Emotional Quarantine and Volatility Management

by Nick Clark | Published March 27, 2026 | PDF

Circuit-breaker restricting agent operational scope when composite volatility metric exceeds threshold, including elevated thresholds, suspended delegation, and additional validation.

What It Is

When an agent's composite volatility metric exceeds a policy-defined threshold, the emotional quarantine mechanism activates. This circuit-breaker restricts the agent's operational scope: promotion thresholds are elevated, delegation authority is suspended, and additional validation requirements are imposed on all proposed mutations.

Quarantine is not a shutdown. The agent continues to operate cognitively, including forecasting and planning, but its ability to execute and delegate is structurally constrained until volatility returns to acceptable levels.

Why It Matters

Agents experiencing high affective volatility are by definition in a state of unstable evaluation. Decisions made during volatility spikes are unreliable because the promotion thresholds and sensitivity parameters that govern them are changing rapidly. Quarantine prevents unreliable decisions from propagating into the system.

Without quarantine, volatile agents can destabilize multi-agent systems by issuing delegation requests under shifting evaluation criteria, accepting or rejecting proposals inconsistently, and producing contradictory governance signals.

How It Works Structurally

The composite volatility metric is computed as a weighted sum of per-dimension oscillation rates and magnitude ranges over a rolling window. When this metric exceeds the policy threshold, quarantine mode activates. The specific restrictions applied during quarantine are defined in the agent's policy reference.

Exit from quarantine requires the volatility metric to drop below threshold by a hysteretic margin and remain there for a policy-defined stability period. This prevents premature exit followed by immediate re-entry.

What It Enables

System-level stability guarantees. Even in adversarial environments that deliberately attempt to destabilize agents through rapid contradictory inputs, quarantine limits the damage by constraining the destabilized agent's operational authority.

Therapeutic and companion AI applications where emotional volatility in the agent could cause harm to human users, ensuring that volatile agents cannot take actions that require stable evaluation.

Affective State All 21 steps →

Emotion as a computational primitive, not a simulation.

Primary Technical Disclosure
○ Affective State as a Deterministic Control Primitive for Semantic Agents
Secondary Technical
○ Affective State as Seventh Canonical Field○ Named Control Field Modulation Architecture○ Affect-Modulated Promotion Thresholds○ Deterministic Affect Encoding and Update Mechanics○ Emotional Decay Curves With Hysteresis○ Entropy-Governed Valence Stabilization○ Affective Inheritance in Delegation Chains● Emotional Quarantine and Volatility Management○ Affect-Modulated Trust Slope Validation○ Biological Signal-to-Affective Coupling○ Affective Contagion in Multi-Agent Systems○ Affect-Modulated Discovery Traversal○ Affect-Governance Separation○ Policy-Bounded Affective Updates○ Affect as Cross-Primitive Input○ Affect-Modulated Inference Integration○ Substrate-Agnostic Affect Deployment○ Pseudonymous Emotional Operation○ Temporal Cognition Field
Applications (General)
○ Companion AI That Maintains Emotional Consistency Across Sessions○ Therapeutic Agent Affect Management Under Clinical Constraints○ Affective State for Customer Service Agents○ Affective State for Elderly Care Companion Agents○ Affective State for Crisis Response Agents○ Affective State for Negotiation Agents○ Affective State for Educational Tutoring Agents○ Affective State for HR and Recruitment Agents
Applications (Specific)
○ Replika's Emotional Memory Is Stateless○ Character.ai's Personality Problem Is Deeper Than Prompting○ Woebot's Therapeutic Affect Has No Persistent State○ Elomia's Empathy Resets Every Session○ Hume AI Measures Emotion but Cannot Govern It○ Affectiva Reads Faces but Not Emotional Trajectories○ Cogito Scores Conversations Without Emotional State○ Beyond Verbal Decoded Voice Without Building Emotional Memory○ EmotiBit Captures Physiology Without Affective Governance○ RealEyes Measures Attention Without Emotional Persistence
Affective State overview →
AQ
deterministic
autonomy

Legal

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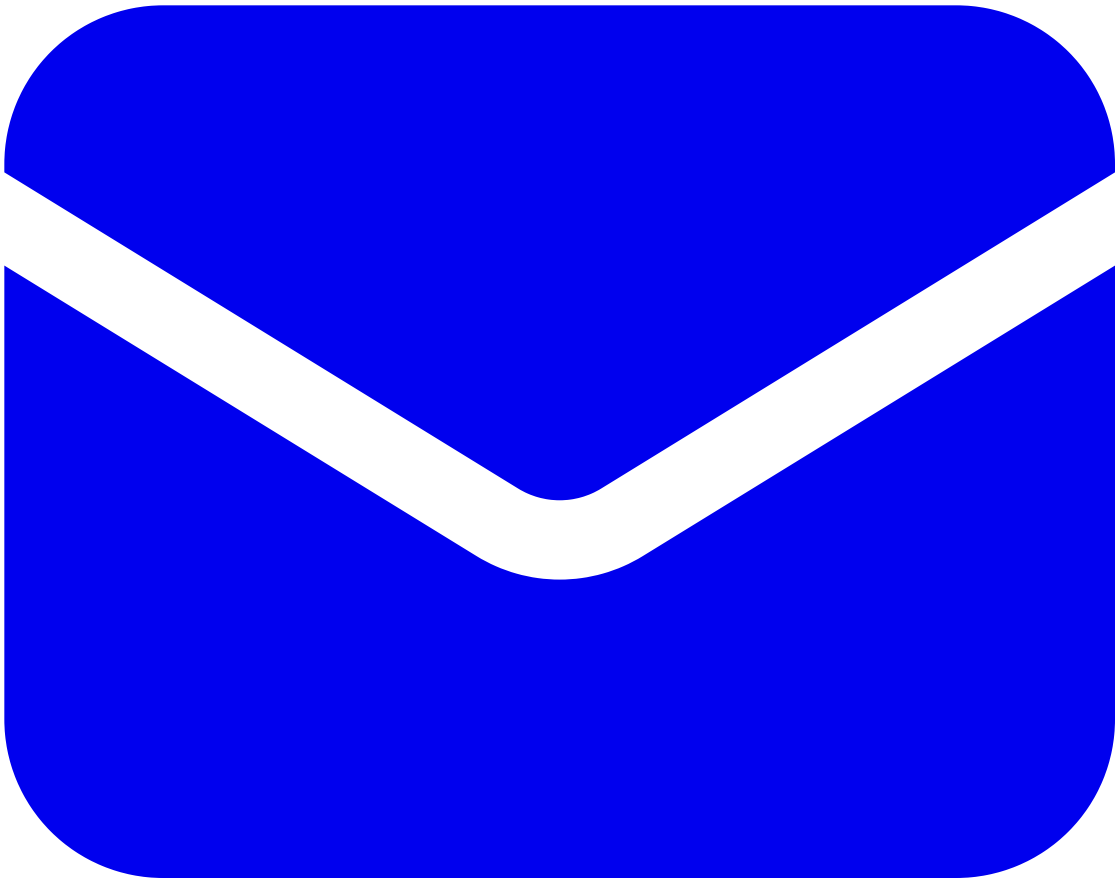
Last updated: 2026-03-03



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