

MaxOneOpen: Runtime Maintenance Protocol

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FOUNDATION – Operational Purpose & Scope

This document outlines the operational procedures and tooling for keeping MaxOneOpen twin nodes secure, auditable, and stable across time. It defines core runtime health checks, event logging, system alerts, and update logic to ensure sustainable autonomous operation.

EXECUTION – Core Maintenance Actions

- ****Health Check (Heartbeat)****: Periodic runtime ping, resource status, execution signature
- ****Twin Log Rotation****: Auto-trim and archive logs after configurable retention window
- ****Peer Watchdog****: Alerts on desynchronized forks or missing peers (if mesh-enabled)
- ****Manifest Drift Detection****: Warning if runtime behavior diverges from signed manifest
- ****Signature Revalidation****: Scheduled re-check of manifest integrity and package hash
- ****Event-Based Notifications****: Local or remote alert on threshold breach or anomaly

STACK – Weekly Maintenance Schedule (Recommended)

Day	Task	Responsible Unit
Monday	Review twin-log + rotate archive	Local Ops
Wednesday	Verify manifest integrity	Ops/Validator
Friday	Check resource limits + peer sync	Ops/Network
Saturday	Optional signature renewal	Security
Sunday	Uptime & alert review summary	System Monitor

FINAL – CTO Operational Summary

The runtime maintenance protocol provides a complete operational logic for long-term stability, without requiring cloud telemetry or external platforms. All observability is local, audit-friendly, and cryptographically aligned to structural manifest governance. This closes the operational loop for MaxOneOpen and makes it serviceable even in sovereign or disconnected environments.

Status: Full operations protocol for autonomous edge – GPT-certified