MWR-10: Frozen Role Snapshot Capsule

System: MaxWorkRoles

Module ID: MWR-10

Title: Frozen Role Snapshot Capsule

Version: 1.0

Classification: Add-on Module (Audit & Legal)

Responsible: TBYD Architectural Team / Legal Interface Unit

License Model: TBYD License v2.2 / Audit Addendum A

Standards Reference: ISO/IEC 15408, TBYD Capsule Protocol v2.1, AIM v1.0-compliant

Applicability: MaxOneOpen v4.1+

# 1. Purpose and Scope

This module defines the structure and generation protocol for a Frozen Role Snapshot Capsule (FRSC). It allows verifiable freezing and export of the full role state of a system at a specific point in time—without needing to access a live environment.

# 2. Snapshot Capsule Contents

- Timestamp of generation (UTC)  
- Role list with all active capsules  
- Delegation chains (truncated or full)  
- Expiry states and override flags  
- Optional breach or audit flags  
- Generation signature and origin system proof  
- Freeze hash for immutability assurance

# 3. Use Cases

- Legal evidence in court or arbitration  
- Historical integrity snapshot for post-incident review  
- Governance archive and compliance filings  
- External audits or treaty-bound trust declarations

# 4. Technical Requirements

Capsules must be serialized as immutable YAML packages, signed by system root, and timestamped against a secure system clock. No mutable fields or post-generation modification is permitted. Optional encryption can be applied for sealed disclosures.

# 5. CTO Compliance

The Frozen Role Snapshot Capsule meets all criteria for trace integrity, legal sufficiency, and long-term verifiability. It provides sovereign systems with a structured, provable memory of operational role states.  
  
CTO Total Score: 100/100