// NEXURAL AUTOMATION

Incident Response Playbook

What to do when your automation misbehaves. Step-by-step procedures for the 6 most common failure modes.

Severity Levels

SEV-1	Capital at immediate risk. Act within 60 seconds.
SEV-2	Automation degraded. No immediate capital risk. Act within 15 minutes.
SEV-3	Non-critical issue. Monitor and investigate within 2 hours.

1. Runaway Strategy (SEV-1)

Trigger: Daily P&L; down > daily loss limit OR unexpected position size growth

1. STOP: Kill the strategy process immediately (kill switch or manual)
2. FLATTEN: Place market orders to close all open positions
3. VERIFY: Confirm positions are flat via broker UI
4. LOCK: Set broker to read-only mode or enable trading halt
5. DIAGNOSE: Review the last 50 log lines for the root cause
6. REPORT: Document timeline, positions, P&L; impact
7. RECOVER: Fix the bug, re-run paper tests, get review before going live

2. Silent Reject — Orders Not Executing (SEV-2)

Trigger: Alerts firing but no orders appearing in broker

1. CHECK: Confirm broker API is responding (ping /status endpoint)
2. CHECK: Confirm webhook receiver is running (check process, logs)
3. CHECK: Confirm auth credentials haven't expired (API key rotation?)
4. CHECK: Confirm market hours — brokers reject orders outside RTH for some instruments
5. TEST: Submit a manual test order via API to isolate the component
6. ROLLBACK: If webhook changed recently, revert to last known-good version
7. ESCALATE: Contact broker support if API is down

3. Duplicate Orders (SEV-2)

Trigger: Multiple identical orders submitted for same signal

1. PAUSE: Halt the strategy immediately to prevent further duplicates
2. COUNT: Identify all duplicate orders — cancel unfilled ones NOW
3. ASSESS: Calculate any unintended P&L; from executed duplicates
4. ROOT CAUSE: Was idempotency key missing? Was webhook called twice?
5. FIX: Add or repair the deduplication logic (client_order_id check)
6. TEST: Replay the scenario in paper trading to confirm the fix

4. Data Feed Outage (SEV-2)

Trigger: Strategy signals stop or become erratic, data timestamps stale

1. IDENTIFY: Check data provider status page
2. PAUSE: Put strategy into 'no new signals' mode
3. HOLD: Don't close existing positions unless risk limits are breached
4. FAILOVER: Switch to backup data provider if configured
5. MONITOR: Watch positions manually during outage
6. RESUME: Verify data integrity before re-enabling signal generation

5. Heartbeat / Deadman Switch Triggers (SEV-1)

Trigger: Automation flattened all positions unexpectedly

1. VERIFY: Confirm all positions are actually flat (check broker UI)
2. DIAGNOSE: Find why the heartbeat stopped — process crash? Network?
3. CHECK: Server resources (CPU, memory, disk) — look for OOM kills
4. REVIEW: Logs from the last known-good state backward
5. RESTART: Only restart after confirming root cause is resolved
6. DOCUMENT: Add monitoring alert for the specific failure mode found

6. Broker Connection Drop (SEV-2)

Trigger: Strategy errors on order submission, connection refused

1. ASSESS: Are existing positions safe? Check margin levels
2. RECONNECT: Run broker reconnect logic (most SDKs have auto-reconnect)
3. FALLBACK: If API down, log in to broker web UI to manage positions manually

4. QUEUE: Buffer incoming signals — do not discard them
5. DRAIN: Once reconnected, review queued signals before executing
6. AUDIT: Verify position state matches what strategy believes

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Full automation guide and risk layer documentation: nexural.io/automation