
  - Optimize for: Single sheet
  - Allow overrun: Leave untouched. This setting is ignored with the single layout option.
3. Click “Auto Layout 1 Image(s)”.
4. Wait a few seconds until no more new solutions are found. Click Use to accept the current solution. After a few seconds click “stop optimizing”.



Auto Layout has created only 1 sheet with as many copies as possible on the sheet.

5. Select the Sheet Inspector, sheet 1 must be printed 11x (to obtain minimum 140 image copies). 13 images are placed on the sheet. When printing the sheet 11 times, you will have  $11 \times 13 = 143$  printed images.
6. Select Sheet > Auto Layout Image.
7. Enter the following settings:
  - Copy count: 1
8. Click "Auto Layout 1 Image(s)".  
Wait a few seconds until no more new layouts are found. Click Use to accept the current solution.
9. Click stop optimizing.  
1 sheet is created. Auto Layout has created 1 sheet with as many copies as possible on the sheet although the requested image copy count is only 1.
10. Submit job, select Print Files: "Hold".



Print 11x