

SAFE & MAINTAINED

by Gary Brandt

A portion of our October meeting, scheduled for October 18, will be centered on Mac maintenance. We will look at several free applications, including Onyx and Sophos Anti-Virus. Onyx is a utility to run maintenance tasks such as deleting cache files and running UNIX chron jobs. Sophos Anti-Virus Home Edition is a free program that detects both Mac and Windows malware.

We will also take another look at some of the features of OnOne Software's Perfect PhotoSuite. An auction of that program will be held for KeyMac members at the October meeting. We will accept e-mailed bids for Perfect PhotoSuite from members prior to the October meeting for those members who cannot be at the meeting. Bids need to be e-mailed to programdirector@keystonemac.com by 9:00 PM October 17th.

If time permits we will also watch portions of a training DVD on What's New in iMovie'11.

The October meeting has been rescheduled and will be held on the third Tuesday, October 18, at the Giant Food Store in Camp Hill. We hope to see you there.

Meet us at

Giant Food

Corner of Trindle Road & 32nd St (Route 15) 3301 East Trindle Road, Camp Hill, PA 17011

Tuesday, October 18, 2011, 6:30 p.m.

Attendance is free and open to all interested persons.

Contents

Safe & Maintained by Gary Brandt	1
President's Corner by Linda J. Cober	. 3
Keystone MacCentral Minutes by Gary Brandt	. 4
Follow-up to Finding a Replacement for Quicken	
by Michael E. Cohen	13
Convince Your Printer It Has More Toner by Jeff Carlson	13
October Software Review by Tim Sullivan	17
Mac 911by Christopher Breen	18

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 © 2011, Keystone MacCentral, 305 Somerset Drive, Shiresmanstown, PA 17011.

Nonprofit user groups may reproduce articles form the Printout only if the copyright notice is included, the articles have not been edited, are clearly attributed to the original author and to the Keystone MacCentral Printout, and a copy of the publication is mailed to the editor of this newsletter.

The opinions, statements, positions, and views stated herein are those of the author(s) or publisher and are not intended to be the opinions, statements, positions, or views of Apple Computer, Inc.

Throughout this publication, trademarked names are used. Rather than include a trademark symbol in every occurrence of a trademarked name, we are using the trademarked names only for editorial purposes and to the benefit of the trademark owner with no intent of trademark infringement.

Board of Directors

President Linda J Cober

Vice President
Tom Owad

Recorder Gary Brandt

Treasurer Tim Sullivan

Program DirectorGary Brandt

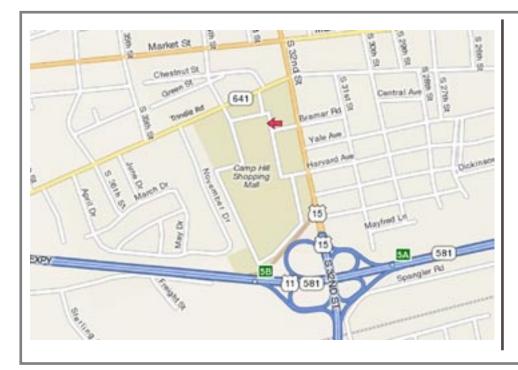
Membership Chair Eric Adams

Correspondence Secretary
Sandra Cober

Newsletter Editor Tim Sullivan

Industry LiaisonWendy Adams

Web Master Tom Bank II



Keystone MacCentral Essentials

Meeting Place

Giant Food (upstairs)
Corner of Trindle Road & 32nd St
(Route 15)
Camp Hill

Web Site

http://www.keystonemac.com

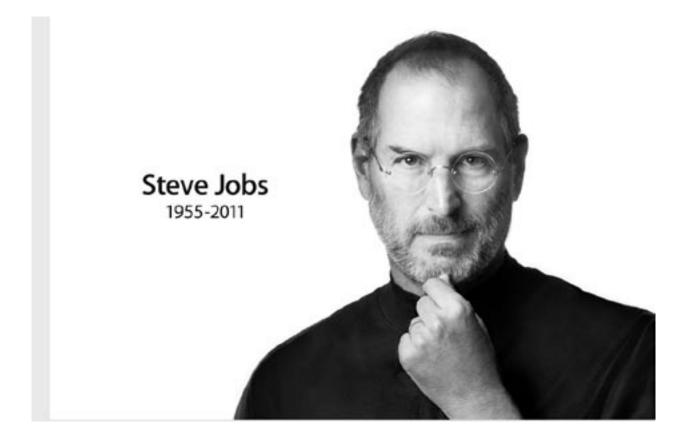
Mailing Address

310 Somerset Drive Shiresmanstown, PA 17011

President's Corner

AS I write this, I am still thinking about the tremendous loss I felt Wednesday evening when I read online on my MacBook Pro that Steve Jobs had died. I can only imagine how much worse his family and his friends must feel. After all, I never met Steve personally although I have been an Apple enthusiast since the early days when Steve was first in command and stayed loyal even when pundits predicted the company's doom. During the dark days of Steve's exile, I subscribed to Guy Kawasaki's mailing list (blogs had not yet been invented) and continued to buy Apple products, even as PC users dismissed the "niche" machines. Then, like a miracle, Steve was once again in command at Apple, the magic was back, and "the computer for the rest of us" burst onto the scene in an array of bright colors. Steve Jobs' vision, leadership,

enthusiasm, showmanship and magic launched a dormant Apple to new heights; even the sky was not the limit as iPods accompanied astronauts into space. As President Obama tweeted, people around the world learned of Steve Jobs' death on devices he had invented. Following the many tributes online, I see that I am not alone in feeling a great loss at the death of someone I never knew. Yet, as I write the words "someone I never knew" I feel that while literally true, those words do not depict emotional truth. Like so many people around the globe, I feel that I did know Steve Jobs, that we had a connection through our mutual enthusiasm for his many wonderful inventions, for our strong support of Apple, and for the mutual sense of fun we felt as Steve's mischievous grin heralded "just one more thing." Goodbye, Steve, and thank you.



Keystone MacCentral Minutes

September 20, 2011

Business Meeting

President Linda Cober announced the resignation of Treasurer Ron Rankin. Ron had an accident this summer and is currently going through therapy and showing some improvement. He would welcome your cards. The address was listed in the last Printout. Linda has been serving as acting treasurer. Tim Sullivan had volunteered to take over Treasurer duties. Eric Adams made a motion to appoint Tim as Treasurer. The motion was seconded by Wendy Adams and approved by a voice vote of members. Linda gave Tim some printouts from our Wells Fargo account.

We will also auction off a copy of the OnOne Software PhotoSuite 5.5 at our October meeting. An update to version 6 is included.

Tom Bank II has updated our web site and our Facebook page. Eric Adams passed around some business cards to members advertising KeyMac's contact information. Members can give them to prospective members who are users of Apple products.

Q&A & Comments

A rumor has been making the rounds that a new Mac with Lion installed could not have Snow Leopard also installed due to firmware issues. We did not confirm the truth of the rumor but we noted that others have talked of dual booting on new Macs.

Someone mentioned an offer on the Deal Mac site for iWork '09 for \$39 and \$5 shipping. It looks like that deal has since expired but you might want to check on future offers. Eric Adams asked if anyone was using iBank. Tom Bank II said he had been trying its 30 day free trial offer and that his Quicken files were imported with no problems. Marc Soto also uses iBank. Quicken has not been updated to work on Macs running the Lion OS X.

Marc got a message onscreen when trying to install Lion that he needed a newer Mac. The specifications for running Lion are listed on Apple's site.

Linda Cober asked about turning off ink levels on an H-P printer so she could use generic cartridges without chips in them. Gary Brandt asked about trying to retrieve data

from a CD with a damaged B-tree. DiskWarrior and Drive Genius were suggested as possibilities.

Program Notes

Eric Adams began the September program with a look at the "A Spotlight on FOSS" DVD. The DVD, a copy of which was given to each member present, includes a PDF with descriptions of many handy applications. The DVD has some of those freeware and open source applications on it.

We watched the Apple Keynote video announcing Lion and its new features. Lion is only available from the App Store, only installed with Snow Leopard or later. It is a 4GB download.

Gestures have been integrated into the OS. Support for full screen applications is included. Launch Pad is used to organize and launch your apps. Versions is like Time Machine for documents, keeping past versions of docs as you make changes to them. Mail has been updated with support for conversations, for easier viewing of e-mail threads.

Another video previewed 10 features of Lion in 3 minutes. Multi-touch gestures were shown. Resume lets you pick up right where you left off in an application. Auto Save helps those who might forget to save their documents as they work. AirDrop is used to easily share files with others on your network. System Preferences panes that you do not regular use can be removed from view, although they are still available.

We had received a link to an informative site on Lion that was hosted at the macatlehighvalley.org web site. The link for Lion Vet had links to other pages with helpful information on upgrading to Lion. We looked at the page detailing hardware requirements for running Lion. A Mac with an Intel Core 2 Duo (2006)or better is required.

Eric demonstrated how to check for application compatibility with the System Profiler. Applications listed as being PowerPC kind will not work with Lion. Examples of programs that will not run under Lion are Quicken and AppleWorks.

Eric demonstrated one of the programs on the DVD. HandBrake can be used to convert DVDs you own into formats for viewing on iPads, iPhones, or Apple TV.

Follow-up to Finding a Replacement for Quicken

"Finding a Replacement for Quicken" (5 August 2011), we presented some of the questions that you should ask yourself about the features and capabilities that you need in a personal finance package to replace Quicken 2007 (and earlier) now that OS X 10.7 Lion has made that software obsolete. In addition, we asked you to add to our list of questions in the comment section for that article. Many of you did just that, and we bundled your questions and ours into an e-mail message that we sent to the 17 developers of the possible Quicken replacement packages that we listed in the article.

Nine of the developers have responded, and we have collated their responses, which we present below. Although we have tried to be as accurate as possible, we have to admit that sometimes it was not entirely clear which of the answers went with which of our questions in the responses we received. We think we got them all right, but we apologize if we have misrepresented any of the developers who were kind enough to take time to respond to the many questions with which we bombarded them. If there are any mistakes, just let us know and we'll fix them.

In what follows, we have organized the questions into topics of interest, and presented the responses in the order in which they landed in our inbox. No ranking or other evaluation is implied nor should be inferred.

The following developers responded to our questions:

Cognito: MoneyWorks

• No Thirst Software LLC: Moneywell • Hardcoded Software: MoneyGuru Scimonoce Software: SEE Finance

• IGG Software: iBank 4

Catamount Software: PocketMoney

 Synium Software: iFinance • Intuit: Quicken Essentials

• The Infinite Kind, LLC: Moneydance (added 27

September)

Statements and reconciliation

Can your package download bank statements and use them to reconcile accounts?

MoneyWorks: Yes.

MoneyWell: Yes.

moneyGuru: There is no direct download feature, but you can import files you download from your bank(s) website(s) and do reconciliation.

SEE Finance: Yes.

iBank 4: Yes.

PocketMoney: *Desktop-*Yes; *iOS-*statements can be downloaded through Safari on iOS and imported directly on device; Android-Yes, from SD card.

iFinance: Yes (in Germany only).

Quicken Essentials: Yes.

Moneydance: Yes.

If so, what formats does your package support?

MoneyWorks: QIF, OFX, QFX. Text files (CSV and tab delimited) can also be imported (via copy-paste in Cashbook), but these lack the automatic allocations of the bank imports.

MoneyWell: If the financial institution supports OFX direct connect banking, MoneyWell downloads with one click. It also supports importing OFX/QFX, QIF and delimited

moneyGuru: OFX, QIF and CSV files.

SEE Finance: You can create statements in the program by downloading the statement information directly from the institution, by importing QFX, OFX, QIF or CSV files, or by manually creating a replica of the institution's statement.

iBank 4: OFX, QFX, QIF, CSV.

PocketMoney: *Desktop-*QIF files, and Quicken Essentials CSV formatted files; iOS-OFX/QFX/QIF; Android-QIF.

iFinance: Retrieves account information via HBCI (Home Banking Computer Interface, which is only a standard in Germany).

Quicken Essentials: Quicken Essentials for Mac imports data from more than 12,000 financial institutions.

Moneydance: Moneydance supports direct download from banks that support the OFX protocol as well as the following file formats: OFX, QFX, OFC, QIF, CSV and using a plugin/ extension just about any line-delimited text file format.

Can it handle transfers among accounts when the transfer is within a split transaction?

MoneyWorks: Yes.

Continued on page 6

October 2011

Follow-up to Finding a Replacement for Quicken

MoneyWell: Yes.

moneyGuru: Absolutely. moneyGuru does proper double-entry accounting.

SEE Finance: Yes. You can create transfers in split

transactions.

iBank 4: Yes.

PocketMoney: *Desktop-Yes; iOS-Yes; Android-*No.

iFinance: No, split transactions can be created, but it is only possible to transfer the whole transaction.

Quicken Essentials: The program recognizes transfers and does not double count them.

Moneydance: Yes.

Receipts

Does your package provide a way to scan or photograph receipts and associate them with transactions?

MoneyWorks: You can drag an image (scanned or photographed) of the receipt onto the transaction, and MoneyWorks will save a copy of that image with the transaction.

MoneyWell: One attachment per transaction using existing files or e-mails.

moneyGuru: No.

SEE Finance: Yes. You can attach images and PDFs to individual transactions. Currently this is limited to one image for each transaction, but there's plans to expand this in the future. You can also attach images to statements in the program such as a PDF of your statement from the institution.

iBank 4: Yes. Any file or image may be attached to a transaction.

PocketMoney: N/A (?).

iFinance: The mobile companion application iFinance Mobile 2.1 provides a QR-Code scanner, which can can convert a QR Payment Code image into a transaction. It requires the payment code to be available as a QR Code.

Quicken Essentials: Yes.

Moneydance: No, not yet.

Does it provide a mobile component (e.g., iOS or Android app) that syncs with the desktop version?

MoneyWorks: No.

MoneyWell: Yes. Our iOS app supports Dropbox sync for multiple devices or Macs.

moneyGuru: No, but many mobile app provide export files (QIF, CSV) which can, of course be imported into moneyGuru.

SEE Finance: There are not currently mobile companion applications for SEE Finance. All our current focus is on the desktop version's official 1.0 release which is expected within a few months. Then our focus will shift to the mobile iPhone/iPad companion apps (no current ETA).

iBank 4: Yes. IOS app only.

PocketMoney: Supports syncing of multiple devices so multiple users can sync to the same desktop database.

iFinance: Yes, the mobile companion application is called iFinance Mobile 2.1. (for iPad, iPhone and iPod touch) iFinance Mobile can be synced with iFinance 3.3, but it can be also used as a stand-alone application to keep track of your finances while you are on the go.

Quicken Essentials: No.

Moneydance: Yes, there is a universal iOS app that syncs via Bonjour+Wi-Fi (with additional point to point encryption). There is also a third party app for Android called HandyBank (just linked from our blog).

Does your package provide any other special features to facilitate entering receipts?

MoneyWorks: Yes: drop-down lists, choices lists, validations, reminder notes.

MoneyWell: Yes. Favorites allow for quick transaction entry and categorization of imports.

moneyGuru: Other than the general data entry efficiency, which is one of moneyGuru's strong points, no.

SEE Finance: You can download transactions directly from over 1000 different institutions (referred to as Direct Connect) plus you can import QFX, OFX, QIF and CSV files from institutions (referred to as Web Connect). The Web Connect process can be further simplified by using the built-in browsers for accounts where the program will recognize when financial files are downloaded and prompt you with options to save and/or import them.

iBank 4: Yes. Drag and drop a NeatReceipts PDF file onto an account icon in the iBank source list to automatically create a new transaction for that item.

PocketMoney: *iOS-*"Keep the Change" that rounds up the transaction amount and transfers the change to a specified account/posting of transaction from their party apps

(CheckPlease for tips, MPG for vehicle transactions, BillMinder for bill management...)/add "Fee" posts a transaction for the amount of a fee set in the account info. Useful for ATM fees or wire transfer fees/Address book support/auto-complete transactions based on payee; *Android-*"Keep the Change" rounds up the transaction amount and transfers the change to a specified account/add "Fee" posts a transaction for the amount of a fee set in the account info. Useful for ATM fees or wire transfer fees.

iFinance: No.

Quicken Essentials: You can attach receipts and other files to transactions.

Moneydance: Moneydance (as well as the iOS+Android app) is optimized for quick transaction entry with autocompletion and fully keyboard accessible.

Tags and categories

Can your package apply categories or tags to individual transactions?

MoneyWorks: Yes. MoneyWell: Yes.

moneyGuru: It depends what you mean by "applying categories". Categories don't exist in moneyGuru and I consider them to be an over-simplification of proper accounting concepts. A transaction is a movement of money from one or more account to one or more other account. Of course, it's possible to assign any account to any transaction in moneyGuru.

SEE Finance: There currently is not a Classes/Tags feature available in the program. We do have plans for adding a Tags (aka Classes) feature, but there is not a current ETA.

iBank 4: Yes. Categories but no tags.

PocketMoney: Yes. Categories, multiple subcategories, Classes, multiple subclasses, Memo.

iFinance: Yes, iFinance 3.3 and iFinance Mobile 2.1 can apply tags, as well as categories.

Quicken Essentials: Yes.

Moneydance: Yes, Moneydance supports both categories and tags.

Can these tags be flagged as tax-related?

MoneyWorks: Yes.

MoneyWell: Yes.

moneyGuru: No.

SEE Finance: You can designate categories as tax related and associate them with US tax codes. You can create

Category reports based on different options for "Tax Related" categories.

iBank 4: Yes.

PocketMoney: Not explicitly. Could name the class/category as "Tax*".

iFinance: No tags can't be flagged.

Quicken Essentials: Yes.

Moneydance: No, but you can generate and memorize settings for custom reports that apply to those tags.

Can your package produce reports for individual categories or sets of categories?

MoneyWorks: Yes.

MoneyWell: Yes.

moneyGuru: No categories, but it's possible to select specific accounts in Net Worth and Profit & Loss reports.

SEE Finance: You can create Category reports on any desired categories. You can also export tax information into TXF files for use with programs such as TurboTax for transactions with categories that are tax related and associated with US tax codes.

iBank 4: Yes.

PocketMoney: Yes, for individual categories.

iFinance: Yes iFinance 3.3 can produce reports and charts of selected categories and tags. Filters can be applied for categories, tags and accounts, as well as for certain time periods.

Quicken Essentials: Yes.

Moneydance: Yes.

Checks, bill paying, and reminders

Can your package print checks?

MoneyWorks: Yes.

MoneyWell: No.

moneyGuru: No.

SEE Finance: There currently is not a check printing feature available in the program. We cannot provide a specific ETA for the check printing feature addition, but it is expected within a few months.

iBank 4: Yes. Standard, wallet, voucher style; custom; or to plain paper.

PocketMoney: No.

Continued on page 8

Continued from page 7

Follow-up to Finding a Replacement for Quicken

iFinance: Yes.

Quicken Essentials: Yes.

Moneydance: Yes.

Does your package support online bill-paying?

MoneyWorks: No.

MoneyWell: No.

moneyGuru: No.

SEE Finance: There is not online bill pay in the program. There are also not any immediate plans to add online bill pay to the program. However, most institutions allow you to setup recurring bill payments easily through their websites.

iBank 4: No.

PocketMoney: No.

iFinance: No.

Quicken Essentials: No.

Moneydance: Yes.

If so, what protocols (e.g. OFX or HBCI/FinTS/EBICS) does it support?

MoneyWorks: N/A

MoneyWell: N/A

moneyGuru: N/A

SEE Finance: N/A

iBank 4: N/A

PocketMoney: N/A

iFinance: N/A

Quicken Essentials: N/A

Moneydance: Moneydance supports online bill payment

via the OFX protocol.

Does your package offer reminders of upcoming regular transactions?

MoneyWorks: Yes.

MoneyWell: Yes, as scheduled transactions.

moneyGuru: Yes, the scheduled transactions system.

SEE Finance: You can setup recurring transactions in the program and have them be set to notify you when they are scheduled to post. There is not currently customizable reminders or iCal integration.

iBank 4: Yes.

PocketMoney: *Desktop*-No; *iOS*-Yes; *Android*-No.

iFinance: Yes, payment reminders can be added to all types

of transactions.

Quicken Essentials: No.

Moneydance: Yes.

Can it use a payment reminder to make a bill-pay transaction?

MoneyWorks: No, but you can set up transactions as

automatically recurring.

MoneyWell: No.

moneyGuru: No.

SEE Finance: N/A

iBank 4: No.

PocketMoney: N/A

iFinance: No.

Quicken Essentials: No.

Moneydance: Not yet.

Investments and investment tracking

Does your package track individual investments?

MoneyWorks: No. ([Although] it does not have specific provision for tracking of investment portfolios and the like, we've answered No to those questions. However people do

seem to use it to do this quite successfully.)

MoneyWell: No. (2.0 will offer investment tracking)

moneyGuru: No.

SEE Finance: Yes.

iBank 4: Yes

PocketMoney: No.

iFinance: No, but stock prices can be retrieved

automatically.

Quicken Essentials: Yes.

Moneydance: Yes.

Can it track profit/loss on individual investments

over time?

MoneyWorks: No.

MoneyWell: (2.0 will offer investment profit/loss).

moneyGuru: Depending on what you mean by "investment", yes. moneyGuru doesn't support stocks yet, but there's a full fledged profit & loss report.

SEE Finance: Yes. Gains/losses are currently only FIFO

based.

iBank 4: Yes.

PocketMoney: N/A

iFinance: Not on individual investments, but different charts and summaries of a stock's performance are available.

Quicken Essentials: Yes.

Moneydance: Yes.

Does it handle stock splits?

MoneyWorks: No.

MoneyWell: No. (2.0 will offer stock splits and importing

of other details)

moneyGuru: No.

SEE Finance: Yes.

iBank 4: Yes.

PocketMoney: N/A

iFinance: Can be entered manually within the available range of functions. An automatic calculation feature for it

is not available.

Quicken Essentials: No.

Moneydance: Yes.

Dividend reinvestments?

MoneyWorks: No.

MoneyWell: No (2.0 Yes)

moneyGuru: No.

SEE Finance: Yes.

iBank 4: Yes.

PocketMoney: N/A.

iFinance: Can be entered manually within the available range of functions. An automatic calculation feature for it

is not available.

Quicken Essentials: No.

Moneydance: Yes.

Track capital gains?

MoneyWorks: No.

MoneyWell: No.

moneyGuru: N/A

SEE Finance: Yes.

iBank 4: Yes.

PocketMoney: N/A.

iFinance: Can be entered manually within the available range of functions. An automatic calculation feature for it

is not available.

Quicken Essentials: No.

Moneydance: Yes.

Does it treat brokerage accounts differently from

checking accounts?

MoneyWorks: No.

MoneyWell: No. (Only as transactional accounts)

moneyGuru: N/A

SEE Finance: Yes.

iBank 4: Yes.

PocketMoney: N/A(?)

iFinance: Can be entered manually within the available

range of functions.

Quicken Essentials: No.

Moneydance: Yes.

Loan tracking

Does the package track loans?

MoneyWorks: No.

MoneyWell: No.

moneyGuru: "Liability" is one of the 4 possible types of

accounts in moneyGuru, yes.

SEE Finance: Yes.

iBank 4: Yes. Including mortgages, auto loans, student

loans, etc.

PocketMoney: No.

iFinance: Can be entered manually within the available range of functions. An automatic calculation feature for it

is not available.

Continued on page 10

October 2011

Continued from page 9

Follow-up to Finding a Replacement for Quicken

Quicken Essentials: Yes.

Moneydance: Yes.

Does it track principal and interest?

MoneyWorks: Yes.

MoneyWell: N/A.

moneyGuru: Not yet.

SEE Finance: Yes.

iBank 4: Yes.

PocketMoney: No.

iFinance: Can be entered manually within the available range of functions. An automatic calculation feature for it is not available.

Quicken Essentials: No.

Moneydance: Yes.

Does it allow one to specify what part of a payment is applied to principal and what part to interest?

MoneyWorks: Yes.

MoneyWell: Yes, as a split transaction.

moneyGuru: No.

SEE Finance: No, you cannot specify which amounts are applied to interest and which amounts is applied to principal as it is based on the designated interest rate.

iBank 4: Yes.

PocketMoney: No.

iFinance: Can be entered manually within the available range of functions. An automatic calculation feature for it is not available.

Quicken Essentials: No.

Moneydance: Yes.

Does it handle variable interest rate loans?

MoneyWorks: No.

MoneyWell: No.

moneyGuru: No.

SEE Finance: You can adjust loan schedules to have varying

interest rates.

iBank 4: Yes.

PocketMoney: No.

iFinance: Can be entered manually within the available range of functions. An automatic calculation feature for it is not available.

Quicken Essentials: Yes.

Moneydance: No.

Budgets

Can your package create a budget?

MoneyWorks: Yes.

MoneyWell: Yes, using proactive envelope budgeting.

moneyGuru: Yes.

SEE Finance: Yes.

iBank 4: Yes.

PocketMoney: *Desktop-Yes; iOS-Yes; Android-*No.

iFinance: Yes it can create various budgets. Budgets can be also limited to certain categories, accounts, or tags. Rules for warning messages can be created. For example "Expenses must no exceed x" or "Profit must amount to". Budgets can also be printed.

Quicken Essentials: Yes.

Moneydance: Yes.

Can it track income and expenditures against the budget?

MoneyWorks: Yes

MoneyWell: Yes.

moneyGuru: No, budgets in moneyGuru are for forecasting upcoming financial situations.

SEE Finance: Yes.

iBank 4: Yes.

PocketMoney: Desktop-Yes (in next release); *iOS*-Yes;

Android-No.

iFinance: Yes (see answer to previous question).

Quicken Essentials: Yes.

Moneydance: Yes.

Can it handle multiple budgets?

MoneyWorks: Yes. (Two)

MoneyWell: No. (2.0 Yes)

moneyGuru: Yes.

SEE Finance: Yes.

iBank 4: Yes.

PocketMoney: No.

iFinance: Yes, you can create as many budgets as you want.

Quicken Essentials: Yes.

Moneydance: Yes.

Does it provide budget reports and graphs?

MoneyWorks: Yes.

MoneyWell: Yes.

moneyGuru: Other than budget data being included in

forecasting reports, no.

SEE Finance: Yes, it provides budgeted vs actual performance information/report. There are not graphs, but there is progress indication bars that indicate budget performance and these progress indication bars can have the level in which their colors change customized in the program's Colors->Budgets preferences.

iBank 4: Yes.

PocketMoney: *Desktop-*No; *iOS-*Yes; *Android-*No.

iFinance: Yes, iFinance 3.3 provides a graph chart of all budgets within a budget folder. Further graphs display income and expenses. The charts can be displayed in 2D and 3D. Filters can also be applied for certain categories, subcategories and accounts.

Quicken Essentials: Yes.

Moneydance: Yes, both a quick-view budget graph on the "home page" as well as detailed reports and graphs.

Can it handle category budgets that vary month by month (for example, quarterly property taxes, utility bill variations)?

MoneyWorks: Yes.

MoneyWell: Yes.

moneyGuru: It's not convenient to set up, but it's possible,

yes.

SEE Finance: You cannot currently have varying amounts in such a case as a yearly budget with varying monthly values. You can create and duplicate individual monthly budgets and have an overall yearly budget. We are also revising the budgets to add varying monthly values for an upcoming update.

iBank 4: Yes.

PocketMoney: *Desktop*-Yes (in next release); *iOS*-Yes (in next release); *Android*-No.

iFinance: Partially yes, budgets can be created for selected categories. The budget compares the budget to the actual expenses for specified time periods (Day, Week, Month, Year). You can create multiple budgets, but each budget has a fixed amount which can be changed only for the whole budget (not for certain time periods of the budget).

Quicken Essentials: Yes.

Moneydance: Yes. Budget items can be set as pro-rated monthly/weekly/yearly, lump sum monthly/weekly/yearly, or one-off amounts.

Taxes and net worth

Can your package calculate and report on net worth?

MoneyWorks: Yes.

MoneyWell: Yes, in a limited format.

moneyGuru: Yes, absolutely.

SEE Finance: Yes, you can create Balances reports in the program which if all accounts are included then this is a net worth report.

iBank 4: Yes.

PocketMoney: Yes.

iFinance: No, there are no presets to exclude taxes or similar costs from the gross amount.

Quicken Essentials: Yes.

Moneydance: Yes.

Does your package support exchanging information with consumer tax preparation packages?

MoneyWorks: No.

MoneyWell: No.

moneyGuru: Other than standard QIF/CSV exports, no.

SEE Finance: Yes

iBank 4: Yes.

PocketMoney: No.

iFinance: No.

Quicken Essentials: Yes.

Moneydance: We have a (currently beta) extension/plugin that can export to a TXF file which I believe can be imported by TurboTax.

Continued on page 12

Follow-up to Finding a Replacement for Quicken

If so, which ones?

MoneyWorks: N/A

MoneyWell: N/A

moneyGuru: N/A

SEE Finance: If categories are set up as tax related and associated with US tax codes you can export a TXF file for use with programs such as TurboTax.

iBank 4: TXF export for TurboTax, Tax Cut.

PocketMoney: N/A

iFinance: N/A

Quicken Essentials: TurboTax.

Moneydance: Those that can handle the TXF file produced by our (currently beta) extension/plugin.

Multiple users and security

Can your package support multiple users, each with their own sets of accounts?

MoneyWorks: You can create multiple entities (companies, accounts etc) on the one computer; MoneyWorks is licensed by computer, so a separate license is required for each computer; MoneyWorks Cashbook is not multi-user (higher-end MoneyWorks products are).

MoneyWell: Yes, as multiple documents.

moneyGuru: Yes, moneyGuru can manage multiple documents.

SEE Finance: Yes, the program is document based similar to spreadsheet and word processing programs so you can have any number of different files for any reason.

iBank 4: Yes.

PocketMoney: *Desktop*-Yes, as separate database files;

*iOS-*No; *Android-*No.

iFinance: You can create multiple databases for multiple

users.

Quicken Essentials: No.

Moneydance: No.

Does it provide password-protected access to user information?

MoneyWorks: Yes

MoneyWell: Yes.

moneyGuru: No.

SEE Finance: Yes, you can password protect the program's

iBank 4: Yes.

PocketMoney: Yes.

iFinance: Yes, databases can be protected by password and

encryption.

Quicken Essentials: Yes.

Moneydance: Yes. Not only password protected, but

encrypted.

Exports

In what forms can your package export information (e.g., QIF, CSV, tab-delimited, Excel)?

MoneyWorks: tab-delimited, HTML, Excel, Word, Numbers.

MoneyWell: QIF or tab-delimited formats.

moneyGuru: QIF and CSV.

SEE Finance: Yes, you can export QIF and CSV files from the program.

iBank 4: QIF, TXF, drag-and-drop to CSV (Excel/Numbers).

PocketMoney: *Desktop-QIF,* CSV, Tab-delimited; *iOS-OFX/QFX,* QIF, CSV, Tab-delimited; *Android-*QIF, CSV, Tab-de-

limited.

iFinance: CSV and iFinance 3 Archive.

Quicken Essentials: Excel.

Moneydance: QIF, CSV, tab-delimited, (lossless) XML. The moneydance file format is also a text-based format that can be easily imported by other applications.

Can it export subsets (e.g., a date range of transactions) in these forms?

MoneyWorks: Yes.

MoneyWell: Yes.

moneyGuru: You can export your whole document or selected accounts. You cannot choose a date range to export.

SEE Finance: This can be done for any date range and for all accounts or individual accounts. You can also export any report, investment holdings list, investment security list, or security historical prices as a CSV file. There's also the ability to create PDFs from account's transactions, account transaction search, and almost any other list in the program. The generated PDFs and most CSV files are either

customizable for what information is listed in the PDF or CSV file or just WYSIWYG based on the user's custom table column selections.

iBank 4: Yes.

PocketMoney: *Desktop-*Yes (in next release); *iOS-*Yes; *Android-*Yes.

iFinance: Time periods can be applied as filter rule for the CSV export. Furthermore users can specify which data fields should be exported and how the CSV code is created.

Quicken Essentials: N/A

Moneydance: Yes, when exporting to tab-delimited or QIF. Otherwise, transaction reports can be set for any date range or set of categories and can be exported to text (tab-delimited or CSV) files.

Support from vendor

Do you offer online chat or telephone support?

MoneyWorks: Yes.

MoneyWell: No, but we have e-mail support along with public and private discussion.

moneyGuru: Support is available through e-mail or the online forum.

SEE Finance: Currently we only provide e-mail support.

iBank 4: e-mail only.

PocketMoney: Very limited phone-call and online chat support; e-mail and forums are main line of support.

iFinance: We offer support via e-mail. iFinance 3.3 includes an extensive user guide. A vast number of FAQs and tutorials on our Web site are updated regularly.

Quicken Essentials: (Did not specify type of support)

Moneydance: We offer free e-mail- and Web-based customer support for all customers – whether paid or using the trial version.

If so, what is the cost to the user?

MoneyWorks: Telephone support is available at \$2.00 per minute.

MoneyWell: N/A

moneyGuru: Free.

SEE Finance: For no cost for any customer or potential customer.

iBank 4: Free and unlimited.

PocketMoney: Free.

iFinance: Free.

Quicken Essentials: Free support.

Moneydance: Free. 🗖

by Jeff Carlson

Convince Your Printer It Has More Toner

The only thing separating me from The Go-Go's was a pair of printed tickets. It's the electronic age, so why was paper getting in my way?

My printer, a Brother HL-2170W, downright refused to print. Sure, the yellow "low toner" light had been lit for a while, but I rarely print anything and the last time I did, there weren't any of those telltale streaks or fades that indicate the toner is on its last puff.

Nothing on my Mac seemed out of place. The Print Queue (the printer icon that appears in the Dock during a print operation) didn't report any errors – it just processed the job as if everything was fine. And then the printer ignored my tickets. Restarting the printer didn't make a difference, either. It's a good thing my daughter was downstairs out of earshot of her suddenly foul-mouthed father.

As it turns out, Brother printers (and others) just stop printing when the toner cartridge reaches a certain point, even though toner is still present. Fortunately, I remembered reading on Twitter about a simple hack to work around the problem.

On the toner cartridge, there are two small windows on each side where the printer can look inside and gauge the toner level. I grabbed some black electrical tape (though any opaque tape would work, I suspect) and covered the windows. With the printer believing the cartridge was full, I soon had tickets in hand and dashed out to enjoy the concert.

I don't print enough to get myself worked up over the insane price of toner and the industry's sleazy practices to push the stuff (see Farhad Manjoo's article "Take That, Stupid Printer!" in Slate for more). But it did make me particularly irate that my printer – which is otherwise a great little machine – turned mulishly obstinate at exactly the same time I needed to print something important. Fortunately, an evening rocking out at an outdoor concert was just the ticket to improve my mood. \Box

October Software Review

Appalicious 1.0 http://appaliciousapp.com/

Requires OS X 10.4 or greater. Universal binary. Annual subscription of \$12.95.

Appalicious Makes the Mac App Store Useful

by Matt Neuburg

Here's a confession that should surprise no one: I personally find the Mac App Store pretty much useless. To me, it seems little more than a way for Apple to extract money from developers, in exchange for the dubious "favor" of controlling what apps are allowed to do on my computer. And as for the App Store application, it seems to be modeled on the worst features of the iTunes Store interface, a winky-blinky antithesis of usefulness. At its best, the Mac App Store might at least offer a cornucopia of apps for new users to find and use to extend their Macs, but the App Store application, by making apps difficult to discover, turns the Mac App Store into something more like an app graveyard where only a few featured or popular apps bubble to the top and everything else languishes in obscurity.

But what a difference an interface makes! Appalicious, a newly released application from ProVUE (makers of Panorama and Panorama Sheets; see "ProVUE's Panorama Gets a Baby Brother: Panorama Sheets," 7 January 2011), puts a whole new face on the Mac App Store. In doing so, it actually succeeds in making the Mac App Store useful for people like me who want to go beyond browsing with a couple of clicks.

The power of Appalicious comes in two parts. First, there is ProVUE's online database that records information about all the apps in the U.S. Mac App Store. This database knows not only the current facts about the available apps, but also the historical facts about them; thus, it knows (for example) the changes over time in each app's pricing. The screenshots below give some indication of what I mean (they come from the Appalicious Web site, not Appalicious itself). In the first screenshot, we learn that the U.S. Mac App Store currently holds 6,742 applications from 2,940 companies, of which 933 are free, and of which 1,352 are being sold today at a discount from an earlier price. In the second screenshot, we see some details about those discounts.

Date:	Aug 30, 20
Applications:	6,742
Companies:	2,940
Released Today:	14
Price Change Today:	55
Discounted Today:	1,352 (20%
Total Discount Available:	\$10,365
Average Discount:	52%
Free Applications:	933 (14%)
\$1 Applications:	1,026 (15%
\$2-\$5 Applications:	2,202 (33%
\$6-\$10 Applications:	1,116 (17%
\$11-\$50 Applications:	1,286 (19%
\$51-\$100 Applications:	117 (2%)



Second, there's Appalicious itself. It is, of course, an application on your Mac. When you run it, it downloads the data about the apps in the Mac App Store from the online database, and presents those data to you using the full database power of Panorama's super-speedy in-memory database engine. That means you can instantly search, sort, and filter the list of available apps, to see just those you're interested in. For example, in the screenshot below, showing the main Appalicious window, I've filtered the list to show just those apps currently selling at a discount of 75 percent or more, and then I've sorted the list to show first those apps that have been awarded the most stars by users. Needless to say, gleaning this kind of information from the App Store application would be utterly impossible.



A secondary Appalicious window (called the detail window) displays additional information about an app. For example, in the screenshot below, I've double-clicked the listing for the first app in the main Appalicious window, thus bringing up a detail window describing that app, which is called Accessorizer. The window displays the screen shots and description from the Mac App Store entry; you can click a screen shot to see a full-size version. Note also the historical information shown down the left side of the window: for example, we learn that this app once cost \$19.99, and that its price was later lowered to \$9.99 and has gone as low as \$1.99 before settling on its current price of \$3.99. (Such is the power of the historical Mac App Store data stored in ProVUE's online database that one can almost sense the developer experimenting to find the sweet spot at which the app will sell best while earning a reasonable return.) If I decide to purchase and download this app, a button near the top left of the window (View in Mac App Store) lets me switch to the App Store application, where I can do so.



If you've experienced Apple's App Store interface, you can readily understand why Appalicious opens up a whole new world for me. Quite apart from the super-fast

searching and the historical pricing information, the mere capability to browse the apps available from the Mac App Store makes Appalicious a vastly more usable approach. As you can see from the screenshot above, the main window displays all the information about multiple apps, including the start of the developer's detailed description of the app, in a compact scrolling interface. And if an app seems potentially interesting, double-clicking its listing brings up the associated detail window – and multiple detail windows can be open simultaneously, while the main window remains open as well. Thus, instead of the frustrating, tedious back-and-forth between the different displays in the single window of the App Store, in order to learn whether an app is or isn't of interest, I can explore multiple apps quickly and easily with Appalicious, pulling out detail windows so I can compare them side by side. Plus, the compact, text-based display of the Appalicious main window, and the capability to display a subset of the list quickly, makes apps discoverable in a way that they definitely are not in Apple's App Store interface. (Indeed, app developers will surely benefit from Appalicious, as a means of notifying the world of their products, just as much as end users.)

Another thing I greatly appreciate about Appalicious is the extent to which it puts the power into the hands of the user. For example, in Appalicious's detail window, notice the field at the bottom where I can enter my own notes about this app. And back in the main Appalicious window, not only can I choose what columns to display, create simple or complex custom searches, and perform simple or multiple sorts, I can also create and maintain customized settings for each of those things, making a set of columns, a search, or a sort into a "favorite" that can be put into effect instantly by choosing from a menu. Indeed, Appalicious comes with numerous built-in preset searches and sorts, so that (for example) I can instantly see apps that are "On Sale 5 Stars" or "Huge Downloads" or "Free (Recent)". In addition, Appalicious keeps track of what apps I've recently viewed in the detail window, and enables me to put apps into a wish

Even this brief description should give you a sense of Appalicious. There really isn't that much more to know about it, and what there is, you can easily discover for yourself. Appalicious comes with excellent online help, and is also backed by an excellent introductory guided tour and a bunch of screencasts. Above all, Appalicious is fun and easy, and it makes the Mac App Store fun and easy. It actually makes me want to download stuff from the Mac App Store! Using the discount history to focus on the best available deals gives me, I must confess, a particular thrill.

The pricing for Appalicious is a bit unusual. It's free for a week after you start using it; after that, the application doesn't stop working, but the linkage between the Appalicious application and the online database is suppressed, so that you are no longer able to obtain up-to-date information about what's in the Mac App Store. In effect, what's

Continued on page 16

October 2011 1:

October Software Review

happened is that you were given an initial one-week subscription to the Appalicious service, which then expires. To extend the subscription, you have two choices. One is to pay, at a rate that is normally \$12.95 per year, although coupon codes can lower the price; right now, the coupon code INTRO gives you a year's subscription for \$7.95. Furthermore, if you use the Appalicious interface to recommend Appalicious to a friend who then uses the app (even if they don't pay to subscribe), your subscription is extended by a month, and your friend's subscription is extended as well (this referral model is inspired by Dropbox). You can combine a purchased subscription with a referral subscription, and you can accumulate multiple referral subscriptions (up to two years' worth). Considering how much you can save by judicious use of the information Appalicious gives you about Mac App Store applications and their pricing, this seems a reasonable cost.

Appalicious works on OS X 10.4.11 Tiger or later (though we gather there's currently an installation problem on Tiger that ProVUE is presumably investigating), but of course you won't actually be downloading any apps from the Mac App Store unless you're running 10.6.6 or later. Currently, Appalicious displays data only from the U.S. Mac App Store; we suspect support for versions of the Mac App Store in other countries is coming. It is a 23.8 MB download.

Apple Updates

ProApps QuickTime Codecs September 20, 2011 - 1.1 MB

System Requirements

- OS X 10.5.6 or later
- QT 7.6 or later

This update adds the following video codecs for use by QuickTime-based applications:

- Apple Intermediate Codec
- Apple ProRes
- AVC-Intra
- DVCPRO HD
- HDV
- XDCAM HD / EX / HD422
- MPEG IMX
- Uncompressed 4:2:2

This update is recommended for all users of Final Cut Pro X, Motion 5, or Compressor 4.

Thunderbolt Display Firmware Update September 19, 2011 - 923 KB **System Requirements**

- OS X 10.6.8
- OS X Lion 10.7.1 or later

This update improves the stability of the Apple Thunderbolt Display.

Thunderbolt Software Update (Snow Leopard) September 19, 2011 - 65.48 MB

System Requirements

- OS X 10.6.8

This update provides support for the Apple Thunderbolt Display and bug fixes for Thunderbolt device compatibility.

Thunderbolt Software Update (OS X Lion) September 14, 2011 - 60.30 MB

System Requirements

- OS X Lion 10.7.1 or later

This update provides support for the Apple Thunderbolt Display and bug fixes for Thunderbolt device compatibility.

Mac mini EFI Firmware Update 1.3 September 14, 2011 - 4.26 MB

System Requirements

- OS X Lion 10.7 and later

This update includes fixes that enhance the stability of Lion Recovery from an Internet connection, and resolve issues with Apple Thunderbolt Display compatibility and Thunderbolt Target Disk Mode performance on Mac Mini (mid 2011) models.

Macbook Pro EFI Firmware Update 2.2 September 14, 2011 - 4.17 MB

System Requirements

- OS X Lion 10.7 and later

This update enables Lion Internet Recovery which starts Lion Recovery directly from Apple servers over a broadband Internet connection if the built-in recovery is unavailable. It also includes fixes that resolve issues with Apple Thunderbolt Display compatibility and Thunderbolt Target Disk Mode performance on MacBook Pro (early 2011) models.

MacBook Air EFI Firmware Update 2.1 September 12, 2011 - 3.99 MB

System Requirements

- OS X Lion 10.7 and later

This update includes fixes that enhance the stability of Lion Recovery from an Internet connection, and resolve issues with Apple Thunderbolt Display compatibility and Thunderbolt Target Disk Mode performance on MacBook Air (mid 2011) models.

Security Update 2011-005 (Snow Leopard) September 09, 2011 - 869 KB

System Requirements

- Mac OS X v10.6.8

Security Update 2011-005 is recommended for all users and improves the security of Mac OS X.

Security Update 2011-005 (Lion) September 09, 2011 - 15.59 MB

System Requirements
- OS X Lion 10.7.1

Security Update 2011-005 is recommended for all users and improves the security of OS X.

Lexmark 2.6 Printer Driver September 08, 2011 - 133.99 MB

System Requirements

- Mac OS X 10.6 or later

This download includes the latest Lexmark printing and scanning software for OS X Lion and OS X v10.6.

by Christopher Breen

Mac 911

Cure for unintended gestures

Reader Joe Forbes' heavy-handed mousing is causing problems with Safari. He writes:

I am now using Lion with a Magic Mouse. Sometimes when navigating windows in Safari with the mouse the page zooms in. I have never been able to figure what I was doing to make it zoom or how to zoom out. The only way I have found to go back to the original is to close the window and re-open it. Can you enlighten me?

You're undoubtedly triggering one of Lion's gestures. By default, if you double-tap with a single finger, you'll zoom in on a Safari page element. To zoom out, double-tap again with that single finger. This is the Smart Zoom gesture.

This is one reason I find the Magic Mouse a less-than-ideal input device under Lion. Because it has no physical buttons that register an intended tap or touch, it's possible to accidentally trigger gestures, much as you seemingly have. Thankfully you have options.

First, familiarize yourself with Lion's gestures. You do this within the Mouse system preference (or Trackpad system preference if you're using that device). Just hover your cursor over each gesture and you'll see a helpful video that demonstrates how to trigger the gesture as well as shows you what the gesture does. Knowing what a particular tap, click, or swipe can do will help you avoid accidentally triggering gestures.

Secondly, turn off those gestures that get in your way. If you can't avoid zooming in on page elements when working in Safari, switch off Smart Zoom. If you accidentally move between pages, turn off the two-finger side-to-side swipe gesture that initiates this action.

I understand that gestures is one of Lion's marquee features, but you likely got along just fine without them when using Snow Leopard. If you find them distracting, there's no shame in switching them off.

Ripping foreign films with subtitles

[Editor's note: The MPAA and most media companies argue that you can't legally copy or convert commercial DVDs for any reason. We (and others) think that, if you own a DVD, you should be able to override its copy protection to make a backup copy or to convert its content for viewing on other devices. Currently, the law isn't entirely clear one way or the other. So our advice is: If you don't own it, don't do it. If you do own it, think before you rip.]

An interested party who would prefer to remain anonymous is curious about ripping DVDs. The Unknown One writes:

I am a college film teacher and occassionally I find it necessary to show sequences of subtitled foreign films to my class (yes, this is legal). However, I can not get subtitles to appear on my iPad. I have tried selecting each of the different subtitle options including "forced" in HandBrake but the titles never appear. Is there a setting that I'm missing?

You're so close. This is possible, but you've chosen the wrong option. Here's the secret.

In HandBrake, select the chapter you want to rip from the Chapters pop-up menus—Chapters 2 through 2 to rip the second chapter, for example. Click on the Audio tab and from the first Track pop-up menu, select the language you want to use if there's more than one—for instance, Chinese if that's the language originally used. Then click the Subtitles tab, choose the English language track from the Track pop-up menu, and enable the Burned In option. Select the iPad preset and click on the Start button to rip the chapter to a file compatible with the iPad.

In the resulting file you'll find the subtitles you want. Note, that they're burned into the movie clip and so you can't switch them off. They're stuck like glue.

For those not ripping foreign films but rather domestic fare, you may have another option that looks better on the

Continued on page 18

Mac 911

iPad. For those movies that support closed-captioning, move to HandBrake's Subtitles tab and choose Closed Captions from the Track pop-up menu and enable the Default option. Rip your movie and transfer it to the iPad.

On the iPad, open Settings and select Video. Ensure that the Closed Captioning option is switched on. Launch the Videos app on the iPad, start the movie playing, tap on the Closed Caption icon in the play controls area, and choose English from the menu that appears. On the iPad you'll see crisp captions in the black bars below the movie rather than the somewhat pixelated subtitles that overlay a movie when you choose the Burned In option.

MobileMe gallery alternatives

Reader Truman Lyon looks to the future and doesn't like what he sees. He writes:

I have a MobileMe picture gallery that's linked to my website. I have learned that MobileMe will cease to exist sometime in the next year and I wonder if there is any way I can keep my gallery and be able to link to it from my website.

Three significant components of MobileMe will disappear at the end of June 2012–iWeb publishing, iDisk, and Galleries. When July 1, 2012 rolls around, any links you have on your site to your MobileMe gallery will be dead, dead, and there's currently no option for migrating it in its current state to another site. So yes, it's time to make plans.

First, if you don't have a local copy of your images, download them from MobileMe. Apple's MobileMe: How

to Save Your MobileMe Gallery Photos and Movies document provides the details. (Your options include downloading them via iPhoto '08 — '11, syncing these albums with Aperture, and downloading them directly from the Web.)

There are many places on the Web where you can create photo galleries, though not all are free (but then, neither was MobileMe). Flickr allows you to upload up to 200 photos for free. To post more than 200 you must upgrade to a Flickr Pro account, which costs \$25 per year. Flickr has many advantages, including multiple ways to tag your images and an emphasis on sharing images with others. It's also an export option within iPhoto and can be accessed from an Apple TV.

Google's Picasa is another free option. With Picasa you can not only share 1GB-worth of photos for free, but also edit them using Google's Picasa Mac software. With Picasa you get what you pay for in the form of not-terribly-attractive galleries.

SmugMug is a pay-for option. For \$40 a year you can upload an unlimited number of photos (a plan that includes video uploading costs \$60 a year) as well as embed Flash slideshows in forums and blogs. SmugMug's galleries are more polished-looking than either Flickr or Picasa's.

"OS X 10.5 Leopard Essential Training (video)" from lynda.
com Find Chris' books at www.amazon.com and www.
peachpit.com. Get special user group pricing on Macworld
Magazine! Subscribe today at http:// www.macworld.com/
useroffer \$\frac{\tau}{2}\$

Share Keystone MacCentral with other MACaholics

Name	
Address	
City	
Home Phone	
E-mail Address	
Date	Is this O Renewal or O New?
How did you hear about us?	
Dues for one person are O \$20/yr.	Family or Corporate dues are O \$30/yr.

To join Keystone MacCentral, mail this form with your membership dues (payable to Keystone MacCentral) to:

Keystone MacCentral Membership Chair 310 Somerset Drive Shiresmanstown, PA 17011

Keystone MacCentral meetings are **usually** held at 6:30 p.m. on the 3rd Tuesday of the month at Giant Foods, Trindle & 32nd, Camp Hill