



# Apple WWDC '07 Report

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Eastman Kodak

6/29/07

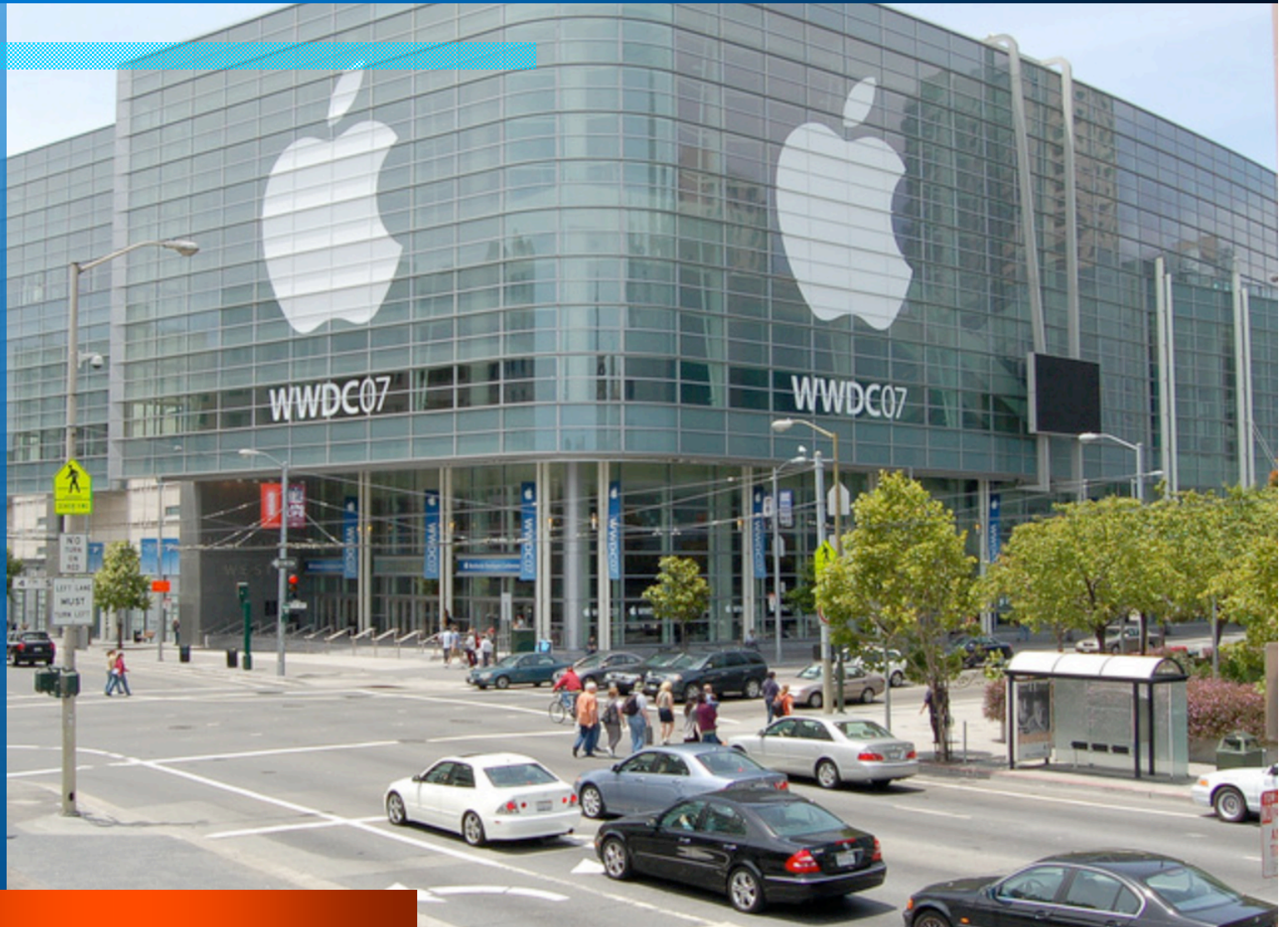
# Presentation Overview



# Presentation Overview

- WWDC Overview
- Special Evening Events
- Keynote Address
- Leopard Development
- Demo of Mac OS X 10.5 Leopard
- Q & A

# About WWDC '07



# Apple & WWDC in 2007

- Apple marketshare spike:
  - Overall, **13.0%\***
  - Portables, **14.3%\***
  - Desktops, **10.4%\***(\*figures for May 2007, NPD)
- Record 5,000+ attendees
- 1,200 Apple engineers
- 1:4 ratio with attendees



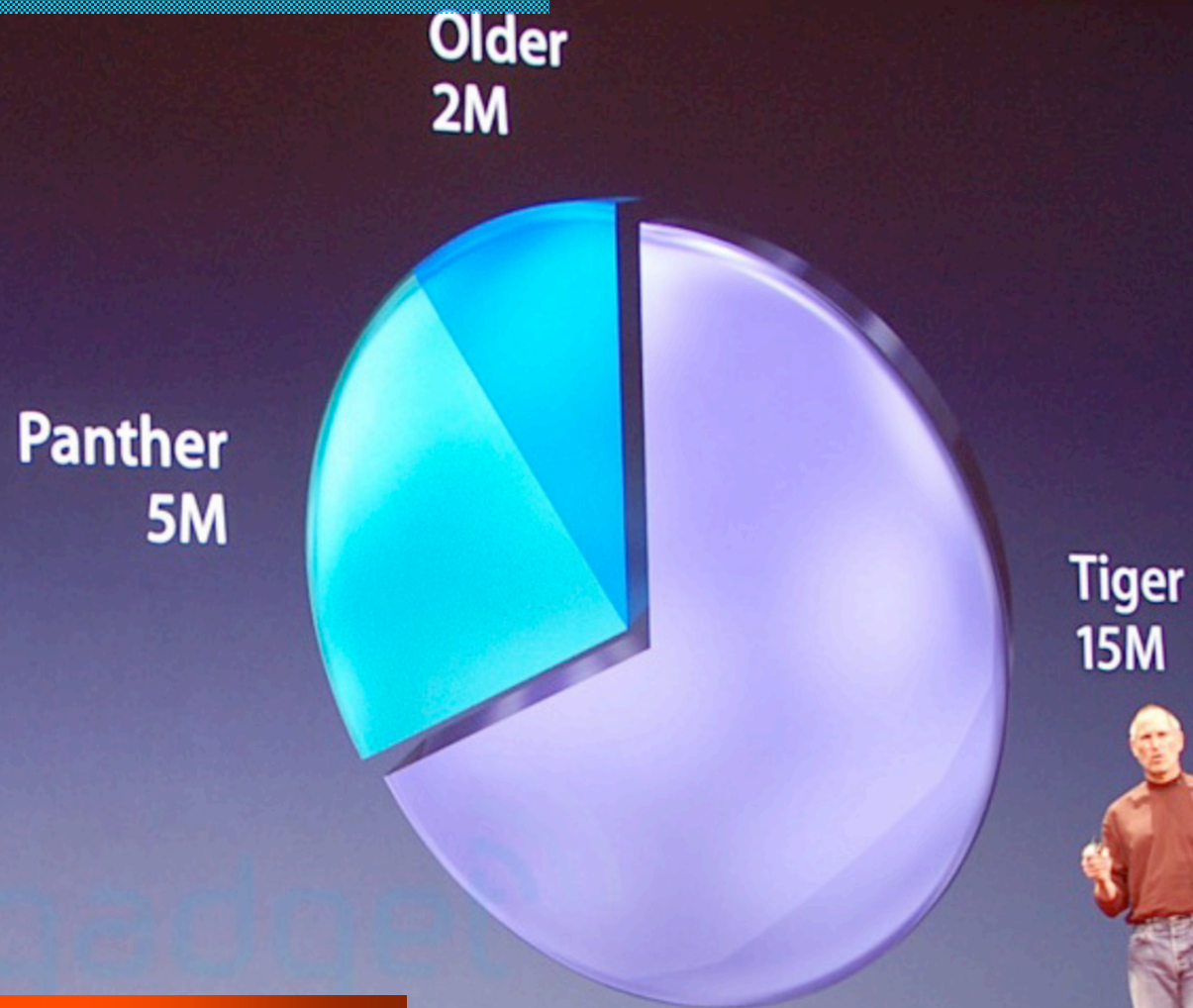
Nearly 1 million registered Mac developers

950,000


200,000 more than last year



# Mac OS X Usage



# 159 Sessions



Mac OS X  
State of the Union

# 94 Hands-On Labs



# 94 Hands-On Labs



# Feedback Forums



# Games Area



# Lunch



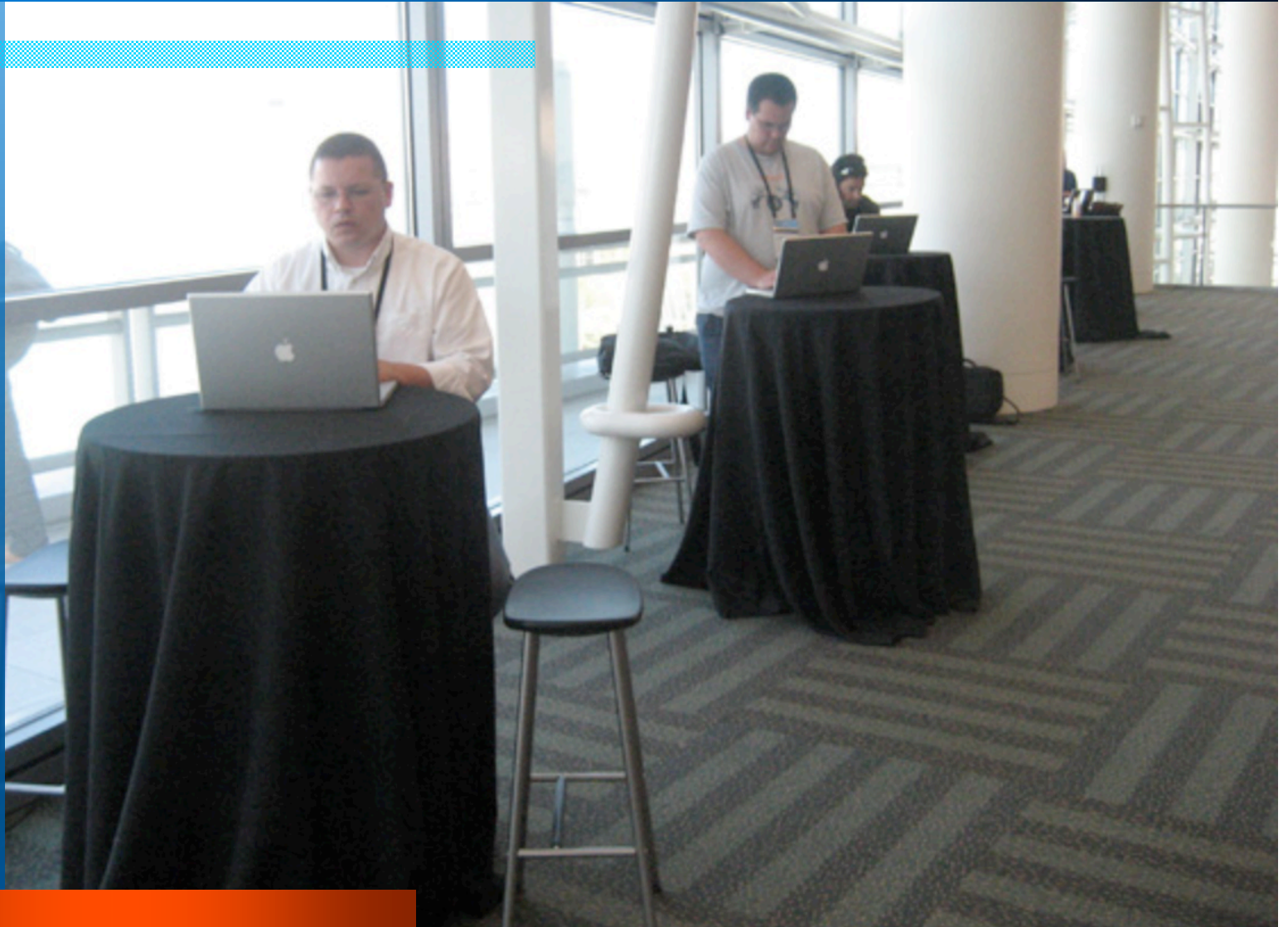
# Lunch



# Common area



# Common area



# Common area



# Student Lounge



# WWDC '07 Evening Events



# ADC Reception

Dashcode Widgets without the wait.

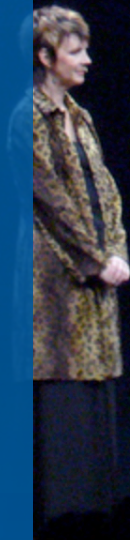


Xcode 3.0 Kills bugs dead.

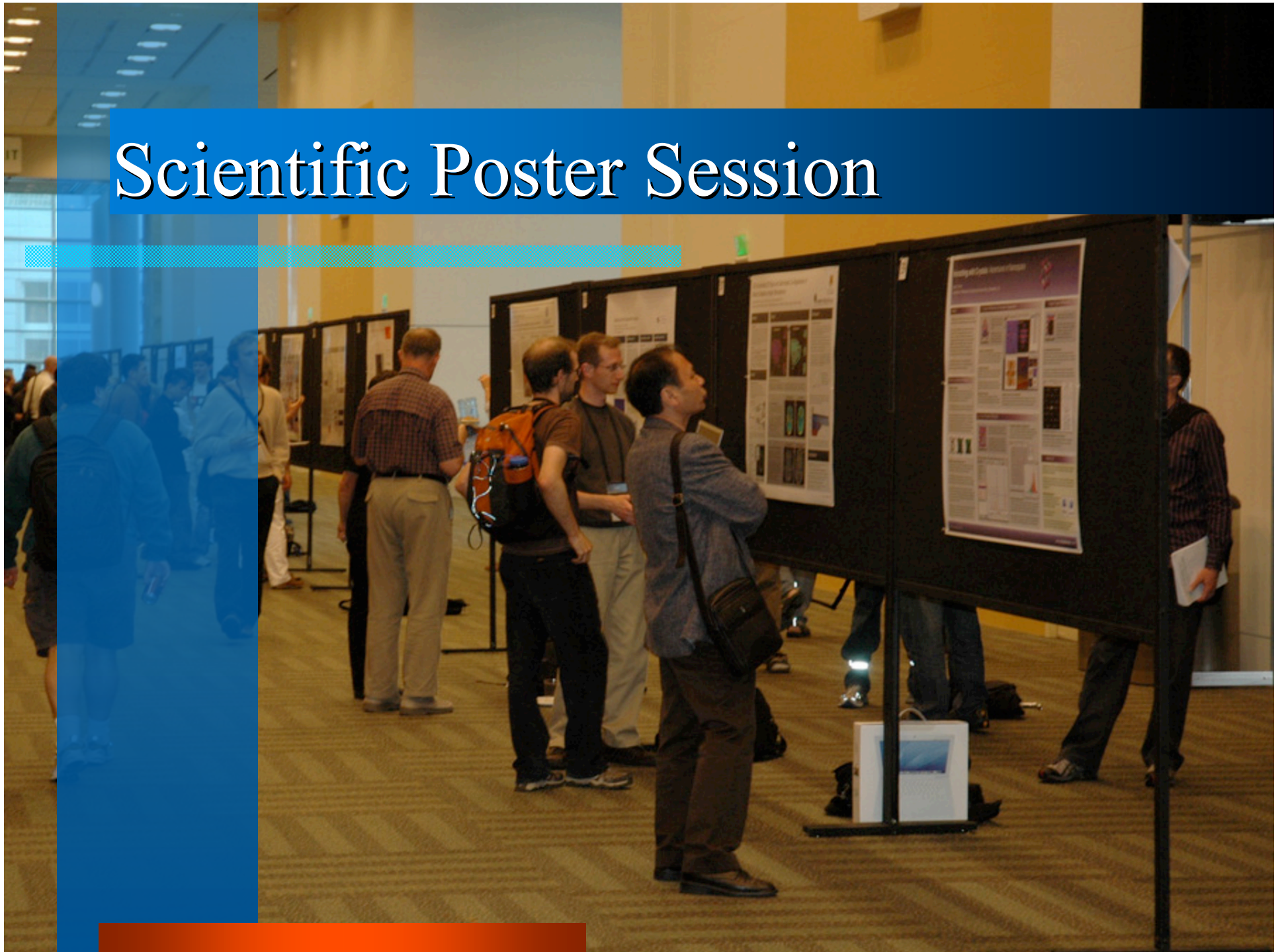


# Apple Design Awards

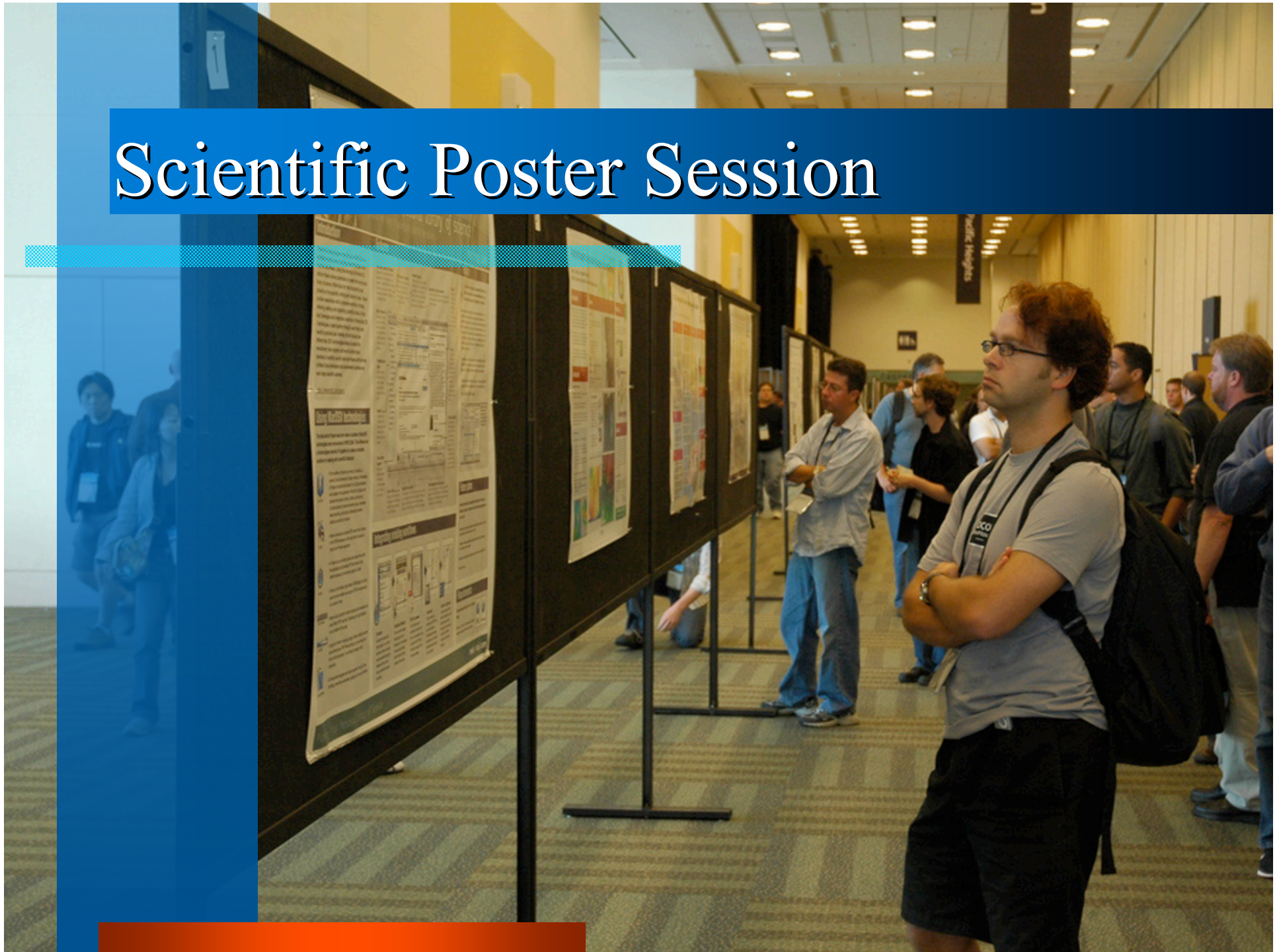
## Apple Design Awards WWDC 2007



# Scientific Poster Session

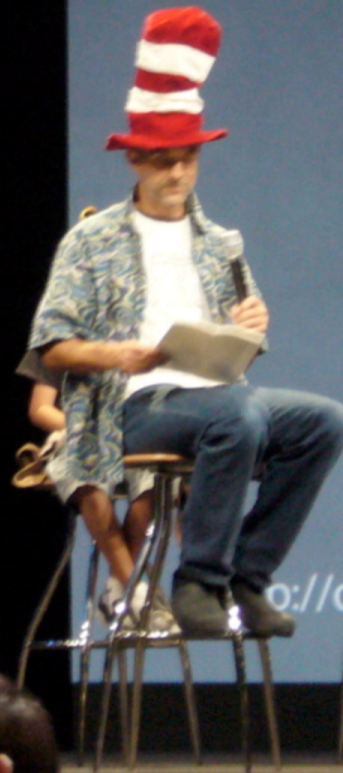


# Scientific Poster Session



# Stump the Experts

Q&A



# Stump the Experts

- Identify and explain at least 3 different time epochs used by the Macintosh.
- What Bonjour service type is registered by Apple TV when it is displaying the passcode screen?
- What Apple command-line environment can respond with the following error message: **\*\*\* SYNTAX ERR**
- What does the following 6502 assembly code accomplish when run on an Apple ][?: **JSR \$F689**



# Stump the Experts



# Apple Party



# Apple Party



# Apple Party



# The Keynote Address



# Media Coverage for Keynote



# Line to the Keynote

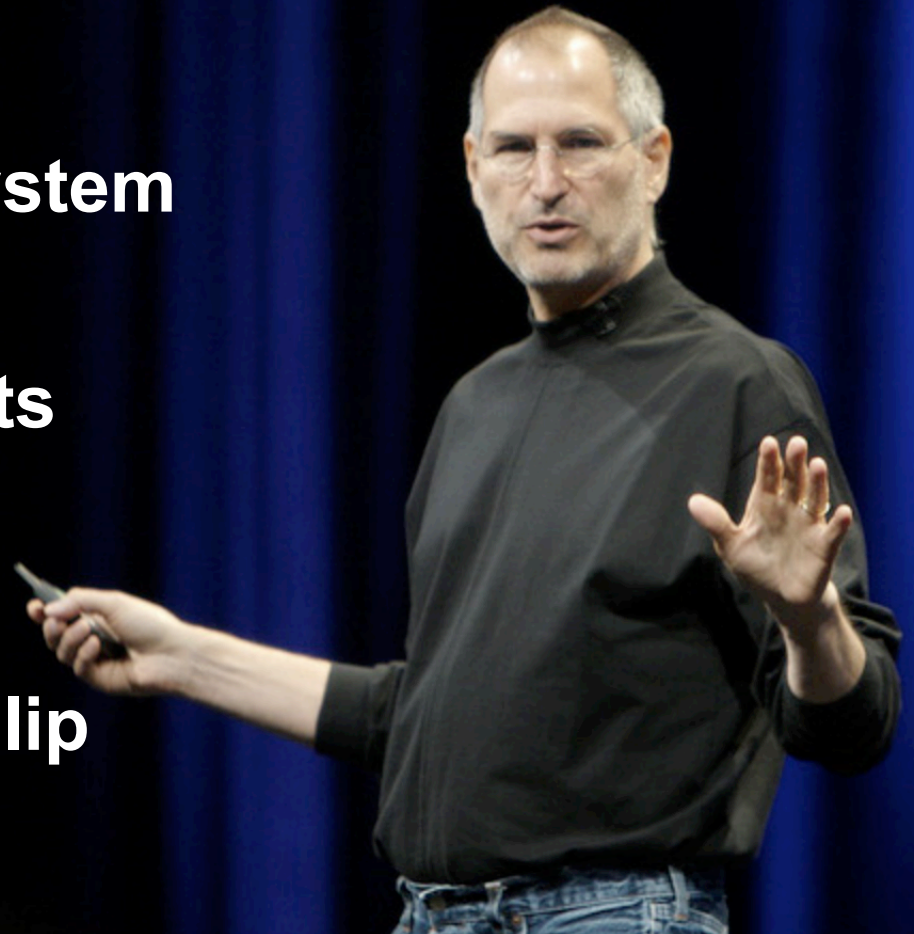


# Keynote Overflow Rooms



# The “Stevenote” Address

- New Desktop & Finder
- QuickLook
- 64-bit operating system
- Core Animation
- iChat improvements
- Boot Camp
- Spaces
- Dashcode & WebClip
- Time Machine



And of course...

One more thing...



# Safari for Windows



# Safari for Windows

## HTML Performance on Windows XP



# iPhone

- No iPhone SDK or development kit
- iPhone comes with full version of Safari
- Write Web 2.0 + AJAX applications, and these will run on iPhone



# Leopard Development



# Whither Carbon?

*“There will come a time when we will stop investing in Carbon.”*

**Bertrand Serlet**  
**6/11/07**



# 64-bit Development

- WWDC '06: Carbon & Cocoa 64-bit ready
- WWDC'07: Carbon will *not* support 64-bit
- 64-bit GUI development in Cocoa only
- Leopard will run 32-bit & 64-bit apps side by side (no separate 32-bit version)
- New runtime API
  - Optimized for 64-bit
  - Uses C++ exception model, which is faster

# Xcode 3.0 Development Tools

- Debug & run in place
- Message bubbles
- `xed`: Xcode command line
- Focus & folding
- Select & evaluate expr's
- Debugger improvements
- View string & vector
- Ruby & Python support



# Objective C 2.0

- Fast enumeration
- Properties: dot syntax  
`z = x.y; same as z = [x y];`  
`x.y = z; same as z = [x set:y];`
- 64-bit zero C++ exceptions
- Headers rearranged
- New 64-bit ABI
- New class construction API



# Zero Cost C++ Exceptions

- 64-bit only
- Entering a try block is fast
- Throwing exception slower
- AppKit assumes all exceptions are `NSException`
- 64-bit C++, ObjC, ObjC++ all use C++ machinery
- 32-bit `@catch(...)` is like `@catch(id e)`



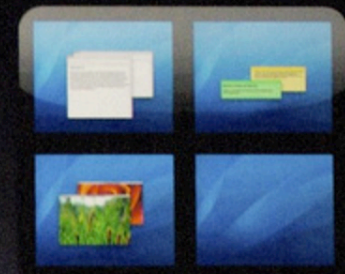
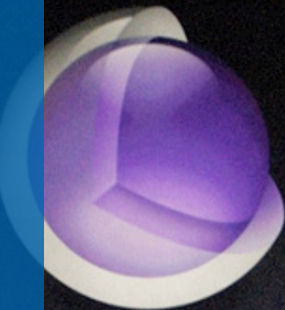
# CUPS Update

- Leopard will ship with (at least) CUPS 1.3
- 3.5GB of drivers in Leopard (2500 models)
- CUPS now owned by Apple!
- Michael Sweet now an Apple employee
- Still GPL, still being developed, now by Apple
- CUPS in Mac OS X:
  - 10.2 Jaguar: CUPS 1.1.1.5
  - 10.3 Panther: CUPS 1.1.1.9
  - 10.4 Tiger: CUPS 1.1.2.3
  - 10.5 Leopard: CUPS 1.3.x

# CUPS 1.3

- Backchannel to Port Monitor & Driver
- Sidechannel commands (soft reset, status)
- Messages sent to stderr relayed to user
- `/usr/sbin/cupsd` scheduler in background
- Filters, drivers & pm's run as lp user
- Back end runs as root
- Access: `/private/var/log/cups/access_log`
- Errors: `/private/var/log/cups/error_log`
- Info: `/private/var/log/cups/page_log`

# Leopard Demo



# Q & A

