



---

# 1990 Worldwide Developers Conference

David Harrison  
Denture Wearer

---

# Don't Call Me MultiFinder

---

- Long live a “cooperative multi-tasking system”
- If you've got MultiFinder problems, you've got 7.0 problems

# You're not an Application Developer, You're a Process Developer

---

- Everything is a process
  - Applications
  - Desk accessories

# Working with Other Applications is like Working with the Macintosh Toolbox

---

- You can:
  - Launch other processes
  - Get info on other processes
  - Change the state of other processes

# Process Serial Number

---

- Identifies application sessions on local machine
- Used in the sender field of the high-level event
- Not just for IAC...

# Improved Temp Memory

---

- “Real” Handles now
  - Except for TempNewHandle, all call are usual Memory Manager calls
  - Temp Memory is disposed when app Quits/Dies/Crashes
- Longterm allocation guided by the user

# Helping IAC Work with Pre 7.0 Applications

---

- Finder sends standard AppleEvent messages to application, but Process Manager intercepts, and “translates”
- Older application launches AppleEvent-aware application, but Process Manager “translates” AppParmHandle

# “New and Improved” for Users

---

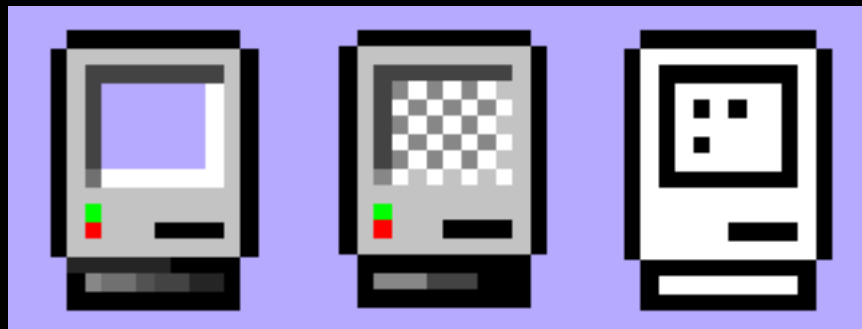
- Desk accessories are in individual layers
- Application list moved to “Cooperative Multitasking System” icon
- Show/Hide application layers
- Kill Hung Apps



# FYI

---

- Application icon sizes and depths



8 Bit

4 Bit

B/W

- Number of processes is not limited
- Programmer's Guide to MultiFinder is replaced by Inside Mac vol VI

# Compatibility Issues

---

- Use Gestalt
- Application resource tracking
- Use the length fields in parameter blocks and data records
- Use the SameProcess trap to compare Process Serial Numbers

# Squeezing Performance...

---

- Use `WaitNextEvent` instead of `GetNextEvent`
- Don't hog time when handling background update events
- Use Gestalt (just had to say this one more time!)



The power to be your best