

# PROJECT ZEPHYR: TECHNICAL SPECIFICATION v2.0

**Date:** 2024-10-05 | **Confidentiality:** Level 4 (Restricted)

## 1.0 Executive Summary

The Zephyr module aims to reduce latency by 14.5% across distributed nodes. Initial testing on the us-east-1 cluster showed promising results, specifically when handling concurrent requests > 10,000 req/s. However, legacy systems running Firmware v1.0.4 exhibited a memory leak (refer to Ticket #9942).

## 2.0 Key Requirements

The parsing engine must handle the following inputs without truncation:

- **Unicode Support:** Strings containing non-ASCII characters such as "café", "naïve", and mathematical symbols ( $\sum$ ,  $\pi$ ,  $\neq$ ).
- **Pathing:** Windows paths (C:\Users\Admin\Docs) vs. POSIX paths (/usr/local/bin).
- **Serialization:** JSON objects embedded within text: {"id": 404, "status": "error"}.

## 3.0 Known Issues & Workarounds

- *Issue:* The OCR layer misinterprets the digit '0' as the letter 'O' in serial numbers (e.g., SN: X099 vs XO99).
- *Issue:* Trailing whitespace causes hash mismatches.
- *Workaround:* Apply .trim() before ingestion.

## 4.0 Contact Information

For immediate escalations, contact the Site Reliability Engineer (SRE) at ops-team@internal-domain.com or call +1 (555) 019-2834. Do not commit these credentials to public repositories.