



Macclanta

A Publication of the Atlanta Macintosh Users Group, Inc. • March 2001

MAC OS X - Is It For You?

By Chris Waldrip (chris_waldrip@atlmug.org)

Within a few days of reading this Mac OS X will (hopefully) be available for purchase. There are some people who will be standing outside their local Mac retail shop, counting down the minutes until midnight. There are some people who won't even consider touching the box until closer to Christmas. There are some people who will be curious, but won't have the hardware to run it. Who will you be? Hopefully this article will help you decide what type of person you'll be.

First, let's look at the latest requirement for Mac OS X according to the most recent update on Apple's web page. You'll need a Beige G3 or newer, WallStreet model PowerBook G3

or later (the original PowerBook G3 won't work), an iMac or an iBook. If you've got any of these machines then you're doing well so far. If you have an older PowerMac, PowerBook, a 68k based Macintosh, or a Mac clone then officially you're out of luck. There are reports that some users have been able to install the Public

Beta successfully on unsupported upgraded PowerMac's and Mac clones, but Apple won't help you if you have questions or problems.

The last requirements are that you have at least 1 GB of hard disk space, and at least 128MB of RAM. The last requirement is if you will be using the Classic environment (Mac OS 9.1) in addition to Mac OS X. Most likely you

will be, and if you need more memory don't fear – memory prices are at their lowest in years.

So, you've got the hardware. Your hardware meets the minimum requirements. Should you rush out and be the first in line to get Mac OS X? Here are some questions you should ask.

Is it critical that my machine be running as stable as possible?

Mac OS X is a very stable and robust operating system. But it's a

new operating system; it's not an update to an operating system. And while Mac OS X has been beta tested by over a hundred thousand users for almost six months, that doesn't mean that they've discovered every possible problem. There are always bugs, and you don't want to lose productivity because you were fortunate enough to be the first to discover that doing A, B, and C

MESSAGE FROM THE CHAIR

Michael Henigan

(michael_henigan@atlmug.org)

Greetings to all! Spring is such a nice time of year, we are getting warmer weather, the colder air is almost gone, and we can make plans to be at our Spring Swapfest.

Wait a minute; Swapfest has sort of been made over into a BIGGER and BETTER entity, called, Macclanta Xpo!

Stan Allen has been working hard on getting all the final details together for this event, which will be held, in less than 2 weeks, on March 17th. We will be having classes, the swap fest and there will, as always be a raffle (and all sorts of goodies to give away!) Look on the website for further information.

Speaking of the website, we have moved the website to a new domain and also a new server (thanks to Cartersville Schools and Sheryl McDonald for the space). Please change all your pointers and browsers to: www.amugonline.org The old domain name will still point you in the right direction and will for some time to come, but please get used to the new server, it is easy to remember and we hope you enjoy the upcoming new web design, stay tuned for further information on it.

CONTINUED ON PAGE 2

This Month's Macclanta

Mac OS X - Is It For You?	1
Message From The Chair	1
Editorial	2
In The News	2
February Meeting	4
AMUG Meeting Schedule	4
Unix Coming To A Mac	
Near You, Part 2	4
Macclanta Xpo	5

CONTINUED ON PAGE 3

Maclanta is published monthly by the Atlanta Macintosh Users Group, Inc. (AMUG™), Post Office Box 15130, Atlanta, Georgia 30333-0130, a non-profit 501 (c) (3) educational organization, as a service to the membership.

Subscriptions: A portion of membership dues in AMUG are designated for an annual subscription to the Maclanta. Annual membership dues are \$40. A separate subscription to this publication is available for \$15 per year.

© Copyright 2001 by the Atlanta Macintosh Users Group, Inc. All rights reserved. Maclanta is an independent publication, not affiliated or otherwise associated with Apple Computer, Inc. or any other vendor who might advertise herein. The opinions, statements, positions, and view stated herein are those of the author(s) or publisher and are not intended to be the opinions, statements, or views of Apple Computer, Inc. or any other vendor who might advertise herein. Rather than, place a trademark symbol at every occurrence of a trademarked name, we hereby state that we are using the names only in an editorial fashion with no intention of infringement of the trademark.

Nothing herein may be reproduced in whole or in part without the express written permission of the Newsletter Director with the following exception: all articles/graphics, not copyrighted by the author may be reprinted by a nonprofit computer user group or club provided proper credit is given to the author and the Maclanta Proper credit is defined as Title, Author, and the words, 'Reprinted with permission from Month, Year of the Maclanta, a monthly publication of the Atlanta Macintosh Users Group, Inc.' Permission to reprint copyrighted articles and/or graphics may be obtained by writing to the author or artist c/o, this publication.

Submissions: Maclanta welcomes unsolicited articles (including feature stories, commentary, and user group news) pertaining to personal computers, hardware, software, related products, services, and end users. Submissions should be made via E-mail attachment or body in text format. Unless otherwise arranged, deadline for all articles, letters, and illustrations is 5 p.m. the Saturday before the first Wednesday of the month of publication. The editors reserve the right to edit for brevity and clarity. Payment will be in the form of credit in the Maclanta newsletter, and copies of the issue(s) at the least.

AMUG, the AMUG peach and Maclanta logo design, Maclanta, and the slogan "AMUG... Peach of the MUGs" are service marks and/or trademarks of the Atlanta Macintosh Users Group, Inc.

AMUG Board Of Directors

ChairpersonMike Henigan
Vice-ChairpersonJay Cann
Past ChairpersonDoug Franks
SecretaryKathy Grawe
Treasurer.....Kelly Hilliard
Communications DirectorChris Waldrip
Program DirectorStan Allen
Education Director (Acting).....Jay Cann
Membership Director.....Phillip Byrd
Publicity DirectorDavid Whitehead
Telecom DirectorSheryl McDonald
Special Projects Director.....Bruce Barrett

AMUG Contact Info

BBS Non-Members Number 770-386-7971
BBS Members Number 770-386-7970
General Information Line 404-327-9002

Atlanta Macintosh Users Group

PO Box 15130

Atlanta, Georgia 30333-0130

PDF FOR YOU AND ME

By Chris Waldrip

(chris_waldrip@atlmug.org)

This month members will receive a printed version of Maclanta as usual. But, you should have also received an e-mail letting you know that the PDF version of the newsletter was available.

Why both formats, you ask? Adobe's PDF format offers several features that are just impossible with print. Click on an article in the index on the front page and you'll be transported to that story. Click on a 'continued on' or 'continued from' notation and you'll be taken there. See an e-mail address? If you click on the address, your e-mail client will open and prepare an e-mail to that person. Or if you see a URL in a story, you'll be taken to that web page when you click on it.

Those are the features we've already implemented. Some that we're investigating include embedded QuickTime movies (imagine watching the next keynote in the newsletter), embedded audio clips (a theme song for the newsletter), fill out a survey in the back of an issue of the newsletter and have the results sent automatically, and many more.

There are cost savings as well. With PDF's we can publish the newsletter every month and we can use full color. And if enough members opt to receive the PDF only, we can probably begin printing the newsletter monthly, benefitting those members that wish to receive the newsletter by mail (for their own reasons).

If you didn't receive an E-mail notification about this newsletter, or if you'd like to be one of the first to switch to receiving the PDF only, you can contact Phillip W. Byrd, the Membership Director, at phillip_byrd@atlmug.org. And if you have any questions about our efforts to move the Newsletter into the digital age you can contact me at chris_waldrip@atlmug.org.

IN THE NEWS

Mac OS X: The Missing Features

In a recent interview, Ken Bereskin, Apple's OS X product manager, stated that the initial release of Mac OS X will not feature DVD playback ability, and probably won't ship with Cocoa (native Mac OS X) versions of iTunes and iMovie. Also lacking from the initial release, it has been reported, will be several non-multinational languages such as Scandinavian and others.

Apple itself has decided to not over-promote the release of the first major rewrite of the Mac OS. The release will be kept low key with no major media promotion planned.

Many critics have derided these announcement as a major mark against Apple's next generation operating system and a missed opportunity. But others have noted that the vast amount of native applications won't be released until later this year and that the initial release is intended for die-hard adopters and that these issues will be minor.

MacWorld Tokyo

Steve Jobs, dressed in a pinstripe suit and wearing a tie (signs of the apocalypse?) made the keynote speech at February's MacWorld Tokyo show. While much of the keynote was a repetition of the January MacWorld San Francisco keynote there were some notable announcements.

New iMac configurations with processors up to 600Mhz and with CD-RW drives instead of DVD drives. Color choices are down to Indigo and Graphite, with two new colors - Blue Dalmation (blue with white dots), and Flower Power (a floral tie-dye look). Also of note in hardware were price drops on the Cube and the Cinema Display. A new Cube featuring a CD-RW drive was also added to the line up.

CONTINUED FROM MESSAGE FROM THE CHAIR, PAGE 1

We are still looking for volunteers to help us wherever you can, anyone who helps will get a chance to win an exclusive AMUG hat and \$20 in auction bucks. We will be drawing the winner at the April meeting! Contact Mike or any board member to offer your assistance.

See you next month!

Mike

CONTINUED FROM MAC OS X - IS IT FOR YOU?, PAGE 1
causes Mac OS X to format your hard drive, or something worse.

Are you comfortable with the prospect of learning a new operating system?

This is a new operating system. I can't say that enough. There are several new interface elements in Mac OS X that are not in previous versions of the Mac OS. Expect a learning curve as you feel out this new look and feel for the Mac. It should also be said that your learning curve might not be as bad as you would expect. One of the biggest underlying reasons for this new look and feel is to help novice users get around.

Do you have an unusual external device?

Since Mac OS X is a new operating system your favorite piece of hardware may not work. Apple has worked hard to ensure compatibility with some hardware. FireWire and USB hard drives work fine, and internal Zip drives work like they should. But if you have an external tape drive, or a third party CD recorder or re-write drive, or maybe a SCSI scanner, or even an old joystick or multi-button mouse, you may be in for a disappointment. These devices will need drivers made for Mac OS X, and probably will only be available from their manufacturer. That is, if the manufacturer is still in business, or is inclined to make new drivers. If you're quick to upgrade you may end up needing to upgrade your hardware as well.

Do you have an unusual or older piece of software?

Still using that unique software application written maybe a decade ago? It should work in Classic on Mac OS X. But there's no guarantee. You should find someone with Mac OS X already

installed and ask them to check it. Software that communicates with a piece of hardware will also most likely have problems. Scanner software probably won't be able to find SCSI scanners. Palm says they'll have new drivers, but



The Mac OS X desktop. Coming to a Mac near you... eventually...

owners of the Public Beta are stuck restarting their machines in order to use the current Mac OS just to sync our Palms... not that we're bitter or anything. Games will also be hit hard since Mac OS X does not yet have a feature analogous to Input Sprockets which are used by developers for access to game controllers, keyboard input, and mouse features.

Okay, I Still Want To Install It...

So, if you've made it through those questions and still want to install Mac OS X, here's what you should know and do. The first thing that you should always do when installing a significant upgrade or new release of an operating system: back up your important files. You never know when disaster may strike, so having a backup is just smart to do. You don't need to backup everything, although it would help in restoring in case of a disaster. Instead, all you need to backup are files that aren't installed with your applications or by the operating system, or that you've changed. Note pad data file, bookmarks/favorites from your browser, and com-

plex preferences are all examples of files that are overlooked.

Next you'll want to boot from another drive (CD, Zip, second hard drive, etc.), and use Apple's Drive Setup to partition your hard drive. I personally have three partitions, one for Mac OS 9.1, one for Mac OS X, and one for storage. Apple suggested for the Public Beta that users have at least two partitions, one for Mac OS 9 and one for Mac OS X. The benefits of this are that you'll be able to boot from the other partition if there's a problem. If you have a compatible machine, other than the Beige G3s, you can startup your system while holding down the option key. This will bring up the open firmware screen allowing you to choose the partition you

want to boot from. Otherwise you'll have to use a software program installed by Mac OS X similar to Startup Disk that lets you choose your startup disk.

When you've got Mac OS X installed you'll want to get started using it. Unfortunately most of your commercial software will probably only work in the Classic environment (Mac OS 9.1). As the year progresses updates and new releases will be announced that will make most of your commercial software more Mac OS X compatible.

When Apple introduced the PowerMacs users were introduced to 68K applications and PPC applications. Now with Mac OS X you'll have to keep track of Classic applications that will run in only Classic mode, Carbon applications that will work on non-Mac OS X systems or in Classic as well as in Mac OS X, and then there are Cocoa applications that will only work in Mac OS X. By the end of the year you can expect to see most of the more popular applications updated or new versions released as Carbon applications. It may be a year or longer before many of these applica-

CONTINUED ON PAGE 8

AMUG FEBRUARY MEETING

The meeting began with the standard Q&A featuring technical questions from those in attendance. Next month we'll probably have questions and probable solutions listed here in Maclanta.

Image input and output was the feature du jour from this month's guest. Canon's Scott Norman introduced many AMUGer's and visitors to the benefits of Canon's scanners and Bubble Jet printer. And that's Canon with one "N", as Scott pointed out.

Scott discussed the advantages of Canon's Bubble Jet technology over competing ink jet systems, and showed examples of the accuracy of their print head systems. Very impressive. A unique feature to Canon's printers, in addition to more accurate ink level detection, is the scanner cartridge for use in Canon systems. This cartridge replaces the black ink tank and can scan well as most entry-level consumer scanners. And considering the multi-page feed

available with the printer, Canon's printers are better multi-page scanners than most competitors' single page scanners.

But Canon also has several impressive flatbed scanners. Slim, portable, and powered by the USB cable were



Scott Norman from Canon introduced AMUG to Canon's scanner and inkjet line.

impressive features found in the Canon scanners. And dual hinged covers that keep as much light out of the scan area as possible, even with large-sized originals, had many in attendance impressed.

In club business, Michael Henigan, AMUG Chair, brought a motion before the

membership. The annual budget of \$16,500 income and \$16,500 expenses was finally voted upon, and passed

FEBRUARY DOOR PRIZE WINNERS

Chuck Briggs.....	FlashBack
Don Cook.....	Canon Hat
Ali Demarci.....	Stuffit Deluxe
Ali Demarci.....	Microsoft Encarta
Ali Demarci.....	Canon Scanner
John Forbes.....	Canon Hat
Mel Martin.....	Canon Paper
Mike "Brainworm" Merritt.....	Canon Hat
Charlie Newton.....	Canon Printer
Charlie Newton.....	Stuffit Deluxe
Charles Smith.....	Canon Paper

unanimously. Those in attendance were also given a sneak peak of the upcoming revised AMUG web page. A new URL for the AMUG web page was also introduced. Members and non-members should now use <http://www.amugonline.org>. The new web site is still in development, and will be posted soon. Until our new web site is posted, a temporary page is up offering basic club information and news.

Poor weather seemed to have kept attendance lower than our expected 100 people. And Scott was generous enough to offer both his giveaways. Two lucky AMUG members walked away with a scanner and a printer!

AMUG MEETING SCHEDULE

3/17/01 - The First Maclanta Xpo (St. Patrick's Day)
4/17/01 - Special Guest (it's a surprise!)
5/15/01 - The great Web Publishing Shootout
- Part 1 with Adobe
6/19/01 - The great Web Publishing Shootout
- Part 2 with Macromedia
7/17/01 - iMovie and the Video Revolution
8/21/01 - Apple Computer Macworld New York Update
9/22/01 - The Second Maclanta Xpo with Microsoft
10/16/01 - TBA
11/20/01 - Mac Holiday Gift Ideas
12/18/01 - TBA (Christmas Party)

Note: Remember, all dates and topics are subject to change. Please check back periodically for updates.

All meetings except for the Maclanta Xpo are at Macquarium unless otherwise noted.

Editor's Note: We're honored to be able to reprint select articles from the long running E-mail-only TidBITS mailing list. Look for more great articles and reviews from TidBITS in upcoming issues of Maclanta.

UNIX COMING TO A MAC NEAR YOU, PART 2

By Chris Pepper (pepper@reppep.com)
(TidBITS 559, 11-Dec-2000) - With Mac OS X, Apple is bringing Unix to a large, new audience. In part one of this article, I offered a brief history of Unix

and mapped out how Unix will provide the basis of Mac OS X. The Macintosh user community is comprised of well over 25 million people, so as Apple paves a new path - even if most don't follow it immediately (or ever) - the implications for the industry are significant. Apple's last major change of direction, the iMac, introduced translucent colors, a strikingly original case design, USB, the removal of floppy disks and serial ports, and Internet access as a

major feature. The iMac had a profound impact on the whole industry - even PC and PDA users without iMac's were affected by the iMac's endorsement of colors and USB. To understand Apple's latest decisions behind Mac OS X and its impact, it's necessary to examine Mac OS X, Unix, and the industry as a whole.
<http://db.tidbits.com/getbits.acgi?tbart=06227>

Competition Makes Strange Bedfellows - In this industry, the dominant

CONTINUED ON PAGE 6

MACLANTA XPO

Stan Allen (stan_allen@atlmug.org)

What is Maclanta Xpo?

It's the Monthly Meeting, the Swapfest and Mac College all rolled into one Special Saturday event.

Our Monthly Meeting will feature the first demo of the final (or close to final) shipping version of the most long-awaited Apple product ever...

Mac OS X! Mike Kozee from the Apple Solutions Experts program will be there to help us launch Apple's new operating system.

The AMUG Swapfest will have expanded hours, going

from 9:30 AM until 2 PM. The Swapfest is like a huge garage sale of used (and new) computer and electronic equipment. Come on by and browse for that discontinued or hard to find hardware or software item you've been looking for at a ridiculous low price. Haggling and trading are accepted at the swapfest. It's a great time!

Also, Mac College will start its new

semester with a core curriculum of 6 classes.

When is Maclanta Xpo?

It's on Saturday, March 17th (St. Patrick's Day) - Just one week before the official launch of OS X.

Where is Maclanta Xpo?

It will be held at North Atlanta High School in the Cafeteria and nearby classrooms. Directions to the school



can be found in the AMUG web site and in the Online Community Events Folder. Directions to the classrooms and Mac OS X demo will be

posted at the registration area on the day of the event.

Who is Maclanta Xpo?

It is sponsored by AMUG. The Swapfest will be open to AMUG members only from 9:30 AM until 10:30 AM. The general public will be invited from 10:30 AM until 2 PM. Of course, the General Meeting/ Mac OS X Demo and Mac College classes are all open to the public. Classes will begin at 11 AM and at 1 PM. Classroom space is limited, so you need to register at the door upon arrival to get a seat in your choice of classes.

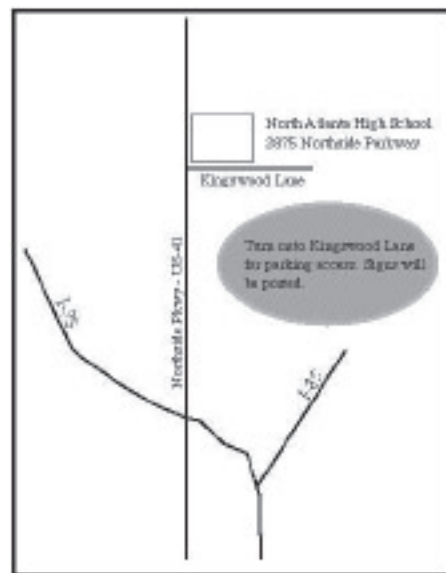
Anyone interested in volunteering for helping make the Xpo a success should contact Stan Allen at stan_allen@atlmug.org. We are still looking for instructors for a couple of classes, folks to work the registration tables, help to bring in equipment, move a few tables and help with refreshments. We are also looking to borrow a LCD data projector and a couple of Macs (G3 or better) to use for the classes.

Also, there is no charge to sell at the Swapfest, but we do ask that you register with the front desk.

DIRECTIONS TO NORTHSIDE HIGH SCHOOL:

Going to Maclanta Xpo? Here's how...

Take I-75 to the Northside Parkway exit. If you are coming from the South (from Downtown), take a right onto Northside. If you are coming from the North (the 'burbs), take a left onto Northside. The school is just about 5 minutes from the exit. The entrance is at the rear of the school, so make sure to park in the back, off of Kingswood, rather than directly off of Northside.



Thanks For Joining AMUG

William Akers, Gerry de Harven, Carol Busby, Warren Was, Tyler Jones, Mark Farmer, Karen Kirspel, Andrew Slusher, Tom Baumgarten

And Renewing Your Membership

Kenneth Bowles, David Cato, Michael Dangerfield, Mria Dangerfield, Scott Denton, Ernest Di Rico, Les Fuchs, Dianne Gregg, Kathleen Innes, Henry J Jacobs, Sheila Lichtman, Donny Limbert, Beverly Mattox, Steve Meeks, William Moss, L Gene Sidwell, Heyward Tunstall, Charles Wommack, Jarrot Lindsey, Janet Ferguson, Glen Samels, Christopher Uhl, Carol Busby

Maclanta Xpo Schedule of Events

Swapfest Hours:

Setup time for Swapfest
sellers and staff 8:30 AM - 9:30 AM
Swapfest for AMUG
members only 9:30 AM - 10:30 AM
Swapfest open
to the public..... 10:30 AM - 2:00 PM
Mac OS X Demo..... 12:00 Noon - 1:00 PM

Mac College Schedule:

Intro to the AMUG Online
Community 11 am - 12 pm
Basic Macintosh System
Maintenance..... 11 am - 12 pm
Quicken Basics..... 11 am - 12 pm
How to Network Your Mac 1 pm - 2 pm
Web Surfing 101..... 1 pm - 2 pm
All About E-mail 1 pm - 2 pm

Notes: All event times, including the Mac College schedule are subject to change. It's a good idea to check the web site before the event to make sure things like class times or the class subjects have not changed.

player is obvious: Microsoft. In fact, Microsoft is so much larger and more entrenched than any other company, including Apple, that they're almost a feature of the landscape. All Apple's plans for years have been made around the realities of playing with, against, and off of Windows PCs. As it turns out, this is just as true for Linux and BSD Unix users - perhaps even more so, because the PCs that Linux and BSD generally run on can (and often do) also run Windows. This raises an interesting question: are Apple and users of Unix-based systems natural allies, trying to carve different niches from the Windows market? It would seem that by basing Mac OS X on BSD Unix, at least Apple is endorsing this view.

Despite their fundamental differences, the Mac OS and Unix have a number of interesting similarities. Both platforms are shadowed by Microsoft's dominance but boast vigorous support within their own communities. The Mac OS and Unix have to "fit in and stand out," and success is often determined by how well they integrate with Windows. Windows can't (without the addition of a utility like Mediafour's MacDrive 2000) read Mac or Unix file formats or disk formats, but Macs and many Unix systems can both read Windows (FAT) floppies and hard disks. In contrast, Windows has so much market share that various "private" Microsoft technologies, such as the Word .doc file format and the Win32 APIs, have become de facto standards. In turn, Macs and Unix machines support these Microsoft-originated technologies to varying degrees, with Mac OS features like File Exchange and third-party products like Thursby Software's DAVE, which enables Macs to do Windows file sharing. The Mac OS and Unix must offer major advantages to be considered in spite of compatibility issues and have to take a much more open attitude towards compatibility and interoperabil-

ity.

<http://www.mediafour.com/>
<http://www.thursby.com/products/dave.html>

Because the capability to run other operating systems, particularly Windows, is so valuable, emulators are popular on Macs and Unix machines. Full emulators like Virtual PC provide all the capabilities of a foreign computer system, allowing other operating systems to run within the emulator. In this way, Virtual PC can run Windows, Linux, and other operating systems intended for Intel-based PCs. An alternative is to replicate only the operating system's functionality with a replacement compatibility layer. This approach is popular on PCs, where the processors are the same, so emulating just Windows, instead of a whole PC, provides a workable system. This is also how the Classic environment in Mac OS X works, and how the free Mac-on-Linux project runs Mac OS 8.6 and later under Linux on PowerPC-based computers.

<http://www.connectix.com/products/vpc4.html>
<http://www.maconlinux.org/>

Unix is often seen as the operating system for serious computer experts. At the other end of the continuum, Macs are "computers for the rest of us". Together, Unix and the Mac OS bracket Microsoft's huge lump in the bell curve of platform usage. Macs and Unix often differentiate themselves from Windows on the same issues, but take opposite tacks in doing so. Examples of such divergence include the Mac's ease of use, tight hardware-software integration, and - until now - unified control over hardware and operating system development; in contrast, Unix supporters tout advantages such as flexibility, control, broad hardware support, and reliance on open source projects.

Real World Differences - Despite these similarities, we shouldn't lose sight of the fact that the Mac OS and

Unix are in many ways utterly different. Unix has a long and distinguished history as a collaborative research project and programming environment. Over the years, it has matured into a robust and efficient networking platform, while remaining excellent as a development environment. In obvious contrast, Apple considers Macs to be powerful appliances, or sometimes technological agents, but doesn't expect users to develop software or explore the system. As open source advocates love to point out, Unix development is a worldwide and long-running effort, so Unix is very mature in their terms - stable and fast. On the other hand, Mac OS 9's maturity is visible in its consistency among applications and its well-honed interface. This is part of why the recent QuickTime and Sherlock interfaces (and many of the changes in Mac OS X's interface) cause such dismay among Mac users - they throw years of interface improvement and familiarity out the window, abandoning a long history of deliberate and incremental improvement in favor of novelty and glitz.

Over its long history, Unix has developed an extensive stable of software, especially in the networking, programming, and security arenas. "Productivity" applications, however, are much less common on Unix than on Macs and Windows, where they're staples - used by millions of people each day. A quick glance at the Freshmeat Linux/Unix software release site shows a wealth of programming tools, servers, and hacks, but little in the word processing, publishing, and spreadsheet areas. This makes a lot of sense when you remember that Linux machines can also run Windows, so many Linux users may also be using Microsoft Office under Windows on the same machines they use for Linux, or on secondary machines or client workstations, reserving the Unix machines as

servers or programming environments. This is something of a self-fulfilling prophecy - because Unix is so impoverished in business software, Unix users generally require additional systems for such work, and because they have alternatives, there's less demand for these applications on Unix. As a result, Unix remains an excellent server platform, with notably different usage patterns than Mac OS and Windows.

<http://freshmeat.net/>

Grand Unixification – With Mac OS X, Apple has done a fair job of reconciling these two worlds in a brand-new combination, and an excellent job of isolating them enough that users can remain within a single familiar environment if desired. There are rough edges (particularly the three different views of the file structure: Mac OS 9/Classic, the slightly different Mac OS X layout, and the NeXT/Unix structure), but when Mac OS X is running, it's easy to ignore the Unix aspects, and remain in a familiar Mac environment with bigger icons, different buttons, and a much more limited Desktop.

This is apparently Apple's expectation for most users - that they will completely ignore the underlying Darwin layer, while still benefiting from its stability and performance. Alternatively, if you use the included Terminal program to log into the Darwin environment, you encounter a fairly normal Unix installation (except that, again, files are in strange places - a leftover from Mac OS X's NeXT heritage).

In addition to trying to create a unified system, Apple is also trying to move the proprietary work NeXT did on NeXTstep back into the BSD/Unix mainstream. Apple has repeatedly stated that their goal is to use as much generic BSD code as possible, thus saving time and money for maintenance of proprietary Apple software. As part of this pro-

cess, Apple has released Darwin under an open source license, which means the program code is available for non-Apple developers to see, critique, and modify. In licensing terms, Mac OS X consists of two parts. The Darwin code is public and free, and the rest (the graphical and Mac-specific parts) is proprietary. This is a reasonable division, as Apple's focus has never been robust core operating system functionality, but rather the user interface. If taking Darwin open source proves successful [and comments from Darwin developers at MacHack 2000 seemed to indicate it already has been -Adam], Apple will garner significant development support from other developers, helping to improve the Darwin foundation for Mac OS X, and freeing more Apple developers to focus on Apple's strengths.

This split between the open source foundation and proprietary upper layers gives Apple what they've been desperately seeking for years: a version of the Mac OS that includes all the buzzwords important for a good, fast, stable operating system. BSD is stable and features preemptive multitasking, and provides excellent virtual memory and crash protection. Apple's hope is that existing Macintosh users will appreciate these features, and that they'll also attract a new class of users: serious network users and server administrators. With Mac OS X, Apple is taking a stride towards making the Mac an excellent server platform - even for serving Windows users. Plus, with high-bandwidth Internet connections becoming available and popular, Apple might just be on the cusp of empowering another leap in self-publishing. Mac OS X now includes Apache, gcc, cron, ssh, mainstream Perl, and a whole slate of Unix-based staples which were simply unavailable for Macs before, or required interface hacks and significant porting effort to run on the Mac. Mac OS X with Apache is already a much better

personal server platform than Windows 98 or Microsoft's new Windows Me.

<http://www.microsoft.com/windowsme/>

What Does Unix Mean to Me? –

Historically, Macs have had limited support for the latest Internet protocols and security tools. Although Mac OS 9 has an excellent track record for security, and there are several excellent mail, Web, FTP, and news clients, Macs have been too small a population to garner the same level of support as Windows from many vendors. This results in fewer options for virtual private networks (VPNs), PPP over Ethernet (PPoE, required for many cable and DSL ISPs), and similar networking tools and utilities. Mac OS X brings Unix-based tools to fill these needs. In many areas, this move should help eliminate the problems of being a niche player which have plagued the Mac OS for years.

The union of the Mac OS with Unix also has interesting sociopolitical implications for Mac users in the larger industry. With the Apple and Apple II, Apple made computers much more affordable and accessible to individual users. With the original Power Macintoshes, Apple became the only high-volume RISC (Reduced Instruction Set Computing, a design model that enabled PowerPCs to be so much faster than the previous Motorola 68000 series) computer vendor, bringing a major speed improvement to its users. If Mac OS X is even somewhat successful, within a year it will more than double the number of computer systems running BSD-based operating systems, even though Mac OS X users won't see their computers as Unix systems.

It will be interesting to see if and how Apple uses this new leverage into the Unix world, and if Apple takes advantage of the power of Unix directly, or instead restricts its focus to Aqua-based graphical applications. Thanks to hybrid

applications, Apple may not have to make the choice. The FizzillaMach Web browser, for instance, uses a Carbon front end with an Aqua interface, but the standard Unix-based Mozilla back end for high-performance threaded networking. In the future, I hope to see Mac developers using the powerful Unix utilities included in Darwin from their Mac applications, perhaps through AppleScript scripts that pass text from Carbon to command-line programs like `grep`, `sed`, and `wget`, (which find matches, find and replace text, and get Web pages and sites, respectively) returning results to the Mac applications.

<http://www.mozilla.org/ports/fizzilla/>

Apple is bringing us into the Unix world, like it or not. It is important to remember that Mac OS X's Darwin foundation offers major advantages for Mac users in two very different areas. First, it provides much better reliability

and power than Mac OS 9, almost invisibly. Even users who completely ignore Darwin will silently benefit from its robustness and performance. Second, Darwin provides access to the tools and operating system facilities that make Unix so powerful, like shell scripting and networking tools.

Each user of Mac OS X will have to make their own decisions on whether and how much to venture beyond familiar Macintosh territory into the domain of Unix, but the capability will always be there. For me, at least, it's been the beginning of an exciting journey.

Chris Pepper is a Linux and Solaris system administrator in New York, and he's just delighted that his Mac workstations are now running Unix like the servers he coddles for a living. If you want Chris to coddle your servers, check out his resume and contact him directly. His Mac OS X Software and Information site has links to useful information and a few Unix ports for Apple's new operating systems.

<http://www.reppep.com/~pepper/resume/>
<http://www.mosxsw.com/>

tions are released as Cocoa applications. Programs that are new to the market, or were originally written for NextStep/OpenStep or one of the various flavor's of Unix or Linux will also probably make their appearance on the Mac as Cocoa programs.

Having said all this Mac OS X looks amazing. It's fast, remarkably stable, and quick to get started with. It's a new operating system, one that Apple is betting the farm on. But if you have any qualms about how it will fit into your life you may be better served by waiting until later this year.

Chris is currently a support analyst at a large global multi-media organization seemingly bent on world domination. Other than AMUG. His hobbies include playing on his Mac at home, playing on his Mac at work, and thinking about playing on his Mac if he's not at home or work. He also enjoys the occasional movie and book, at least when he's not working or playing on his Mac. He's realizing that he may need some new hobbies...



Membership Application

Atlanta Macintosh Users Group, Inc.
Post Office Box 15130 / Atlanta, Georgia 30333-0130

To join, fill out and print this page, attach your check (or fill in the required credit card information), and mail to the address shown above. Membership fees are non-refundable (if for some strange reason you choose to cancel your membership).

Membership Category: Yes! I would like to: Join AMUG! Renew my membership

Regular: \$40/year.

Privileges: admission to General Meetings, 1 year Newsletter Subscription, voting privileges, opportunity to participate in special hardware and software purchases, and 1 BBS account with full member access including Internet e-mail and OneNet/Usenet Newsgroups.

Household: \$10/year. There must be one Regular membership held by an individual in the household to qualify. Subsequent household members may join for only \$10 each (pro-rated at \$1/month to a maximum of \$10). Privileges are the same as a Regular member, except that only one newsletter will be mailed to the household address. Those under 18 will not receive OneNet/Usenet access without written parental permission.

Full-Time Student: \$25/year (copy of student ID and current class registration required).

Privileges: same as Regular.

Corporate: \$105/year (includes 3 members). Additional members may be added at \$35 each.

Privileges: Each member is entitled to admission to General Meetings for entire immediate household, 1 year Newsletter Subscription, voting privileges, opportunity to participate in special hardware and software purchases, and 1 BBS account with full member access. Must be paid by company check.

Name	Occupation	
Address	Date of Birth (Optional)	
City, State, ZIP Code	E-Mail Address	
Home Phone	Work Phone	Internet Provider (Not AMUG)
Computer Most Commonly Used (make/model)?	How would you like to become involved in AMUG?	
RAM Amount (in MB)?	System Version?	Name of sponsoring member (if any)?
Brand, Model, and Speed of Modem Used?	Do you need FirstClass BBS software? Please add \$5.00 for the software shipping and handling.	Diskettes CD
Please Note Method of Payment:		
My check is enclosed: #		
I'd like to charge my VISA/Mastercard		
Cardholder Name As It Appears On Credit Card	X _____ Cardholder's Signature	
Credit Card Number	Expiration Date	