Tutorial Managing CPM's

Calibrated Printing Modes (CPM) sometimes need changes to make them more useful. This can be small tweaks like different color profile settings (GCR) or an updated print mode (make a faster bi-directional CPM) or bigger changes like changing media or even engine (as long as they are compatible).

Sometimes these variants can be made upon creating new derived CPMs. Although creating new derived CPMs require a couple of print and measure steps. The time (although it is very short) is not always available. A modified CPM might be needed for a quick test. This tutorial will explain on how to change existing CPMs without the need to print nor measure.

Generic CPMs cannot be edited. They need to be kept unaffected to derive new CPMs.



1. Copying CPMs

CPM can be copied in different directions: to a different media type or even towards another engine (as long as both source and destination engines are compatible).

Copying a CPM to another media

This exercise will learn how to copy existing CPMs to a new media type.

- 1. Open the Media Hub.
- 2. Click File New Media
- 3. Name the new media "Tutorial.
- 4. Go to your original CPM (e.g. from the Generic Media), select the CPM and drag it to the new "Tutorial" media.



- 5. Once released the Asanti client will ask in what status the CPM needs to get.
- As available: The CPM has the same resources (Calibration table, ICC profile, print mode etc. ...) as the original, but with a new name. These CPM's may be less than optimal for the new media as they are not really measured.

🖪 Asanti		×
Copy "HighQ-8P Bi 1016x12 (Anuvia 250 + 050 White +	00 APS-6C-Generic-V1-W-R0 Jeti Primer)" to "Tutorial"	CG5-Nb-CMYKcm+PW
It is recommended to updat CPM. The copied CPM will b	e the calibration and color pr e marked as changed.	ofiles of the copied
Copy as Available.	Copy as Changed.	Cancel

- As changed: CPM receives a changed label. The CPM can be used but a warning will be generated mentioning the CPM has been changed. The changed label can be resolved by calibrating the new CPM and doing a profile tune.
- 6. Click "Copy as Changed". The CPM is then copied and converted to the new media (this might need some time). The CPM will become available but each calibration set will be labeled changed.

The new CPM has now been labelled as changed. This label indicates that the quality in output cannot be guaranteed and needs to be checked. This can be done by calibrating (and eventually profile tune). Once the quality is acceptable, then the CPM changes can be accepted.





Accepting the CPM changes

The status of the CPM can be updated to mark it as "Available" without an orange label.

- 1. Click on the cogwheel of the CPM (or context click on the CPM itself).
- 2. Click on "Accept Changes..." and click "OK" to accept the changes.



Changes can also be accepted on an individual calibration set (on media, on white ...) by clicking on the cogwheel next to the individual calibration set.

Copying a CPM to another engine.

Drag and drop can also be used between digital presses if they are compatible. The system will refuse to copy when this isn't the case. The drag and drop is an alternative and more user-friendly way then exporting/importing (still available to exchange CPMs between different Asanti servers).

Calibrated Printin	g Mode	20 C
Name: Used for:	HighQ - 8P Bi 1016x1200 A High Quality on Jeti Tauro	Rename CPM Accept Changes Revert
Inks: Colors: Created:	CMYKcm+PW (Anuvia 250 CMYKcm 07/15/15 14:45:43	Redo Wizard Resume Wizard
Creator: Comments:	CPM Wizard (from scratch)	Duplicate Delete
	_	Ехроп
Color On Media -	Changed	Ехроп
Color On Media - Print mode: Profile:	Changed 8P Bi Calibrated: embedded Meas	02/16/16 10:37:39 surement mode: M0
Color On Media - Print mode: Profile: PST/TAC:	Changed 8P Bi Calibrated: embedded Mear WF-LightGCR / 300%	02/16/16 10:37:39 surement mode: M0



🗚 Media Hub					>
File Edit					
Clear Selection			×	Name Generic	
Qualities	Media	Calibrated Printing Modes			
Quality	^ Category ▲	Printer	Calibrated Printing Mode	Media	
All Qualities	All Media	Jeti Tauro H 2500 Simulator	Expr - 2P Bi 635x1200 APS - 6C	Form:	O Sheet only
Draft	Cardboard	Jeti Tauro H 2500 Simulator	Expr - 2P Bi 1016x1200 APS - 6C		Ob-lively
Everage	Eim	Jeti Tauro H 2500 Simulator	HighD - 12P 725x1200 AQS Gloss		O Roll only
Draduction	Form Period	Jeti Tauro H 2500 Simulator	HighD - 12P Bi 725x1200 AQS - 6C		Both
Production	Poalitiboard	Jeti Tauro H 2500 Simulator	HighDens - 8P Bi 1016x1200 APS		
CALIBRATION	Generic	Jeti Tauro H 2500 Simulator	HighDens - 12P Bi 1016x1200 AQ	Default thickness:	125 micron
HIGH	Paper	Jeti Tauro H 2500 Simulator	HighQ - 8P 725x1200 APS Gloss - 6C		
Standard	Synthetic Board	Jeti Tauro H 2500 Simulator	HighQ - 8P Bi 725x1200 APS - 6C	Categories	
TECHNICAL	Synthetic Substrates	Jeti Tauro H 2500 Simulator	HighQ - 8P Bi 1016x1200 APS - 6C	Generic	
	Media	Jeti Tauro H 2500 Simulator	Prod - 4P Bi 635x1200 APS - 6C		
Printers		Jeti Tauro H 2500 Simulator	Std - 8P 635x1200 APS Gloss - 6C		
	Generic	Jeti Tauro H 2500 Simulator	Std - 8P Bi 635x1200 APS - 6C	Media Calibration	
Printer A	GPrint			0.11.1	
Epson SureColor S50600	Grafiprint •			Media nee	ds dedicated calibrated printing modes
Epson SureColor S70600	Iconos +			🔵 Media can	use same calibrated printing modes as
Epson SureColor T3200	KHS-Brown +				
Epson SureColor T5200	KHS-Green +				
Epson SureColor T7200	KHS-Transparent +				
Generic SD	Oracal +				
Industrial Front End	PM120 +			Printer Parameters	
Jeti Ceres RTR 3200 LED	SelectJet +			Adjust Printer Paramet	ers for printing on "Jeti Tauro H 2500 Simulator"
leti Mira LED MG 2716 HS	Sherpa Proofing Base 170 +				
leti Mira MC 2716 HS	SPB 170 +				
2-5 Mar MC 2710 H3	SPB250 +			Adjust	
Jeu mild MG 2710 HS (2)	Sypans +				
Jet Tauro H 2500	Synaps SA				
Jet Tauro H 2500 Simul	Test				
Jeti Tauro H 2500 Tutorial	Test				
Jeti Titan HS Simulator	Test 2				
Unknown	Incotex			1	
	Tutorial + *			`	,

1. Go to your original CPM, select the CPM and drag it to another digital press.

- 2. Once released the Asanti client will copy the CPM to the alternative engine.
- 3. The CPM is now available in a <u>changed status</u>.



2. Changing the profile settings of a CPM.

Profiles are always created based on a measurement file. This can be done by various applications which are able to generate ICC profiles (incl. the Asanti client). How this measurement file is calculated to a profile is described in the profile steering file (PST)? The calculation can be done with different settings. One of the differences are the GCR settings (replacement by the common CMYK black component by the black ink). Low GCR settings use more CMY tints. Heavy GCR settings use more black ink and less CMY. This can make output noisy (black drops can easily be distinguished) but these prints dry much better.

Lowering the TAC can be useful when drying problems affect the shadow parts of an image. The TAC level is the maximum amount of ink/color which will be printed on top of each other.

- 1. Select a CPM of the "Tutorial" media, context click and click "Duplicate".
- 2. Select the newly duplicated CPM.
- 3. In the right pane (CPM details) click on the cogwheel next to the Color on Media details. Click on "Edit Profile Settings ..."
- 4. A profile settings window will open. From the dropdown menu select the WF-LightGCR-v2 steering file (PST). Lower the TAC to 280%. Click OK.

Change Profile Creation Settings					×
Select new settings for profile creation					
PST/Profile	WF-LightGCF	R-V2		~	
TAC	280	%			
			Create Profile	Cancel	

5. The CPM details are updated with the new PST and TAC level active.



Calibrated Printin	g Mode	*
Name:	HighQ - 8P Bi 1016x120	00 APS - 6C copy
Used for:	High Quality on Jeti Tau	uro H 2500 Tutorial on GPrint
Inks:	CMYKcm+PW (Anuvia 2	250 + 050 White + Jeti Primer)
Colors:	02/16/17 14:57:45	
Creator:	CPM Wizard (derived)	
Comments:		
Color On Media		
Distantion		Calibrate
Print mode:	SP BI Ca	Update G7 Calibration
PST/TAC:	WF-LightGCR / 300	Tune Profile
		Edit Profile Settings
		Edit Print Mode
Color On White		Accept Changes
Print mode:	8P Bi Ca	Report
Profile:	embedded	Import External Profile
PST/TAC:	WF-LightGCR / 300	Export Profile

3. Changing the Print Mode of a CPM

The print mode of an existing CPM can be changed. This can be done to make additional flavor of a CPM (bi- and uni-directional) or to improve the print quality (e.g. adjust the paper feed adjustment parameters of an Epson digital press).

- 1. Again, duplicate a tutorial CPM.
- 2. Select the newly duplicated CPM.
- 3. In the right pane (CPM details) click on the cogwheel next to the Color on Media details. Select "Edit Print Mode ..." from the menu.
- 4. The dropdown menu allows to select from a list of print mode presets.



Only print modes with the same resolution will be displayed.

- 5. Click the \rightarrow to open the Print Mode parameters window of the presets, which allows to change a limited amount of (safe) print settings. Change a couple of things and notice the updated naming convention.
- 6. Click "OK" to accept the changes.

			Created: Creator: Comments:	02/16/17 14:57:45 CPM Wizard (derived)	
ancel			Color On Media Print mode: Profile: PST/TAC:	8P Bi Cali embedded WF-LightGCR-V2 / 28	Calibrate Update G7 Calibration Tune Profile
Print Mode Paran	neters - Color On I	Media X	Color On White		Edit Profile Settings Edit Print Mode
Print Mode parameters CPM "HighQ - 8P Bi 101 H 2500 Tutorial.	for Color On Media 6x1200 APS - 6C co	py" for GPrint on Jeti Tauro	Print mode: Profile: PST/TAC:	8P Bi Cali embedded WF-LiahtGCR / 300%	Report Import External Profile
Resolution	1016x1200				
Number of passes Direction Droplets per dot UV Leading	8 VIII-Directional VIIII-DIRECTIONAL VIIIIDON VIIIDON VIIIIDON VIIIDON VIIIIDON VIIIIDON VIIIIDON VIIIIDON VIIIIDON VIIIDON VI	· · · ·	White Print mode: 100% Ink Limit:	8P Bi 65%	<u>\$</u> .
UV Trailing Masking Mode Mask	80 Flat	% / %			

Calibrated Printing Mode

Colors: CMYKcm

Name:

HighQ - 8P Bi 1016x1200 APS - 6C copy

Used for: High Quality on Jeti Tauro H 2500 Tutorial on GPrint

Inks: CMYKcm+PW (Anuvia 250 + 050 White + Jeti Primer)

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- 7. The filename of the print mode will now be displayed in italic to indicate the changed print mode (the print mode is not "standard" anymore). Click "OK" to update the CPM.
- 8. The CPM is now update but is in a changed state. Eventually do a calibration (and profiling) cycle to update the CPM with new measurements.

Color On Media -	Changed		<i>ф</i> .
Print mode:	8P Uni	Calibrated:	02/16/17 15:08:08
Profile:	embedded	Mea	surement mode: M1
PST/TAC:	WF-LightGCR-V2	/ 280%	

9. Open the cogwheel and click "Accept Changes..." make the CPM available without restrictions.



Color On Media -	Changed	
Print mode: Profile: PST/TAC:	8P Uni Cali embedded WF-LightGCR-V2 / 28	Calibrate Update G7 Calibration Tune Profile
		Edit Profile Settings Edit Print Mode
Color On White		Accept Changes 🗲
Print mode:	8P Bi Cali	Report
Profile:	embedded	Import External Profile
PST/TAC:	WF-LightGCR / 300%	Export Profile



4. Importing an external profile.

An external profile can be added to the CPM. This external profile will replace the existing profile. Keep in mind that there will be no possibility to tune the profile with a limited profile target. It is always possible to revert to the original profile.

- 1. Again, duplicate one of the "Tutorial" CPMs.
- 2. Select the newly duplicated CPM.
- 3. Click on the cogwheel in the right pane (CPM details) next to the Color on Media details.
- 4. Click "Import External Profile ..."
- 5. A file dialogue will open. Browse to your external profile (icc or icm) and click open to add the profile to the CPM.



		÷.
8P Uni Cali embedded WF-LightGCR-V2 / 28		Calibrate Update G7 Calibration Tune Profile
		Edit Profile Settings Edit Print Mode
		Accept Changes
8P Bi Cali		Report
embedded WF-LightGCR / 300%		Import External Profile Export Profile
	8P Uni Cali embedded WF-LightGCR-V2 / 28 8P Bi Cali embedded WF-LightGCR / 300%	8P Uni Cali embedded WF-LightGCR-V2 / 28 8P Bi Cali embedded WF-LightGCR / 300%

6. The profile is now added to the CPM. The CPM details are updated.

Color On Media		<u>\$</u> .
Print mode:	8P Uni	Calibrated: 02/16/17 15:08:08
Profile:	external	Measurement mode: M1
Profile Name:	PSOcoated_v3	◀

The options to tune the profile or to change the profile settings will now be greyed out. The Media Hub is not able to change or update any profile parameters of third party profiles.



To revert a CPM back to the initial profile.

The media hub still allows to go back to a previous profile (also valid for calibration). The CPM is not lost if the external profile is not suitable for any reason.

- 1. Select the CPM with the external profile.
- 2. In the cogwheel of the CPM itself. Click "Revert...".
- 3. This will open the CPM history.

Select the Profile import action and click revert to go back in time.

1	Revert CPM		×	
	Select CPM Version			
	Date 🔺	Job Type		
	02/24/17 11:56:22	Profile import (On media)		

Calibrated Printing	g Mode		
Name: Used for:	HighQ - 8P Bi 1016x1200 A High Quality on Jeti Tauro I	P Rename CPM Accept Chang H Revert	 Jes
Inks: Colors:	CMYKcm+PW (Anuvia 250 CMYKcm	+ Redo Wizard	
Created:	02/16/17 14:57:45	Resume Wizar	ra
Creator: Comments:	CPM Wizard (derived)	Duplicate	
		Export	
Color On Media		*	×.
Color On Media Print mode:	8P Uni Calibrate	d: 02/16/17 15:08:08	×
Color On Media Print mode: Profile:	8P Uni Calibrate external M	d: 02/16/17 15:08:08 leasurement mode: M1	¢.



5. Changing the 100% ink limit of varnish or white layers.

Additional inks such as white, varnish and primer are printed as a fixed layer of ink, no characterization is done. In certain situations, it might be that the print quality of these additional inks isn't as it should be (media specificities, print limitations ...). In those cases, it might be useful to change the level (100% ink level) of used white or varnish.

- 1. Context click on the CPM in the Media Hub.
- 2. Click on the cogwheel next to the White (or Varnish) calibration set.

Print Mode "White"		×
Print Mode:	8P Bi 1016x1200 APS	0
100% Ink Limit:	70 %	
	ОК	Cancel

3. Change the 100% Ink Limit levels of white and/or varnish.

The available levels of varnish and white depends on the applications available in the CPM. Varnish will be disabled when there is no varnish calibration set available. A CPM without an "on white" calibration set can still contain a white printing mode and ink limit level. The white is then used for post white printing.

4. The CPM will be updated with the new 100% Ink Level for white.



White	<i>Ф</i> .
Print mode: 8P Bi	Edit Print Mode
100% Ink Limit: 65%	

