

Cal-TSS 20th Anniversary Trivia Quiz
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The System

- System Standard Time was a 60-bit unsigned integer. What did it measure? (Extra credit: what is the current value of the Cal-TSS clock?)
- The directory system provided two flavors of "name tags" -- static and dynamic. What was the difference? (Extra credit: what did Howard originally want to call static name tags?)
- Cal-TSS provided both "directory chains" and "scan lists". What was the difference? Why did we need both?
- A vital role was played by "zero-level files". What were they, and what was the role?
- What were class codes? What were they good for?
- How did the ECS system optimize its interpretation of pointer blocks when accessing a file?
- What was the Bead Ghost? What did it do for a living? (Extra credit: What was the Fake Bead Ghost? How did it differ from the real thing?)
- If you wanted to, you could "nudge" an ECS file? Why would you want to do this?
- Operations could either fail or get an error. What was the difference?
- What was duplicate event checking and what was it good for?
- The storage occupied by each ECS object was funded by an "allocation block". How was the storage for the allocation block itself funded?
- What were "fixed parameters" and why were they important?
- What did it mean to "pseudo-close" an open disk file?
- We would sometimes run new programs with the code mapped Read/Write until they were debugged, at which point we would change the mapping to Read-Only. Why in the world did we do this?

The Machine

- How did the Central Exchange Jump instruction identify the new state to be loaded without allowing user code to screw things up?
- Was it possible for a CPU program to save the entire CPU state on a stock 6400? (i.e. without the Central Exchange Jump option)

- What was the primary tool used by the Control Data CEs to test the memory modules? Why was testing the memory modules so important?
- What was funny about the logic levels used in the 6000 series machines?
- What was wrong with the 6400's subroutine call instruction?
- The 6400 had 1 CPU and 10 PPU's. How many data channels did it have?
- The 6638 disk had two spindles and two head positioners, yet it really had to be treated more like four separate disk units. Why?

The Computer Center

- Jim Gray once sent Ken Hebert a Cal-TSS Progress Report that stated: "We are confident that Cal-TSS will gracefully support 100 student users". How was this number arrived at?
- Despite being liquid cooled, the 6400s were in fact cooled mostly by the machine room air conditioning in Campbell Hall. Why?
- The printer hardware had a stubborn glitch in it that caused the printer to hang occasionally. What was the operators' standard technique for clearing such a stuck printer?

The People

- Who claimed what was "polished with jeweler's rouge"?
- Three people wrote small prototype language implementations that actually ran "native mode" on Cal-TSS (i.e. not under the Scope simulator). Name the people and the languages.
- Who was Tovar and why were we mad at him?
- Who was the "Cal-TSS Consultant"?
- Which Cal-TSS user derided timesharing as an addictive drug that rotted the users' minds, but still came by often for a "fix".
- Jim Gray once changed the Bead in a way that moved the buffer it used for reading the subprocess call-stack. What did the ensuing chaos demonstrate about Karl's programming style?
- Late night debugging sessions generally ended promptly at 1:45am. Why?