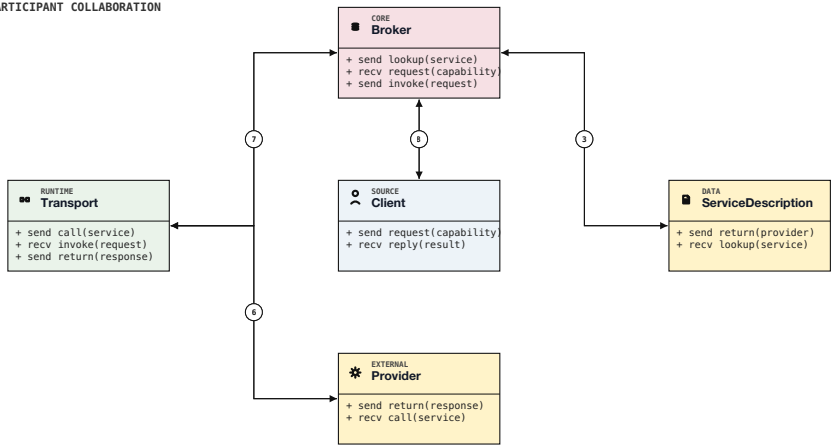
C04 Broker

Communication · A² A1 · broker role collaboration

Mediate discovery and invocation across boundaries.

STRUCTURE · PARTICIPANT COLLABORATION



PATTERN INTERFACE

context

A caller invokes a service or provider without direct construction.

trigger

A service description is registered or a request is addressed.

structure

Registry, service description, transport, request/reply, and error mapping.

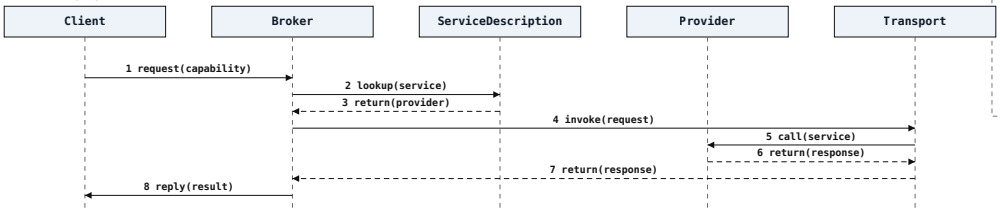
effect

Broker resolves a compatible endpoint and returns a correlated response.

CONTRACT ANNOTATIONS

requires	Provider identity and versioned service description are available.
ensures	Client and provider agree on schema or return incompatibility.
invariant	Broker discovery does not bypass authentication or trust boundaries.
violation	Provider absence, timeout, partial reply, and schema mismatch are explicit.

INTERACTION



MESSAGE TRACE `1 request(capability) → 2 lookup(service) → 3 return(provider) → 4 invoke(request) → 5 call(service) → 6 return(response) → 7 return(response) → 8 reply(result)`

Evidence: 23/41 repositories, 22/36 families; 23 trajectories (10 multi-checkpoint); exact audit: not sampled.

Variation: Tool registry, provider registry, cross-process broker, and service mesh.

Negative control: A local factory returning implementations is only a registry cue.