P2-REQ-16-4-008

Return to Requirements

Statement

The Logical Architecture / PIM SHALL support communication pattern independence by distinguishing logical communication relationships from the implementation mechanisms that realise them.

Source

Part 2, Section 16.4: Logical Communication Requirements.

Rationale

Logical communication relationships describe architectural intent rather than implementation behaviour. Distinguishing logical communication from implementation mechanisms allows different communication patterns, protocols, middleware products, and runtime infrastructures to realise the same logical relationships without altering the architecture. This separation preserves platform independence while supporting interoperability, governance, and long-term architectural evolution.

Applies To

This requirement applies to the Logical Communication Model and all profiles that specialise or realise it.

It applies specifically to:

- Logical Communication Endpoints;
- Communication Roles;
- Logical Interaction Patterns;
- Domain Logical Profiles;
- Implementation Profiles; and
- Deployment Profiles.

Verification

Verification SHALL confirm that logical communication relationships remain independent of the implementation mechanisms that realise them.

Verification activities should include review checks confirming that:

- logical communication relationships are defined independently of implementation mechanisms;
- communication pattern independence is preserved throughout the Logical Architecture;
- Implementation Profiles map communication mechanisms without redefining logical relationships; and
- Domain Logical Profiles preserve inherited logical communication semantics.

Traceability

This requirement supports traceability between logical communication relationships and the implementation mechanisms that realise them while preserving platform independence.

Related requirement identifiers:

- p2-req-16-4-001
- p2-req-16-4-005
- p2-req-16-4-007
- p2-req-16-10-007

Related source section:

- 16.4 Logical Communication Requirements

Status

Draft
