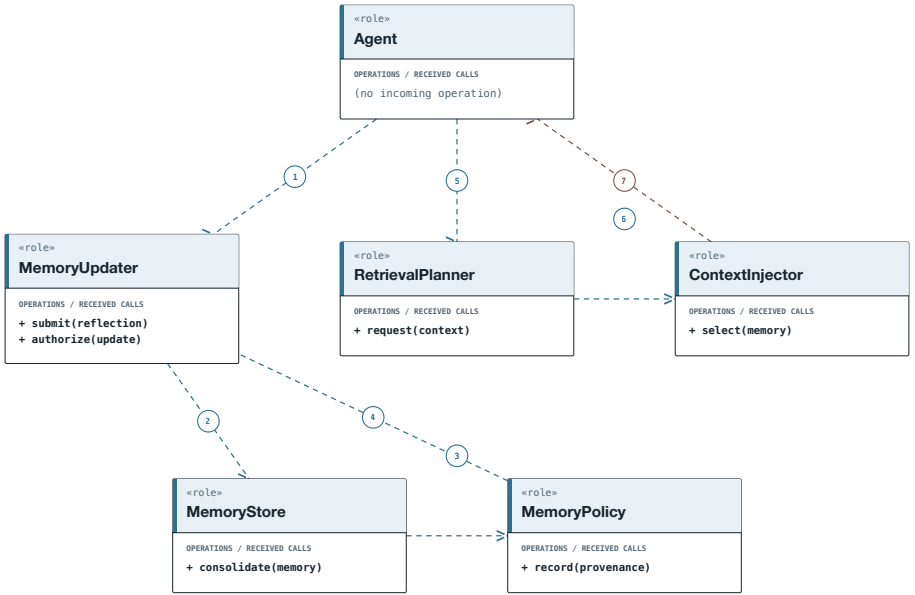
P28 Agent-maintained memory pipelines

Primitive / UML CLASS VIEW / ANALYTICAL MODEL

Update reusable task memory.

UML CLASS VIEW

dashed arrow: call dependency · brown: return/failure · analytical, not an observed trace



POINTCUT / PATTERN INTERFACE

CONTEXT	The harness selects and stores knowledge across tasks or sessions.
TRIGGER	An observation, reflection, or memory write is processed.
STRUCTURE	Selection, consolidation, provenance, access control, retrieval, and revision.
EFFECT	Stored memory is traceable, retrievable within scope, and updateable.

CONTRACT / REQUIRED BEHAVIOR

REQUIRES	Candidate memory has a source and intended scope.
ENSURES	Retrieval identity and revision history survive consolidation.
INVARIANT	Untrusted memory cannot silently redefine instructions or permissions.
VIOLATION	Stale, poisoned, or conflicting memory is quarantined or rejected.

RELATIONSHIPS / ANALYTICAL CALLS

number · caller → callee · message

1 Agent → MemoryUpdater submit(reflection)
2 MemoryUpdater → MemoryStore consolidate(memory)
3 MemoryStore → MemoryPolicy record(provenance)
4 MemoryPolicy → MemoryUpdater authorize(update)
5 Agent → RetrievalPlanner request(context)
6 RetrievalPlanner → ContextInjector select(memory)
7 ContextInjector ↩ Agent inject(context)

VARIATION / TEST / NEGATIVE CONTROL

VARIATION	Observational memory, vector store, summary file, scoped project memory.
TEST_OBLIGATION	Test source provenance, poisoning, stale update, deletion, and cross-scope read.
NEGATIVE_CONTROL	A chat transcript retained in memory is not an update pipeline.