Multiple Memories Proposal update

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Motivation

Security

...separate private from public memory

Isolation

...separate thread-local from shared memory

Persistence

...enable memories with different life times

Linking

...enable interoperating with or merging multiple modules that have a memory

Instrumentation

...enable code instrumentation that requires auxiliary memory

Polyfilling

...enable emulation of new features that require auxiliary memory

Recap

Allow multiple memory definitions, im/exports in a *single* module

Add memory index to all memory constructs (instructions, data segments)

Design canonical, filling intentional design gap

No changes since initial proposal

Proposal Status

prose spec: ✓

formal spec : ✓

interpreter:
√ Phase 3

tests: √

JS API: N/A

implementations: **√** (V8, SpiderMonkey, Wasmtime, ...)

Poll

Phase 4?