

printout

Keystone MacCentral Macintosh Users Group ♦ 717-932-4009 ♦ <http://www.keystonemac.com>

Speech Recognition and AppleScript

by Ed Benninghove

For years your Mac has come with speech recognition and AppleScript but how many of you have taken the time to experiment with it? Speech recognition has come a long way since its first incarnation on the Mac OS platform. For example it misunderstood my dog's barking as "Load Al Unser Junior Racing" quite a few times and this small announce was enough to turn several people off from the technology. Speech recognition now is at a point that it has the potential to make your computing experience more enjoyable and interactive

while you are moving about the room.

Using AppleScript along with Speech Recognition makes most tasks on your computer as simple as opening your mouth. And we're going to give you the basics to help you explore this little used feature we've had for years. ☺



Contents

Speech Recognition And Applescript by Ed Benninghove	1
President's Corner by Ed Benninghove	3
The Way We Were by Gary Brandt	4, 9
Optimizing Disks Is a Waste of Time by David Shayer	5-7
Rumors and Reality by Tim Sullivan	8
July Software Review by Tim Sullivan	9-11

Keystone MacCentral is a not-for-profit group of Macintosh enthusiasts who generally meet the third Tuesday of every month to exchange information, participate in question-and-answer sessions, view product demonstrations, and obtain resource materials that will help them get the most out of their computer systems. Meetings are free and open to the public. The *Keystone MacCentral Printout* is the official newsletter of Keystone MacCentral and an independent publication not affiliated or otherwise associated with or sponsored or sanctioned by any for-profit organization, including Apple Computer, Inc. Copyright © 2003, Keystone MacCentral, 1020 Pines Road, Etters, PA 17319.

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Keystone MacCentral Essentials

Meeting Place
Gannett West
209 Senate Avenue
Camp Hill

Web Site
<http://www.keystonemac.com>

Address
1020 Pines Road
Etters, PA 17319

Phone
717-932-4009

Fax
717-932-0888

President's Corner

It's been an active month for the Mac community already and the Create Expo in NY hasn't begun yet! At the WWDC, World Wide Developers Conference, Apple announced the all new, 64 bit G5 Desktop towers, Panther and several small upgrades including a new version of iChat with audio and video support. The motherboard upgrades alone are impressive in these new machines with BUS speeds never seen before that were almost a necessity to make the G5 scream to full potential. Panther, Apple's next version of its operating system, OS X, will be sporting some new interface enhancements and I am looking forward to seeing Exposé, a feature that takes the overlapping clutter of all the windows on your screen and makes them all visible instantly so you can pick the exact one you want. Last but not least, the Mac will finally have a great audio/video chat ability with the new version of iChat. Text messaging and e-mail are all fine and dandy but now over the internet you'll be able to see and speak to anyone around the world.

That's the world of Mac news this month. I hope to have more for you next month and as always, please send any questions, comments, or terms you'd like define to president@keystonemac.com.

Question of the month: What, why, where and how do I do a clean install of OS X?

What?: A clean install of your operating system is just that, clean, starting from scratch. Your existing system files will get renamed to

something like 'System Folder Old' and all of your old preferences and extensions will remain there, unused, while a new, factory original, system folder gets installed. This differs from a straight install or upgrade in that your computer would otherwise selectively replace/upgrade existing files in your existing system folder, leaving your preferences and any extras installed intact.

Why?: This depends on your use of your computer. If you're a heavy user and do a lot of tweaking of your computer, run ten apps at once, tweak/hack your system, use a lot of freeware, shareware or even some commercial products that tweak how your computer works, you are bound to run into a problem eventually. With all these variables a lot of times it is easier to just do a clean OS install and start fresh to solve a lot of your problems. If you are an average joe, most likely this is not the case and you can trace back the last few things you've installed and pinpoint the problem avoiding this dilemma.

Where?: Where, as it applies in this situation, is where to find common files you'll need after you do a clean install. As always with installing a OS you should backup your important files. These are your documents and your preferences. I am sure many you have backed up your documents but forgot to backup your preferences at some point in time. Your preferences hold things such as your e-mail, bookmarks and

preferences to your Application's customizable settings. Under OS 9 and prior these are in the System Folder, in a folder labeled 'Preferences' and additionally in your System Folder there is an 'Application Support' folder containing such information as well. Under OS X these settings are stored in your 'Home' directory within the Library folder. I suggest backing up the entire Library folder as there are important items in many different locations within this folder.

How?: Under OS 9, insert your installation CD, restart and hold the C key down until you are brought to the general installation process. Past the first few licensing agreements you'll see an 'Options' button and selecting this will give you the option of doing a clean install.

Under OS X, again insert your install CD, this time launch the OS X installer on the CD and you will eventually come to a screen prompting to do an upgrade, clean install or format your drive and start from scratch. **DO NOT FORMAT UNLESS YOU BACK UP EVERYTHING TO A CD OR OTHER DRIVE.**

After your clean install is complete you should have a fresh clean system but you'll notice you've lost your e-mail and bookmarks. This can be solved by selectively restoring items from your backup of your Preferences or Library folders and when you launch those apps again, you'll see all of your old saved items. ☹

The Way We Were

June 17, 2003



Business Meeting

Ed Benninghove began the business meeting by asking board members to give their reports. Tim Sullivan reported one membership renewal and mentioned the release of Internet Explorer 5.2.3 which will be the last version that Microsoft releases for the Mac. It seems that Apple's Safari browser is gaining more converts among OS X users. Linda Cober told us to expect some visitors from Hershey Apple Core at the July meeting.

Gary Brandt reported two motions passed by the board at its meeting on June 3, 2003. The board approved purchase of a train ticket to send Industry Liaison Eric Adams to the Create Expo in New York in July so that he can retain his relationships with vendors he has met. The other motion passed by the board dealt with the removal of a board member. After discussions over the last several months, members present at the June board meeting approved a motion to remove Dudley Peffley from his position as Membership Director in accordance with provisions of the club's bylaws. Most of the duties of the Membership Director have been performed by Tim Sullivan and Jim Carey in recent months. They will continue to do so until next year's election of officers.

Wendy Adams brought in a birthday cake to celebrate Ed's

birthday and invited all to help themselves. Linda Smith showed us her redesign of the KeyMac web site. She has included a new section called Program Links with links related to the month's program. She added links for some news sites and e-zines and a link to find all sorts of drivers you may need to update for OS X. Ed has agreed to do the program in July. He already had some ideas for that program but he invited members to tell him if they were interested in a particular topic.



Q & A & Comments

We did not hold our normal Q & A session in June. We began instead with Abigail Schearer reviewing some of the terms in the handout she provided. This material was gleaned from *The Robin Williams Mac OS X Book - Jaguar Edition* which some of our members had purchased in a group book buy. We will be reviewing other chapters from that book in coming months.

Before Jim Carey and Linda Smith began their program, we watched a video of Steve Jobs demonstrating iTunes 4 and the Apple Music Store. He also showed the new iPod which now drops into a dock. The dock has a Line Out jack to connect to a stereo system. Other new features include AAC decoding, On-the-Go playlists, and customization options for the Main Menu. Auto-Sync seamlessly synchronizes your

iTunes and iPod libraries. The new AAC codec is a state of the art method which creates smaller file sizes with less loss of musical information than the MP3 format. Steve also announced iTunes support for Rendezvous, which enables computers to find each other over a network to share their respective iTunes libraries. Apple has since released iTunes 4.1 to disable internet sharing since the hacker community could not leave well enough alone. Songs can now be archived onto DVD from within iTunes. Steve demonstrated the ease of use built into the new Apple Music Store. You can browse or search for music and listen to 30 second previews of each available selection. Apple is offering some exclusive tracks and streaming videos from some popular artists.



Program Notes

Jim Carey brought in his iPod to demonstrate how he downloads the online Your Mac Life show to iTunes and then transfers it to his iPod for listening as he walks or works. The new iPod can also function as an external hard drive to concurrently hold data as well as music files. If used as an external drive, just remember to unmount it from the desktop before shutting down your Mac.

Linda Smith demonstrated importing tracks from a CD into the iTunes music library. An online database is accessed to import the track listings of a CD. Using iTunes 4, you can choose to import tracks as MP3, AAC, or even WAV files. In the Burning pane of iTunes preferences, you can check the option to use Sound Check. This option will level the volume of all burned tracks. Sound Check in the

Continued on page 9

Optimizing Disks Is a Waste of Time

Optimizing disks is a waste of time. There, I said it. The horse is out of the bag, the cat is out of the barn. So why do so many people believe that an optimizer is an essential part of any Mac user's tool kit? And what does it mean to optimize a disk, anyway?

Background Fragments — When you save a file to disk, the file system looks for an empty space to write the data. If there isn't a single space large enough, it divides the file among several smaller spaces. When a file is stored in more than one piece, we say it's fragmented. Each piece is called a fragment, or an extent.

A file may be broken into two fragments, or 20 fragments, or 200 fragments. The file system doesn't care; it can handle any number of fragments equally well. However, reading a fragmented file takes longer than reading an unfragmented one. The more fragments in the file, the longer it takes to read. That's because the hard disk's head must move to each fragment and read each one separately. Reading a single chunk of data sequentially is fast, even when the chunk is rather large. But moving the head from track to track for each fragment is comparatively slow. (And I mean "comparatively" - we're talking about additional milliseconds here.)

The solution to this slowdown? Defragmenting or optimizing. Some programs claim to defragment a disk, others claim to optimize it,

and a few offer both functions. What's the difference?

Defragmenting combines files that are broken up across multiple fragments into a single fragment. But defragmenting files is only part of the problem, since the free space on a disk is often split into many pieces, a little here, and a little there. In effect, the free space is fragmented. You may have 5 GB of free space, but it could be in 5,000 chunks of 1 MB each. The next file saved may be fragmented, simply because there isn't enough unfragmented free space. That's where optimizing comes in - it defragments all the fragmented files and the free space.

Some optimizers also position similar files, such as all the operating system files, physically next to one another. The claim is that this speeds up the computer even more, because operating system files are likely to be accessed together, which prevents the disk head from needing to move long distances to read the next file. Although the concept sounds good at first blush, I'm dubious that this technique creates any perceptible speed increase. Beyond a few simple cases, it's very difficult to divine in advance which file the computer will want next.

So optimizing the disk should make your Mac run faster, right? Well, maybe. If a file you use all the time is fragmented, such as a key part of the operating system, then defragmenting that file could really

help. But the operating system is usually written to the disk right after it has been freshly formatted. The disk is empty, so the operating system is rarely fragmented. If a file you rarely use is fragmented, such as that QuickTime movie from Aunt Ethel's birthday party, it doesn't matter as long as you can access the file - play the movie, in this case - normally. In short, avoiding fragmentation is helpful only on files that are accessed constantly.

So where did this cult of disk optimization come from? Back in the early days of Windows, and DOS before that, PCs used the FAT (File Allocation Table) file system. Legend has it that the FAT file system was pretty bad about fragmenting files, so disks quickly became badly fragmented. Back then, disks - and computers in general - were extremely slow, especially by today's standards. With those painfully slow disks and computers, optimizing a disk could provide noticeable performance improvements. Modern computers and disks are of course much faster, and they also have much larger and more sophisticated disk caches, all of which significantly reduces the impact of a fragmented disk.

When Apple designed the HFS (Hierarchical File System) file system for the Mac, and later when they replaced HFS with HFS+, they took special care to try to minimize fragmentation. All hard disks store data in 512 byte chunks called sectors. FAT, HFS, and HFS+ use

Continued on page 6

Optimizing Disks Is a Waste of Time

larger chunks, called clusters on FAT and allocation blocks on HFS. One purpose of clusters and allocation blocks is to try to reduce fragmentation, by storing files in larger pieces. But HFS goes one step further. When saving a file to disk, the Mac file system allocates space in even larger chunks, called clumps, in a further effort to reduce fragmentation.

When the Mac file system saves a file, it looks for a free space large enough to hold the entire file. If there aren't any, it finds the largest free space available, then the next largest, and so on, in an effort to reduce fragmentation as much as possible. HFS will never fragment a file if it can be avoided.

Real World Fragmentation —

There are two things that lead to disk fragmentation for most people: full disks and email.

Overall, the Mac's HFS+ file system does a good job of keeping fragmentation to a minimum, assuming a reasonable amount of free space remains on the disk to use when laying down files in contiguous chunks. How much free space should you maintain? There is no set answer, but leaving 20 to 25 percent of a disk free is a good rule of thumb.

If your 60 GB hard disk has only 5 GB free, that doesn't mean that you have a single empty space on the disk where the entire 5 GB is available. Rather, there are dozens, if not hundreds, of smaller free areas. The largest single chunk of free space may be only 500 MB. When a disk is very full, not only is there less total free space, but the size of the largest free area becomes

much smaller. Thus the likelihood of fragmentation goes way up.

What kind of files tend to be fragmented? The most likely candidates are files that grow regularly, with little bits of data added to them over time. Each time the file system extends the file, it looks for another piece of free space, and the file fragments a little more. Various types of files fit this profile, but the prime candidate is email.

My email program's In box file has been fragmented into more than 100 pieces. Does this matter? No, it still functions perfectly. Doesn't it slow down my email program? Certainly, but not enough for me to notice. The main reason people optimize their disk is to make their Mac run faster. Doubtless it does make using the Mac somewhat faster, but I've rarely seen a perceptible speed increase in real world usage.

Pros and Cons — So increasing the speed of your Mac, even if the improvement is nearly imperceptible, is one reason to optimize your hard disk. There is a second reason to consider defragmenting files. If you suffer a disk crash, disk recovery software has a harder time recovering badly fragmented files than unfragmented files, simply because there are more pieces to track down. And which files are most likely to be fragmented? Email files, which are also the most likely to have changed recently, and thus the least likely to be in your last backup. (Obligatory reminder - if you don't have a recent backup, make one right after you finish reading this article. Really.)

There are also some good reasons not to optimize, and ironically, one of them is speed. Optimizers are slow. It takes many hours to optimize a disk. Does it make sense to tie up your Mac for hours just to make it respond a second faster when you're opening a mailbox?

More worrying is the fact that if the optimizer crashes, the disk could be, to use the technical term, "horked." That's because an optimizer must move nearly every piece of data on the disk. The best optimizers use algorithms that make it nearly impossible to lose data, even if the power goes out in the middle of a long optimization, but there's always a slim chance of something bad happening when you let a program move everything on your disk.

The problem is that no program is perfect. Earlier versions of some optimizers have had bugs that resulted in lost data or damaged disks. I don't know of any currently shipping optimizers with these types of catastrophic bugs. But that's not to say that some future version may not contain a bug, or that a current version won't have trouble when combined with a new version of the Mac OS. Be careful when you're using optimization software!

Optimization Advice — If you're going to optimize your disk, be sure to check the disk first with a program like Apple's Disk First Aid or Disk Utility. A damaged disk could cause even the best optimizer to crash when it runs across corrupted data or data in a completely unexpected place.

It's also a good idea to back up your entire disk (or at least your most important data) first. But once you have a backup, you could just erase the disk, and restore from your backup. Doing this optimizes the disk as effectively as running any optimizer. Plus, reformatting a hard disk ensures you have clean directory structures, and if you reformat it with the option of writing zeroes to every sector (which takes a long time and isn't worthwhile unless you've been experiencing odd disk problems),

you'll also make the drive map out any bad blocks it may have developed. That's why I say my favorite optimizer is Retrospect - with it you can both protect your data and optimize your disk.

<http://www.dantz.com/products/mac_express/>

Speed Disk, the optimizer in Symantec's Norton Utilities, has some useful features for analyzing a disk. It rates the overall disk fragmentation as light, moderate, or severe. It's almost certainly not worth optimizing a disk unless the fragmentation is severe, and often not even then. That's because Speed Disk considers a disk severely fragmented based on a combination of how many files are fragmented, how fragmented they are, and how fragmented the b-trees (disk directory structures) are. The last item is what can make it seem alarmist, because the b-trees act as triggers: if they're fragmented a certain amount, Speed Disk can automatically assign the whole disk a severe rating, even if the other files on the disk wouldn't otherwise generate that rating.

<http://www.symantec.com/nu/nu_mac/>

Speed Disk shows a graph of the files and free space on the disk, letting you see how badly the free space is fragmented. It also lists the size of the largest free block, a useful piece of information to keep in mind because any file larger than that will, by necessity, be fragmented when it is saved. If you routinely work with files larger than your largest free block, optimizing the disk would be advisable.

Lastly, Speed Disk lists all fragmented files and the number of fragments per file, and it lets you defragment individual files. Why would you want to do this? HFS+

can track up to eight fragments in a file's catalog record. If a file has more than eight fragments, HFS+ creates additional records, called extent records, to track the extra fragments. Since files with more than eight fragments require accessing these additional records each time they are opened, a file with more than eight fragments is certainly a reasonable candidate to be defragmented, assuming of course that you access it frequently enough for defragmenting to make a real difference.

There's usually no need for Speed Disk's capability to defragment individual files. That's because you can usually defragment a file yourself, by simply duplicating it in the Finder. When the file system creates the duplicate file, it automatically uses only a single fragment for the file, assuming there is enough contiguous free space on the disk. Then you can delete the original and rename the copy with the original file's name.

Alsoft's DiskWarrior 3 offers the unique feature of showing a graph of a disk's directory, using a color gradient to show items that are out of order. DiskWarrior's "rebuild" function is usually used to repair damaged disks, but when used on healthy disks, it "optimizes" their directories. Although Alsoft calls this feature "optimization," it's quite different from what all other disk optimizers do. Other disk optimizers defragment the files on a disk. DiskWarrior puts the disk's catalog in order.

<<http://www.alsoft.com/DiskWarrior/>>

The catalog is composed of nodes, which contain records that correspond to files. The nodes form a tree structure, with all the nodes linked together in a specific order. The file system tends to keep the nodes in order. But as files are

added to and deleted from the disk, nodes are likewise created, deleted, and shuffled around, and they can end up out of order. This is not dangerous, or even wrong, just not optimal.

DiskWarrior reorders the nodes. In theory, this should make a disk faster for the same reason defragmenting a file makes it faster, namely that related information is stored together, so the disk's head doesn't have to seek to distant sectors when retrieving it. In the real world, I doubt the speed increase is noticeable, especially since the file system caches key pieces of the catalog in memory, making access much faster than when the information is stored only on the hard disk. Disk Warrior is excellent at recovering disks with damaged directories, but optimizing a properly functioning catalog is gratuitous.

Bottom Line — To sum up then, for most people, most of the time, there's simply not enough to gain by optimizing your disk to bother doing it. There's nothing wrong with optimizing a disk, and for a severely fragmented disk that is responding slowly when reading regularly accessed files, it may even be worthwhile. But in general, it's not necessary and carries a small risk. If you really want to optimize your disk, the best approach is to make a backup (with a second backup for safety's sake), reformat your hard disk, and restore from the backup.

[David Shayer was a senior engineer on Norton Utilities for Macintosh 3.0, 4.0, and 5.0. Before that he worked on Public Utilities, a disk repair program that won the MacUser Editor's Choice Award, and on Sedit, a low level disk editor.] 🐉

Rumors and Reality

Microsoft Vs iTunes: Legal Internet music subscription services have been around even before iTunes began selling tracks and albums. Most of these services rely on Pressplay, which uses Microsoft technology. Most of the services essentially rent the music. It is possible to download a lot of music for a monthly subscription fee, but locks make it difficult to move files from a PC in their downloaded form.

Now Microsoft is developing software that makes it easier for subscription services to transfer music to portable music players. Originally the security enhancements were to be ready in January. After they missed that deadline, Apple introduced the iTunes Store and was off and running.

How Small Can You Go? Cornice, a Longmont, Colorado-based start-up has developed a 1.5GB, 1-inch diameter hard drive. Cheaper and smaller than some other mini-hard drives or flash-memory cards, the drive will be introduced in a Samsung digital video camera. The camera will cost less than \$600 and will be about the size of a pack of cigarettes. The drive accounts for about \$200 of the cost.

Other companies are not far behind as industry moves away from flash storage. Hitachi Global Storage Technologies is coming out with a line of 1.8-inch drives this year. Currently, only Toshiba markets 1.8-inch drives. Hitachi will come out with a 4GB Microdrive before the end of the year. RCA is planning an MP3 player using the micro-drive. It will be about the size of a sports watch.

Challenge-Response is reasonably new method of eliminating spam.

The technology obliges a sender to verify their authenticity before their electronic messages can be accepted. When a recipient gets e-mail from an unknown sender, software automatically returns a message — a challenge — requiring the sender to perform a task such as filling out a form. Recipients may pre-approve senders, eliminating rude and irritating challenges. EarthLink introduced challenge-response recently to its 5 million subscribers.

While the technique might seem heaven sent for the “little guy” who gets a handful of legitimate e-mails per week, there is, as always, a downside. Actually, several downsides. Forgetting to pre-approve could really annoy others, personal friends and business associates alike. The back-and-forth traffic does use up resources. Busy people will not be always be immediately available to respond to a challenge. And some e-mails get forwarded to a list of recipients — sounds like grid lock to me.

Trusted Computing: Last month we alluded to a concept known as Trusted Computing, a technology designed to severely inhibit access to computer data. There’s even a group, the Trusted Computing Platform Alliance (TCPA), formed to study and standardize the technology. The TCPA is a group of vendors founded by AMD, HP Compaq, IBM, Intel, and Microsoft.

By a combination of hardware and software, files are accessible only on specific machines. Current and legacy machines, that don’t have the hardware, have no chance of reading the data.

Hopefully, this idea will get the same acceptance as the idea of

using serial numbers in microprocessors to secure data. Remember? They did that about four years ago.

MRAM is an acronym for magnetic random access memory. We may find the stuff in laptops with two or three years. The really big advantage of MRAM is that combines the storage capacity and low cost of DRAM (dynamic RAM), the high speed of SRAM (static RAM), and the non-volatility of flash memory. The non-volatility part is important to laptops: first, it doesn’t require power to retain data when the laptop is in a sleep state, which translates to less drain on batteries. Second, it means almost instantaneous recovery from the sleep state — no waiting.

Justin Frankel is a really good programmer. He is responsible for such programs WinAmp (the most popular MP3 software player), Shoutcast (streaming radio), and Gnutella.

We mention this because when he releases a new program, people take notice. Recently he posted the code to a program called Waste on a Web site.

It was a program for setting up relatively small, private, encrypted networks, where chatting is the main method of communication. This is important because all major chat programs utilize a central server. Any chat can be monitored. Since Waste offers decentralization and encryption, users can feel completely confident that what they’re chatting about won’t be monitored.

Since the program allows swapping files (like music), it was removed from the site within hours. However, the proverbial genie was out of the bottle. A whole bunch of copies are available on the internet. And the code is open source which means that the program will be evolving. It could be a program worth watching. ☞

The Way We Were

Effects pane will automatically adjust playback volume from iTunes. Individual tracks can still be manually adjusted afterward to decrease or increase their volume. Start and stop times of individual tracks can also be set, perhaps to eliminate a spoken intro or applause.

Linda accessed the Music Store built into iTunes 4 to demonstrate its operation. Your account preferences can be set to purchase with one click shopping or using a shopping cart. With a broadband internet connection, your selections quickly begin downloading into iTunes after confirming your password to purchase one song, selected songs, or an entire CD. Most songs downloaded from the Music Store will include album artwork. If you have other tracks in iTunes, Linda demonstrated how to find that artwork online and then drag it into iTunes. A good resource to try is the allmusic.com site that Linda has included in the Program Links section on the KeyMac web site. Pictures other than album artwork can be added if preferred. The artwork becomes part of the ID3 tag for a track and it will slightly increase the file size of that track. Linda and Jim demonstrated sharing libraries on a local network and just how easy that is. The features of iTunes are just one more compelling reason to upgrade to Mac OS X.



Raffle Winners

Ben Davis won the raffle prize. He received the Advent powered speakers that were used to demonstrate iTunes. ☺

by **Tim Sullivan**

July Software Review

If you are one of semi-fortunate people who have an MP3 player, but not an iPod, you will probably want a way to convert the iTunes tracks to MP3 format. Here are two utilities to help. Both use the LAME encoder, a proven high quality codec.



iTunes-LAME Encoder 2.0.0
<http://www.blacktree.com>

This applications allows the users to convert iTunes tracks directly to MP3s using the LAME encoder. As is, the encoder does a great job of converting tracks. If you choose, it is possible to tweak and fine tune all sorts of parameters. However, you will need to access the command line interface to apply the tweaks.



Amadeus II 3.6.1
<http://www.hairersoft.com/>

Amadeus is a more sophisticated (i.e. user friendly) program. It is more flexible, reading from a variety of sources, including CDs. Because it reads the entire track into memory, it is possible to make modifications to the file before writing it out in one of several different formats.

There are sound repairing functions. Amadeus II allows you to easily remove background noise and/or little cracks from a recording, making it the ideal tool for restoring old LP's. It runs on MacOS 8.6 and up, as well as natively on MacOS X. And Amadeus includes a PDF manual explaining all of the menu selections.



Apple updates this month

The following software updates have been released by Apple. For OS X users, select System Preferences > Software Update to have the system check your system files against current updates. To determine your specific pre-OS X systems update requirements go to <[http:// www.versiontracker.com /systems/system.shtml](http://www.versiontracker.com/systems/system.shtml)>. This site lists the updates by Mac model and by OS system. The Apple Support Download page <[http:// www.info.apple.com/ support/ downloads.html](http://www.info.apple.com/support/downloads.html)> contains a list of featured software downloads and a link to recently posted software.

AirPort Extreme Mib 2003-06-25

Required

- AirPort Extreme Base Station with v 5.1

This file is a custom SNMP mib for the AirPort Extreme Base Station v5.1.

In case you wanted to know, a SNMP is a Simple Network Management Protocol and a mib is a Management Information Base. Does that help?

Hard Drive Update 1 for OS 9 2003-06-24

Required

- OS 9.1-9.2.2

The Hard Drive Update 1 improves the longevity of some

July Software Review

hard drives shipped in certain Power Mac G4 computers, including:

- Power Mac G4 Cube
- Power Mac G4 (AGP Graphics)
- Power Mac G4 (Digital Audio)
- Power Mac G4 (Gigabit Ethernet)
- Power Mac G4 (Quicksilver)

Most drives do not need this update. You can check the drives in your computer by running this update. If the update is needed, a message will appear which says that "one or more hard drives in your system need updated firmware." You will be allowed to quit (cancel) at this point in order to complete backup prior to the actual update.

We recommend discretion when applying Apple's hard drive updater. We ran across this tidbit:

"If you applied Apple's hard drive updater and are now left with a defunct drive, this procedure may help you regain use of the hard disk, though you will lose any data that was previously stored there.

"If you have a Wintel machine handy, or can get your hands on one, ..." 'Nuff said.

AirPort Extreme Mib 2003-06-19

Required

- AirPort Extreme Base Station with v 5.1

This file is a custom SNMP mib for the AirPort Extreme Base Station v5.1.

AirPort Extreme Firmware v 5.1 2003-06-19

Required

- AirPort Extreme Base Station
- AirPort 3.1 recommended

With AirPort 3.1, you'll enjoy significant benefits, especially from the standpoint of wireless printer sharing, easy base station administration, and many options for managing the range of your wireless network:

- Compliant with the final IEEE 802.11g specification
- Base station Interference Robustness, which provides improved performance when 2.4GHz devices like cordless phones and wireless video distribution system cause significant interference with the AirPort network.
- Automatic channel selection allows the base station to find the most appropriate channel to use whenever it is restarted.
- Simpler Wireless Distribution System (WDS) setup experience in AirPort Admin Utility
- Administrators have the ability to set the DHCP range on their base station when NAT is on
- Performance improvements between wired and wireless clients.

AirPort 3.1 For Mac OS X 2003-06-19

Required

- Mac OS X v10.2.6 or later
- An AirPort Extreme-ready computer with an internal AirPort Extreme Card
- An AirPort-ready computer with an internal AirPort Card

New AirPort Extreme Base Station features:

- Compliant with the final IEEE

802.11g specification

- Base station Interference Robustness, which provides improved performance when 2.4GHz devices like cordless phones and wireless video distribution system cause significant interference with the AirPort network.

Automatic channel selection allows the base station to find the most appropriate channel to use whenever it is restarted.

- Simpler Wireless Distribution System (WDS) setup experience in AirPort Admin Utility

- Administrators have the ability to set the DHCP range on their base station when NAT is on

- Performance improvements between wired and wireless clients.

Security Update 2003-06-09 2003-06-13

Required

- 10.2.6 Client or 10.2.6 Server

Security Update 2003-06-09 addresses a potential security issue when the Apple Filing Protocol (AFP) is used to reshare a Network File System (NFS) mount. This update also addresses a situation where LDAP bind authentication requests may be improperly sent when using Kerberos authentication.

Keynote 1.1 for Mac OS X 2003-06-09

Required

- Mac OS X 10.2 or greater
- Keynote 1.0, QuickTime 6.3 recommended

What's new in Keynote 1.1

- Ability to jump to specific slide during slideshow

- Preference to reduce image resolution on insert to fit images on slide
- Option to show series label on X-axis of charts
- New 3D transition preference
- Improved interaction and feedback while working with slides in the navigator view
- Improved PowerPoint import and export compatibility
- Reduced size of PDF export files
- Improved QuickTime playback during slideshow
- Improved QuickTime export

iSync 1.1 Palm Conduit for Mac OS X
2003-06-03

Required

- Mac OS X 10.2.5 (or later)
- iCal 1.0.2, and iSync 1.1 installed. You also need to have Palm Desktop 4.0 installed.

iSync 1.1 Palm Conduit provides performance and stability improvements over iSync 1.0 Palm Conduit.

iSync 1.1 for Mac OS X
2003-06-03

Required

- Mac OS X 10.2.5 or laterw
- iCal 1.0.2

- To manage information using iSync 1.1, you need to use Address Book, iCal, and Safari to store your contacts, calendar information, and web bookmarks.

iSync 1.1 works with additional brands and models of mobile phones, allows you to synchronize Safari bookmarks across computers (if you have a .Mac membership), and has a number of performance and stability improvements.

iMovie 3.0.3 for Mac OS X
2003-06-03

Required

- Mac OS X 10.1.5 or higher
- Power Macintosh, Power Mac, PowerBook, iMac, eMac, or iBook with a G3 processor or better, at 400 MHz or faster
- 256 megabytes (MB) of random-access memory (RAM)
- 2 gigabytes (GB) of free hard disk space
- Screen resolution of 1024x768 or higher
- QuickTime 6.3
- The Send to iDVD feature of iMovie 3 requires iDVD 3

What's new in iMovie 3

- Access to your iPhoto library, pictures, and albums (requires iPhoto version 2.0 or later)

- Access to your iTunes library, songs, and playlists (requires iTunes version 3.0 or later)

- Chapter marker support for iDVD (requires iDVD version 3.0 or later)

- One-click iDVD project creation (requires iDVD version 3.0 or later)

- Pan and zoom effects to add motion to digital photos

- Enhanced audio tools

- New, resizable window and streamlined user interface

- New title styles

- Professional-quality video and sound effects

- A new and improved Help system

iMovie Updater 3.0.3 for Mac OS X
2003-06-03

Required

- Mac OS X 10.1.5 or higher
- Screen resolution of 1024X768 or higher
- Power Macintosh, Power Mac, PowerBook, Imac, eMac, or iBook with G3 process or better at 400 MHz or faster
- 256 MB of RAM
- 2 GB of free hard disk space



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