

NOVAK PROTOCOL LAWS

# Law L2: Rule Hash (HR)

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The Cryptographic Identity of Governance

Authoritative Edition

# The Digital Fingerprint

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Every rule—whether it's a Python function, a federal regulation, or a configuration file—must have a unique cryptographic identity.

We call this the **Rule Hash (HR)**.



Identity Locked.

# The Equation

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Text is Math. Code is Math.

HR = SHA3-512( Rule Definition )

If you change a single comma, space, or letter in the rule:

**The Hash Changes Completely.**

# The Enforcement Check

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Before any code runs, the system compares the current hash to the approved hash.



**MATCH**

Execute



**MISMATCH**

BLOCK & ALERT

# What is a "Rule"?

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## Source Code

Python, C++, Rust logic.



## Config

Thresholds, parameters, limits.



## Regulation

Legal text, statutes, policies.

Anything that controls a decision is a Rule.

# Why Hash Rules?

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Without L2, systems suffer from:

- 👻 **Silent Updates:** Changing logic without notice.
- 🚧 **Backdoors:** Developer-inserted bypasses.
- ⇄ **Drift:** Accidental version mismatches.



# Immutable Governance

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## The Freeze

Once a rule is deployed, it is frozen. It cannot be edited.

## The Update

To "change" a rule, you must deploy a **New Rule** with a **New Hash (HR')**.

This creates a perfect, auditable history of every logic change ever made.

# Visualizing L2

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```
def approve_loan(score):
    if score > 700:
        return True
    return False
```



The code is frozen in cryptographic amber.

# Summary

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Rule  
Identity

## Code is Law

L2 ensures that "Code is Law" isn't just a metaphor—it's a cryptographic reality. If the hash doesn't match, the law isn't executed.

# Questions?

NOVAK Protocol Standards Series

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