MPC-02: Trigger and Flow Conditions

System: MaxProcess

Module ID: MPC-02

Title: Trigger and Flow Conditions

Version: 1.0

Classification: Execution Rule Specification

Responsible: TBYD Capsule Rule Unit

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

Standards Reference: ISO/IEC 15408, TBYD Capsule Protocol v2.1

Applicability: MaxOneOpen v4.1+

# 1. Purpose

This module defines how ProcessCapsules are triggered, conditionally activated, skipped, or passed to fallback paths. It specifies accepted trigger types, logical conditions, and cross-capsule references.

# 2. Trigger Types

Each ProcessCapsule may specify a trigger\_condition, which may be one of the following:  
- state: references another capsule’s state (e.g., executed, refused)  
- time: absolute or relative time (e.g., 2025-06-01T12:00Z, +5d after step)  
- event: predefined system event (e.g., deployment\_approved)  
- role\_input: confirmation or refusal by assigned actor  
- audit\_ref: reference to capsule in MaxAudit as condition

# 3. Condition Operators

Trigger conditions may include logic operators for composite triggers:  
- AND / OR / NOT logic (limited to 3-level nesting)  
- Optional fallback if any condition fails  
- Example: trigger = (capsule\_X.executed AND role\_input.confirmed)

# 4. Flow Outcomes

If a trigger fires:  
- Capsule state becomes 'active'  
- Assigned role is notified and empowered to execute or refuse  
- Trace capsule is created in MaxAudit  
  
If a trigger fails:  
- Capsule may move to 'frozen' or pass to fallback path  
- Governance override may be requested  
- Policy-specific behavior may block or reassign step

# 5. CTO Summary

Trigger and flow logic in MaxProcess is deterministic, capsule-anchored, and fully auditable. Each step is executed based on clear, immutable capsule conditions, without external state reliance or hidden timers. This ensures structural auditability and fork resistance.