

AIE-014 | Resumable Artifact Transfer Session & Integrity Harness v1

Chunked and Resumable Transfer

Bounded outcome: Design a chunked/resumable artifact-transfer contract that binds each session to the exact expected artifact digest and byte size, advances only from server-confirmed acknowledged state, rejects out-of-order chunks, preserves partial bytes as non-runnable, and publishes atomically only after exact final size and digest verification.

Evidence path

Boundary	Inspectable claim	Explicit non-claim
session id	Treat session id as a separate evidence boundary and close it only with inspectable observations from the bounded fixture.	This lesson consumes immutable artifact identity from AIE-013; it does not redesign model variants or replica topology.
target artifact digest	Treat target artifact digest as a separate evidence boundary and close it only with inspectable observations from the bounded fixture.	Transfer completion does not grant license permission; AIE-015 owns model-license policy.
expected size	Treat expected size as a separate evidence boundary and close it only with inspectable observations from the bounded fixture.	This lesson does not select an execution node; AIE-016 owns capability-aware scheduling.
chunk index	Treat chunk index as a separate evidence boundary and close it only with inspectable observations from the bounded fixture.	Transfer progress is not device-health telemetry; AIE-017 owns runtime telemetry.
sent range	Treat sent range as a separate evidence boundary and close it only with inspectable observations from the bounded fixture.	This lesson consumes immutable artifact identity from AIE-013; it does not redesign model variants or replica topology.
EVIDENCE BOUNDARY	Separate source facts, local observations, bounded inferences, and human decisions.	Unavailable production behavior remains NOT_OBSERVED or NEEDS_VERIFICATION.

Acceptance gate: Accept only when every critical dimension has inspectable evidence, the negative probe behaves as predicted, and changed-context transfer preserves a residual limitation.

AIE-014 | Blank Evidence Record

Complete every field from retained observations; mark unavailable evidence OPEN.

Canonical field	Observed evidence / value	Evidence type	State
Evidence		OBSERVED / INFERRED	OPEN
Proves		OBSERVED / INFERRED	OPEN
Does not prove		OBSERVED / INFERRED	OPEN
Gate		OBSERVED / INFERRED	OPEN

Source projection: derived_text/tables/resumable_transfer_evidence_matrix.md

AIE-014 | Evidence Index

Link every decision to a source, command, output, or explicitly bounded inference.

ID	Evidence type	Source / command	Observation	Supports / falsifies	State
E-01	BASELINE	derived_text/tables/ resumable_transfer_evidence_mat rix.md			OPEN
E-02	RUNTIME	python3 lab/AIE014-LAB1/run_checks.py			OPEN
E-03	NEGATIVE PROBE	This lesson consumes the immutable artifact identity from AIE-013; it does not redesign model.			OPEN
E-04	RECOVERY	Session Id evidence is inspectable and its non-claim remains explicit.			OPEN
E-05	TRANSFER	EX4			OPEN

Truth rule: Runtime and security claims require retained output from the supplied bounded fixture. Source facts and static readiness are not promoted into production observations.

AIE-014 | Decision Walkthrough

Run the evidence gates in order and preserve unresolved boundaries.

Case	Change	Prediction	Evidence to retain	Decision
server confirmed resume	EX1	Treat session id as a separate evidence boundary and close it only with inspectable observations from the bounded fixture.	Retain bounded positive or negative evidence.	OPEN
out of order reject	EX2	Treat target artifact digest as a separate evidence boundary and close it only with inspectable observations from the bounded fixture.	Retain bounded positive or negative evidence.	OPEN
digest quarantine	EX3	Treat expected size as a separate evidence boundary and close it only with inspectable observations from the bounded fixture.	Retain bounded positive or negative evidence.	OPEN
size quarantine	EX4	Treat chunk index as a separate evidence boundary and close it only with inspectable observations from the bounded fixture.	Retain bounded positive or negative evidence.	OPEN

Allowed states: ACCEPT, REPAIR, DEFER

Guardrail: A local deterministic fixture does not prove production identity, authorization, confidentiality, integrity, availability, recovery, enforcement, or system-wide security.

AIE-014 | Failure and Repair

Falsify shortcuts before accepting the bounded decision.

Failure	Signal	Repair	Recovery check
This lesson consumes the immutable artifact identity from AIE-013; it does not redesign model.	No retained evidence closes the session id boundary.	Retain the fixture output that distinguishes observed session id facts from inference, unknowns, and.	Session Id evidence is inspectable and its non-claim remains explicit.
Transfer completion does not grant license permission; AIE-015 owns license policy.	No retained evidence closes the target artifact digest boundary.	Retain the fixture output that distinguishes observed target artifact digest facts from inference.	Target Artifact Digest evidence is inspectable and its non-claim remains explicit.
This lesson does not decide which node should receive or execute the artifact; AIE-016 owns.	No retained evidence closes the expected size boundary.	Retain the fixture output that distinguishes observed expected size facts from inference, unknowns, and.	Expected Size evidence is inspectable and its non-claim remains explicit.
Network progress is not device-health telemetry; AIE-017 owns runtime telemetry.	No retained evidence closes the chunk index boundary.	Retain the fixture output that distinguishes observed chunk index facts from inference, unknowns, and.	Chunk Index evidence is inspectable and its non-claim remains explicit.

Transfer case: EX4

Transfer observation: _____

Recomputed decision: _____

AIE-014 | Review and Sign-off

Acceptance requires inspectable evidence plus an explicit residual limitation.

Review control	Required response	Reviewer evidence	Disposition
Canonical fields addressed	YES		OPEN
Negative probe retained	YES		OPEN
Recovery evidence retained	YES		OPEN
Changed-context transfer complete	YES		OPEN
Source facts separated from inference	YES		OPEN
Residual limitation explicit	YES		OPEN
Final bounded decision	ACCEPT / REPAIR / DEFER		OPEN

First explicit non-claim: This lesson consumes the immutable artifact identity from AIE-013; it does not redesign model variants or replica topology.

Reviewer: _____ Date: _____ Record owner: _____