

Week 1: Linux CPU & Process Failures

Learn

- ■ Load average vs CPU utilization
- ■ Run queue and scheduler behavior
- ■ Zombie vs orphan processes
- ■ CPU throttling vs contention

Break

- ■ Create CPU saturation inside a pod
- ■ Apply low CPU limits
- ■ Observe throttling behavior

Investigate

- ■ Compare node CPU vs pod CPU
- ■ Inspect cgroup CPU stats
- ■ Validate throttling evidence

Fix

- ■ Adjust CPU limits or requests
- ■ Confirm latency improvement

Reflect

- ■ Why metrics were misleading
- ■ Guardrail to prevent recurrence

Postmortem Worksheet

Incident Summary: What happened?

Impact: What was the user or system impact?

Detection: How was the issue first noticed?

Root Cause: What was the true underlying cause?

Contributing Factors: What made this worse?

Resolution: What fixed the issue?

Time to Recovery: How long did it take?

Prevention: What guardrail will prevent recurrence?

Key Lesson: What will you remember next time?
