

RELATIONAL EVENT

VERSION: V0.0
DOMAIN: COMPUTE
STATUS: WORKING
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RELATIONAL EVENT

$X_0 \text{ — } [C_1 | K_1] \text{ — } X_1$

$[X_0, [C_1, K_1], X_1]$

TERMS

X₀
frame relative differentiation.

C₁
coherence relation.

K₁
carry relative to a local zero.

X₁
frame relative differentiation.

LOCAL POSITION

position within a complete Relational Event.

GLOBAL RELATION

complete relation relative to its local positions.

LOCAL ZERO

zero relative to a frame, relation, or carry condition.

MACHINE FORM

RELATION

$[X_0, [C_1, K_1], X_1]$

POSITION ARRANGEMENT

$[X_0, [C_1, K_1], X_1]$

POSITIONS

X₀: unrestricted bytes

C₁: unrestricted bytes

K₁: unrestricted bytes

X₁: unrestricted bytes

POSITION PRESENCE

All four positions are physically present in every complete Relational Event.

EMPTY POSITION

valid and physically present

NESTING

Any local position may contain another complete encoded Relational Event.

COMPLETION

The complete body of X_0 , C_1 , K_1 , and X_1 , together with the exact end of the Relational Event, must be physically recoverable.

CODEC

```
LEN64LE(X0) || X0 || LEN64LE(C1) || C1 || LEN64LE(K1) || K1 || LEN64LE(X1) || X1
```

LENGTH WIDTH

8 bytes

LENGTH TYPE

u64

BYTE ORDER

little endian

ENCODING ORDER

X_0 , C_1 , K_1 , X_1

TRAILING BYTES

rejected

TRUNCATED LENGTH

rejected

TRUNCATED BODY

rejected

OVERFLOW

rejected

ROUND TRIP

decode(encode(event)) = event

PRESERVATION

All four position bodies are preserved byte for byte.

POSITIVE STATEMENTS

Relational Event = $X_0 \text{ --- } [C_1 \mid K_1] \text{ --- } X_1$

Relational Event = $[X_0, [C_1, K_1], X_1]$

Relational Event = one complete relation

Relational Event = four physically present relational positions

complete relation = global relative to its local positions

X_0 = local relational position

C_1 = local relational position

K_1 = local relational position

X_1 = local relational position

local position = unrestricted bytes

empty position = valid physically present position

complete relation and relational placement of its positions = consistent

contents, naming, use, and interpretation of local positions = open

local position = may contain another complete Relational Event

contained Relational Event = local relative to its containing relation

contained Relational Event = global relative to its own local positions

K_1 = carry relative to a local zero

carry = may resolve to local zero without removing K_1 or the complete relation

local zero = zero relative to a frame, relation, or carry condition

codec = physical serialization and recovery of the complete relation

codec = byte for byte preservation of all four position bodies

NEGATIVE STATEMENTS

Relational Event $\neq$ four separate mechanisms

Relational Event $\neq$ fixed position contents

Relational Event $\neq$ permanent position semantics

global relation $\neq$ universal absolute frame

local position $\neq$ permanently local

local zero $\neq$ universal absolute zero

$K_1 = 0 \neq$ absent K_1

empty position $\neq$ absent position

contained Relational Event $\neq$ different base relation

relational position arrangement $\neq$ temporal sequence

relational position arrangement $\neq$ causal sequence

relational position arrangement $\neq$ operational sequence

relational position arrangement $\neq$ computational sequence

codec encoding order $\neq$ relational behavior

codec $\neq$ position meaning

codec $\neq$ prescribed carry encoding

codec $\neq$ prescribed local zero encoding

STATEMENT OF DISCLOSURE

This document establishes a public technical description of the Relational Event as disclosed in this release.

Equivalent encodings, serialization methods, or physical representations that preserve the same complete relation $[X_0, [C_1, K_1], X_1]$, its four relational positions, and its complete event boundary are considered implementations of the Relational Event.

VERSION RECORD

V0.0

STATUS: working

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JARET WALKER — JULY 27, 2026