asura

Optimizing RGB Workflows With OneVision Asura

Manchester Evening News (MEN) produces a wide range of publications from their Manchester offices: Four editions per day of the MEN, including a morning edition which is printed at one of their alternative print sites, the following three editions are printed at Trafford Park Printers who since 1990 have been a business partner of the Manchester Evening News.

Additionally to the above, a weekly free Metro news is also produced and delivered to over 300,000 homes. Along with the core products there are also a number of quality glossy magazines printed at remote sites and also special publications for sport, gardening and advertising specials. MEN takes pages from the core products, and repurposes them for use on web sites. The fact that they have an RGB workflow sits well with repurposing because they are not changing the colour space from CMYK back into RGB, therefore there is no colour shift on the web based images, although they use Asura to downsample the images.

The production tools at the MEN

The editorial system of MEN is CCI. The company uses Atex Enterprise for ad booking and Atex Classpage for the make up of classified advertising, with the pages being delivered via Asura into CCI. CCI is responsible for the output of all pages for the publications in PostScript format prior to processing by Asura. "Prior to Asura the classified pages were sent to the editorial system as PDF via an Acrobat Distiller and there were a number of problems associated with this. Those problems disappeared overnight when we installed our first Asura server in May 2003", says Chris Winstanley, IT Application Manager at MEN. "We purchased a second Asura in April of 2004 and the two proved so successful that by September 2004, we decided to purchase Asura Balance because so much was now going through the machines. It is no exaggeration to say that our workflows have been revolutionised since we purchased Asura. In fact before we actually purchased the first Asura, we had a trial from OneVision, and it soon became known as 'The God'."

Brief history of colour at the MEN

Prior to 2000 employees had to use five colour printing with a secondary black plate containing the text as it would have been impossible to meet deadline on conventional 4 plate

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CMYK printing. At this time MEN was using an ICC profile on their editorial CMYK pictures – no more than a profile created via Photoshop look-up tables. Also the images had to be manually converted to profiled CMYK, depending on the product and print site the pages were going to. A fairly lengthy process and once a team member had converted an image to a CMYK profile for one print site, the original image would then have to be used again if the image was to be used in another publication at another printer. This meant storing a large number of files in case somebody needed them again.

By 2000 the prepress department had installed Autologic RIPs and was taking all the colour through them in CMYK format. Also at this time they implemented ICC-based colour management. In conjunction with their colleagues at Trafford Park Printers they fingerprinted each of the four Goss Headliner presses with the aim of producing a single averaged, acceptable ICC profile, which would give them good results on each of the four presses. It still took until early 2003 before the press crews were happy with the science of printing to density and trusting the ICC profile which they were applying.

The need to have ICC profile relevant to the print site and specific presses

The tools used today for image origination such as cameras and scanners all work in the RGB colour space and it is preferable to maintain that space for as long as possible. Hence the situation in the industry is changing: there is a general feeling that everyone should be moving to RGB workflows. "With our situation there was one specific issue which really pushed us to find an answer: we were now having to print at multiple print sites. To date we are using six remote sites to produce a vast variety of publications and each time we used a new print site the question of a suitable ICC profile came up for discussion, but assuming you can agree with your printer on a suitable profile, it still meant that images for remote printing had to be manually handled to attract a suitable profile", explains Chris Winstanley. "Notwithstanding the issue of having at least two copies of an original, one in RGB raw and another in CMYK, there was another issue to contend with in that our CCI editorial system had to have three versions of each image, RGB for screen display and proofing, CMYK for use when the page was typeset final for production and a third version in greyscale format should the image be used on a mono page."

The aim of MEN was then clear: they wanted to have all editorial images in a neutral colour format in the RGB colour space. That would eliminate the need for multiple copies and give them the flexibility to seamlessly apply a profile giving them the quality they wanted at each of their chosen printers.

Advertising treated differently

In fact, MEN takes a very different view when it comes to advertisements sent to MEN. There are other issues, which arise with advertisements and colour space, but MEN's decision was to deal with advertising upon receipt. The company does not apply its ICC profile to advertising. "There are two schools of thought about this, one being publishers should change images to meet their own requirements, but our view is if an advertiser or agency prepare the images for you and stick to your technical specification then you should leave their images alone. If you change and the client is unhappy with the printed quality, you leave yourself open to allowances or non payment", comments Chris Winstanley. Since the company also receives adverts in the RGB colour space Asura is set to convert RGB or Lab colour to CMYK with their own ICC profile.

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Changing the colour space on Asura

For editorial images, MEN utilises Asura in conjunction with Fotoware's Color Factory 5. The operators on the picture desk view the raw RGB images through Color Factory and it allows them to edit and make changes but the view they see on screen is a representation of the final printed CMYK image. Once the required changes have been made the images are transferred to the CCI system in RGB. At this point it will not be known if the image is going on a colour or mono page, at the time of final page output, Asura will either convert to CMYK or greyscale. The labour that was released in the scanning department enables operators to scan the input queues on the Fotoware picture desk and make any corrections to the originals. The result is RGB images that go into the picture library in a far better state then ever before and in spite of MEN having to handle many more images, the RGB workflow has meant they can handle the work without extra effort.

When it is time to output a page the CCI system delivers a PostScript file into a series of folders, which denote whether it is CMYK, CMY, BW, or K only. MEN has the four folders because their primary print site for their core product is TPP, and they deliver separated TIFF files to them. For reasons of speed and edition deadlines they can send the CMY separations, hours ahead of edition deadline, the journalists can then continue working on the non CMY elements, which is ostensibly the text, and as they get nearer to deadline the page can be typeset K only, to the print site. "Sending a page as CMY or K only does not mean any colour information is missing, we use the folders and Asura queues to direct the composite PostScript to the RIP and it is there that the removal of colour happens", explains Chris Winstanley. When the RIP receives a file in the CMY folder it will throw away the black plate and in the K Only folder only the K information will be processed.

Once CCI has delivered the file, Asura will pick it up ready for processing and conversion. "We utilise the 'file list' option on the input queues to filter on filename. If we have a special publication going to a remote print site we use the file list function to filter the files to a specific queue which would ultimately apply a profile specific for that print site. On our Asura we use file list functionality an awful lot. By filtering you can pass files on to other queues very successfully and if you apply enough logic you can implement some efficient and flexible workflows", says Chris Winstanley. Eventually a file will arrive in its appropriate Asura queue and at the output lines stage MEN applies an output style which is set to action if it finds RGB or Lab colour and then converts to CMYK or greyscale and applies a specific profile.

As an example an Asura queue called Contract Printers is used to send special publications such as sports or gardening specials. Prior to production MEN agrees with the print site which profile they will apply to the images. "We then either install or use an existing profile and set the Asura queue to use it, a two minute job, which compared with having to manually change the profile on the picture desk is by far the most efficient option." When the pages for this publication leave the editorial system, the filename includes the word „SUPP" and as the file hits Asura it will be filtered until it hits the Contract Printers queue where the RGB/Lab will be replaced with profiled CMYK, and also at this point they can actually change the size of the page if required using the Asura trim boxes options.

Paired pages

With some of the queues, MEN uses Asura functionality which allows them to take one file in and send multiple files out. The first edition of the day is sent to two remote print sites,

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one in paired PDF format and another in separated TIFF format. Because they can make two versions on the way out of Asura they can seamlessly send two PDF files to the output system to be RIPed and paired for output. Chris Winstanley explains a problem they faced before installing Asura: "Setting up Asura to do the colour conversions is reasonably straight forward, but we also had to think about one other issue: we needed a queue for the picture desk people which, if they had an existing CMYK image or one was supplied, they could drop it into an Asura queue and we would convert the CMYK back to RGB and deliver it back to their server." One large stumbling block looked likely to halt the project at one point: converting RGB or Lab to CMYK colour with or without a profile is quite easy and caused little anxiety. A major issue was to convert RGB or Lab to greyscale: in other circumstances this would be done via a RIP, but because MEN controls everything through Asura the colour space had to be modified on Asura.

"There are a number of options within Asura to make the change to colour or greyscale, but ultimately it actually comes down to an issue of acceptable quality. Our solution to this issue was to edit our colour profile and save it as a grey ICC profile. Once you have a grey profile you can edit it to dial in a suitable curve from highlight to shadow, and again this can vary from print site to print site, allowing you to have a wide range of profiles available to be used. "

MEN has been using the RGB workflows since 2004, and they are more than pleased with the results. The advantages of the RGB workflow are immense. "Had we not put it into place we would have needed to hire extra labour to do the CMYK conversions, or, more likely, set up new and costly workflows within our CCI system to do the conversions automatically." Additionally storage space is reduced because only one version now is needed. The system gives MEN the ability to change print sites whilst maintaining quality, very quickly and the page designers are delighted at not having to bother differentiating between colour and BW pages. "Finally, I appreciate that as publishers we all have different systems and mixtures of systems at our production sites but in most cases there will be a solution available to utilise Asura to modify or change images to whichever format you choose."

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