

This tutorial demonstrates how to work with software DQS in Asanti.

There are 3 types of DQS (Digital Quick Strip):

- **Software Image DQS:** images and marks are rendered separately. If an image/mark is placed multiple times on the sheet it will only be rendered once by PDFRender. Asanti sends the complete Print Layout to the printer. Software DQS can be used for all printers except of Tauro.
- **Software Sheet DQS:** sheets are rendered separately. Asanti sends the complete Print Layout to the printer. Software Sheet DQS is not explained in this tutorial.
- **Hardware Sheet DQS:** Sheets are rendered separately. Asanti sends the sheets to the Printer. Assembly of the sheets on the Print layout is done on the printer. Hardware Sheet DQS can be used for Tauro. Hardware DQS is not explained in this Tutorial.
- **No DQS:** the render renders the complete Print Layout and sends it to the printer.



DQS Mode	Tasks processed by PDFRender	Tasks sent to Printer
No DQS	Print Layout	Print Layout
Software Image DQS	Images, marks	Print Layout
Software Sheet DQS	Sheets	Print Layout
Hardware Sheet DQS	Sheets	Sheets

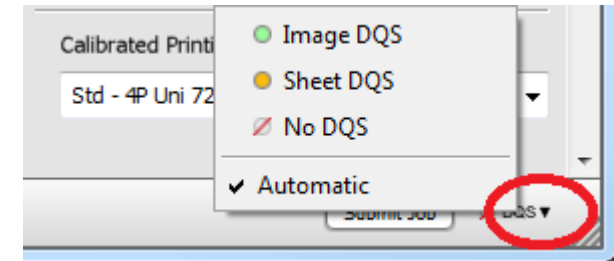
Download the Asanti Sample Files via the Asanti Client (Help > Asanti Online > Download Sample Files).

1. Step and repeat images

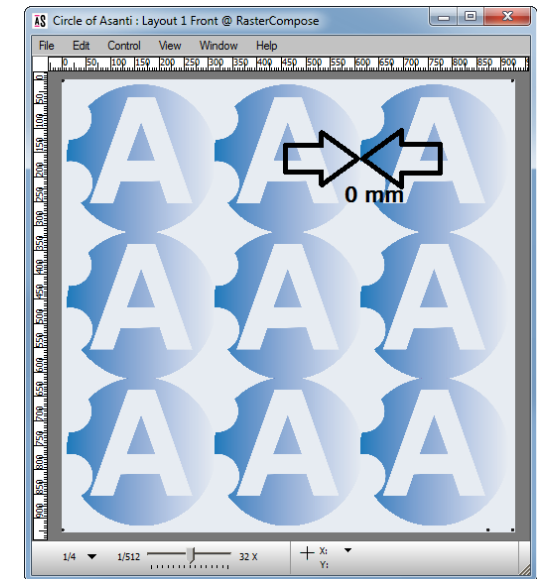
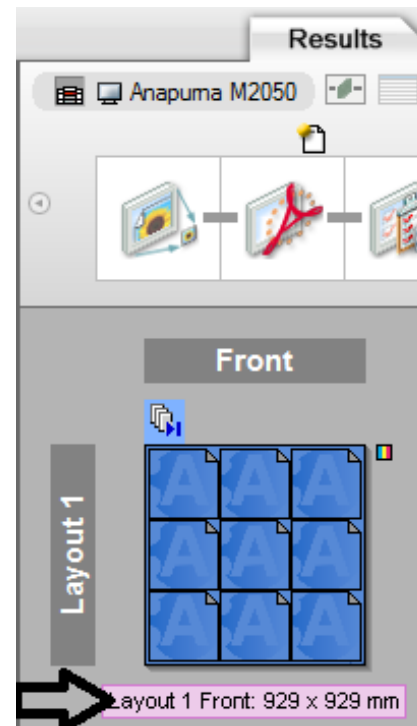
1. Open the System Overview window.
2. Double click PDFRender to open the PDFRender activity window. Keep this window open during this lesson.
3. Go to the jobs window.
4. File Menu > New from templates.
5. Open template "Asanti" from category "Asanti".
6. Select a printer that supports software DQS (all printers except Tauro) e.g. Anapurna M2050.
7. Set Quality to e.g. High Definition.
8. Set sheet size 1000x1000 mm.




9. Select the Finishing inspector.
10. Select cutter Zünd, Finishing Margins: iCut Corner Marks, between 0. This will set the distance between images to 0 mm.
11. Click the dropdown next to the DQS icon (right bottom Layout editor). Make sure DQS is set to Automatic.
12. File Menu > Add product...
13. Open "Circle of Asanti.pdf".
14. Place the product on the sheet. The DQS icon has a red line:  (DQS is OFF). DQS is off because there is no advantage in enabling DQS if there is only a single product on the Sheet.
15. Place the product a second time on the sheet. The DQS icon is green:  (Green = image level DQS is ON). Image level DQS automatically gets enabled if the sheet contains enough repeated images.

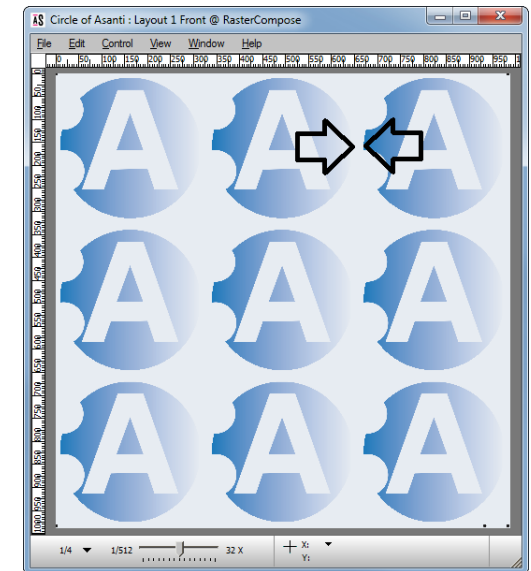
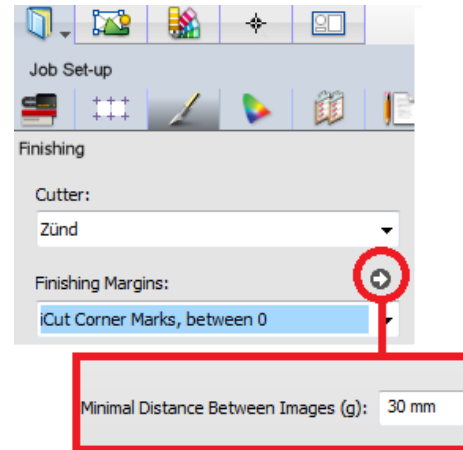


16. Edit Menu > Duplicate Frame on sheet.
17. Check Fill sheet and click ok. The image is placed 9x.
18. Submit > Make and hold. The PDFRender activity window shows 2 tasks that are processed: 1 for the iCut marks and 1 for the image (because image DQS). Processing goes fast (e.g. 11 seconds at 1440x720 dpi).
19. In the results tab, double click the name of the Print layout: Layout 1 Front. This opens Raster Preview for the Print Layout. The distance between each image is 0 mm.
20. Close Raster Preview.



2. Edit a DQS job


1. Edit the job “Circle of Asanti”.
2. Select the Finishing inspector.
3. Click  to edit the Finishing margins.
4. Change “Minimal distance Between Images” to 30 mm and click ok.
5. Sheet menu > Rearrange Frames. This increases the distance between images to 30 mm.
6. Submit > Make and hold. The PDFRender shows no activity. This is because image DQS is enabled and the content of the images hasn’t changed.
7. Open Raster Preview for the Print Layout. The distance between images is increased.
8. Close Raster Preview.

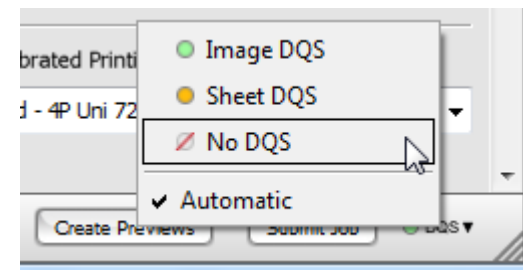


3. Turn ON/OFF DQS

In Automatic DQS mode, Asanti automatically enables/disables DQS to get optimal rendering performance. If you want to ignore the automatic DQS mode, you can still manually turn ON/OFF DQS.

Turn OFF DQS can result in slower performance

1. Context click job “Circle of Asanti” > Duplicate job.
2. Click the dropdown next to the DQS icon (right bottom Layout editor). Select NO DQS. The DQS icon has a red line:  (DQS is OFF).
3. Click Submit job.
 - Set job name to Circle of Asanti NO DQS.
 - Select Print Files: Make and hold.



The PDFRender activity window shows 1 task (the Print Layout). Processing a step and repeat job takes much longer in No DQS mode (e.g. 70 seconds at 1440x720 dpi). In most cases it best to set DQS mode Automatic.

The DQS Mode Automatic/Image DQS/Sheet DQS/DQS OFF is saved in ticket templates.

DQS cannot be enabled for jobs with Job-set inspector > Media deformation enabled.

In Asanti 4.3 and older there was an issue with image marks placed on top of images (grommets, tiling marks,...). These marks were rendered in overprint on the image. Sometimes these marks were no longer visible in raster preview and on print. This is fixed in Asanti 5.1. Marks on top of images are now rendered in knockout on top of the image (screenshot below shows rendered light color grommet on top of image in image DQS mode).

