Digital Technology Trends #20

by Howie Fenton, NAPL

In This Issue

Turbocharging the Information Superhighway with RSS

The amount of information available on the Web has grown exponentially. While it remains the best source of information it is not the easiest, most efficient source. If your like me you have a list of web sites bookmarked such as WhatTheyThink.com, KeepMedia.com, VersionTracker.com, and Usatoday.com/travel - to try to visit to remain up-to-date of newsworthy announcements. Of course there are days when visiting each site is not possible.

This was all before experimenting with the wonderful world of RSS (Rich Site Summary) feeds. I get almost all of the content I want from all of these sites delivered to one place as soon as the site is updated, saving precious time. The most amazing part is that I am notified when any of the sites I subscribe to are updated within minutes.

Really Simple Syndication (RSS) is a lightweight XML format designed for sharing headlines and other Web content. Think of it as a distributable "What's New" for your site. Originated by UserLand in 1997 and subsequently used by Netscape to fill channels for Netcenter, RSS has evolved into a popular means of sharing content between sites (including the BBC, CNET, CNN, Disney, Forbes, Motley Fool, Wired, Red Herring, Salon, Slashdot, ZDNet, and more).

But it's not just for news. Pretty much anything that can be broken down into discrete items can be syndicated via RSS: the "recent changes" page, a changelog of CVS checkins, even the revision history of a book. Once information about each item is in RSS format, an RSS-aware program can check the feed for changes and react to the changes in an appropriate way.

RSS-aware programs called news aggregators are popular in the weblogging community. Many weblogs make content available in RSS. A news aggregator can help you keep up with all your favorite weblogs by checking their RSS feeds and displaying new items from each of them.

http://www.macworld.com/news/2004/02/06/rss/index.php
http://www.cnet.com/4520-6022-5115113.html

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⏩ Mac OSX Tiger's, Safari 2.0

The arrival of Tiger, the next Mac OSX next year will also marshal the arrival of next version of Safari 2.0, Apple's Web browser that will feature support for the emerging world of RSS feeds, plus several other new features.

Typically, RSS requires a separate utility. However, Safari 2.0 will integrates RSS right into the browser itself, making it available to a much wider audience. With Safari 2.0, if you go to a Web site that offers an RSS feed, a blue RSS badge appears on the right side of Safari's address window. You can click on the badge to read the RSS feed, a simplified view of the site's content with headlines and story descriptions. You can also view more than one feed at a time, creating your own personal channels full of, for example, news stories from organizations such as the New York Times, the BBC, and ESPN.

RSS isn't all that's new in Safari 2.0. The new Start Private Browsing command under the Safari menu basically makes Safari black out, forgetting everything that it's doing while you're browsing privately. Everything you do during Private Browsing is ignored -- the pages you visit, the passwords you type in, you name it.

Fans of Internet Explorer's Web Archive feature, which let you save a web page to disk (including embedded images) will be happy to know that Safari 2.0 will let you save out Web archive files as well. Although saving a PDF from Safari works okay today, it's not the same as being able to save the actual web page.

http://www.macworld.com/weblogs/editors/2004/07/000251/index.php
http://www.apple.com/macosx/tiger/safari.html
http://appleinsider.com/article.php?id=531

⏩ Xpress 6.5 "cool" features and problems

As Xpress pioneer and Denver resident its embarrassing to admit, but I have switched from Xpress 4.11, up to 5.1, then back to 4.11. Next from 4.11, up to 6.0 and 6.1 then back to 4.11. Even working in classic mode under OSX I have preferred to leaner, faster 4.11. While working this summer for Cabela's some of the Quark staff visited and I spoke to them about the speed problems. Strangely, they seemed unaware.

But my love affair with 4.11 has been challenged. Earlier this year, Quark announced the availability of Quark XPress 6.5, which offers several bug fixes, new Photoshop-like image editing features and integration and its a free update. And since then I have been test driving the latest version. Here's my initial impressions - there are some wonderful new features, the free fonts are NOT free and there are printing issues. First the cool new features.

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Quark is working hard to try to reverse the migration away from Xpress to InDesign. The reversal on there licensing charges where you have to pay for a 2nd version have a laptop and the free upgrade are 2 strong signs. Of course, I did pay for the second license and would like a rebate.

Something else that backfired was an attempt to give away – free fonts. Quark claims that there is a bundle of fonts from Linotype valued at $1,000 available for free, but when I took 30 minutes to select the fonts I wanted it asked for a credit card. Free stuff is cool, wasting my time is not.

On a more positive note, a feature I really like is the QuarkVista which is a new Xtension for image manipulation. QuarkVista is a new XTensions module which offers image editing functionality from within the context of the layout. It offers image adjustments such as color balance, levels, brightness, and contrast, as well as a number of common non-destructive filters.

QuarkVista can optimize images for output by applying transformations such as scale, crop, angle, and skew to the images collected for output, which Quark claims can dramatically reduce the size of files for output and the time required to RIP for output. QuarkVista also performs file format and color space conversions, with support for EPS, Jpeg, and TIFF

This allows you to see high resolution graphics much like you see it in Photoshop. This was available as a stand alone Xtension in previous versions called Enhance preview. There are a host of other Photoshop like features, but I have not had much luck with them. Applying them causes the image to posterize.

New to Quark XPress 6.5 is the ability to import Photoshop PSD files natively into Quark XPress. Once imported, image layers can be switched on and off, opacities and blend methods can be modified, channels can be assigned to be spot colors, and clipping paths can be chosen from within Quark, the company claims.

Quark XPress 6.5 includes an upgrade to QuarkXClusive, an XTensions module that enables variable data publishing within Quark on Mac OS X. QuarkXClusive lets businesses output customized, database-driven documents on HP Indigo digital presses.

The new version adds support for PPML-T, an open standard for personalized printing, allowing it to output to both new and older models of HP Indigo digital presses through HP Production Flow.

http://www.quark.com/products/xpress/65update.html

⏩ Xpress 6.5 Printing Problems

Quark claims that the latest update offers increase power, stability and reliability, as well as new functionality and has a web page that describes these "resolved problems". However, more important to service providers are reported the printing problems. I heard about this problem about a month ago at a HP customer meeting in San Francisco.

After some research I discovered a host of postings in the Xpress forum about problems printing the latest version of Xpress (6.5) to a wide variety of RIPs. Some reports say that files will not print at all, while others report he inability to create separated CYMK files. This separation problem is accompanied by a error message "setcolorspace"

The RIPs mentioned with problems are Harlequin Scriptworks Ver 5.1, Harlequin RIP / ECRM Mako platemaker, Caldera Visual RIP running on a Linux machine, Onyx, Colorspan Rips.

Some RIP and printer driver updates have helped. When problems were encountered while printing to a HP DesignJet 3550 a newer printer driver (1050ps) fixed the problem. A Xerox Rep installed a 6.08 patch for a Caldera RIP which fixed a problem. But the vast majority of problems have been solved by printing with the older version of Xpress which is 6.1

http://www.quark.com/products/xpress/tech_info/65problemsresolved.html
http://www.quark.com/service/forums/
http://euro.quark.com/en/products/xpress/tech_info/65knownissues.html

⏩ Acrobat 7 (Finally!)

After months of beta testing Adobe has finally officially announced that Acrobat 7 will ship soon. (Actually they say before years end, but I recently downloaded another beta – which makes me suspect of that date.) While the new upgrade improves upon the last version, it's not a earth-shattering change for those of us in the graphic arts.

The most relevant feature for service providers is the ability to repairing errors in print preflight as well as some new tools for designers. Service providers will get new tools to correct printing inks, adjust color spaces and fix stroke weight problems, as well as converting preflight reports into PDF's for circulation among service providers and clients. Designers will get new tools to flatten transparencies, convert color spaces to CMYK and create trap presets for PostScript printing.

Enterprise users and IT managers will welcome this upgrade, in which Pro makes deeper inroads into the engineering while Standard becomes a more useful application for secure document sharing in the office environment. Some of the features include:

- 3-D embedded data in PDF's: A new tool in Acrobat Pro supports the creation of 3-D objects as well as fine control over the zoom and view thereof.
- Improved security: Fewer steps are needed to set document-level security settings, and repeated steps can be memorized as “policies.”
- Microsoft Access, Visio PDFMakers: Now, reports, maps, charts and databases can be made into PDFs, with formatting preserved.
- Microsoft Publisher PDFMaker: Now, newsletters and other documents made with this office favorite can be made into PDFs, with formatting preserved.
- New Microsoft Outlook integration: Acrobat can “bind” messages sorted in Outlook or put together in a folder as a single PDF, so that one project’s emails can be kept together and be made a project document itself for circulation and archiving
- More streamlined AutoCAD PDF conversion: Layer control is integrated in the “create PDF” button.
- Faster paper-to-PDF conversion: In past versions, many settings needed to be specified and buttons pushed before text on paper turned into an OCR’ed, navigable, searchable, accessible PDF. Acrobat 7 makes this a one-click process.
- Exporting comments to Word docs: If you’ve made a PDF from a Word document and circulated it around for commenting, Acrobat can send those comments back to the original Word document, provided you’re running Acrobat and either Word 2002 or 2003 on a Windows machine.
- PDF Organizer interface: For heavy users who are lose track of their PDFs, search and history features help better locate files they need.
- Structured bookmarks: This feature helps automate the binding--and unbinding--of files within a PDF.
- Stamp palette: Do you frequently “stamp” things on documents you’re reviewing? You can make a stamp into a button on the toolbar or, for power users, a palette of frequently used stamps.
- Importing Acrobat comments into CAD files: If clients make comments on your drawings, you can bring them into the CAD file as a separate layer.

http://store.adobe.com/products/acrobatpro/newfeatures.html
http://www.pdfzone.com/news/1900-PDFzone_news.html

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⏩ Processless Plates Update - 1st Look

Manufacturers are making giant leaps in processless plate technology, with the potential for significant increases in platemaking productivity. But don't let all the buzz obscure what's really available now and what's still beyond the horizon.

Processless plates use thermal energy to expose a plate but require no processing and some can be put straight on press. Processless plates save considerable amounts of time, hassle and cost because they do not need processing equipment or chemistry.

Processless plates are imaged either with ablation, phase change or wash off technology. Plates that rely on ablation are exposed with a high powered laser that causes the plate surface to burst away from the base. This technique requires debris collection or the dust could settle on the platesetter's mirrors and lenses. This has to be built into the platesetter which can add to the cost of the device. On a wash off plate the laser energy causes the coating to change its solubility. Fount solution washes away the soluble areas on press.

While per-plate costs are higher for processless versus traditional plates, the productivity gains and other savings promised by processless plates are designed to offset that increased cost. For instance, consultant John Zarwan notes in an industry whitepaper that processing and chemistry costs can account for nearly one-third of plate production costs for computer-to-plate costs. Therefore, some argue that adding 10-30% to the costs of CTP plats would make the total costs with processless plates comparable.

Most experts agree that the technology, at least initially, will be best suited for the small-to-medium-sized shop producing short runs. They note, however, that run lengths under 100,000 impressions represent the majority of print sales.

Pros and Cons

Although each manufacturer defines processless plates a bit differently, in general, this technology eliminates the need for a preparing the plate through chemical processing.

The potential advantages of processless plates include:

- Reduced costs.
- Increased productivity.
- Shortened cycle time.
- More consistency, due to the elimination of chemical developing and its variability.
- Space savings (no chemical processor is needed).
- Reduced energy consumption.
- Less impact on the environment.

It's important to keep in mind, however, that the majority of processless plates now on the market perhaps may be more accurately described as "chemistry free," because virtually all versions still require some type of post-imaging process, such as water rinse, wiping, or gumming, before they go on-press.

Run length is an obvious restriction as well as the lack of a visible latent image on the imaged plate for ease of checking plate accuracy. While a number of manufacturers have developed plates with latent images, some are stronger than others so keep this in mind when evaluating the various plates on the market. Here's a look at the current offerings and future plans of the major manufacturers in the processless plate arena:

Presstek

Over a decade ago, Presstek pioneered the processless plate market with the introduction of chemistry-free PEARLdry plates for direct imaging (DI) presses. The company has since introduced Anthem chemistry-free plates, which, like PEARLdry, use thermal ablation the imaging mechanism.

In late 2003, Presstek introduced Applause, which it bills a true processless plate using the latest generation of thermal ablation technology. According to the company, Applause addressing what is widely viewed as shortcomings in the thermal ablation process, such as the need for a powerful debris removal system in the platesetter and a water cleaning step after imaging.

Fuji

The reports that had been circulating for more a year that Fuji was developing a processless plate were confirmed at a technology demonstration at Drupa. According to the company, its debut product in this arena (which, at this writing, was not yet commercially available) addresses three key drawbacks often associated with processless:

- Removal of debris when using a thermal ablative imaging process.
- Lack of a visible latent image on the imaged plate for ease of checking plate accuracy.

The Fuji plate uses a new fast-exposing technology called "intelligent polymer," which enables production at full speed on virtually any thermal plaesetter. The plates employ a barrier layer that holds the ablation debris for disposal after mounting on the press. The company claims the particles are so small that they don't affect the print quality and are passed through the system in five or six sheets during the makeready process.

Fuji chose to implement this methodology rather than risking excessive debris in the platesetter or allowing debris to be abs orbed in the fountain solution, which is recirculated. The Fuji plate on display at Drupa was daylight safe and had a strong latent image.

Kodak Polychrome Graphics

According to the company, its non-ablative KPG ThermalDirect no-process plate, currently in beta testing, supports up to 75,000 impressions, will work with thermal laser platesetters currently on the market and releases no debris during imaging. The plates will image 1%-98% dots at 200 lpi, and are suitable for use with 20-micron FM screening. They are compatible with a wide range of inks and fountain solutions, including alcohol and the most popular alcohol substitutes.

Into the Light

KPG says the plate, which has a visible latent image, can safely reside in white light for up to an hour and in safe light for up to four hours. The plate can hold a 20 micron spot, supports FM screening and is rated for runs of up to 75,000, although the company reports that some customers are achieving good quality with runs of 100,000. KPG demonstrated ThermalDirect on Screen platesetters, which will be marketed under the KPG brand, DirectSet.

Agfa

In February 2004, Agfa introduced its :Azura plate, which uses a non-ablative process but does require a conditioning, or gumming step. “This gumming step brushes away the unexposed areas which, in their absence, leave a high-contrast image. However, it does eliminate the need for chemical development and the associated variables.”

The generic name for the core technology behind Agfa’s Thermolite plates and :Azura plates is ThermoFuse. Agfa’s Thermolite plates are negative working plates using Agfa's grained and anodized aluminum substrate. The technology, which according to Furman, the company will use in future processless developments as well, differs from the concept of switchable polymer technology and provides a true lithographic coating.

High-Powered Lasers

“ThermoFuse takes advance of the high power laser technology now available,” he notes. “Heat from an infrared last melts, or fuses, ultra-fine thermoplastic particles together and bonds them to Azura’s aluminum plate substrate to create a durable printing image. There is no need for a chemical process to develop the plate image as there is in ‘conventional’ CTP processing.”

As a result, he explains, the variables in developer temperature, PH, processor dwell time, and conductivity that can influence the finished image are eliminated. According to the company, :Azura is released for sales on Agfa's :Acento and :Xcalibur 45, and has been mutually certified to work on a growing list of competitive thermal devices.

Because :Azura can sustain run lengths of up to 100,000, the company is targeting smaller printers, especially first-time CTP adopters, for whom space is an issue and slower throughput time is not.

Creo

A "technology only demonstration" at drupa of Creo's new Clarus PL product showcased what the company calls a "true processless" aluminum plate that requires no gumming, processing, or post-imaging treatment. Upon its commercialization, the switchable-polymer product is expected to handle runs of up to 50,000 impressions, support Creo's Staccato 20 FM screening, and be compatible with 830nm thermal platesetters.

DI Compatible

Creo launched a new waterless polyester plate at drupa 2004. The Clarus WL plate is suitable for run lengths of up to 30,000 impressions and is a drop-in compatible solution for direct imaging presses. Creo claims that the Clarus WL plate has the highest sensitivity of any digital imaging thermal waterless plate available in the market today, reducing overall energy consumption.
According to Creo, the Clarus WL plate is already in use by customers in Europe and North America, and was scheduled for commercial introduction in December 2004.

Konica-Minolta

The company has introduced a processless system for on- and off-line imaging applications. The off-line version uses a flexible, thermal plate material (TF-200) supplied in rolls for imaging by the SR-830 platesetter, which outputs plate sizes from 12.8 in. x 15.6 to 26 in. x 32.7 in.

A thermal sensitive, hydrophobic layer is expose in a non-ablative process, with unexposed areas then removed on-press by the action of fountain solution and ink. The finished plate, which supports stochastic screening, is said to be capable of 1%-99% dot reproduction.

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Summary

As we've seen, there have been much advancements with processless plate technology, with many more on the horizon. Many of the priceless plates cited here will be widely available on the market long before the next drupa. The plates, from a variety of manufacturers, reflect a variety of approaches and support various run lengths, quality levels, and sensitivity. Processless plates are poised to have a significant impact on the productivity, cost effectiveness, and environmental impact of the offset platemaking process.

To be added to the list simple email HowieAtPre@aol.com and write "add to production or executive list" in the subject line

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Questions about the alphabet soup of digital prepress…

- **CTP (computer to plate)**
- **TOC (theory of constraints)**
- **QC (Quality Control) or process control,**
- **PDF (Portable Document Format)**
- **CMS (Color Management Systems)**

drop me a note: HowieAtPre@aol.com