

# MacOS X 10.5

# MacOS X 10.5 "Leopard"



Time Machine

Time Machine
Stacks, Fans & Grids

Time Machine
Stacks, Fans & Grids
Quick Look

Time Machine
Stacks, Fans & Grids
Quick Look
Spaces

Time Machine
Stacks, Fans & Grids
Quick Look
Spaces

Core Animation







No more pinstripes



No more pinstripes

No more brushed metal



No more pinstripes

No more brushed metal

Just a single "smooth" look



No more pinstripes

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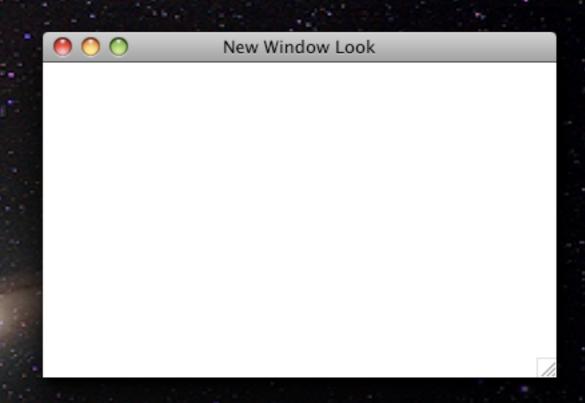
Just a single "smooth" look ... with unified toolbars



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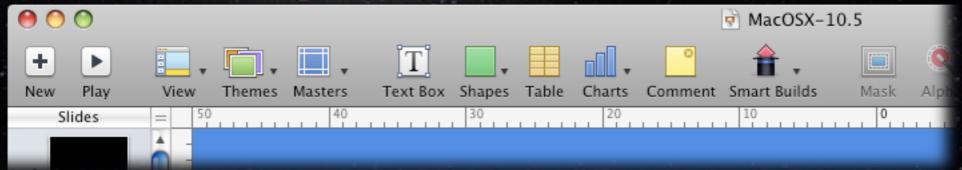


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New folder icons



New folder icons

Translucent menu bar



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3D-looking Dock



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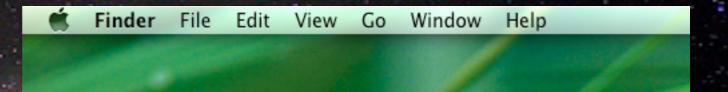




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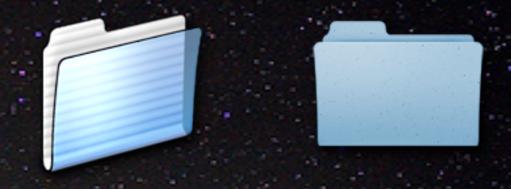


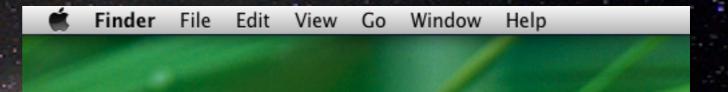




New folder icons

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Quickly access folder contents from the Dock



Quickly access folder contents from the Dock ... good for commonly used folders



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Fans & Grids replace Dock menus



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Fans & Grids replace Dock menus ... full drag & drop support



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High coolness factor ;-)



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Fans & Grids replace Dock menus ... full drag & drop support

High coolness factor ;-)
... some questionable HCl factors though









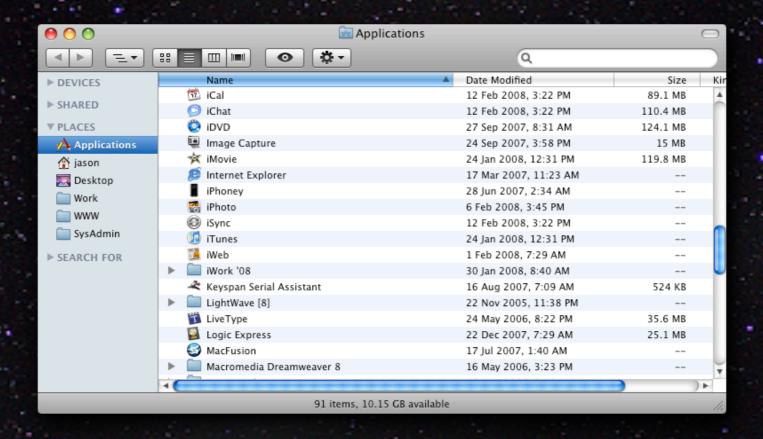




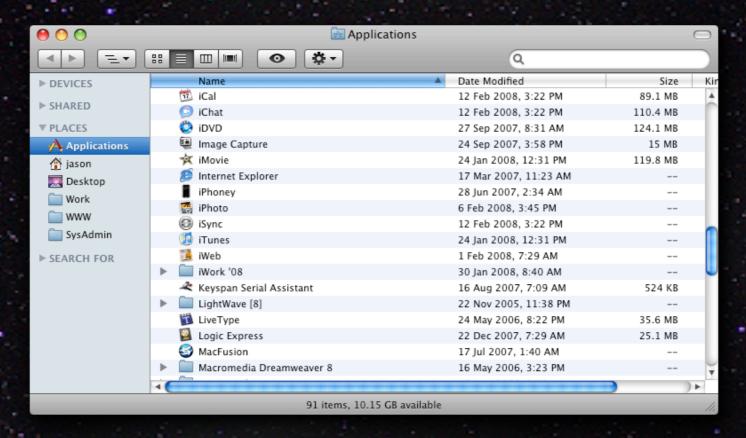






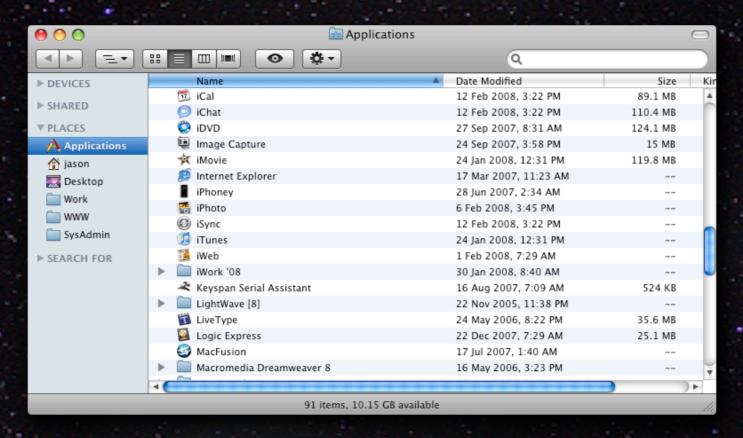






New iTunes-style look

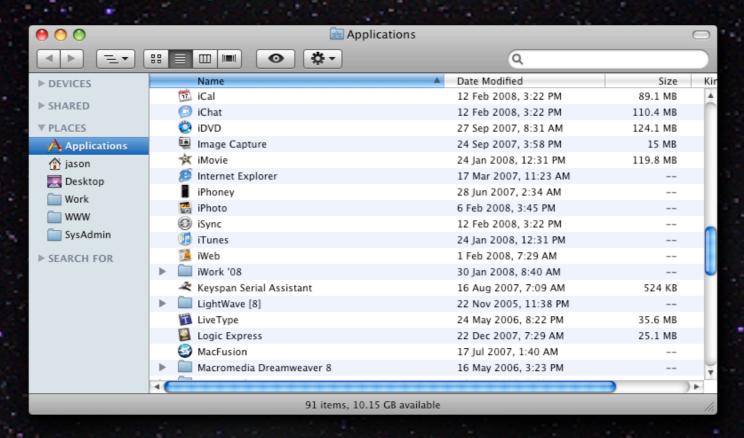




New iTunes-style look

Better threading... better handling of networked disks





New *iTunes-style* look

Better threading... better handling of networked disks

More icon previews, variable grid spacing, Cover Flow





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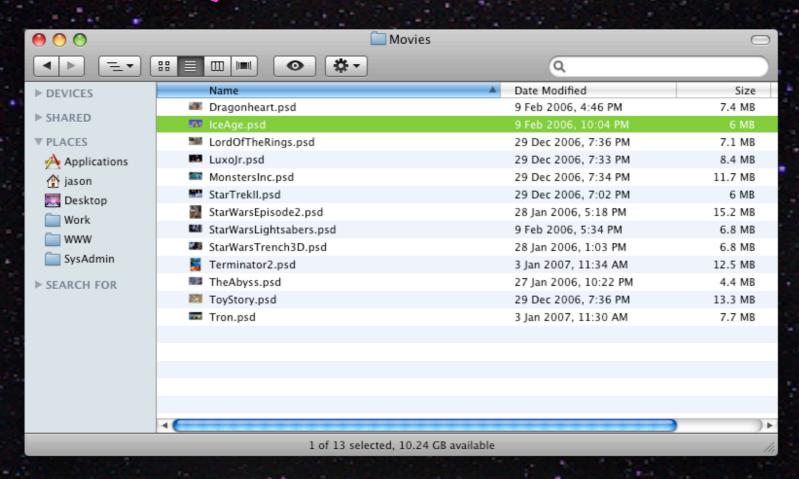
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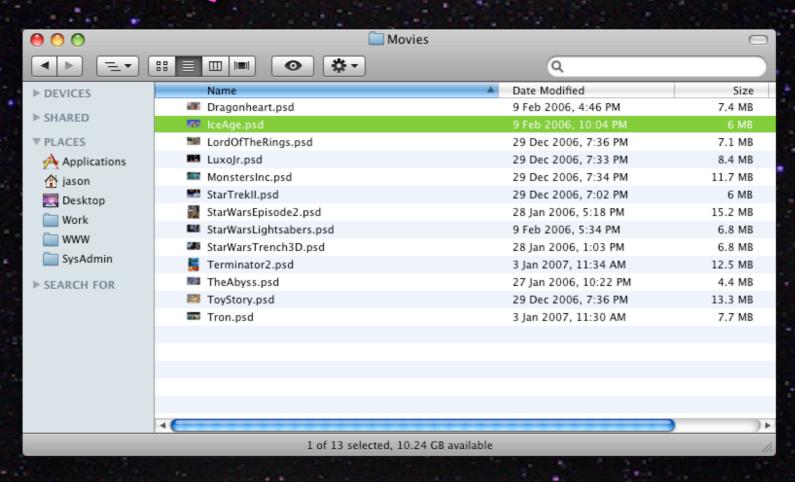






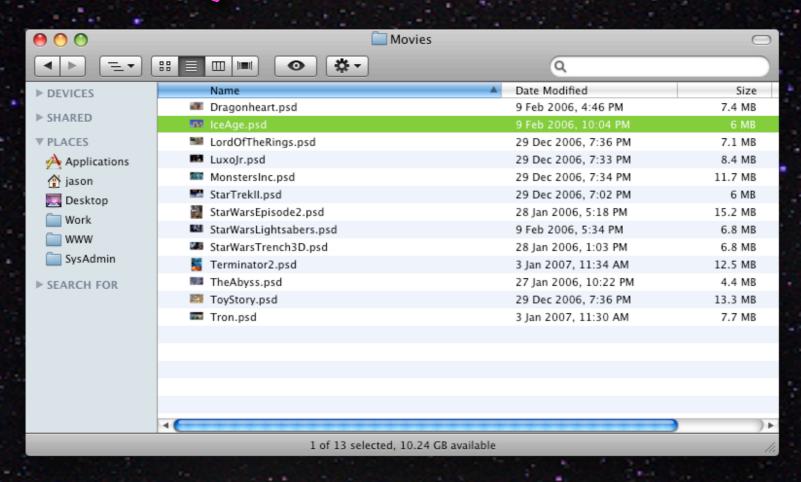






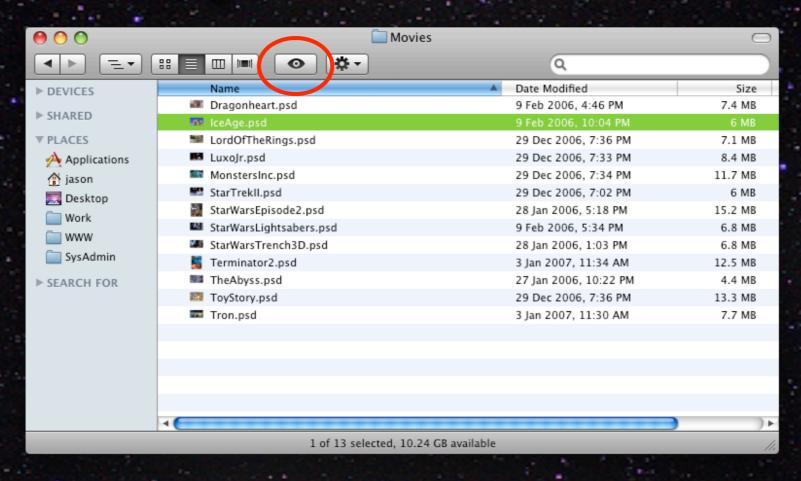
Fast preview from within the Finder





Fast preview from within the Finder ... good for slow-to-launch applications





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Multiple virtual screens



Multiple virtual screens
... much like multiple monitors



#### Multiple virtual screens

... much like multiple monitors

... but switched between in software



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Good for independent tasks



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Good for **independent** tasks ... programming in one, web design in second,



video editing in third etc

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... simply **iconifying** is often better
... or using **Exposé** 















# >- UNIX Foundation



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64-bit support for all applications



# UNIX Foundation

64-bit support for all applications ... not just command line any more



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**DTrace / Instruments** 



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... realtime, low-overhead execution tracing



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Tracking of web-downloaded files



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... warns you when you first open a downloaded file



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New "application-level" firewall



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Code signing







CPU affinity for multiprocessors & multicores



CPU affinity for multiprocessors & multicores ... less bouncing between processors



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Improved paging/swapping algorithm



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... with LLVM JIT for unsupported OpenGL shaders



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More Quartz/Aqua performance tuning







Hardware acceleration for Quartz drawing



Hardware acceleration for Quartz drawing ... on recent graphics cards (uses GPU shaders)



Hardware acceleration for Quartz drawing ... on recent graphics cards (uses GPU shaders) ... enabled on a per-application basis



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Also frees up RAM used for windows



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QuickDraw					
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QuickDraw
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Even faster (was already fastest)





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... and uses less memory too





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Save/restore session





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Cool new inline search





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Web clippings for Dashboard





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- Cool new inline search
- Web clippings for Dashboard
- Resizable text fields, rearrangeable tabs





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... still definitely the best browser









Backgrounds and effects





Backgrounds and effects

Easy content sharing





Backgrounds and effects

Easy content sharing ... photos, PDFs, screen





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Easy content sharing ... photos, PDFs, screen

Audio & video chats with Windows





Backgrounds and effects

Easy content sharing ... photos, PDFs, screen

Audio & video chats with Windows Record audio & video chats





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Easy content sharing ... photos, PDFs, screen

Audio & video chats with Windows

Record audio & video chats

Multiple simultaneous logins





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Tabs, animated buddy icons, SMS forwarding





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Effects

Video Chait with Hank

Tabs, animated buddy icons, SMS forwarding

Still no MSN, Yahoo! or Skype support :-(







Simple, highly automated backup



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... will be first backup of any kind for many users



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... will be first backup of any kind for many users ... set & forget, very little human involvement



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... backups run every hour if backup disk is connected



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... single backup, no rotations



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#### Time Machine

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... backups run every hour if backup disk is connected

#### Easy, user-friendly restore

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#### Some important limitations

... single backup, no rotations

... no compression, no encryption, no verification ... interacts poorly with large files, disk images etc



### Time Machine





### Time Machine









# For Developers Xcode 3



Xcode 3

... inline autocomplete using tab key, yay!



#### Xcode 3

... inline autocomplete using tab key, **yay!** ... code focus, code folding



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... inline autocomplete using tab key, **yay!**... code focus, code folding
... error messages as popup bubbles



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#### Objective-C 2.0

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#### **FSEvents**

... formerly private API for Spotlight



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#### **FSEvents**

... formerly private API for Spotlight ... now also used by Finder, Time Machine etc





### Core Animation



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Mac OS X has always had lots of animation



Mac OS X has always had lots of animation ... Dock, genie effect, throbbing buttons, pulsing progress bars,



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Mac OS X has always had lots of animation
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Should enable *lots* of new animated effects ... some useful, others just gratuitous ;-)







Better **Spotlight interface**, with nesting



Better **Spotlight interface**, with nesting System-wide **grammar checker** (green underline)



Better **Spotlight interface**, with nesting System-wide **grammar checker** (green underline) **To-dos** shared between iCal & Mail



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**Screen sharing (VNC)** 

Improved Networking system preferences



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No more Classic :-(







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... no chance to test absolutely-final release in advance



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Therefore... a few serious bugs:

Photoshop CS3 text input fields



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All pretty-much fixed by 10.5.2 timeframe



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Both Adobe and FileMaker are not supporting earlier versions of their apps on Leopard!!



# Questions?