

Introduction to OS X

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Introduction

- What is OS X ?
- History
- Versions
- Troubleshooting
- Optimisation
- Security
- Audience survey: who knows what?

Agenda

- 1. Brief history of Apple & BSD (Darwin) 5 minutes
- 2. What is OS X 5
- 3. What's the difference between versions 10.2 & 10.3 15
- 4. How to optimise preferences 5 - 10

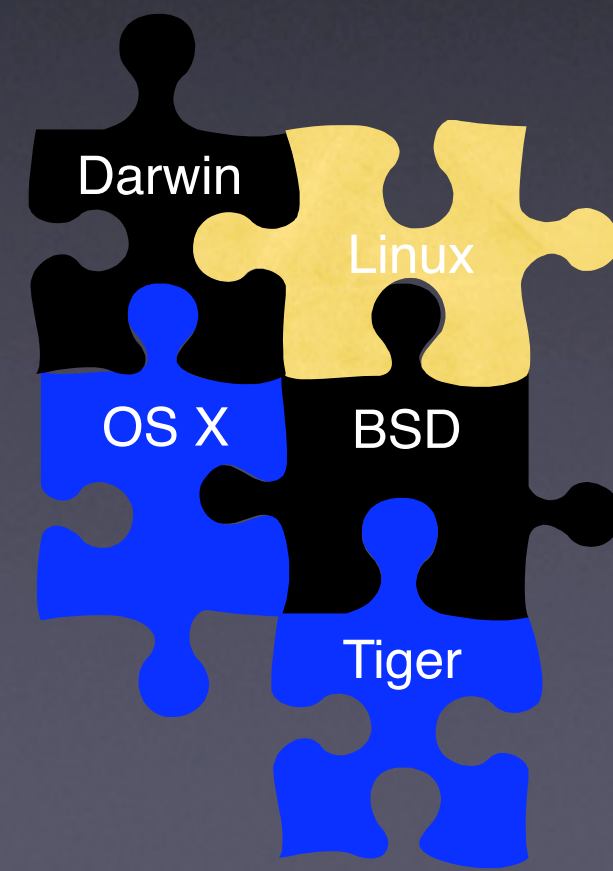
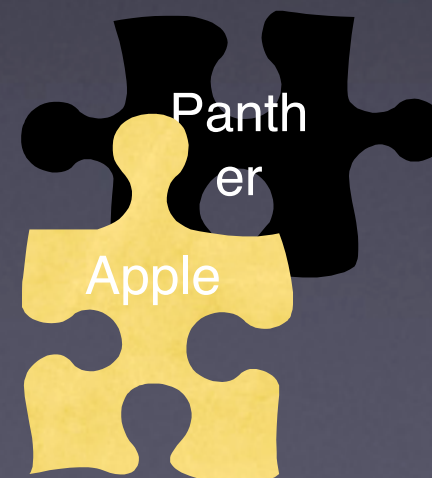
I N T E R M I S S I O N

- 5. Security 5
- 6. How to troubleshoot 10
- 7. Brief view of 3rd party applications 5
- 8. Future expectations of Tiger 5



Overview

- 1985 Jobs leaves Apple to form NeXT
 - based on Mach 2.5 and 4.3 BSD
 - CD-ROMs, colour monitors, NFS, on-the-fly spell checking, dynamically loadable device drivers
- 1988-1995 A/UX based on BSD 4.2 for System 7 Unix features
- 1990 first web browser (offering WYSIWYG browsing and authoring) was created at CERN by Tim Berners-Lee on a NeXT computer.
- 1991, System 7 big leap:
 - MultiFinder built-in
 - Built-in networking and file-sharing
 - Support for 32-bit memory addressing
 - Virtual memory (VM)

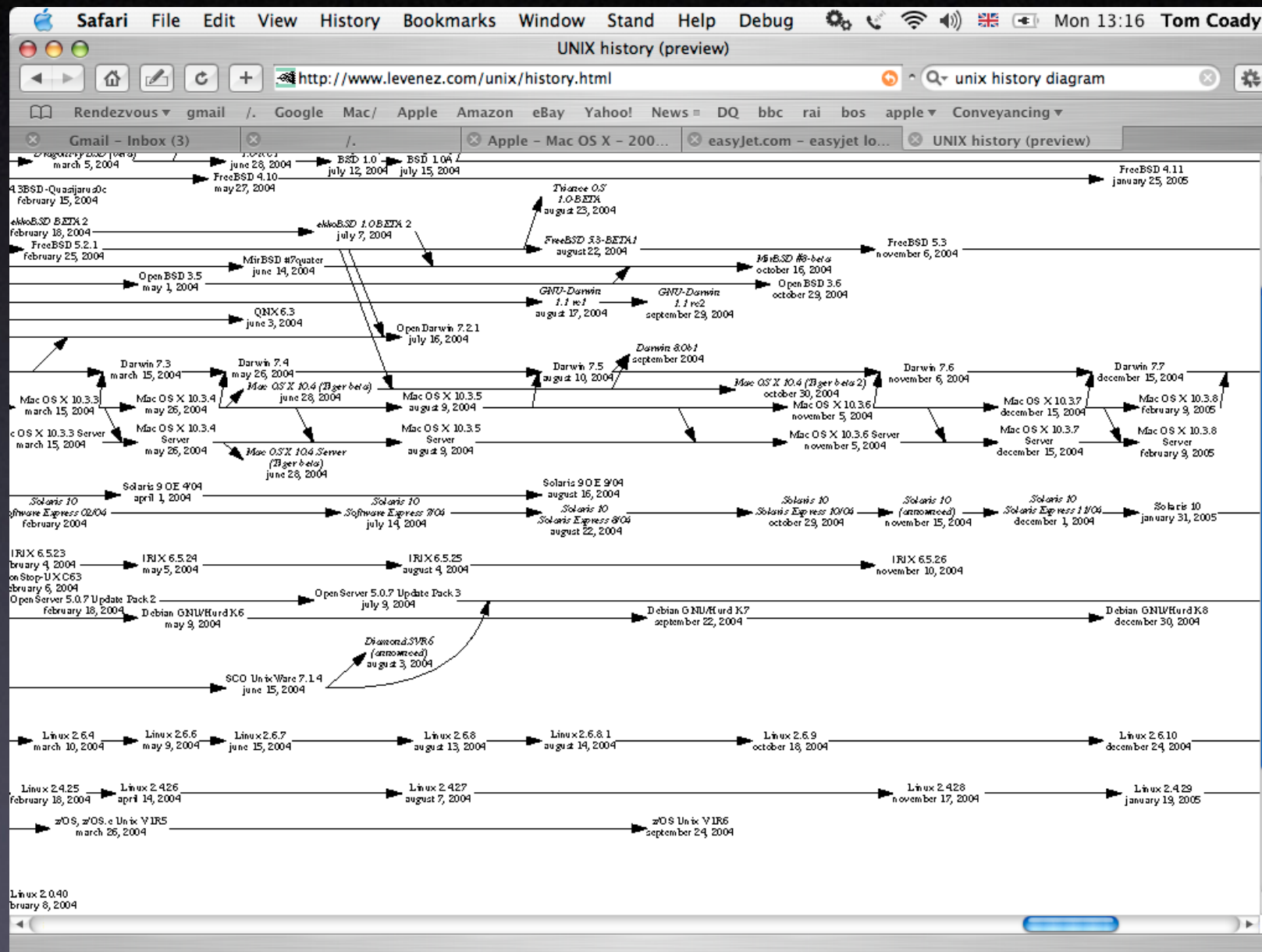


Vocabulary

- BSD: Berkely Software Design
- OS X: Operating System Ten
- Command key:
- Option / Alt key:



History Diagram



<http://www.levenez.com/unix/history.html>

Unix History

- 30 year old UNIX computer operating system still regarded as one of the most powerful, versatile, and flexible operating systems (OS) in the world.
- Popular due to open, portable & versatile architecture.
- Started early 1960s to develop a dependable timesharing operating system.
- Initial failure, but later described as "of unusual simplicity, power, and elegance...."
- Distinctive approach to design -- solving a problem by interconnecting simpler tools, rather than creating large monolithic applications.

OS X history

- Apple acquired NeXT in February, 1997, for \$427 million after considering BeOS
- 1999 OS X Server 1.0 developer preview of the desktop version
- 10.0 ("Cheetah", March 24, 2001)
- 10.1 ("Puma", September 29, 2001)
- 10.2 ("Jaguar", August 13, 2002)
- 10.3 ("Panther", October 24, 2003)
- 10.4 ("Tiger", April 2004)
- Mac OS X's kernel, brings all the features desired from a modern operating system to the Mac OS: memory protection, virtual memory, symmetric multiprocessing, multithreading, and multitasking.

New in 10.3 (Panther)



Panther release video

- Features shown to awe-struck californians

Exercise in Finder and Exposé

- Finder always listed in the applications panel but doesn't necessarily need to be running in order for the Mac to stay running
- Use finder to find applications or documents.
- Click on the magnifying glass to see options
- Use command F to narrow the search
- Look at finder help and preferences [they work the same everywhere command-, & command-?]
- Try killing finder
- Use keys F9, F10, F11
- Use command-tab and command-`. Use Q & H to hide. Use shift to go back
- Try dragging stuff from finder to dock and then back out

Using preferences

- Click on the blue apple or the dock item that opens preferences
- Explore as many of these as you can: there is a huge number of ways to individualise your mac.
- Many preferences are for enabling accessibility for people with a range of abilities
- Some preferences affect the way security works

Security

- Mainly set up using preferences
- Firewall off by default, but so is sharing
- You may be interested to monitor the times when programs access the net then you can use little snitch
- If you have a laptop you can protect content by switching on password access from screen saver etc.
- Some users may wish to use filevault.
- File system check at start, but use Disk Utility utility periodically or when stuff breaks. Or use macjanitor to run missed cron jobs

Troubleshooting

- Force quit either using dock or blue apple menu
- Use console to monitor error messages and activity monitor to see what could be wrong
- Use google to search for error messages
- Join a mug like SMUG
- Try not to get too scared of terminal - it can do some things not possible otherwise. eg tcpdump
- Be prepared to fall back on alternatives like IE or safari to access a few sites like smile

Future features in Tiger - Spotlight

- **Search All Your Stuff** conveniently appearing in Tiger's menu bar, a powerful new search field called Spotlight gives lightning-fast search results encompassing not only files, folders and documents but also messages in Mail, contacts in Address Book and iCal calendars. It's as easy as searching for songs in iTunes, but Spotlight searches your entire personal computer.\
- **The Need for Speed** – spotlight blazes through more than one hundred thousand files and displays the results literally as fast as you can type in search words. Instead of waiting to see results after you've hit Enter, you'll see results as soon as you type the very first letter. Spotlight search results are always up-to-the-moment accurate, too.
- **Intuitive Search** intelligent search capabilities enable Spotlight to find what you want with uncanny accuracy, even when you don't know many details. For example, if you know roughly when you may have saved or received something, you can use relative time periods like "Last Week" or "Yesterday" to find it. If you're not sure of an item's file format, type in a broad category like "Movie", "Image" or "Document." Spotlight displays a neatly-sorted result list that you can easily browse to find what you're looking for.



The smarter we make it,
the easier it gets.

[Address Book](#)

Auto-Update LDAP Cards

Keep your server-based Address Book contacts synchronized with an LDAP based directory — perfect for mobile professionals.

Automator Actions

Automate tasks in Address Book using the new Automator feature.

Certificate Support

View certificate information in your Address Book for contacts who provide public keys.

Contact Import File Formats

Import contacts into Address Book in a variety of formats, including tab-delimited and comma-separated text.

Dashboard Widget

Enjoy instant access to any contact in your Address Book directly from Dashboard.

Envelope Printing

Print custom labels and envelopes from your Address Book.

Pocket Address Book Printing

Print a handy pocket address book to take with you anywhere.

Sharing

Share your Address Book with any .Mac user — ideal for family members or assistants.

Smart Groups

Create address book groups that update automatically based on rules you set up, such as upcoming birthdays.

Spotlight Contact

Find everything related to a contact in your Address Book with a single click — email exchanges, iCal appointments, files attachments or anything else.

Undo Contact Changes

Use the undo function to make individual changes to fields within an Address Book contact.

[AppleScript](#)

AppleScript Utility

Enable GUI scripting, manage folder actions and control the system Script menu from this new utility that manages AppleScript.

Code Sense for AppleScript

Save time and effort when developing

[Finder](#)

Burnable Folders

Burn a CD or data DVD directly from the Finder by quickly creating a “burn folder” where you can drag and drop the files you want to save.

Finder Slideshow

Quickly create full-screen slideshow of any selected images directly from the Finder.

Metadata Info & Preview

View a wealth of information about any file, including metadata from Spotlight.

Smart Folders

Take the results of a Spotlight search and save it as a Smart Folder that automatically updates as you add or remove documents from your Mac.

Spotlight Find

Search all of your documents, images, emails and applications and view the results literally as fast as you can type in search words.

Spotlight Results Group View

View search results as a traditional list, icon view or a completely new group view that clusters found items based on type.

[Font Book](#)

Scriptable Font Book

Control every element of the Font System: scan documents for fonts, quickly create collections, manage fonts automatically based on certain actions and more.

Advanced Font Validation

Automatically check your fonts for problems and incompatibilities and see a detailed report about each one.

Font Export

Easily package up a set of fonts needed by colleagues or service bureaus with just a few clicks.

Font Libraries

Quickly activate fonts from any folder on your system or network.

Scriptable Font Book

Create scripts that automate actions and workflows in the Font Book.

Smart Font Collections

Build a dynamic font collection using rules — just like an iTunes smart playlist or a Finder smart folder.

Spotlight Font Search

[Preview](#)

DNG File Format Support

Open files in the new Adobe DNG (Digital Negative) format using the Apple Preview application.

JPEG 2000 Support

Open files in the next generation JPEG2000 image format using the Apple Preview application.

OpenEXR Image Format

Open images stored in OpenEXR file format using the Apple Preview application.

RAW Camera Image Support

Open images in the RAW file format used by Canon, Nikon and other models using the Apple Preview application.

Image Correction

Leverage the power of Core Image within Preview to adjust colors, exposure and more.

PDF 1.5 Document Compatibility

Take advantage of many popular features of PDF 1.5 in Preview.

PDF Annotations

View and create annotations to a PDF document from Preview.

PDF Forms

Fill out and print PDF forms from Preview.

Preview Grab

Capture screen shots and more from Preview using features previously available in the Grab application.

Preview Slide Show

View an elegant full screen slideshow of images opened in Preview.

Image Keywords

Add, remove and modify keywords for images in Preview.

[Printing](#)

Buy Printing Supplies

Easily purchase supplies for your printer right from Mac OS X Tiger.

GIMP Printer Configuration

Easily set up GIMP Print Drivers, which are installed by default and are configured like any other printer driver.

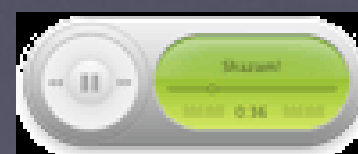
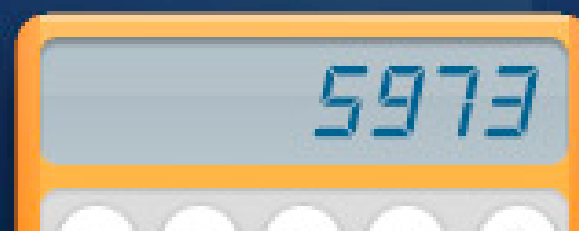
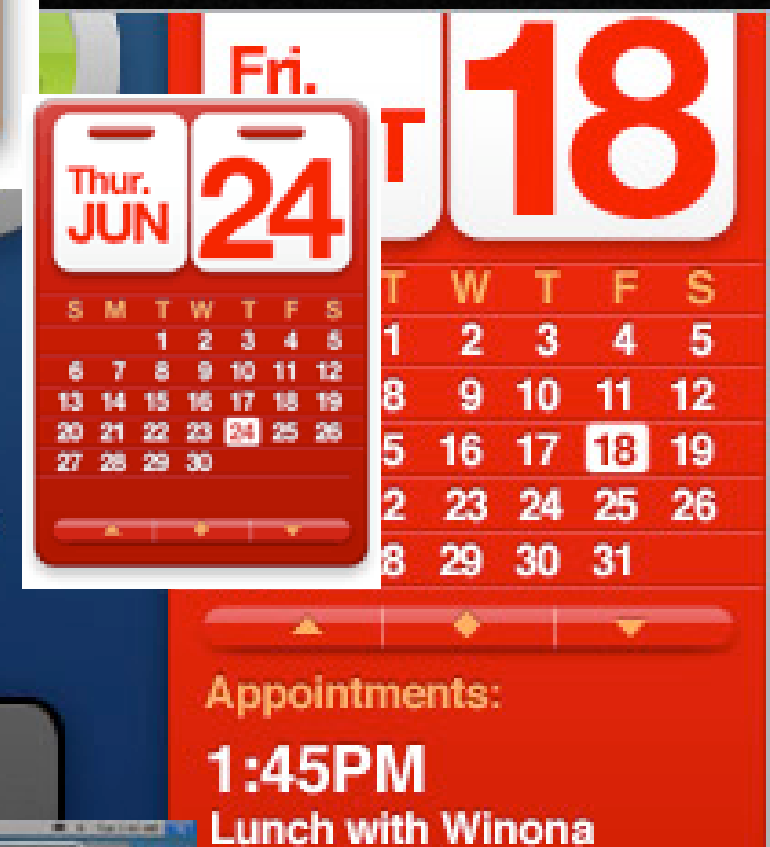
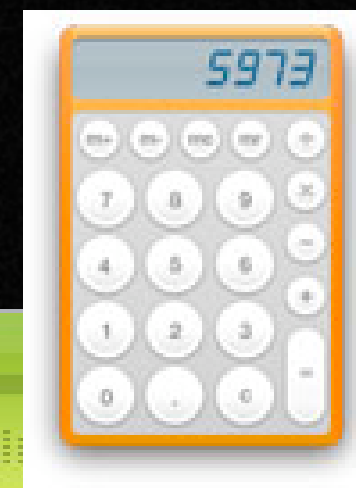
Secure Printing

Take advantage of strong authentication and encryption for shared printers.



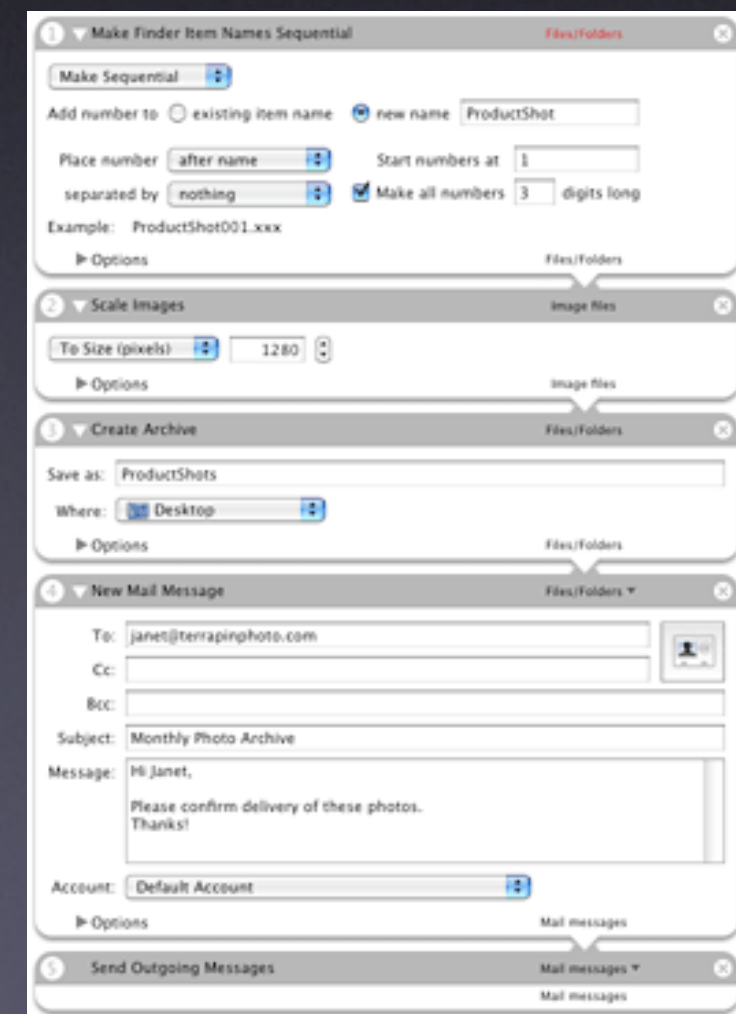
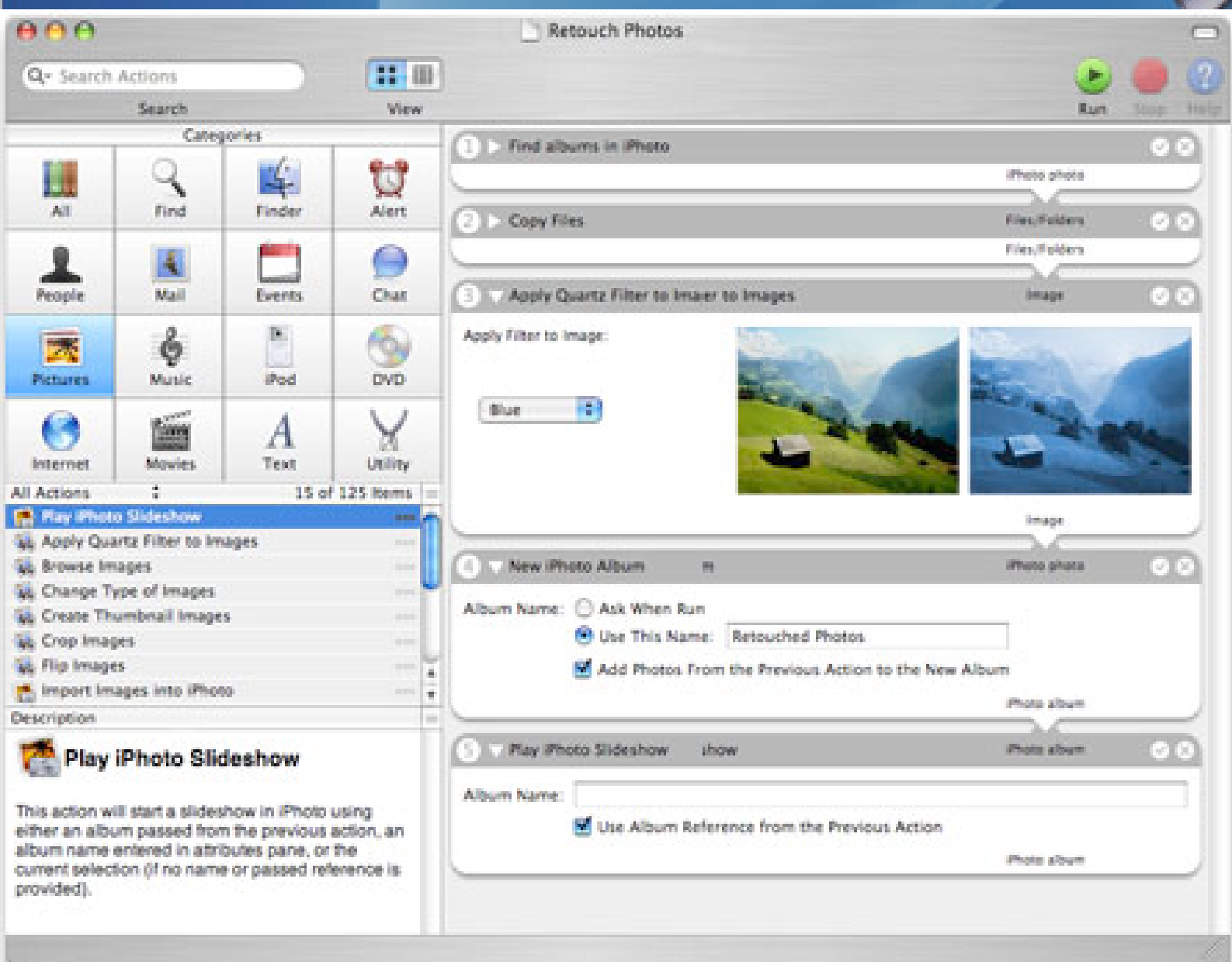
Dashboard

Everything You Need in a Dash.



Automator

Your Personal Automation Assistant.



Automator is not just a nice UI for AppleScript

- Automator is the modern equivalent of the venerable UNIX command line that includes pipelines and loops where you can route the output from one command-line tool to the input of another and create pipelines, and you can loop those pipelines over input. You can type, for example,

```
for i in *.jpg;  
do sips "$i" --resampleHeightWidthMax 300 --setProperty format tiff  
done
```
- Automator lets you create the equivalent of UNIX command lines **without** having to learn a command-line language.
- In place of UNIX tools like "find" and "sips," you use Automator actions. Instead of building command lines, you build workflows.
- For example, to implement the same basic operation as an Automator workflow, start by dragging the "Get Selected Finder Items" action to the workflow pane, then follow it with a "Scale Images" action, then a "Change Type of Images" action.
- Save my workflow as a Finder plug-in, which means it's available from the Action menu in any Finder window. You can then select any file (or group of files), choose the workflow from the Automator sub-menu of the Action menu.
- Think of a UNIX command-line tool that accepts standard input and sends standard output and standard error and you'll have the idea. An Automator action is basically a command-line tool without the nasty command-line interface.
- Will most people use Automator? Frankly, probably not. But most people don't create command-line pipelines and scripts either, even the ones who know how.

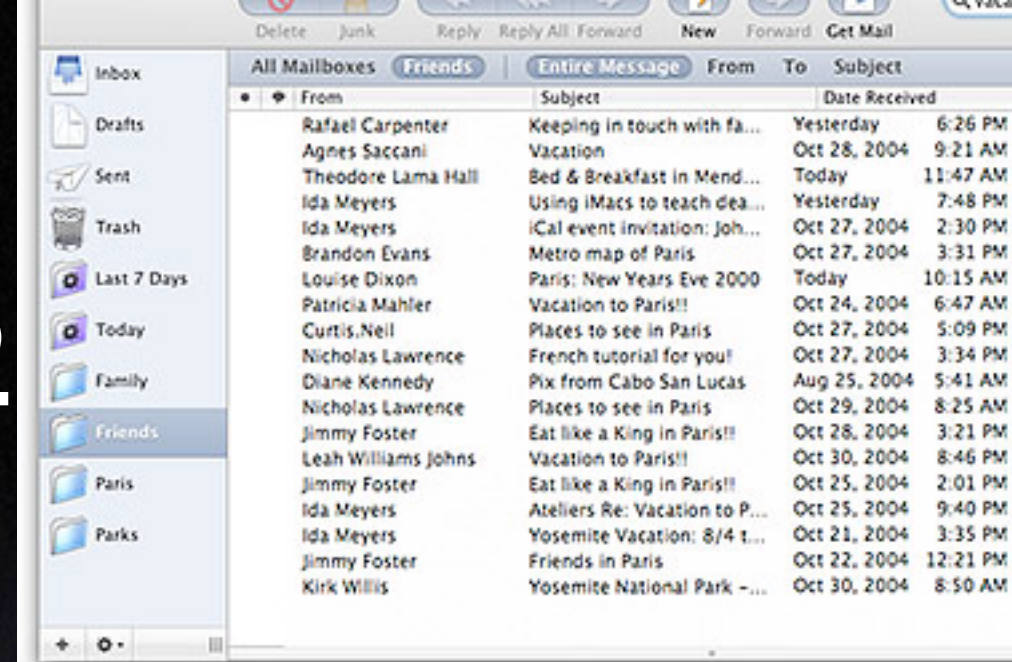


Inkwell

- Use an input device instead of the keyboard. If your tool of the trade is the graphics tablet, let Inkwell save you time when you need to add text to an illustration or layout. Just write, and Mac OS X turns your handwritten scribbles into typed text in any application.
- Inkwell lets you write wherever you want to on the screen, and the recognised text just flows to the current insertion point, as if you'd typed it on a keyboard. So when you're working with a graphics tablet, there's no need to put down the pen and return to the keyboard just to enter a title, caption or filename. You can also write command-key shortcuts with the pen — it's easy to open and close windows, and otherwise control your applications, without lifting your pen from the tablet.



Mail 2



Customised Compose Options

Visually customise which email elements such as To:, CC: and Subject should appear when you compose a new message.

HTML Message Composition

Format newly composed email using HTML.

iCal Invitations in Mail

Review and accept event invitations from iCal much more easily in an interactive Mail message.

Mail and iPhoto Integration

Add photos that you receive in email directly to iPhoto with a single click.

Mail Connection Doctor Diagnose and fix networking issues directly from Mail with this powerful troubleshooting tool.

Mail Controls for Parents Protect children from unwelcome messages by creating an email-safe list that ensures they'll get messages only from people they know.

Outsmart Your Inbox.

Mail Server Quota Management

Display information about the amount of mail server storage used/available on compatible email servers.

Message Priorities

View and set email message priorities and use these priorities for mail rules and Smart Mailboxes, too.

New Mail User Interface

Enjoy a more attractive layout for mailboxes, searchess and more.

NTLM v2 Authentication

Enjoy greater compatibility with a wide range of Microsoft Exchange email server configurations.

Per-account signatures

Use different email signatures for each mail account — like something fun for a personal account vs. serious for a business account.

Photo Controls in Mail

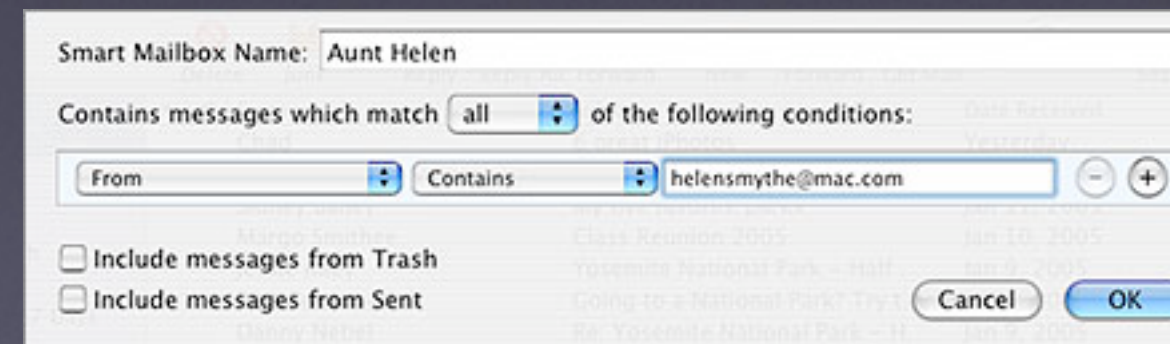
Resize photos before they are sent — Mail can tell you when a picture is too large for your ISP.

Slideshow in Mail

View an elegant full-screen slide show of pictures that have been attached to an email with a single click.

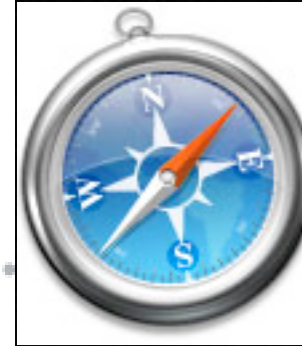
Spell Check Options

Set Mail to spell check your email before it is sent, as you type or never.



Safari RSS

Your desktop is the new doorstep.

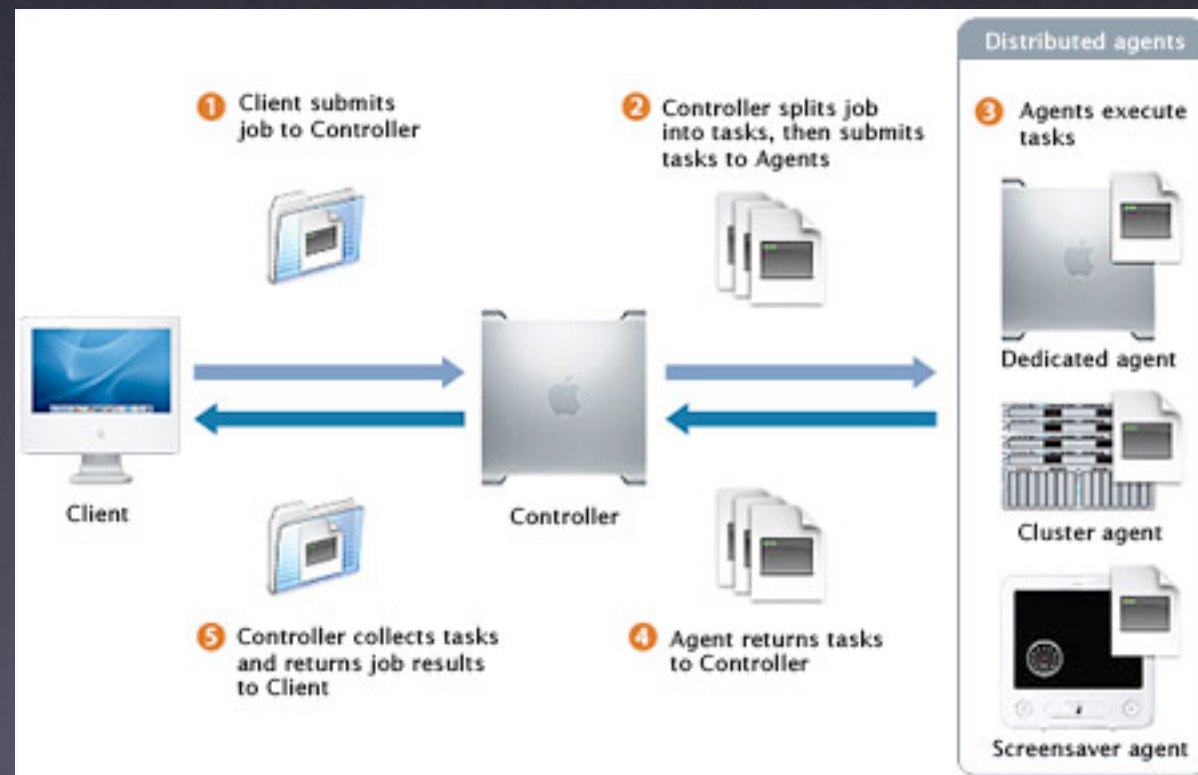


- Archive a Web Page
- Save the HTML and images for the current Web page on your hard drive with just a few clicks.
- Bookmark Search
- Quickly search for a bookmark from all bookmark collections.
- Email Web Page or Link
- Email the contents or URL of the current Web page without the hassle of cutting and pasting into a message.
- Export Bookmarks
- Export Bookmarks directly from Safari — perfect for sharing, archiving and more.
- Inline PDF Viewing
- View PDF documents directly in a Safari browser window — no other application required.
- Private Browsing
- Keep cookies, history and caches private when using Safari on a public access Mac.
- RSS Auto Detection
- Automatically detect the availability of RSS news feeds for a Web site so you can easily add them to your list.
- RSS Bookmarks
- Aggregate and filter RSS news feeds to create a topical bookmark.
- RSS Update Notification
- Learn when an RSS update is available for a single feed, folder of feeds or personal clipping service through this simple bookmark indicator.
- Safari RSS View
- View RSS news feeds for your favourite Web sites directly in Safari — no external news reader required.
- Web site Controls for Parents
- Keep your children safe online by specifying exactly which Web sites a they can access.
- Web site Security Certificate Status
- View the details of a secure Web site's certificate simply by clicking the security lock icon during any secure Web session.
- Safari and iPhoto Integration
- Easily save a picture from the Web to iPhoto with a single click.



Xgrid. Ready to share.

- Imagine waking up one day to find your Mac has solved a vexing scientific problem. While the cure to cancer, super-efficient solar power and ending world hunger are a ways off, you can combine your computing resources using Xgrid — and help usher in a new era of biological breakthroughs, rocket science and advanced models of scientific phenomena.



VoiceOver

The Spoken Interface
for the Mac.



Summary

- History of OS X
- Using finder and expose to navigate files and applications
- Using preferences to enhance security, accessibility and appearance.
- Learn self help methods when problems are met

Where to Get More Information

- Apple.com/uk
- Google
- Mac Ambulance
- Amazon / Borders

