

GET # INFO

Upcoming Programs

September The Making of Super 8 1/2" Using Final Cut Express

Douglas Harned

Douglas Harned has created a derivative, or perhaps an homage, to Fellini's "8 1/2" using Final Cut. It can be seen at <http://www.filmaxis.org>.

NOTE: You may want to watch Harned's work in advance so that you can concentrate on the Mac technology rather than the movie during the presentation.

October Home Networks with an Emphasis on Security

WiFi

- How to password protect it.

Routers and Firewalls

- What they do.
- What is the OSX firewall?
- What precautions should we be taking?

Member Favorites are short presentations by members on their favorite freeware or shareware application, game, script, tool, trick or tip. Members are invited to step forward to present; there is plenty of room on the schedule.

If you wish to be included on the schedule please contact Allen Emory at aemory@earthlink.net.

PREZ SEZ



*Allen Emory,
TMUG President*

My number one goal as TMUG President is to simply have fun. Fun with other TMUGers and fun with my Mac (I think I am doing a pretty good job with that, too). Geeky as it may be, I love playing with my computer, learning new tricks and accomplishing projects that many might find confounding. And the friends I have made at TMUG are ones that will have a long lasting and terrific impact.

Let me tell you, fun with a computer can be an elusive thing. But I insist on it – pursue it! You should, too. The best and fastest way to get there is to take advantage of every opportunity TMUG offers. Okay, that sounds like a shameless plug, but I really mean it or I wouldn't say it.

So how do you get there, you ask.

Are you using your TMUG WebDisk space? If not, give that a try. Put up your own website. TMUG's server is a Mac OS X server. This means PHP is available for your website. Hey, right there is some fun! Learn two things: how to put up a website and learn PHP.

And the TMUG server is about to get even more fun. We have installed MediaWiki on the server. The idea is that we are going to replace our current website with a MediaWiki-based website. What is MediaWiki and how will that make our website more fun?

MediaWiki is the software the Wikipedia uses. A Wiki is a groupware website on which anyone can edit and place content. How fun will that be?! Everyone in TMUG will get to participate in the website. And we may well be the only Mac user group with a Wiki website. Maybe we will become a resource not only for TMUG, but for other user groups as well.

The key to the success of this Wiki-based website will be TMUG member participation. The more, the better. You see, we have a pretty powerful server, and this software will do a lot of things. The more members who participate, the better our site will become.

In the coming weeks, I will be asking for a few members to get together for an introduction to WikiMedia session. If you choose to join in the fun, you'll get to be one of the first to get the new TMUG website running. When you see the software, you'll be amazed at its potential.

It is another way to have fun with your Mac – take advantage, insist on it!



TMUG Officers

President

Allen Emory
p@tmug.org

1st Vice President

Alec Whittaker
vp1@tmug.org

2nd Vice President

Chips Chapman
vp2@tmug.org

Secretary

Cort Boylan
secretary@tmug.org

Treasurer

Stefan Jeglinski
treasurer@tmug.org

Postmaster

Chips Chapman
velomac@tmug.org

Get Info Editor

Lisa Colwell
editors@tmug.org

Listserv Administrator

Chips Chapman
velomac@tmug.org

Support

support@tmug.org

www.tmug.org

WANT TO KNOW?

From the Treasurer

Money in bank as of August 23, 2006: \$4,424. Includes all rent and colocation fees paid through September 2006.

Member count is currently 84, up from last month.

New and renewing members

New:

Mike Hodges
John Fitzpatrick

Renewals:

Stefan Jeglinski
Allen Emory
Dan Edwards
Joe Cohn
Charles Mangin
Jackie Journiette
Catherine Elkins



WANT TO JOIN?

Just fill out the form below and mail it in (along with your check). Or better yet, bring this form with you to a meeting! TMUG meets the second Monday of each month in the Mutual Life building in downtown Durham.

TRIANGLE MACINTOSH USERS GROUP

Membership Application

Renewal

Name: _____

Business (if applicable): _____

Street: _____

City/State/Zip: _____

Phone: _____

E-mail: _____

Membership dues are \$35/year. Make check payable to **TMUG** and mail to:
TMUG, PO Box 28623, Raleigh, NC 27611

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TMUGer Alec Whittaker & Program Committee: On The Prowl for Upcoming Programs

The Programs Committee met on Tuesday, August 15, 2006, at Panera Bread at Briar Creek. Pictured are TMUGers (L to R) **Fred Lampe, Carl Ebhardt, Jim Burcsu** and **Alec Whittaker**.

Any TMUGer is welcome to attend the Programs Committee meetings. It is a great way to learn more about your Mac and what out there for you. For meeting times, or to submit program ideas, e-mail Alec at vp1@tmug.org.



HandiApped Independence

By Frank Petrie

OK. So where have I been? Well, there's my job. Second, I launched a site called "handiapped.com" but that didn't take off so I recently shut it down. I produce and host the weekly vidcast, "Video Sandbox" (which you can find a link to here on Macsimum News, hint, hint). Plus, dealing with governmental red tape, insurance company bureaucracy, conversion van dealers, etc. In short, a full plate.

For those of you new to this column, I started it way back when, when dinosaurs and Lincoln ruled the Earth. It started as a column about how to set up your office and your work area to be as efficient and stress free as possible.

Well ... for those of you who were following along and working on plans to layout your office, I finished my plans. As for executing them ...

But I felt compelled to start this series again, if only occasionally, after watching Steve and Co. perform the keynote yesterday. There was such a strong emphasis on Universal Access (UA) that I had to chime in.

Apple, at least to my knowledge, is the only company to tout these capabilities built into the OS. And as they're beefing it up a bit, I thought that we should take a closer look.

Currently, UA is broken up into four distinct categories: Seeing, Hearing, Keyboard, Mouse (sounds like an obscure Agatha Christie novel). There's various adjustments and compensations that you can make to your Mac to ease your computing experience (some not so obvious, but very useful). You know that they take this seriously when you notice that the seeing section is in what must be 32 pt. type. Obviously they are really working at this, and not merely giving us a nod and tip of the hat.

VoiceOver gets the Leopard's share of additions. The first new thing that Leopard brings to the table is Alex. Alex is the new voice that was demonstrated during the keynote and runs on improved technology. I'll still talk to my beloved Victoria, I promise, but the smoothness of the Alex's inflections (while not perfect) is a major step forward in the VoiceOver category. Voice over also works with any application that supports Apple's speech synthesis.

A new addition for Universal Access is the ability to support for a variety of refreshable Braille displays and note-takers. Leopard dynamically translates VoiceOver output into standard, Grade 2 contracted Braille. So, now the vision impaired can attach any supported device and start using it right away.

With object navigation in VoiceOver, you can find what you're looking for more quickly by navigating sequentially through an application or document, or skipping through a document by

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The Decline of WWDC

by Matt Neuburg, matt@tidbits.com

Who is Apple's most important customer? If your answer is, "Me!" consider this. Without software (applications, preference panes, utilities of all sorts), your Mac would be nothing but a very expensive doorstop. And software doesn't grow on trees; human beings write it. Those human beings are the software developers. So, sure, end-users are important, but without software developers, there would be nothing to use.

And make no mistake: Apple software developers are Apple customers. They all need at least one Mac. They all need to keep up with changes in the operating system. The tools for writing applications are now free (a tremendous revolution that started when Steve Jobs returned to Apple and Mac OS X emerged), but many developers subscribe to some paying level of the Apple Developer Connection [17]. And Apple developers are constantly focused on Apple. They hit the developer Web site [18] dozens of times per day. They download examples, they ask questions, they hang out on the mailing lists [19], they submit bug reports [20]. And a few thousand really hard-core developers, those who have the money and who need the personal touch, show up for Apple's annual Worldwide Developers Conference [21] (WWDC).

[17] <http://developer.apple.com/membership/>

[18] <http://developer.apple.com/>

[19] <http://lists.apple.com/>

[20] <http://bugreport.apple.com/>

[21] <http://developer.apple.com/wwdc/>

WWDC is Apple's most important way of communicating directly with its developer base. Every year, the actual Apple employees who maintain the operating system and the programming interface that software developers use to write applications spend several days standing in front of crowds of those developers. They explain (under non-disclosure agreement) Apple's future plans and directions, lecture extensively and in

"WWDC is Apple's most important way of communicating directly with its developer base."

detail on how to program the Mac effectively, and listen meekly to trenchant suggestions and criticisms. Plus, developers get to bring their code to a room full of computers and receive real-time, line-by-line advice on specific problems and tasks they're facing. It's an intense experience; a developer can easily spend ten straight hours in lectures and labs, without time to leave the building, on three successive days. (WWDC is currently three-and-a-half days, preceded by a day of keynotes.)

It's distressing, therefore, to see how WWDC has become more and more unpleasant for the attendees each year. Each year we

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HandiApped... *continued from page 3*

object. Apple explains: "For example, you could jump to the next or previous header, button, link, field, graphic, or text attribute such as font or style. Improved navigation in Leopard makes it faster and easier for those with reduced motor skills or visual disabilities to move around the Mac. VoiceOver features spoken audio and sound effects that communicate what's happening onscreen. In Leopard, positional cues help you more easily locate and remember the location of items on the screen. All you need is a pair of stereo headphones or standard stereo speakers."

There's also more customization options for audio output. You can now adjust your preferences to provide greater detail in descriptions, then reduce the amount of audio information as you become more experienced. "You can also rearrange the order in which VoiceOver describes objects and events, so you hear the information you want most, first."

Additionally, there's improved QuickTime support which will automatically display the CEA-608 closed captioning text standard in analog broadcasts in the U.S. Can Apple Home Theatre be far behind?

It's comforting to know that Apple (not to exclude third parties) is not only ensuring that everyone can enjoy the Mac experience, but that they are trumpeting it. So, whether I complete the office makeover or not, at least my computing experience will be pleasurable.

©2006 Frank Petrie. *Macsimum News* contributing editor,
Freelance writer, *Curmudgeon*.

E-mail: frank@macsimumnews.com

iChat: *phranky*

Archive: home.comcast.net/~phranky

say to each other, “Wow, it’s really gone downhill, but at least it couldn’t possibly get any worse,” and each year it gets worse. I’m not talking here about the value and relevance of the content, which is usually top-notch, though, to be sure, it can vary in quality, depending partly upon internal aspects of Apple’s mental health and firmness of direction, and partly upon accidents of timing. (The 1996 WWDC, for example, was a complete waste of time and money, because Apple under Gil Amelio had no idea what it was doing or where it was going, so everything it said that year was outrageously false. On a far milder scale, this year’s WWDC was slightly less useful than last year’s because the next release of the operating system is further off, so more of what Apple had to say about upcoming features was inchoate or guesswork.) No, I’m talking about more mundane considerations—freebies, food and logistics.

The zenith in recent years was the 2003 WWDC. Apple had moved the venue from the isolated, unpleasant San Jose McEnery Convention Center [22] to the west wing of the Moscone Center [23] in wonderful downtown San Francisco. Attendees were given a superb portfolio bag that I still use, a copy of the currently shipping operating system, and a major piece of hardware (an iSight!). The food was terrific (excellent hot breakfasts and lunches), and between talks we were plied with free juices and fruit, and of course, plenty of high-quality coffee.

[22] <http://www.sjcc.com/>

[23] <http://www.moscone.com/attendees/faq/>

This year, on the other hand, the freebies were the cheapest portfolio bag I’ve ever seen (flimsy, no padding, few compartments, bad zippers, strap attached in a silly place), a crummy travel mug, and a t-shirt with incorrect Latin on it.

(OK, so I spent many years teaching Latin; they could have asked me.) No hardware, no currently shipping software. Lunches were plastic salad and plastic sandwiches in plastic containers; breakfast was nearly non-existent. Snack between talks were dried-up pastry. One evening there was something that pretended to be pizza; it was so bad that people were literally gasping in disbelief. There were free Odwalla juices, but none of them were the good Odwalla juices: they were all



sugar-added concoctions that no one ever buys. And attendees were herded into lecture rooms by uniformed characters we came to call “seat Nazis,” yelling at us to move forward and inward rather than sitting where we preferred.



The overall trouble here is that WWDC done in this way feels like a rip-off. It’s expensive to attend (including airfare and hotel costs), while the experience itself feels cheap and oppressive. And there’s no need for it to feel that way. This year WWDC had over

4,200 attendees — the largest WWDC ever. So Apple is hardly short on cash flow for the conference itself. Prices vary, but the nominal fee is \$1,600 per person (with a discount for early registration). Is it really possible that renting the Moscone Center and paying for the equipment and logistics for presenting and recording the lectures is so expensive that Apple can’t afford to give back more of those fees in the form of gifts and better food? (At these quantities, a really good portfolio bag, for example, is less than \$20 a unit.)

To complain of this may seem to be whining about a very small thing; and so it is. But it’s a small thing that, in the aggregate, makes the difference between WWDC being a pleasant experience and an unpleasant one; and three and a half days of unpleasant experience quickly starts to feel very unpleasant indeed. There is also the question of what this deterioration in WWDC’s surface quality implies about Apple’s attitude towards its developers. Apple used to honor its developers, as being the creators of the front line of Macintosh usability; now it feeds them like rats and herds them like cattle. Is that really the message Apple wants to send?

AUGUST WRAP-UP



Many thanks to **Kim Kellam**, of the **News & Observer**, for giving us some tips on using **Photoshop Levels**.

Far left: Kim before Levels adjustment. Left: Kim, after. Notice how much detail was brought out in clothing and background areas.



August saw the start of another raffle. We sold enough tickets in one meeting to draw the lucky winner that night! Congrats to **Kathryn Elkins**, shown here with her new copy of iLife.



Cort Boylan (left) and **Mike Jacobs** (above) were our August door prize winners. Let's hear it for free stuff!



Jeff points out a few things on a circa 1970s Minolta 35mm camera.

(left to right) **John Fitzpatrick**, **Jeff Cole**, and **James Burcsu**.

LaCie Rugged All-Terrain Hard Drive

Company: LaCie

Price: \$169

Minimum System Requirements: A computer with FW 400, FW 800 or USB.

Test System: Dual 2.5-GHz PowerPC G5, 4 GB DDR SDRAM, OS 10.4.7 and MacBook

Pro 2.0-GHz, 2 GB RAM, 100-GB HD

Reviewer: Maria O. Arguello

Overall Rating: 4.5 out of 5 apples

Design Rating: 5 out of 5 apples

I fell in love the moment I saw the LaCie Rugged All-Terrain Hard Drive, gorgeously designed by industrial designer Neil Poulton. It has an orange shock-resistant rubber bumper and a protective aluminum shell for durability. It is a looker; fast, durable and I had to have it. It comes in three sizes: 80/100/120 GB with varying rpm depending on the model. I am testing the 80-GB/ 7200 rpm/ 8 MB internal cache. The rear of the casing displays its three-way connection with socket plugs for the USB 2.0, FW 400, FW 800 and power connection.

The speed of copying files is very fast when using FW 800 (60 MB/s). It also mounts very quickly on the desktop with FW 400 (40 MB/s). I never use USB 2 (40 MB/s) when using this hard drive, I simply prefer FW whenever available.

I demoed it at the August 2006 Princeton Macintosh Users Group (PMUG). It is great for taking on the road to back up or to transfer files. The Princeton color is orange, what a coincidence. Everybody loved it. It works great with my Mac Book Pro and my dual 2.5 GHz PowerPC G5. I like the portability and ruggedness of this beautiful pocket drive. It is replacing my older 60-GB pocket drive, which recently died.

And don't forget that LaCie gives a free software application called Silverkeeper[∞] for automatic backup and file verification with Mac OS 9 & Mac OS X. It comes with four cables: FireWire 800 (9-to-9 pin), FireWire 400 (6-to-6 pin), Hi-Speed USB 2.0 (USB 1.1 compatible), and a USB 2.0 power-sharing cable for systems where the USB Bus power is not enough. The Quick Start Guide is very helpful, clearly written, and easy to understand. I used it to find the correct format to suit my needs. I have Windows Professional XP installed on my MacBook Pro but I opted not to partition the drive to read Windows and Mac. I spend 99.9 % of my time on the Mac side and have my most precious files there. Therefore I formatted the drive MacOS Extended (Journaled). Clear explanations for other possibilities are easy to follow in the Quick Start Guide.

It also includes a CD-ROM with the following free software: LaCie 1-click Backup Software, SilverKeeper[∞] Backup Utilities (Mac OS 9, Mac OS X), Silverlining[®] 98 Drive Management Utilities (Windows 98SE), Silverlining[®] Pro Drive Management Utilities (Mac OS 9.x), User's Manual.

The enclosure can be re-used if the drive inside fails out of warranty. Simply buy a new one and put it in your beautiful case. At this rate, you'll always have the case to admire. That's what I did with an old LaCie pocket drive. I bought a new 2.5-inch hard drive, 80 GB this time, 5400 rpm, from Other World Computing, and put it in the case. It's a great way to reuse LaCie's cases. I buy a lot of hardware from OWC because their tech support is superb. They helped me choose the correct hard drive for this project. LaCie's tech support is also very helpful. They helped me with my questions about taking out the old hard drive and re-using the external case.

I would have liked for LaCie to have retained the activity light indicator the older models had to see hard drive activity. At least the light gave me an indication that it was on and something was happening. The green light would turn amber and flicker when I was copying or transferring files or when it was mounting onto my desktop. The LaCie Rugged All-Terrain Hard Drive does not have an indicator light.

I had to wait a long time for this review unit because "it is a very popular item," said the LaCie representative and I don't doubt it. If you're looking for a reliable and a good-looking hard drive, buy this one. You will be the envy of your user group friends.

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Maria O. Arguello is president and vendor liaison of the Main Line Macintosh Users Group (MLMUG) also member of PMUG, NCMUG, MUGSNJ, SJAUG and CCPMUG. She is the Apple User Group Regional Liaison for the Northeast United States, as well as the Liaison for Online Groups.

SuperDuper! 2.1.3

Company: Shirt Pocket www.shirt-pocket.com

Price: \$27.95 (Free trial available)

System requirements: Mac OS X 10.3.9 or higher. Does *not* support optical or tape drives.

Universal Binary

Test Systems: Dual 2.5 GHz PowerPC G5, OS 10.4.7

Reviewer: Maria O. Arguello

Overall Rating: 5 out of 5

With SuperDuper! for OS X, you can back up, clone, restore, image files, and more. This amazing program is so easy to use that losing data can only produce extreme self-flagellation, if you lose them because you didn't have SuperDuper. And remember this profound truth: there are two types of people: those who have lost data, and those who will.

I am embarrassed to admit that I have never successfully used any backup program. I tried Retrospect and it was so complicated that I gave up. I tried the free .Mac Backup for members and gave that up, too. I back up manually; that means, when I think about it, I copy my iPhoto Library and my iTunes Library to an external hard drive. My Aperture photos have Vault, which is a built in backup system, but you have to remember to do it manually. Lately, I've been hearing a lot of my friends rave about SuperDuper and how easy it is to use. I had to try it.

SuperDuper not only is easy to set up, but it is easy for new computer users to understand and has enough features to satisfy the advanced user, too. The first backup is long but the updates are a breeze. I put SuperDuper to the test and cloned my 250-GB SATA startup hard drive, which had 156.85 GB used. It took 2 hours and 10 minutes to copy 156.36 GB to my external SATA Wiebetech 250-GB hard drive via eSATA connection. Once that was done, it took 16 minutes and 43 seconds to complete with Smart Update.

To get started buy a large hard drive, the larger the better, that will be dedicated to hold your backed-up data and to be managed by SuperDuper. You'll have to decide whether or not to partition. It all depends on your personal needs. Partitioning a hard drive may help when using the Sandbox feature in SuperDuper. They recommend a 10-GB partition.

A SuperDuper feature called Sandbox allows you to play with a new OS update first to see if you are satisfied before you commit to it. Clone your OS to a second drive, boot from it, access all your apps from your primary drive. Try the update on the

second drive and see if you like it before you commit. This is pretty cool.

I've never used SuperDuper before so I have not seen the different versions. In this version the developers claim the following changes:

- * Can disable ACL copying in Advanced options
- * The "What's going to happen?" section now says when the destination is an image
- * No longer allows erroneous restarting/startup from an image
- * Scheduling now works with multi-byte characters in volume names
- * Scheduling now works under 10.3.x for Japanese language users
- * Addressed various other minor issues

Of course, the new SuperDuper 2.1.3 still improves on the acclaimed original in many ways, including:

- * The ability to easily schedule backups
- * Additional imaging options
- * More control over shutdown
- * Better AppleScript support
- * Hundreds of UI improvements
- * Growl support
- * And a completely rewritten, task-based User's Guide.

And it's a free update for registered 1.x users!

It is so refreshing to find a quality program that works so well and is so easy to use. This is the only backup program anyone needs.

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Transfer Using Civil Netizen and Pando

by Glenn Fleishman glenn@tidbits.com

Transferring files between two people can be an extraordinarily painful process. E-mail seems perfectly reasonable, but is subject to message file attachment limits for both parties. Using file-sharing technology like FTP could require setting up a drop box or an account. If you want to use your own computer as a server (running AppleShare, for instance), you need a reachable IP address, not always a readily available commodity.

Two new services, Civil Netizen and Pando, hope to make file transfer easier by employing peer-to-peer (P2P) techniques to push data securely over the Internet. Both are in beta testing; the former turns a computer, briefly, into a peer-to-peer surfer for individual connections, and the latter acts as a time-limited central repository with distributed P2P properties for files up to 1 GB in size (during testing).

Both services are currently free, and their developers currently have no plans to charge in the future, although Pando may use some sponsorship advertising to fund bandwidth, and plans to license its technology to other firms. Civil Netizen is an open-source project with no fees.

Civil Netizen

The phrase “peer-to-peer file sharing” has taken a beating. In common use, it almost always implies illegal transfer of copyrighted materials or the implication of that act. But people using ordinary computers to transfer files are peers, and Civil Engines Research recognizes that in the choice of the name Civil Netizen for its project.

<http://www.civilnetizen.com/>

When you install Civil Netizen, you’re not setting up a server. Rather, you’re creating a specific P2P engine that is active only at certain times and in response to the right queries.

Civil Netizen lets you take one or more files or folders and create a “parcel.” The parcel has an associated pickup slip, which is a sequence of obscured data. Instead of transferring the parcel directly, the program lets you use your default e-mail application to send just the pickup slip (you can also copy the pickup slip information to the clipboard for pasting into a program like iChat, or you can save it to a file on your Desktop).

As long as the parcel remains available within Civil Netizen (which must be running), that pickup slip enables any recipient to retrieve the file; the retrieval is logged for reference. Civil Netizen doesn’t allow generic file retrieval—other Civil Netizen users can retrieve only parcels, and only those for which they have the associated pickup slips.

Whenever a recipient attempts to retrieve a parcel by loading the pickup slip details you sent them into their copy of Civil Netizen, their software creates a connection to your computer, retrieves the parcel, and stores it locally. Civil Engines Research uses a centralized storage system for the pickup slips, but that’s the only portion of the connection that’s stored in a non-P2P fashion. You can send the pickup slip to multiple recipients, and as long as you keep the parcel available within your copy of Civil Netizen, others can download it. However, there’s no confirmation that someone with the pickup slip is a legitimate recipient.

Civil Netizen uses a fairly robust method of encrypting data in transit, employing 128-bit AES (Advanced Encryption System) session keys, which are considered quite strong. The keys are negotiated using a Diffie-Hellman key exchange, which prevents interception. However, the developers don’t use a validation step that confirms there’s no man in the middle intercepting both sides of a conversation.

<http://en.wikipedia.org/wiki/Diffie-Hellman>
<http://en.wikipedia.org/wiki/Man-in-the-middle>

However unlikely interception is for most users, the lack of a validation step prevents Diffie-Hellman from being considered reliable. In correspondence with one of the developers, he said the company expects to offer user registration that would then allow an out-of-band method to provide necessary validation. I call that the “evil dictator” problem, in that without validation, you’re well protected, but not against those intent upon intercepting traffic at a governmental level. Validation wouldn’t prevent knowledge of parties transferring data, but would—by today’s standards—provide extremely high security for the contents of packages.

Civil Netizen is at beta 4 for Mac and Windows, and the company plans a Linux client. As an open-source project, clients for other platforms or other versions of the client for Mac or Windows could appear.

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Transfer... *continued from page 9*

Pando

Pando, from Pando Networks, takes an entirely different approach with regard to where files are stored, using what initially appears to be a hub-and-spoke system and a centralized repository, but turns out to have a P2P twist.

<http://www.pando.com/>

Once you've downloaded the Mac software, you can create a new package composed of one or more files or folders, and then enter recipients' e-mail addresses. The Pando client packages your files, uploads them to Pando Networks's servers, and notifies recipients via e-mail. Recipients then open the attached .pando file in their copy of the Pando application to download the packaged files.

Here's where Pando's approach gets interesting. Rather than simply being a file server, Pando uses P2P technology much like BitTorrent to speed the download by having the recipient's Pando client pull data from the Pando servers (which they call supernodes); from your computer, which acts as a P2P node for the file; and from other recipients of the file who have already downloaded it (or pieces of it) and have Pando running and haven't moved the file.

The software is straightforward and easy-to-use. The company stores files on its own supernodes for up to 14 days after the file is posted and recipients informed. Packages can be up to 1 GB in size during the beta period. (The implication is that limit will be raised when the beta period is over, but the company hasn't promised that.) After that 14-day period, packages are still retrievable from any Pando clients that are running and have the file still available.

This is an interesting twist, because you could send out a large file—say, a video you'd created—to hundreds of recipients, all of whom would benefit from the initial high-speed availability on Pando's servers and the swarming effect of many downloaders with Pando's client. However, after 14 days, not only would Pando drop the file and thus reduce some large potential bandwidth costs, but for most downloads of this sort, most of the other recipients would have moved on and probably stopped participating in the swarm, too.

Pando's encryption model is slightly more robust than Civil Netizen's. The developers have chosen to use the 256-bit version of AES, the company said via email, although its FAQ states that Pando uses 128-bit encryption. All other communi-

cation between the Pando client and the company's servers are conducted using certificate-authority validated SSL/TLS, which prevents tampering.

However, the .pando file is sent unencrypted and contains the security key necessary to decipher the retrieved file. Anyone with the .pando file would then be able to retrieve the same data with no additional validation or authentication.

Changing the World of E-mail Attachments

Where both Civil Netizen and Pando could shine is in bypassing the ugly world of one-off file transfers that currently use email attachments. While MIME (Multipurpose Internet Mail Extensions) has long made it relatively simple to send attachments reliably among varied email servers and clients, many companies that provide email services impose attachment size limits.

Many free email services allow you to send and receive total attachments per message of 2 MB to 10 MB. Some also have monthly, daily, or even hourly limits on attachments. Higher-end services have increased attachment limits over time to tens of megabytes, but even still, that's a limit you must be aware of and track.

Plus, email servers aren't designed well to handle large files. Some choke even when the attachment size is within limits. Retrieving a large file often takes substantially longer from a mail server than from a commensurate file server (even file server software running on the same hardware as the mail server software).

Pando has taken one step in that direction by planning a Microsoft Outlook 2003 plug-in that would enable Pando to be used as a substitute for large email attachments. Given the nature of both products, I would hope that plug-ins could be created for popular Macintosh email clients and other Windows email clients, too.

<http://www.pando.com/beta/outlook>

I'd also like to see designated recipients, so that when I need to transfer a file to, say, Adam Engst, I would drag a set of file onto an Adam icon on the Desktop or within the program. If Adam had pre-approved me, perhaps his copy of either package would automatically download the files I transmitted without further ado and alert him. This kind of trust could be made possible through these programs and the systems that support them, and would eliminate a lot of the fuss that file transfer places upon ordinary users.

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Transfer... *continued from page 10*

All that said, when I wrote “Take Control of Sharing Files in Panther” and later “Take Control of Sharing Files in Tiger,” I found that the devil is in the details when it comes to making file-sharing work. Whenever you have a group of people who need a common repository of files, file services like AppleShare, Samba, WebDAV, and FTP are still warranted. In these cases, you want a persistent set of consistently available, updated files found in the same place.

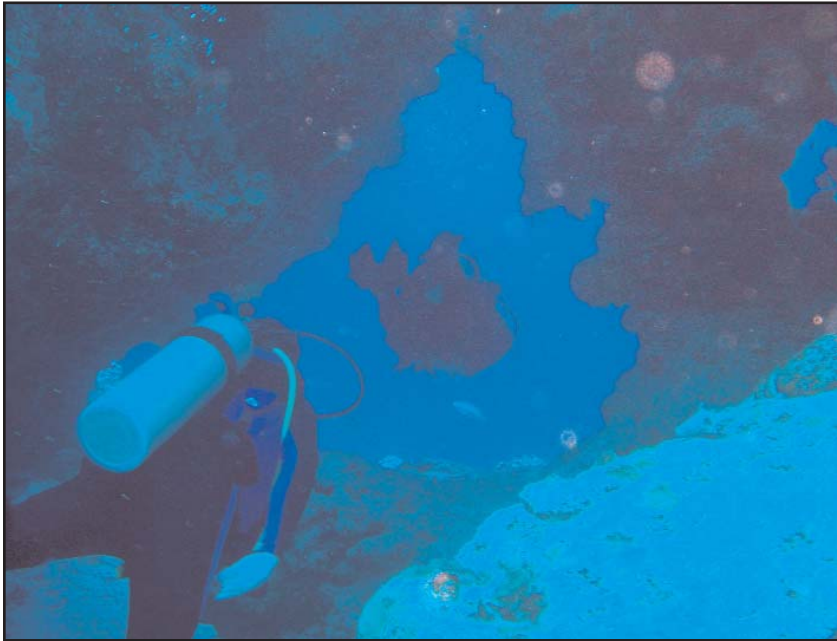
<http://www.takecontrolbooks.com/panther/sharing.html?14!pt=TB843>

<http://www.takecontrolbooks.com/tiger-sharing.html?14!pt=TB843>

And for software companies or other organizations that need to distribute large amounts of files or a few large files, FTP and HTTP downloads still make the most sense, because there’s little chance except during new releases of having the right threshold of users downloading and retaining a file to get the benefit of the swarm behavior of P2P that Pando can leverage.

However, there’s a great place for this new method of bypassing all current forms of repositories and P2P, and, in the process, increasing the efficiency of retrieving files and reducing associated frustration.

So... do anything interesting over summer vacation?



If you have interesting, amusing, or otherwise awesome pictures you want to share, send them to me! Otherwise, I’ll be forced to make you suffer through more of my vacation pictures :)

– Lisa

Websites Mentioned (or not) During the Meeting

<http://www.humanclock.com/>
<http://eazydraw.com/>
<http://graphsketcher.com/>
<http://macfixit.com/>
<http://everymac.com/>

Photoshop resources and tutorials:
<http://graphicssoft.about.com/od/photoshop/>
<http://www.adobe.com/designcenter/>
<http://www.adobe.com/support/forums/index.html>