

# Printing White

This tutorial demonstrates how to print jobs with white ink, and can only be executed if your printer supports White. Download the Asanti Sample Files via the Asanti Client (Help > Asanti Online > Download Sample Files).

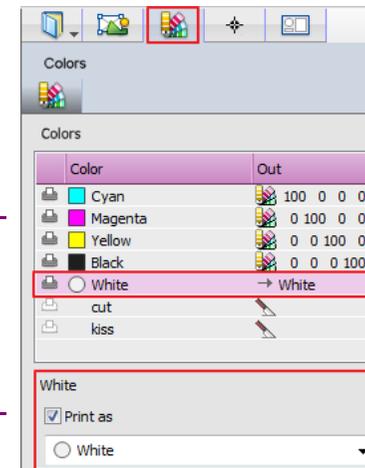
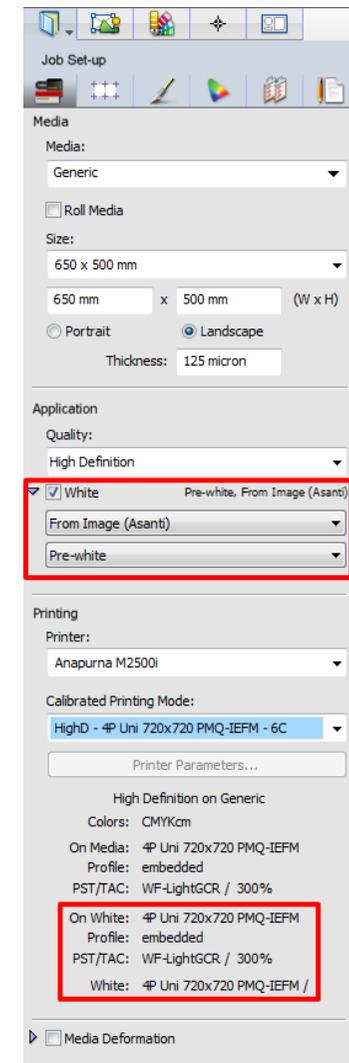
## 1. Printing white from image

In this exercise you will learn how to print white from objects present in the input file.

1. File Menu > New layout job
2. Select the job set-up > Media –inspector > Generic media
3. Set the Media Size to at least to 650x500 mm.
4. Select the for Application-Quality: “High Definition”
5. Expand and enable the White application in the Job Set-Up inspector.
6. Select for Application-White: “From Image (Asanti)” and “Pre-white”
7. Notice that the Calibrated Printing Mode (CPM) should have a section “On White”. Depending on the Quality, CPM’s may or may not contain settings for “On White” and “White” printing. Typically, CPM’s for “High Definition” quality will contain White printing information.
8. In the Image panel click “+” and browse for “Asanti-stickers - Pos-Neg-White.pdf”, click open.
9. Select the Colors Inspector.
10. Click in the White color: Notice that the white color will be printed with White Ink.

*In Asanti, vectors and alpha channels from the input documents can be assigned to the white ink of the printing press if these objects are drawn in a spot color. Several spot colors are automatically mapped to “White”. You can find them in the Color Books (Ctrl+Alt+6) > Special Color > White category.*

11. Click on the “Create Previews” button and wait until the color accurate previews are ready. A little faint green square in the lower right corner of the image thumbnails indicate that the preview creation is still going on. The previews are ready when the green square disappears from the thumbnail.

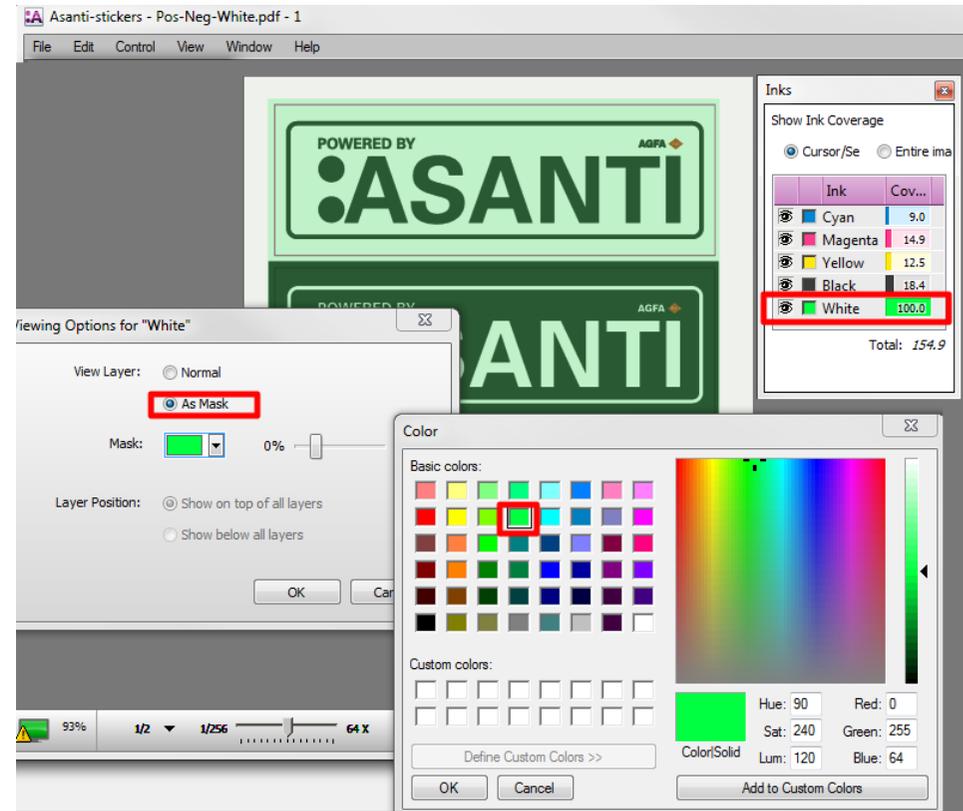


12. In the image panel double click on the first page of the “Asanti-stickers - Pos-Neg-White.pdf”
13. Open the inks pallet (Ctrl+Alt+I).
14. Double click on the white ink channel and enable the “As Mask” view, to view the white layer with a customizable color (e.g. Green) and an opacity level to inspect the content and positioning of the white layer.

*Asanti initially shows the white layer as the actual printed result, so when viewed from the printed side: Pre-white will show the white below the CMYK colors. Post white will show the white on top of the CMYK colors. When enabling masked view the white layer will always be on top of all colors (even if the application is pre-white)*

15. Toggle the different separations with the “eye” icons in the inks pallet, to investigate where white ink will be printed. Clicking Alt + “eye” icon for the white channel, the CMYK separations will be disabled.
16. Use the arrows in the Toolbox (or your keyboard), to verify the different pages.

- The first page contains a single white rectangular box underneath all the text.
- The second page contains all the text only in white ink. (no CMYK colors printed on top)
- The third page contains all the text only in white ink except the Agfa logo which is printed in CMYK on top.



17. Go to page 1, enable the “Normal” view for the white channel and enable the “Show on top of all layers” option. You can now see the effect of the white ink, being printed on top of the CMYK Colors. This simulates how the job would be printed in “post white” mode.

18. Close the Preview window.

19. Select all images (Ctrl+A) in the image panel

20. Select ‘Auto-Layout Images’ in the Layout menu (Ctrl+N).

21. Click the “Auto Layout Images” button

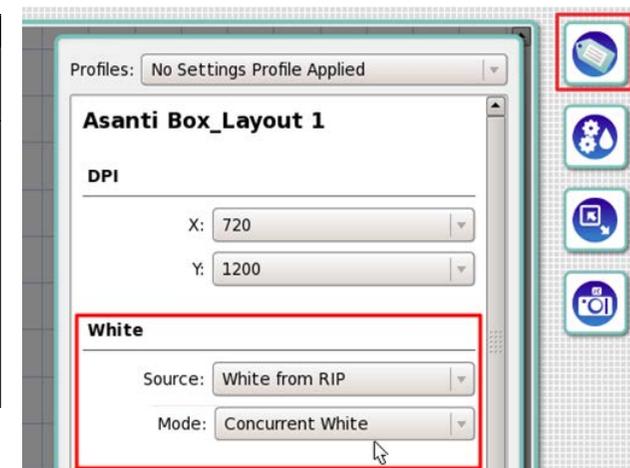
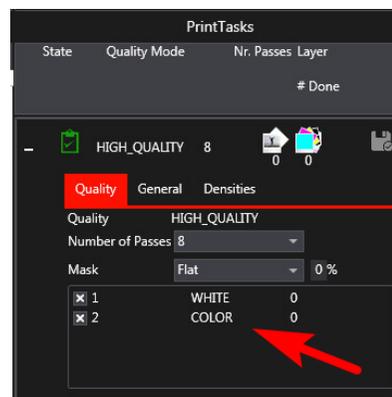
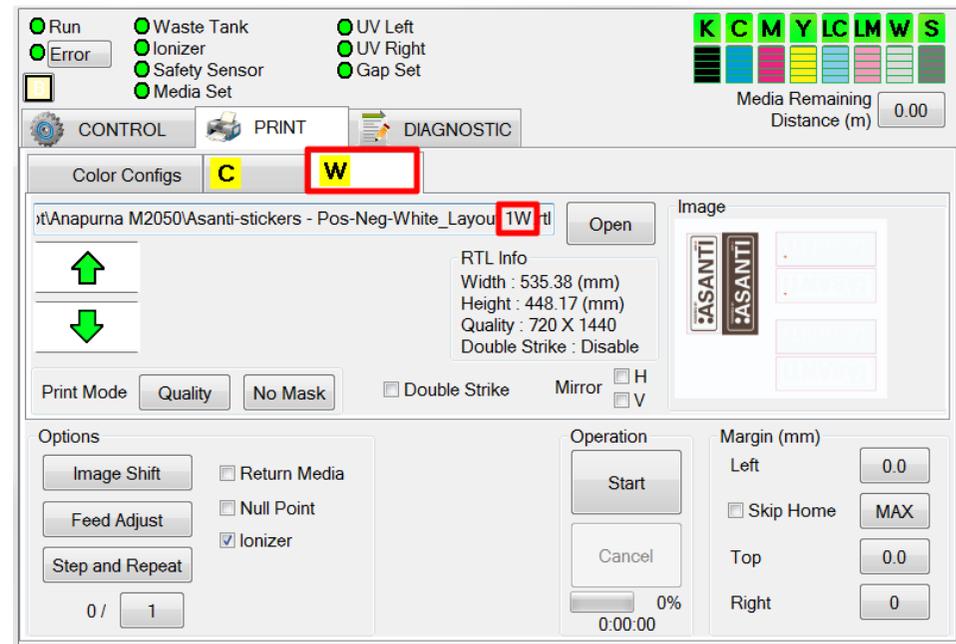
22. In the right bottom of the layout editor click “Submit job”.

23. Select Print files: “**Make and send to printer**”.

24. Click “Submit”.

25. Depending on the printer, the print file for white is represented differently:

- On Anapurna printers, 2 separate RTL files will be created: one for the color print data and one for the white print data (contains a *W* in the filename).
- On Jeti printers, the white print data is included in the PBM file. The GUI shows this in the job info pallet as “White from Rip”.
- On Jeti Tauro, the white print data is included in the PEC file. The GUI shows white as a layer in the print task, the ordering of the layers corresponds to application of white as selected in the Layout Editor



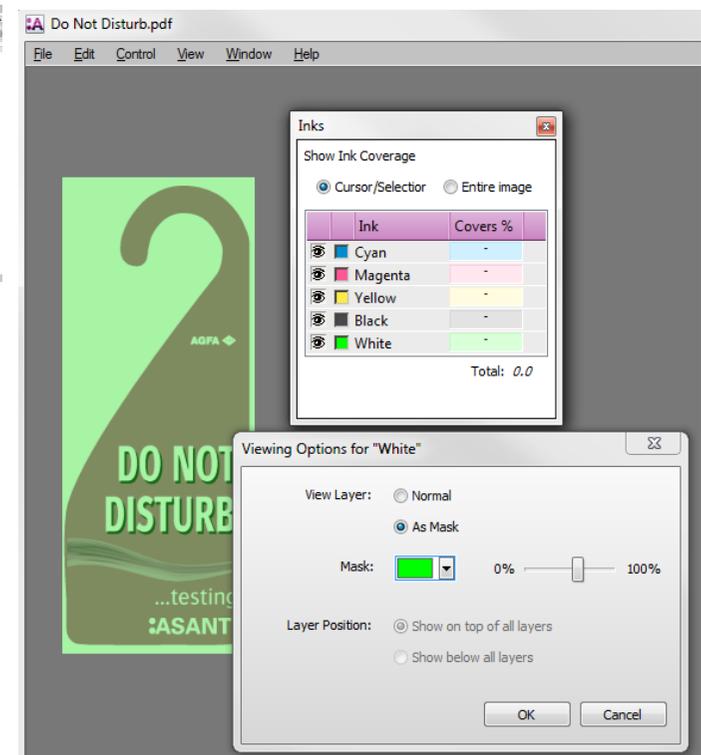
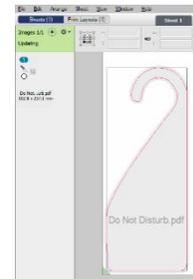
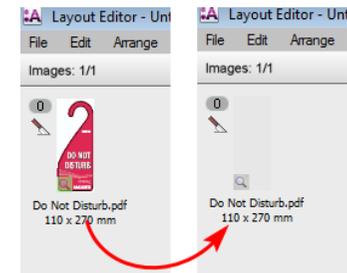
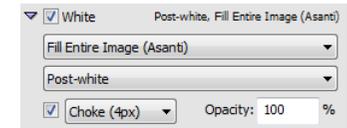
## 2. Printing post white to fill entire image

In this exercise you will learn how to print post white with files that don't have objects for white in the input file. Asanti will create a white layer for the entire image:

1. File Menu > New layout job.
2. In the Job Set-Up inspector, select for Application-White: **"Fill Entire Image (Asanti)"** and **"Post-White"**. Enable the **"Choke (4px)"** option and leave the white opacity to **"100%"**.  
Asanti will now generate a white layer choked 4 pixels within the entire image.
3. In the Image panel click "+" and browse for "Do Not Disturb.pdf", click open.
4. Notice that initially a colored thumbnail is visible. Click on the "Create Previews" button, once ready the thumbnail will show as white.
5. In the image panel double click on the "Do Not Disturb.pdf" image.
6. Double click on the white ink channel and enable the "As Mask" view. Notice that the complete image is covered with 100% white ink. Clicking Alt + "eye" icon of the white ink, the other colors will be disabled.
7. Close the preview window.
8. Drag the "Do Not Disturb.pdf" to the Sheet.

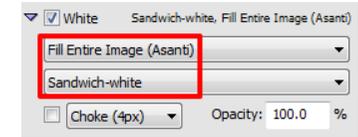
*Notice that on the layout the white is clipped to the image contour caused by the "Through Cut" finishing operation.*

9. Click the "Submit Job" button, and select **"Make and send to printer"**.

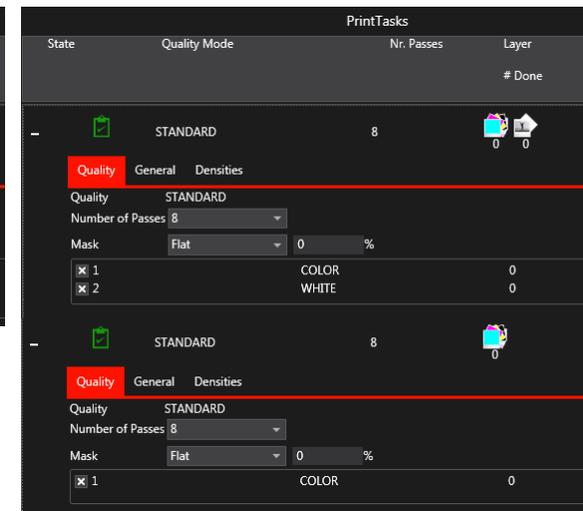
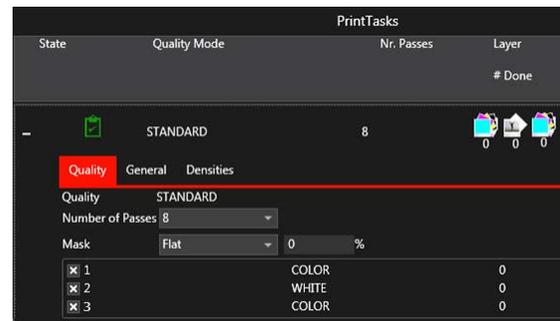
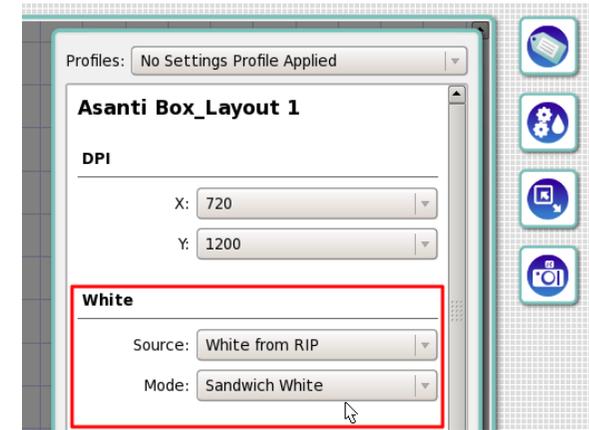


### 3. Printing sandwich-white

In this exercise you will learn how to print in sandwich-white mode. This mode of printing white is also known as Color/White/Color and results in either one or two consecutive print runs, typically on transparent media. During the first run the CMYK and (post) white is printed concurrent, the CMYK print data is printed again with white in between. This feature is currently only available for certain Jeti printers.



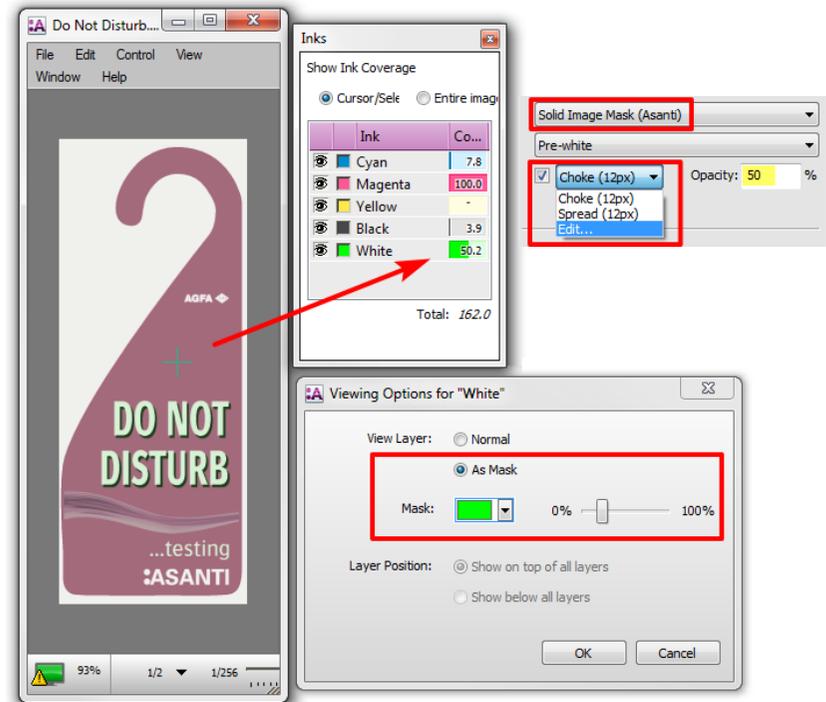
1. File Menu > New layout job and select a printer which supports sandwich-white.
2. In the Job Set-Up inspector, select for Application-White: **“Fill entire Image (Asanti)”** and **“Sandwich-white”**. Disable the **“Choke (12px)”** option and set the white opacity to **“100%”**.
3. In the Image panel click **“+”** and browse for **“Asanti Visual 390x250.pdf”**, click open.
4. In the image panel double click on the **“Asanti Visual 390x250.pdf”** image and wait until the preview is created.
5. In the preview you can verify that both colors and white are present in the job. Asanti shows Sandwich white jobs similar to Pre-white (white underneath)
6. Close the preview window.
7. Drag the **“Asanti Visual 390x250.pdf”** to the Sheet.
8. Click the **“Submit Job”** button, and select **“Make and send to printer”**.
9. On the printer you can consult the white printing parameters:
  - On Jeti printers, you will see: **“White from RIP”** and mode: **“Sandwich White”**.
  - On Jeti Tauro, you will see the different layers as 1 or more PrintTasks (Color White and Color, concurrent or not).



### 4. Printing white to fill solid image mask.

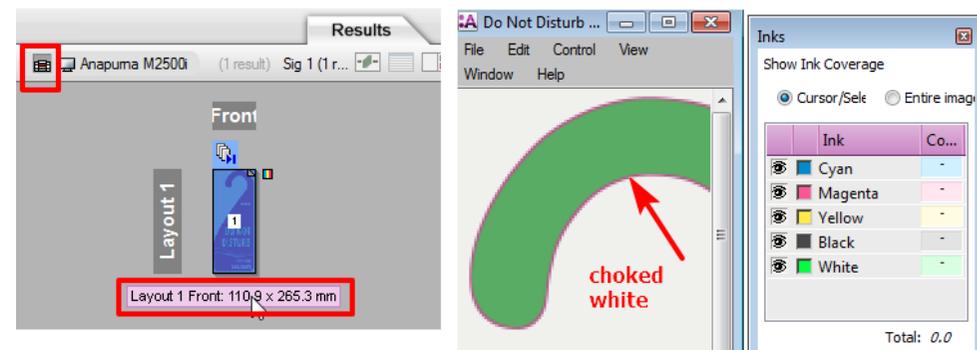
In this exercise you will learn how to print white with files that don't have objects for white in the input file, and for which Asanti needs to create white image data underneath every pixel that is not empty.

1. File Menu > New layout job.
2. In the Job Set-Up inspector, select for Application-White: **"Solid Image Mask (Asanti)"** and **"Pre-White"**. Set the **"Choke"** option to **12 pixels** (with Edit option) and change the white opacity to **"50%"**. Asanti will now generate a white layer underneath every object that contains data, except for white line art (before rendering!).
3. In the Image panel click "+" and browse for "Do Not Disturb.pdf", click open.
4. In the image panel double click on the "Do Not Disturb.pdf" image, Asanti will now create a color accurate preview, wait until the preview is ready.
5. Double click on the white ink channel and enable the "As Mask" view. Notice that the white layer now has an ink-coverage of 50%



*Choking/Spreading isn't possible if the white comes from the input file or when the printer generates white. The result of Choking/Spreading can only be seen in the raster result of the main flow, not in the preview!*

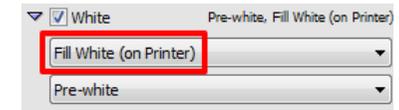
6. Close the preview window.
7. Drag the "Do Not Disturb.pdf" to the Sheet.
8. Click the "Submit Job" button, and select **"Make and hold"**.
9. To see the effect of choking open the rendered result by double clicking on the label underneath the main flow result image.



## 5. Generating white on the printer

In this exercise you will learn how to generate white print data by the digital press. This feature is currently only available for certain Jeti printers.

1. File Menu > New layout job and select a printer which supports white generation.
2. In the Job Set-Up inspector, select for Application-White: **“Fill White (on Printer)”** and **“Pre-White”**.  
Asanti will not create the white print data and therefore the Choking/Spreading options are not available.
3. In the Image panel click “+” and browse for “Do Not Disturb.pdf”, click open.
4. In the image panel double click on the “Do Not Disturb.pdf” image and wait until the preview is created. In the preview you can see that only CMYK colors are present in the job.  
Asanti will not create white printing data, therefore it will not be visualized. However the option “Fill White (on Printer)” will trigger correct rendering; i.e. Use the correct profile from the CPM.
5. Close the preview window.
6. Drag the “Do Not Disturb.pdf” to the Sheet.
7. Click the “Submit Job” button, and select **“Make and send to printer”**.
8. On the printer you can consult the white printing parameters:
  - On Jeti printers, you will see: “Fill White Ink”.




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*The option “Mask White (on printer)” on the Jeti triggers the creation of white on the printer, underneath every pixel covered with CMYK ink. Be aware that here the image is rendered so white is only printed underneath another ink.*

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