MUX-07: UX Trace & Replay Export

System: MaxUXSuite

Module ID: MUX-07

Version: 1.0

Title: UX Trace & Replay Export

Classification: UI Interaction Trace Capsule

Responsible: TBYD Trace Systems Unit

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

Standards Reference: ISO/IEC 27002, TBYD Capsule Protocol v2.1

Applicability: MaxOneOpen v4.1+

# 1. Purpose

This module defines the capsule structure and export format for tracking, auditing, and replaying user interaction paths within the MaxUXSuite. All exported traces are capsule-bound and fully verifiable.

# 2. Trace Capsule Structure

- capsule\_id: unique capsule identifier  
- user\_session\_id: anonymized or pseudonymized session anchor  
- timestamp\_sequence: ordered list of interaction events  
- ui\_component\_id: reference to governed UI element  
- event\_type: ENUM { click, input, submission, error, refusal, skip }  
- response\_capture: captured values or capsule outcome  
- audit\_export\_format: ENUM { .trace.json, .audit.yaml }

# 3. Replay Context

Traces can be used to:  
- reproduce UI paths in compliance reviews  
- test governance policies over time  
- validate refusal paths and recovery logic  
- support treaty-aligned accountability procedures

# 4. CTO Summary

This module establishes a declarative, structural trace layer for UI governance under MaxUXSuite. It aligns UI interaction with audit frameworks and allows verification of sovereignty-compliant usage.