

Browser Extension Architecture v1.0

Browser Extension - Technical Architecture (Phase I)

Status: Developer-ready specification (opt-in, non-blocking, deterministic)

Goals & guardrails

- Opt-in only (user invokes analysis)
- Non-blocking (never hides or ranks content)
- Deterministic (rules decide; no ML judgments)
- Transparent (ruleset IDs shown on every label)
- Privacy-first (local by default)

Components

- Content script: selection capture, context menu, verbatim claim extraction
- Side panel UI: renders dual label; copy/export/print
- LFV engine (local): deterministic pipeline gates A-F
- AICPM extractor (local): metadata, citations, explicit sponsorship markers, declared AI involvement only
- Background service worker: message routing, settings, versioning, optional uploads

User flow

Select -> context menu "Analyze" -> side panel -> optional export/print -> close

Privacy

- Default: local processing only, no telemetry
- Optional: user-enabled submission for stress testing; never auto-upload

Versioning

- Every label shows ruleset IDs and versions
- Updates require new version IDs + public changelog

Non-features (by design)

- No scores, rankings, blocking, motive inference, or policy guidance

End of Extension Architecture Spec