

Framework Configuration Reference

This section documents configuration parameters for all CIF defense components. For algorithm pseudocode, see [sec:methodology](#). Sensitivity analysis quantifying parameter impact is provided in [sec:sensitivity](#).

Reproducibility: *Default values were determined via `scripts/run_sensitivity_analysis.py` \rightarrow `output/data/sensitivity_results.json`. Optimal ranges are validated across all six architecture types.*

Core Framework Parameters

Table 1: Core framework configuration parameters.

Parameter	Symbol	Default	Range	Description
Trust decay factor	δ	0.8	$(0, 1)$	Per-hop trust
Acceptance threshold	τ_{accept}	0.7	$(0, 1)$	Minimum belief
Trusted source threshold	$\tau_{trusted}$	0.9	$(0, 1)$	Direct promotion
Corroboration count	κ	2	$[1, n - 1]$	Required confidence
Consistency threshold	τ	0.8	$(0, 1)$	Contradiction