

PHASE 5 COMPLETION GUIDE

(Full Detail Version)

Executive Summary

Phase 5 has reached full and final architectural, functional, and behavioral completion.

Every mandated deliverable—Session Layer, Session Orchestrator, Memory Wrapper, Risk Interface, Prompt Builder, Session API, and Logging—has been implemented, validated, and integrated into the codebase.

All Phase-5 acceptance test suites now pass cleanly and deterministically.

This concludes the entire Phase-5 cycle.

Phase 5 Core Deliverables Achieved

1. Architecture Compliance

- Interfaces match the Phase-5 spec line-by-line.
- SessionOptions / SessionMode / SessionResponse models finalized and stable.
- End-to-end Session flow implemented as documented.

2. Fully Implemented Session Orchestrator

- Clean ingest pipeline invocation.
- Conditional memory + conditional risk calls.
- Prompt building.
- LLM invocation.

- Response construction.
- Logging capture.
- Guaranteed non-explosive failure behavior.

3. Deterministic Prompt Builder

- Standard → Analyst → Concise mode differences enforced.
- Memory then Risk sections ordering locked.
- No ambiguity, no hidden branches.

4. Memory Wrapper Completion

- Routes to underlying Phase-4 memory architecture.
- Hard schema compliance (k, items[], required keys).
- “Return None on error/empty/invalid” guaranteed.
- Exception-free operation proven by tests.

5. Risk Interface Completion

- Proper RiskSnapshot modeling.
- Deterministic snapshot renderer.
- Zero-crash semantics enforced.
- Valid None-on-no-data behavior.

6. Session API Completion

- FastAPI endpoint exposed.
- Data validation on request.
- Returns correct SessionResponse structure.
- Tested behavior under typical inputs.

7. Logging Layer

- Session event logging implemented.
- Guaranteed non-crashing behavior.

Verification Artifacts

Validated test suites include:

- Phase-5 session tests
- Phase-5 prompt tests
- Phase-5 logging tests
- Phase-5 risk tests
- Phase-5 API tests
- Shared memory wrapper tests

All passing. All green.

Stability Analysis

- No surface regressions.
 - No dangling behavior branches.
 - No silent partial implementations.
 - Test-guarded core.
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Operational State

The Phase 5 layer is now:

- Stable
 - Predictable
 - Deterministic
 - Fully usable by upstream components
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Final Result

Phase 5 is COMPLETE.

It is locked, validated, and ready for consumption by Phase 6.