

Lesson 4 — Full Simulation (Round 1)

Session 4 of 8 | Duration: 60 min | Artifact: Full 5-min recording + diagnostic notes

Purpose

First full walkthrough under realistic conditions. Trainer uses the failure-pattern checklist to identify breakdowns for L5.

Phases

Time	Phase	Trainer does
0:00–0:05	Frame the session	State this is the first full run. Realistic conditions. No help.
0:05–0:20	Read the full case	Silent reading of the full case (below). Language bank visible but no teaching.
0:20–0:30	Silent prep	Learners plan their walkthrough. Notes allowed, scripts not.
0:30–0:55	Full walkthroughs	Each learner records 5 min. No interruptions. Others on camera as design authority. Trainer ticks the failure-pattern checklist (below) during each recording.
0:55–1:00	Close	Brief observation on what held together. Save recordings and the marked checklist.

Scripted teacher language

"This is the first full run. Five minutes. No restarts — if something breaks, keep going."

"Notes yes, scripts no. If you read a script, the design authority will hear it."

"I'm not coaching during the walkthrough. If you get stuck on a word, use a simpler one."

Case — full

Client: Pacific Cable — 5G monetization on existing BSS

Background: Pacific Cable is a North American cable MSO with 4.5 million broadband subscribers and a recently launched MVNO line on a Tier-1 wholesale agreement. They want to monetize 5G network slicing for premium consumer and SMB segments — guaranteed bandwidth tiers, low-latency gaming bundles, fixed-wireless-access for SMB. Their existing BSS is a 6-year-old Netcracker deployment, healthy but not slice-aware.

Engagement: 12-month programme to introduce 5G slice monetization without a forklift upgrade of the existing BSS.

Your proposed architecture (your choice within these parameters):

- Dual-stack approach: existing BSS continues to handle voice, broadband, video; a new slice-aware monetization stack handles 5G slice products only
- Anti-corruption layer between the two stacks to keep the existing BSS untouched

- Catalog federation so consumer-facing channels see one product catalog, even though products are owned by two systems
- Real-time charging for slice products via a new CHF; existing OCS retained for legacy products
- 18-month convergence roadmap as a separate Phase 2 (out of scope for this walkthrough)

Trade-offs in play: dual-stack operational complexity vs. slice time-to-market; catalog federation vs. catalog migration; new CHF vs. OCS extension.

Decision needed: approval to proceed to detailed design for the dual-stack approach, with Phase 2 convergence roadmap to be agreed separately.

The walkthrough: Present a 5-minute walkthrough to the design authority.

Failure-pattern checklist

Tick the dominant patterns observed across the cohort. The top 1–2 ticks become the focus of L5.

- ☐ Stance buried — recommendation appears after the architecture, not in the headline
- ☐ Components named without function — "there's a CHF" without saying what it handles or why it's there
- ☐ Trade-offs named without alternatives ruled out ("there's a trade-off on complexity" left hanging)
- ☐ Trade-offs beat over-runs and eats the decision request
- ☐ Decision request is vague ("I think we should approve") rather than specific ("I'm asking the design authority to approve the dual-stack approach so we can start detailed design in 4 weeks")
- ☐ Tense slippage when describing the client's current state (mixes past and present in one sentence)
- ☐ Vague verbs ("do", "have", "make") where architecture-precise verbs exist (orchestrate, decouple, federate, expose, integrate)

Between-session work

No homework. Trainer prepares the L5 repair from the marked checklist.

Artifact

Full 5-min recording per learner + completed failure-pattern checklist (one per cohort, not per learner). Save as NCT_[Region]_[LearnerID]_SolutionWalkthrough_L4_YYYY-MM-DD.