Zero-Prefill Keep-Alive

Source: Publicaciones · **Status:** Reference demo · **Period:** 2026-04 (active)

Academic publication draft on a transport pattern for keeping connections useful without unnecessary prefill work.

The challenge

Standard keep-alive patterns prefill a session with speculative data so the connection looks busy. The prefill cost shows up at scale and the speculative data often has to be discarded on the first real exchange.

My role

I am drafting a publication on a transport pattern that keeps the connection useful without the prefill cost — the connection stays alive, the audit chain stays clean, and no speculative data is shipped over the wire.

What changed

Prefill bytes shipped per keep-alive

Baseline: Variable, speculative

Zero — connection-state primitive only

Discard step in the audit chain

Baseline: Required — discard prefilled bytes on first real exchange

Not required

Stack

networking | transport | keep-alive | operations