

Troubleshooting Applications

Objectives:

At the end of this episode, I will be able to:

1. Determine if a system error is caused by an application or hardware extension.
2. Use Safe Mode, Safe Boot, and Verbose Mode to isolate the cause of a system error.

Additional resources used during the episode can be obtained using the download link on the overview episode.

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- Application issues
 - Poor performance
 - Spinning wheel
 - Lockup on boot
 - Unable to login
 - Random reboots
 - Safe Mode
 - Hold **Shift** while logging in
 - Does not load Startup Agents and Launch Items
 - Troubleshooting
 - Disable all startup items
 - Re-enable one-by-one
 - SafeBoot
 - Hold **Shift** while booting
 - Flushes startup cache
 - Does not load third-party extensions
 - Verbose Mod
 - Hold **Command-V** while booting
 - Displays text based output of boot process
 - Troubleshooting Software
 - Single User Mode
 - Hold **Command-S** while booting
 - Boots to CLI
 - Sleep Mode
 - Safe Sleep
 - Supported on all Macs with a battery
 - When going to sleep, all system memory is written to disk
 - If the device runs out of power, the memory is preserved on disk
 - On reboot, memory is copied from disk back to RAM
 - System resumes where it left off
 - Automatic Sleep
 - Supported on Macs with SSD
 - Sometimes called Standby
 - When idle, the system goes in to a low power mode

- Can be resumed with any keyboard/mouse interaction

- Power Nap

- System enters sleep mode as usual
- System awakens from low power mode periodically to check e-mail, perform time-machine backups, etc.
- Display does not wake up
- System Preferences -> Energy Savers -> Enable Power Nap
- Set under battery and power adapter