32 Best Practices

General Performance Best Practices

Choose the Right Resolution

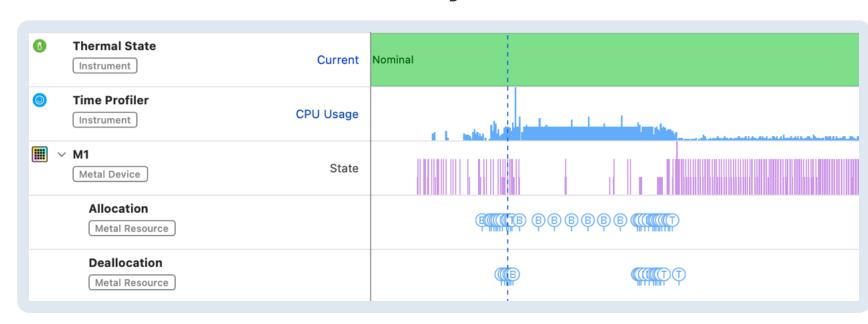


The dependency graph

Minimize Non-Opaque Overdraw

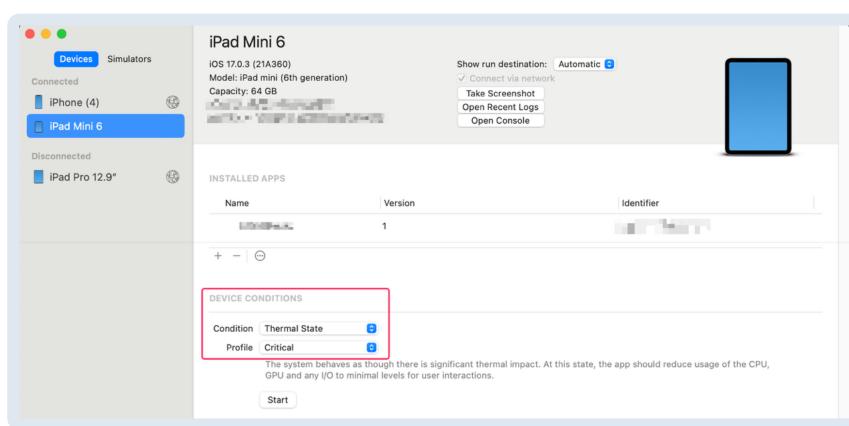
Submit GPU Work Early

Stream Resources Efficiently



Allocations

Design for Sustained Performance



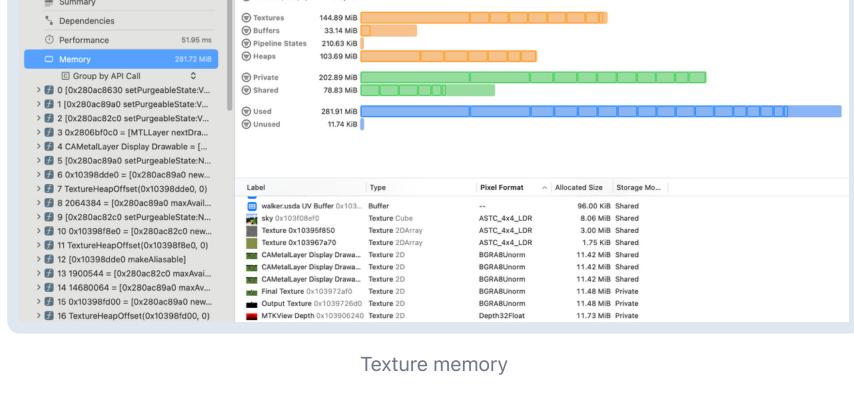
Device conditions



Memory Bandwidth Best Practices

Captured GPU Workload Summary Summary

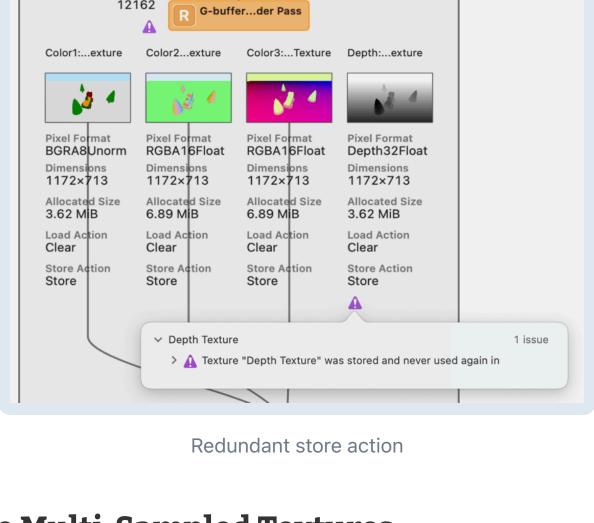
Compress Texture Assets



Optimize for Faster GPU Access

Choose the Right Pixel Format

Optimize Load and Store Actions



Optimize Multi-Sampled Textures

Leverage Tile Memory

Memory Footprint Best Practices

Use Memoryless Render Targets

Avoid Loading Unused Assets

Use Smaller Assets

Simplify memory-intensive effects

Mark Resources as Volatile

Use Metal Resource Heaps

Manage the Metal PSOs