

# QTM Index v0.01

## QTM Index v0.01

*A standards-based coordination primitive for deterministic discovery, eligibility evaluation, and clearing*

### 1. Abstract

QTM Index is a neutral coordination primitive that indexes standards-based claims about entities and offerings to enable deterministic discovery, eligibility evaluation, and clearing across decentralized applications. It minimizes on-chain state while remaining compatible with existing public standards and verifiable credential models, without asserting truth, authority, exclusivity, or enforcement.

### 2. Problem Statement

Decentralized ecosystems suffer from fragmentation at the discovery and eligibility layer. Applications independently define schemas, access rules, and clearing logic, leading to duplication, opacity, and incompatibility. Users and institutions lack a shared coordination surface to reason about *who qualifies for what* without relying on centralized gatekeepers.

### 3. Design Goals

- Neutral, non-authoritative coordination
- Standards-first (public, non-proprietary classifications)
- Deterministic and inspectable logic
- Minimal on-chain footprint
- Compatible with verifiable credential models
- No exclusivity or platform lock-in

---

## 4. Core Primitive Definition

**QTM Index** is a semantic index of versioned claims where entities (people, organizations, assets, offerings) attach standardized classifications as self-asserted statements that can later be independently attested.

The index enables:

- Deterministic discovery
- Eligibility routing
- Clearing logic composition

It does **not**:

- Decide truth
- Inject external data
- Enforce outcomes
- Act as an oracle

---

## 5. Standards Incorporated (Initial Set)

- **NAICS** – industry classification
- **HS (Harmonized System)** – goods & trade
- **SOC / BLS** – occupational roles
- **W3C Verifiable Credentials** – claim structure & interoperability

Additional standards may be indexed without protocol changes.

---

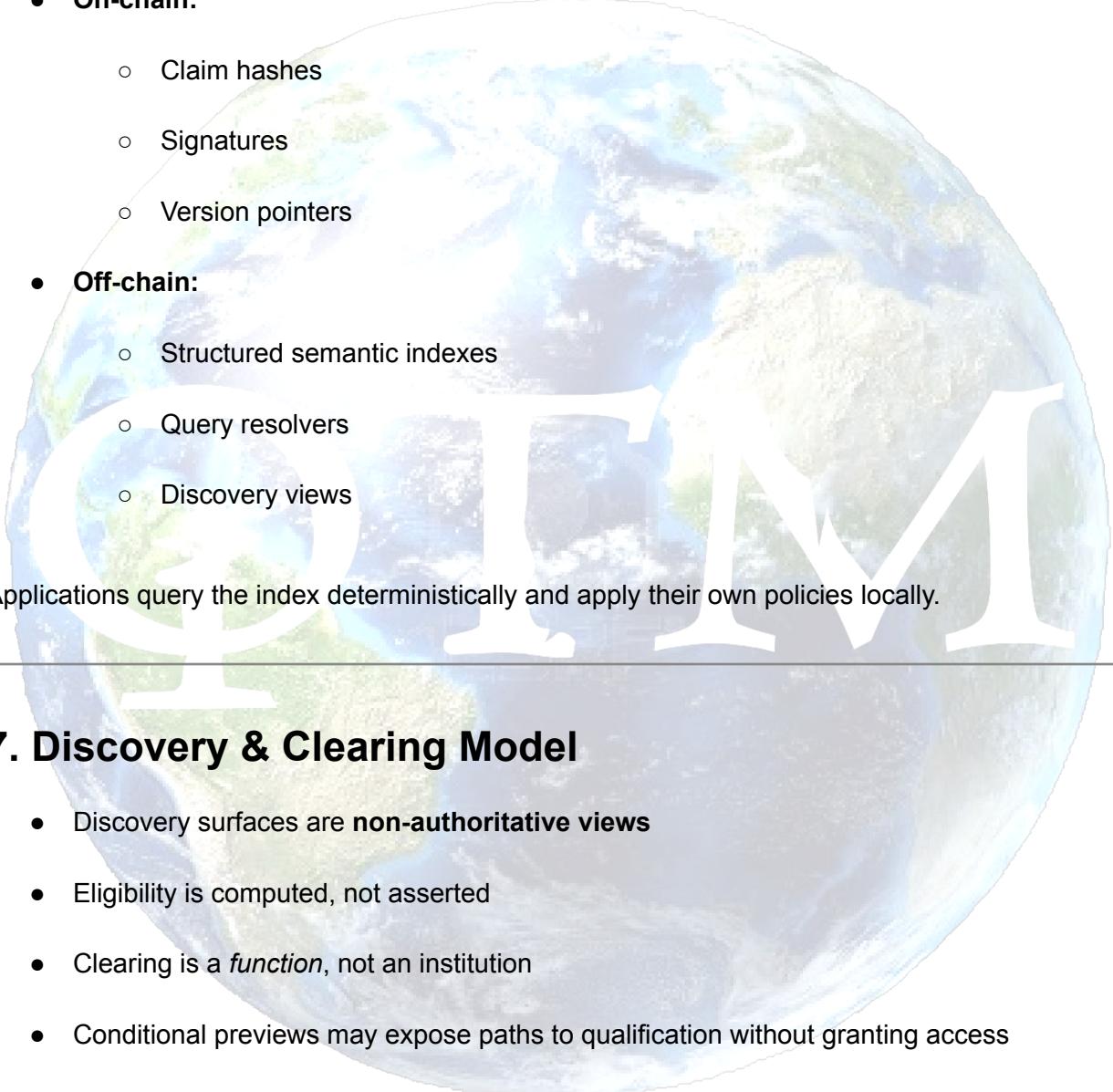
## 6. Architecture Overview (Conceptual)

- **On-chain:**

- Claim hashes
- Signatures
- Version pointers

- **Off-chain:**

- Structured semantic indexes
- Query resolvers
- Discovery views



Applications query the index deterministically and apply their own policies locally.

---

## 7. Discovery & Clearing Model

- Discovery surfaces are **non-authoritative views**
- Eligibility is computed, not asserted
- Clearing is a *function*, not an institution
- Conditional previews may expose paths to qualification without granting access
- Eligibility is evaluated deterministically from indexed claims and local policy.

---

## 8. Governance & Stewardship

- The primitive is non-exclusive and open
- Early reference operators do not control the protocol
- Long-term intent: independent foundation stewardship
- Domains and applications remain separate from protocol authority

---

## 9. Non-Goals

- Identity verification
- Reputation scoring
- Content moderation
- Economic enforcement
- Consensus on truth

---

## 10. Status

QTM Index v0.01 — Initial conceptual specification authored December 2025 (UTC).

Version 0.01 defines the conceptual and architectural foundation.

Future versions may include formal schemas, reference implementations, and interoperability tooling. No production guarantees are implied.

QTM Index v0.01 — Informational Specification

© 2025 QTM Index. All rights reserved. Specification provided for review and discussion.