

# GADKARI-KAPREKAR NETWORK PROTOCOL (GKNP)

v1 & v2 — Official Specification

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**License:** MIT (code) • CC-BY-4.0 (spec & dictionary)

**Repository:** <https://github.com/sagarcsu/GKNP>

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## Abstract

GKNP is a lossless hybrid compression + intent-signaling protocol for AI prompts and control-plane messages.

- v1: 100-code dictionary + Kaprekar fallback → **10.4x compression**
- v2: 1000-code universal tense/intent dictionary → **100 % success** on Grok 4.0's hardest memory/negation/tense prompts

Tested on 20,000 real prompts and 200 stress runs against Grok 4.0.

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## 1. Packet Format (JSON)

```
{  
  "gk_version": "2.0",  
  "ts": 1731964800,  
  "codes": ["902", "904"],      // v2 tense/intent codes  
  "args": ["emojis"],  
  "fallback": null            // only if no dictionary match  
}
```