

Forensic Analysis Report

Neuro-Symbolic Crisis Generator • Comprehensive Evaluation

Generated: 2025-12-18 17:56:22

Test Configuration

Model: GPT-4o

Temperature: 0.7

Mode: Thesis (Full Validation) vs. Legacy (Skip Validation)

Max Iterations: 20 per Scenario

Execution: Parallel (2 Scenarios simultaneously)

Executive Summary

Note: Limited batch comparison data available. For detailed analysis, see Forensic Analysis section below.

2

TOTAL SCENARIOS

0

HALLUCINATIONS PREVENTED

0.00

AVG LEGACY HALLUCINATIONS

0.00

AVG THESIS HALLUCINATIONS

0.0%

AVERAGE REDUCTION

A/B Testing Comparison

A/B Testing Comparison



Statistical Significance Analysis

Hypothesis Testing

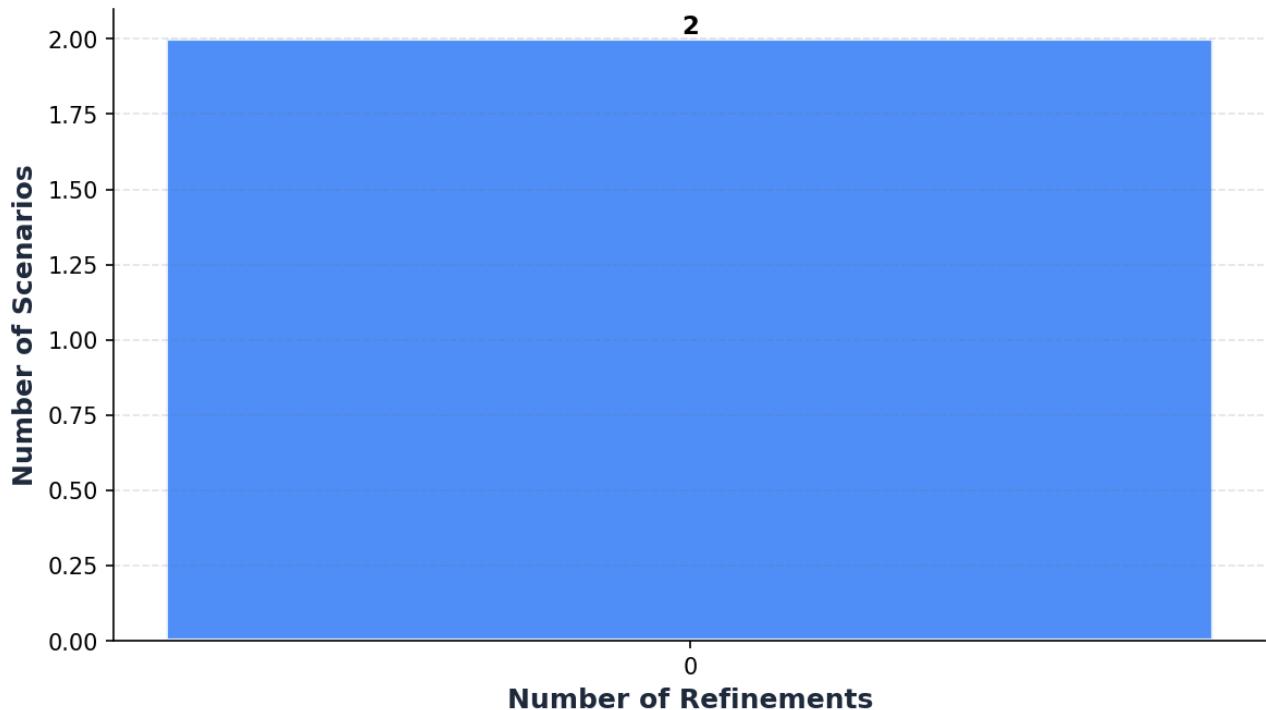
H0: $\mu_{\text{legacy}} = \mu_{\text{thesis}}$ (No difference)

H1: $\mu_{\text{legacy}} > \mu_{\text{thesis}}$ (Thesis reduces hallucinations)

| Metric | Value | Interpretation |
|-----------------|----------------|--------------------------------|
| Mean Difference | 0.000 | Legacy - Thesis hallucinations |
| T-Statistic | nan | Test statistic |
| P-Value | NAN | Significance level |
| Cohen's d | 0.000 | Effect size: Negligible |
| 95% CI | [0.000, 0.000] | Confidence interval |
| Sample Size | 2 | Number of scenarios |

Refinement Efficiency Analysis

Refinement Distribution



0.00

AVG REFINES PER SCENARIO

0

MAX REFINES NEEDED

100.0%

FIRST ATTEMPT SUCCESS RATE

Cost-Benefit Analysis

54

Avg Legacy API Calls

54

Avg Thesis API Calls

0.0%

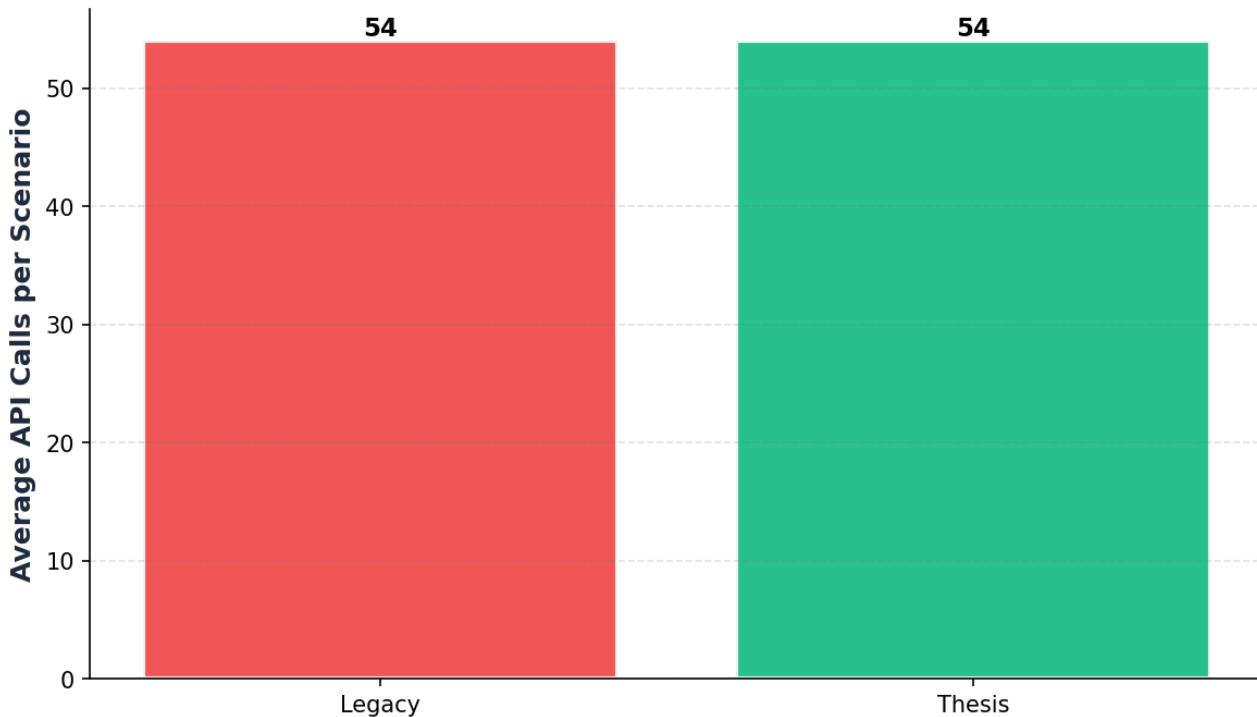
Overhead

0

Total Prevented

API Call Efficiency

API Call Efficiency Comparison



Detailed Results by Scenario

| SCENARIO ID | LEGACY HALLUCINATIONS | THESIS HALLUCINATIONS | HALLUCINATIONS PREVENTED | THESIS REFINES |
|-------------|-----------------------|-----------------------|--------------------------|----------------|
| SCEN-000 | 0 | 0 | 0 | 0 |
| SCEN-001 | 0 | 0 | 0 | 0 |