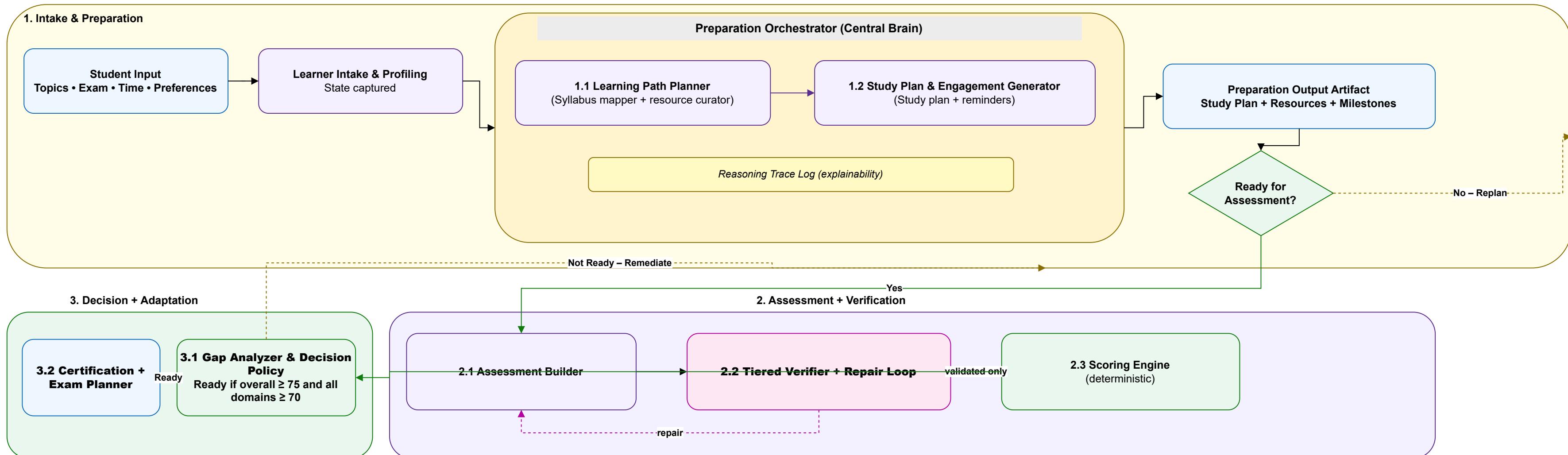


Policy &amp; Safety Guardrails (cross-cutting): PII minimization • harmful-content filter • anti-cheating rules • human escalation path



Evaluation Harness &amp; Observability (passive – no control arrows) • KPIs • latency • verifier catch-rate • gap delta • readiness accuracy

**Learner Intake & Profiling** converts raw student input into a structured learner profile that the Planner uses for orchestration.

**1.1 Learning Path Planner** maps the exam syllabus to structured domains and authoritative Microsoft Learn resources (merged from Syllabus Mapper + Path Curator). **1.2 Study Plan & Engagement Generator** converts the path into a weekly schedule with milestones and sends engagement reminders (merged from Study Plan Generator + Engagement Reminders).

**2.1 Assessment Builder** generates exam-style questions tagged by objective and difficulty. **2.2 Tiered Verifier + Repair Loop** validates questions for correctness, coverage and safety; repairs and re-verifies before output. **2.3 Scoring Engine** computes domain and overall scores deterministically.

**3.1 Gap Analyzer & Decision Policy** converts scores into objective-level insights and applies explicit readiness thresholds (overall  $\geq 75$ , all domains  $\geq 70$ ) to decide: ready → exam, or not ready → targeted remediation and replan. **3.2 Certification + Exam Planner** converts the ready signal into concrete next steps for booking and sitting the Microsoft exam.