

DigiEmu Core 2.0

Draft 1 - Conformance Profile

Implementation Requirements
and Replay Verification Conformance Profile

Status	Public Draft Review Document
Release Line	Core 2.0
Repository	https://github.com/DigiEmu/core
Public Standard	https://digiemu.com

This document defines the Draft 1 conformance profile for DigiEmu Core 2.0 compatible implementations. It specifies minimum implementation expectations for deterministic replay verification, canonical state handling, and audit evidence generation.

1. Purpose

The Conformance Profile defines the minimum observable behavior required for an implementation to claim compatibility with DigiEmu Core 2.0 Draft 1.

2. Conformance Scope

Conformance applies only to deterministic replay integrity, canonical state representation, snapshot hash reproducibility, and structured verification output. It does not imply legal certification, regulatory approval, or trust scoring.

3. Minimum Implementation Requirements

A conformant implementation MUST support deterministic replay, canonical serialization, SHA-256 snapshot verification, explicit PASS/FAIL outcomes, and preservation of structured audit evidence.

4. Canonicalization Profile

Implementations MUST declare the canonicalization profile used for state encoding. Replayed state MUST produce identical canonical output under the same profile.

5. Verification Output Requirements

Verification output SHALL include the referenced snapshot, recomputed hash, comparison result, canonicalization profile, and relevant evidence references.

6. Conformance Matrix

Requirement	Draft 1 Status
Deterministic replay	REQUIRED
Canonical encoding	REQUIRED
SHA-256 snapshot verification	REQUIRED
Structured PASS/FAIL report	REQUIRED
External identity attestation	OUT OF SCOPE

7. Conformance Flow

```
Implementation declares profile
↓
Replay fixture executed
↓
Canonical state generated
↓
Hash recomputed
↓
PASS / FAIL report emitted
↓
Conformance evidence retained
```

8. Non-Claims

A conformant DigiEmu Core implementation does not certify agent identity, model quality, safety alignment, legal responsibility, ethical acceptability, or regulatory compliance. These claims MAY be handled by external governance systems but are outside the deterministic replay boundary.

9. Normative Keywords

MUST - absolute requirement.

SHALL - normative mandatory behavior.

SHOULD - recommended behavior.

MAY - optional behavior.

This document is part of the DigiEmu Core 2.0 Draft 1 review bundle. GitHub remains the normative technical source of truth.