No-Consensus Cross-Mesh Federation

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What It Specifies

Federation agreements are bilateral or multilateral; each agreement is governance-credentialed by its participating meshes. Cross-mesh observations admit against the relevant federation agreements; no global consensus is required.

Agreements compose structurally. A mesh can hold federation agreements with multiple other meshes; the architecture admits cross-mesh observations against the relevant agreements; no centralized federation authority is required.

Why It Matters Structurally

Consensus-required federation faces structural problems: consensus participant capture, consensus latency, consensus failure modes, consensus regulatory liability.

No-consensus federation eliminates these structural problems. Bilateral agreements operate independently; multilateral compositions produce structural decomposition; the architecture supports federation without consensus overhead.

How It Composes With Mesh Operation

The architecture defines the federation-agreement format, the bilateral-and-multilateral primitives, and the cross-agreement composition rules. Implementations apply the architecture; federations operate within the framework.

Federation composes with other features. Cross-jurisdictional federation, byzantine-robust federation under disputed agreements, and dispute mechanism for federation disputes all build on the federation primitive.

What This Enables

Cross-organization mesh federation, cross-jurisdiction federation, and coalition federation all gain structurally-supported no-consensus operation.

The architecture also supports federation evolution. As federation patterns mature, agreement structures update through governance procedures.