POSETTE 2024-06-13

Partition your tables for 20X better performance

adyen

engineered
for ambition

adyen

Derk van Veen

Database specialist

Adyen

adyen

engineered
for ambition

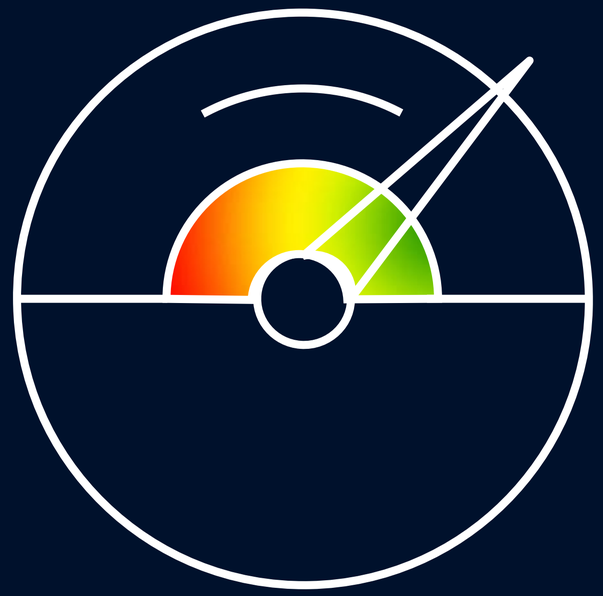
Agenda

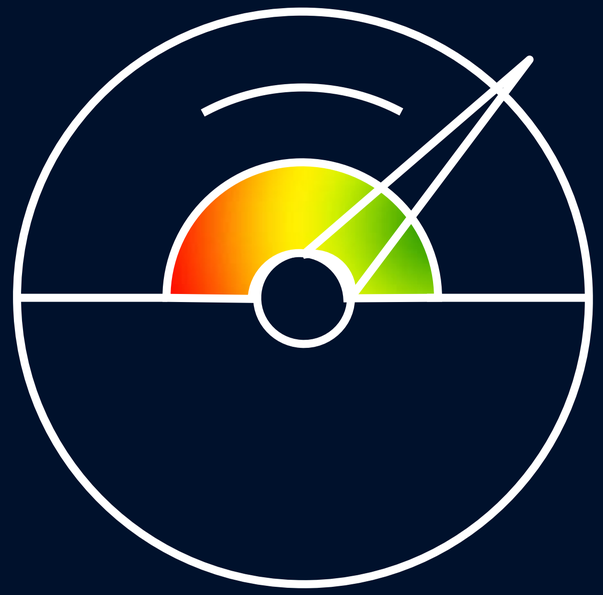
Mastering partitioning

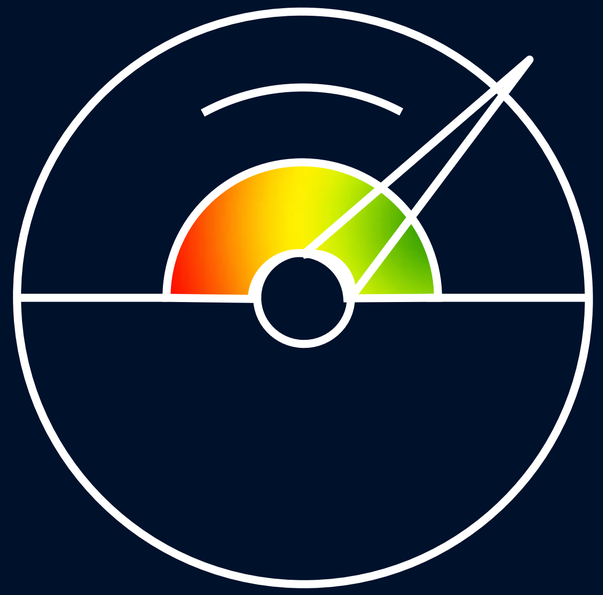
Design flaws

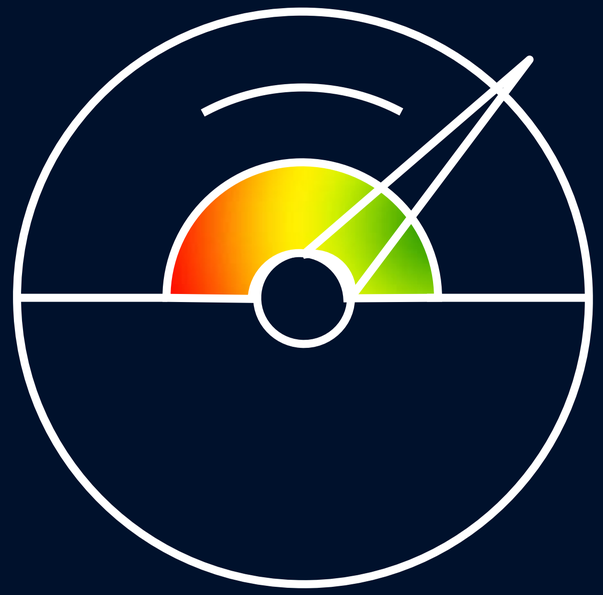
Target setup

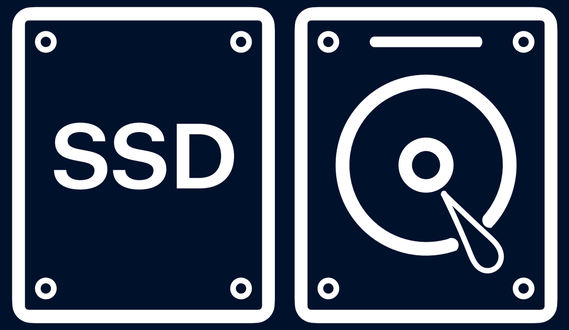
Mastering Partitioning

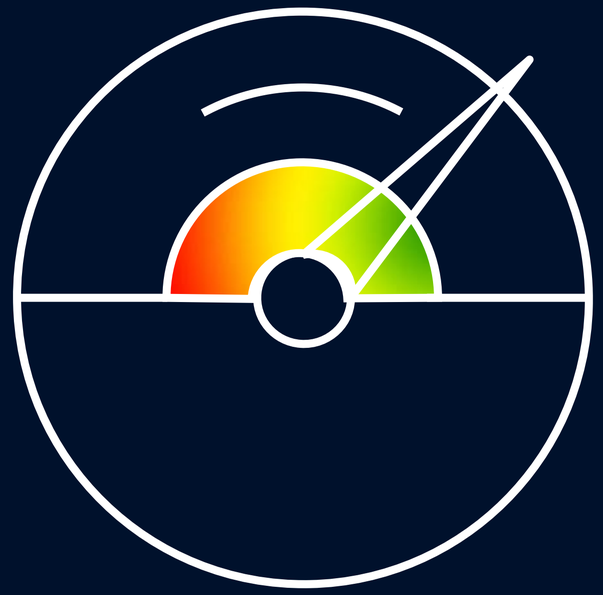


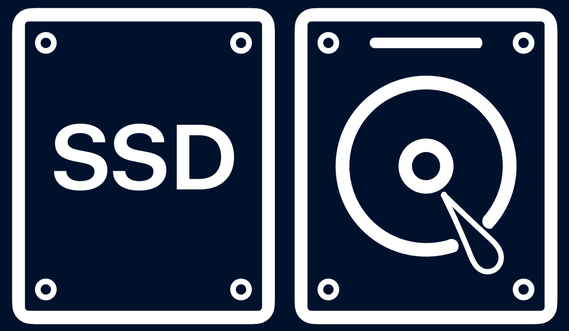




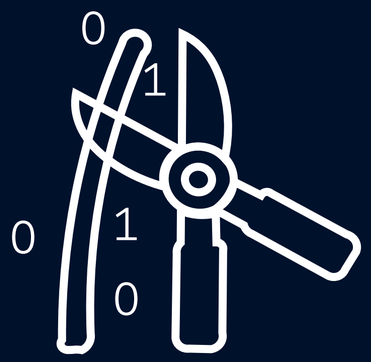


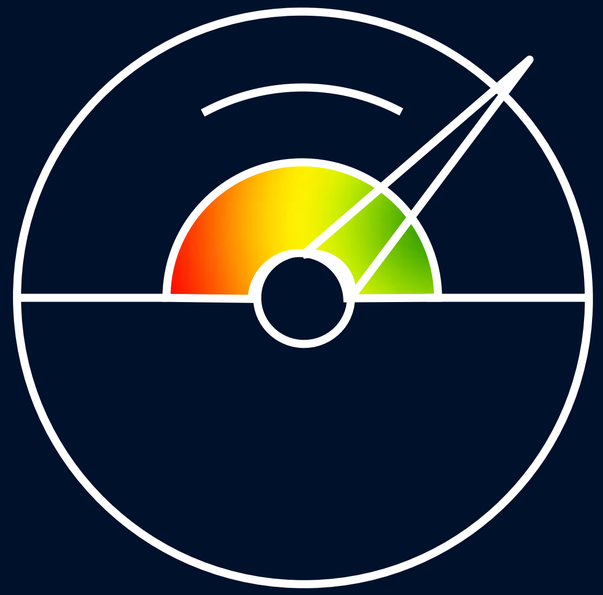

SSD





32 TB





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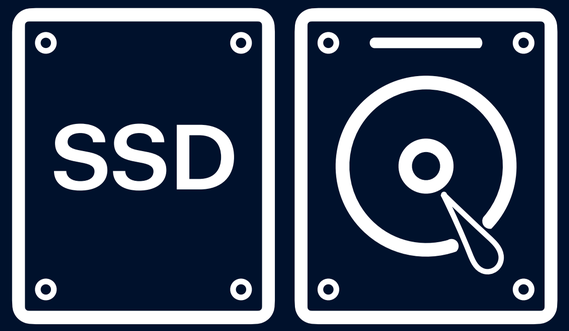
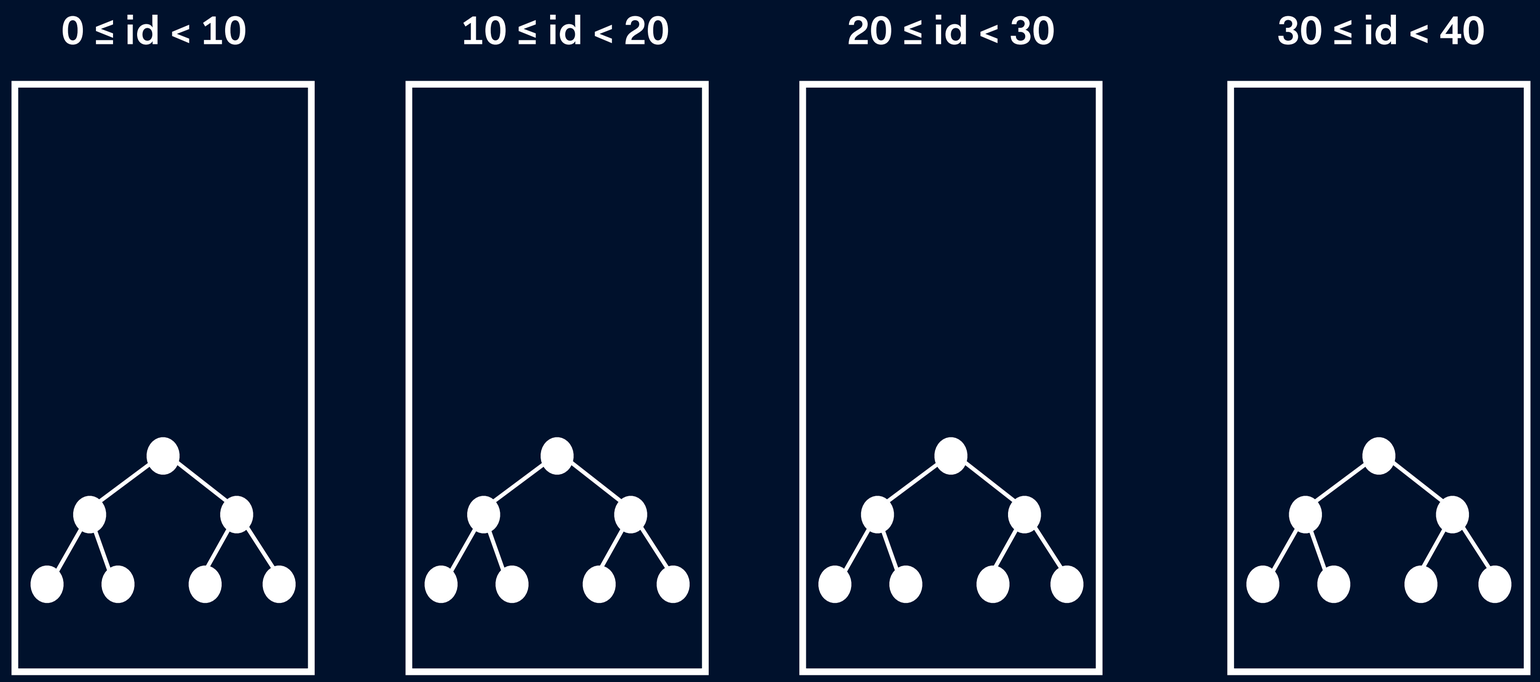


Single table partitioning

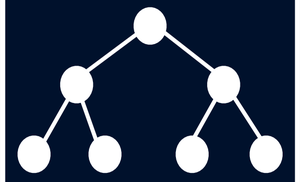
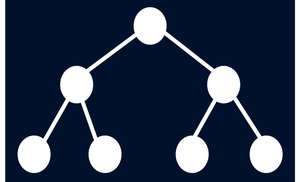
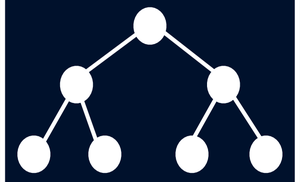
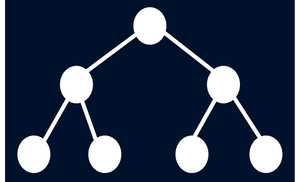
Table: test_partitition
Primary key: id
Partition key: RANGE (id)



Single table partitioning

Table: test_partitition
Primary key: id
Partition key: RANGE (id)

0 ≤ id < 10	10 ≤ id < 20	20 ≤ id < 30	30 ≤ id < 40
2023-03-01 ≤ date ≤ 2023-04-01	2023-04-01 ≤ date		

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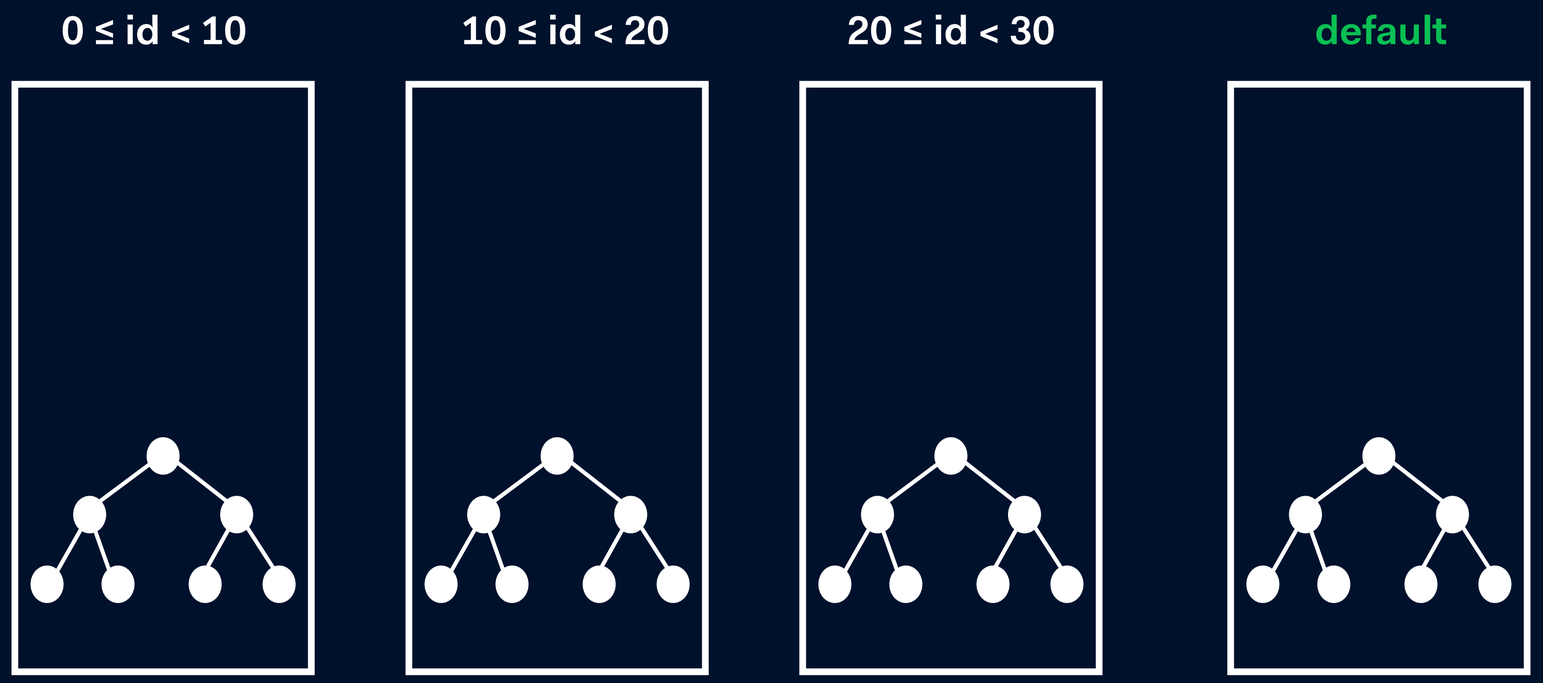

Mastering partitioning

Mastering partitioning

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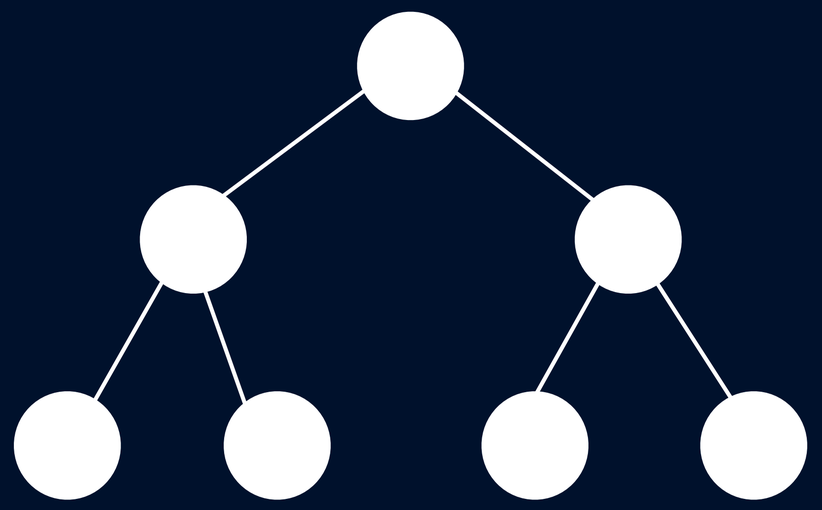
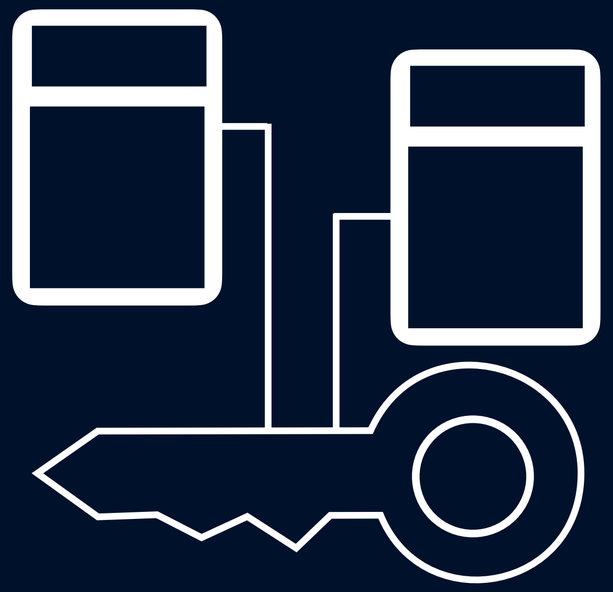




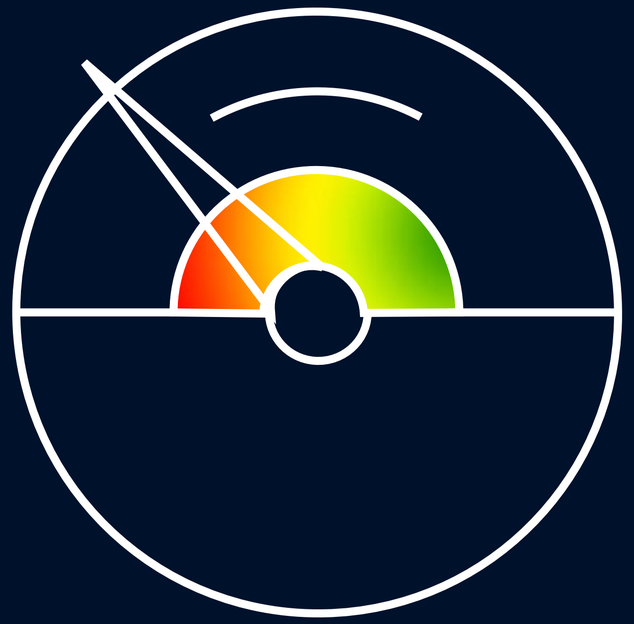
Mastering partitioning

Guide

Blog

Single table partitioning

And we lived
Happily ever after



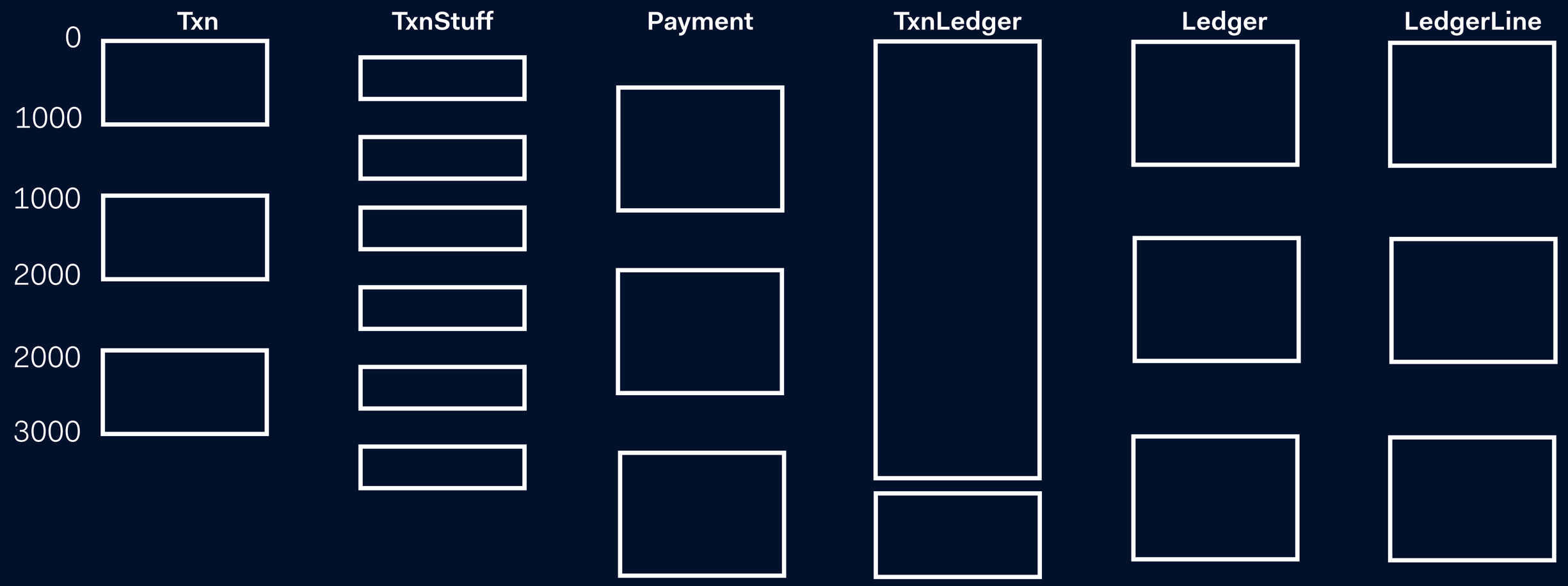
Design flaws

Optimiser struggles

Optimiser struggles

“The fastest way to do it,
is to not do it”

Current situation



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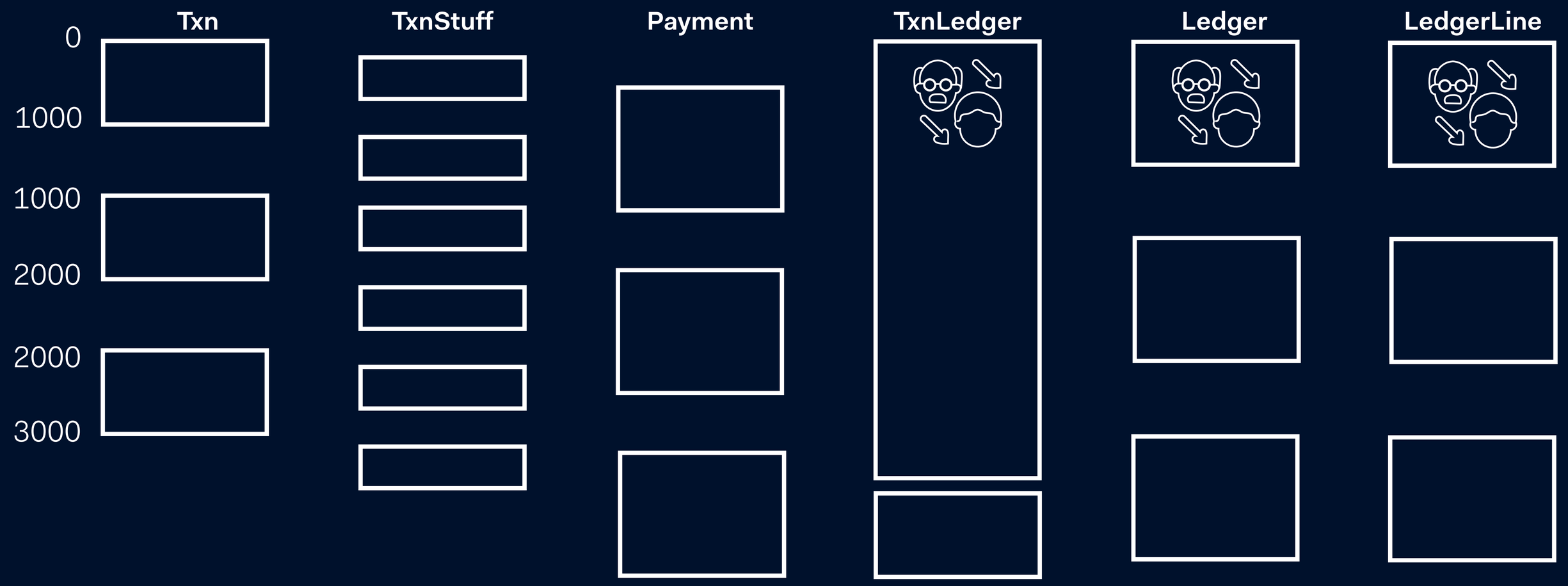

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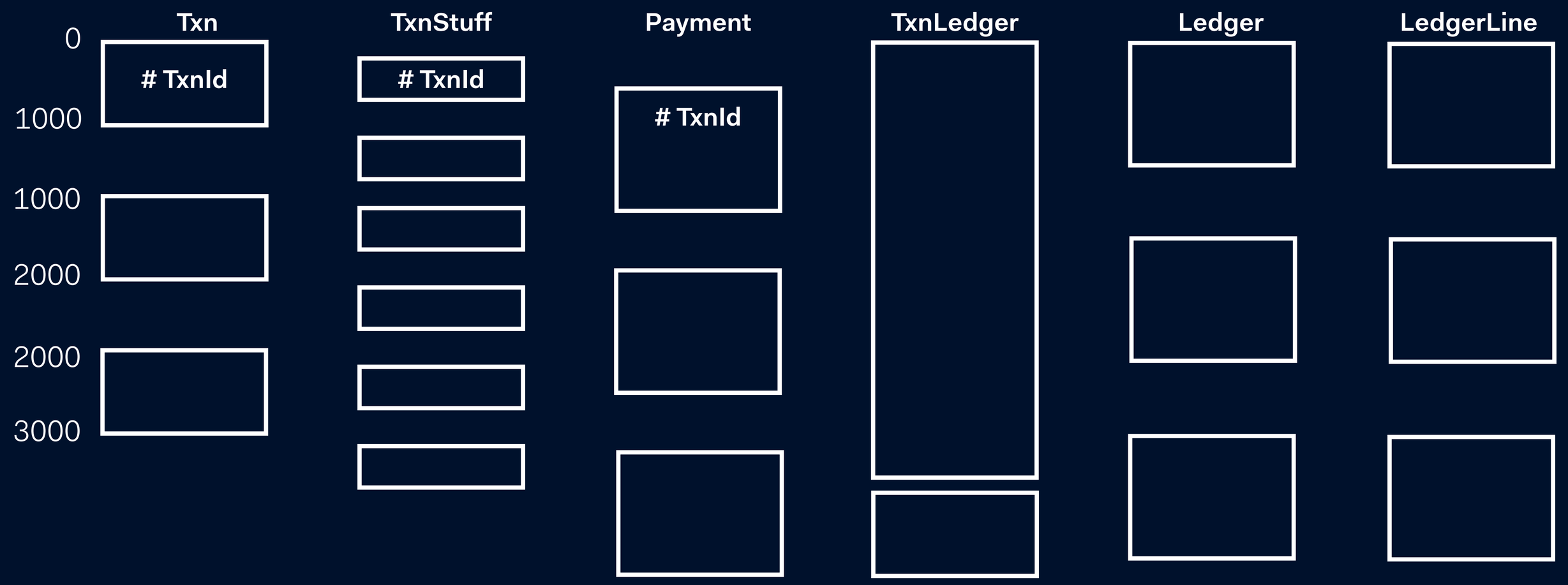
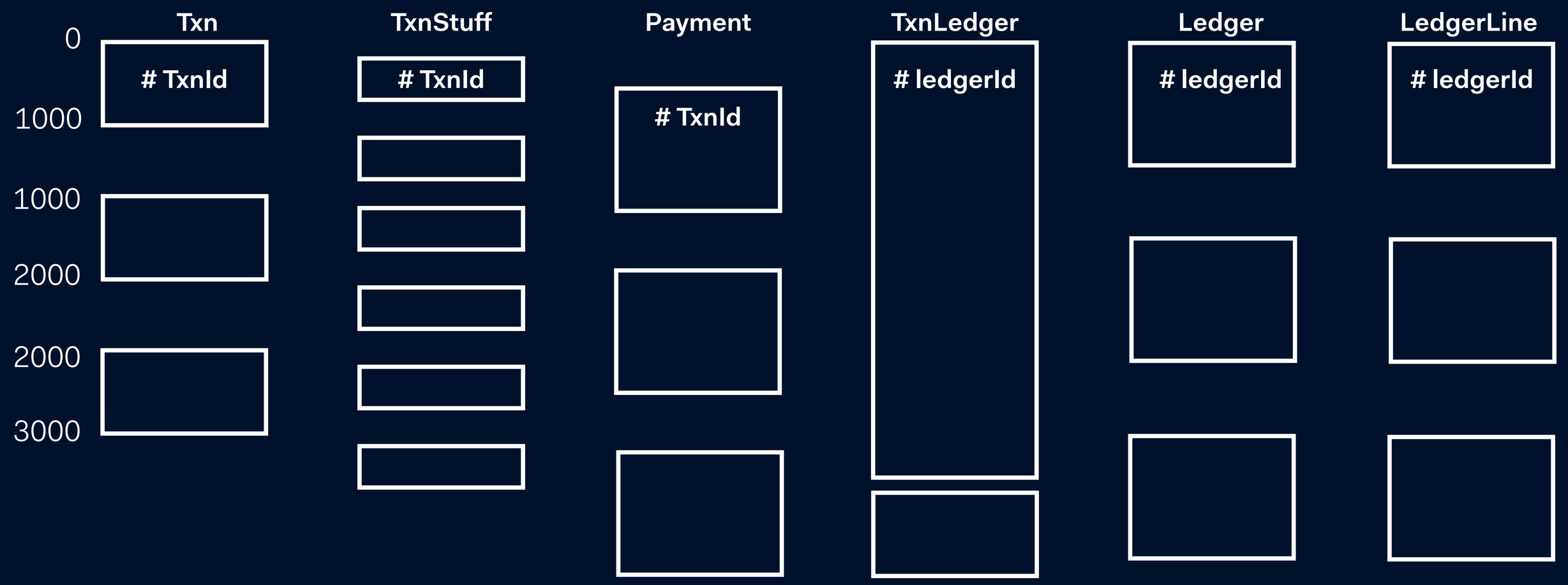
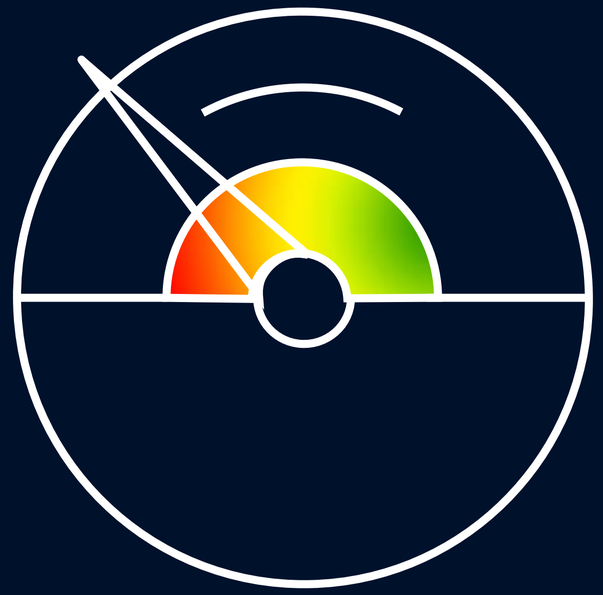


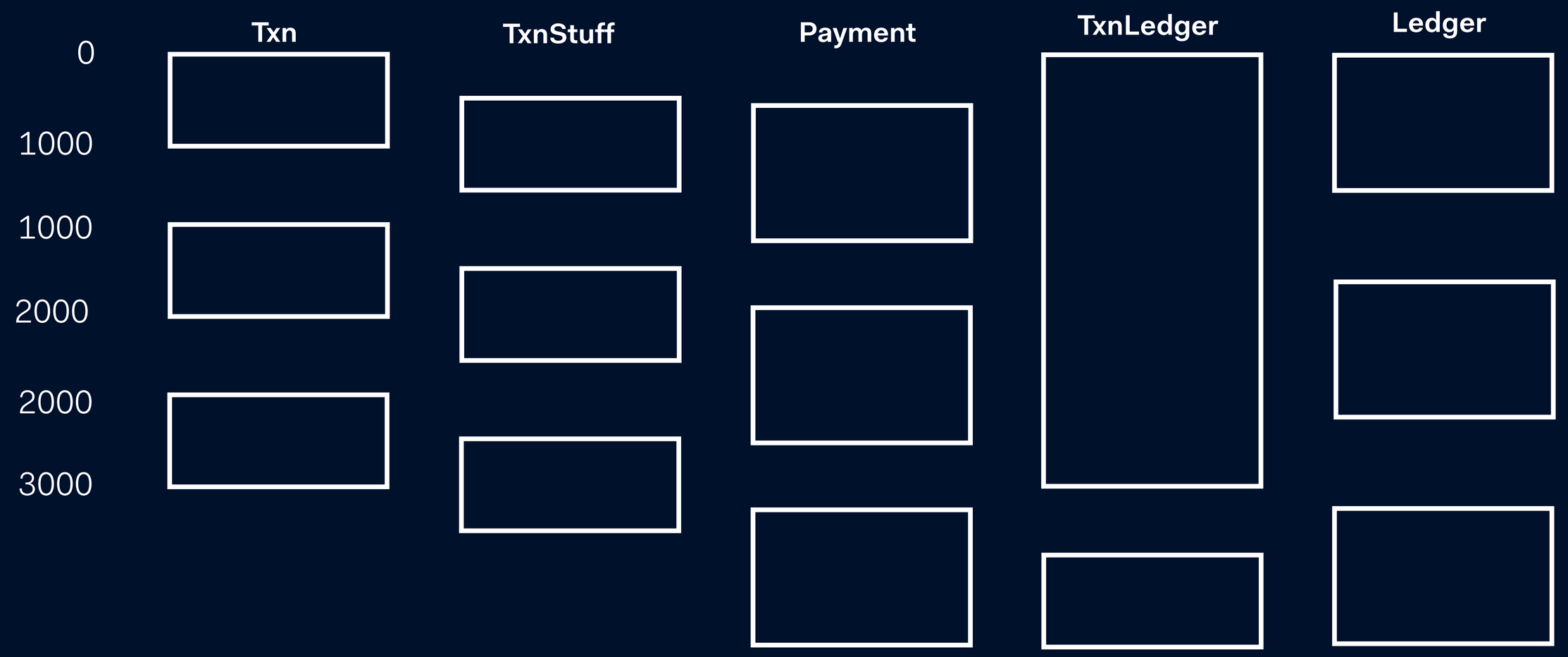
Current situation



Query performance



Current situation



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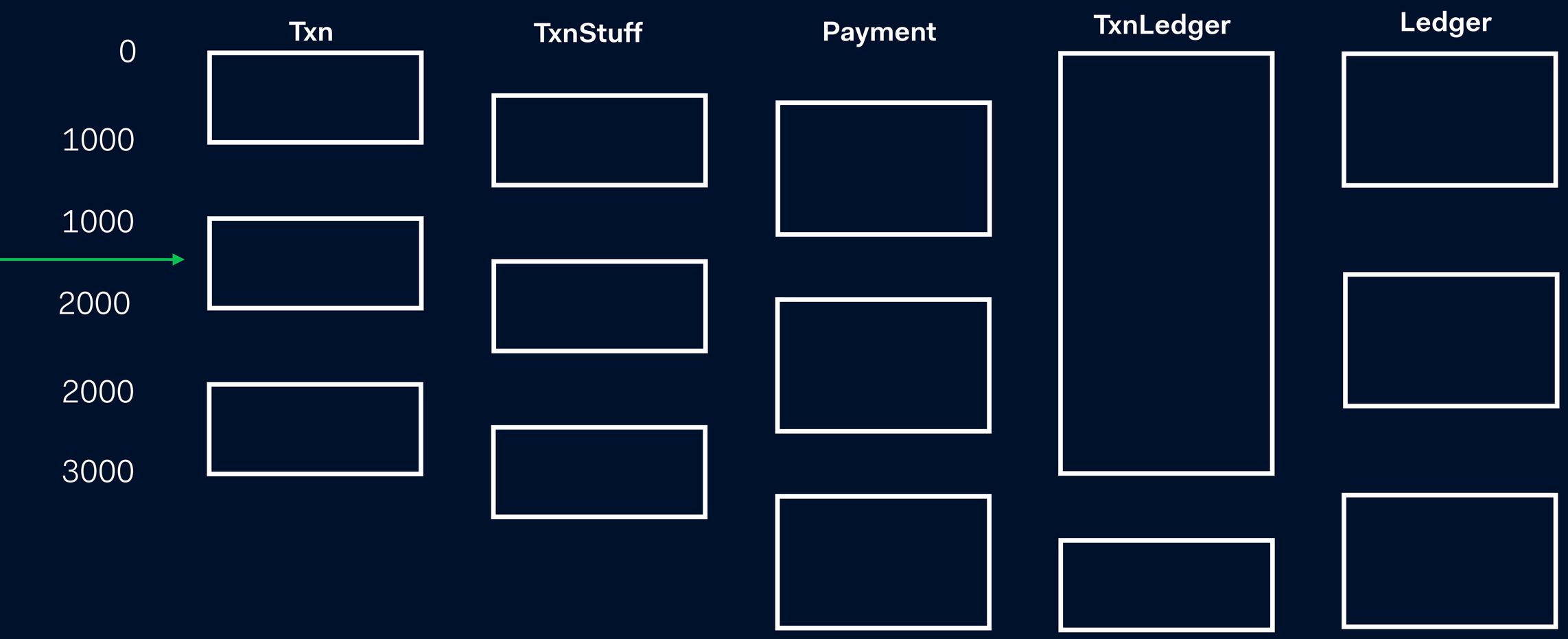

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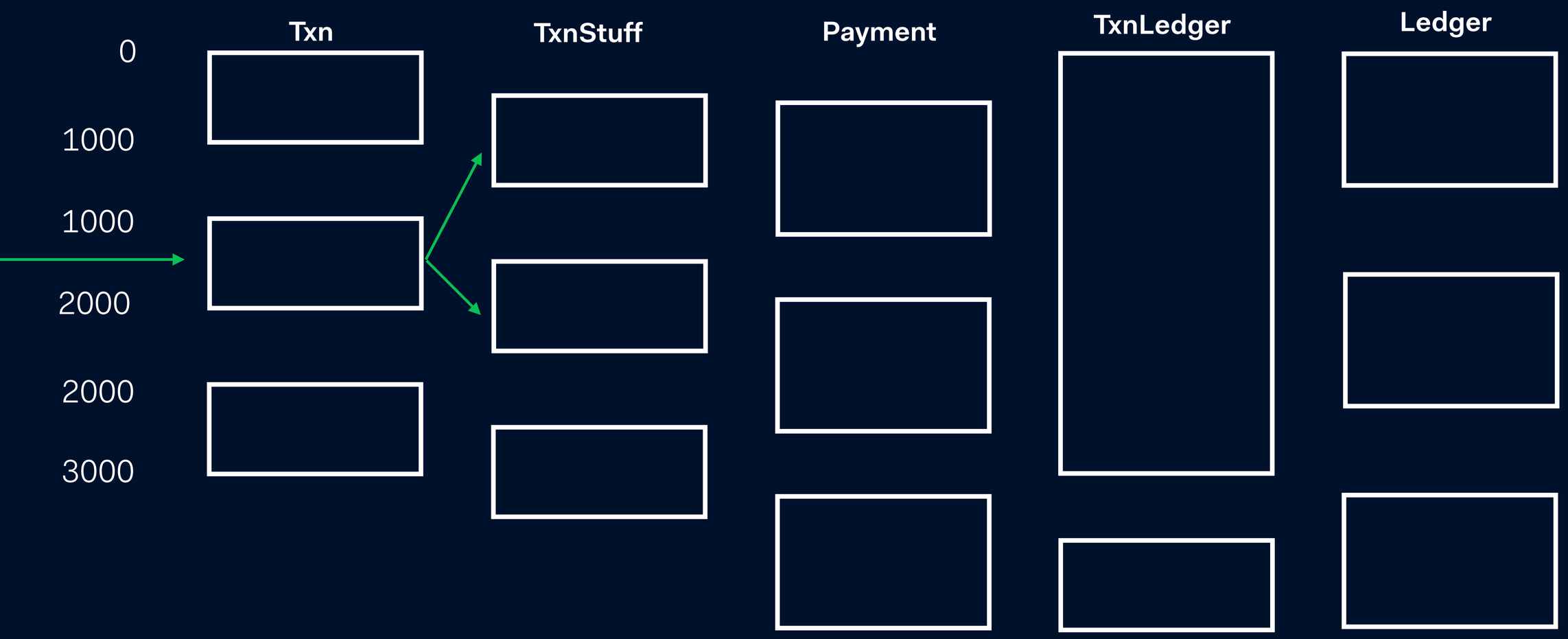

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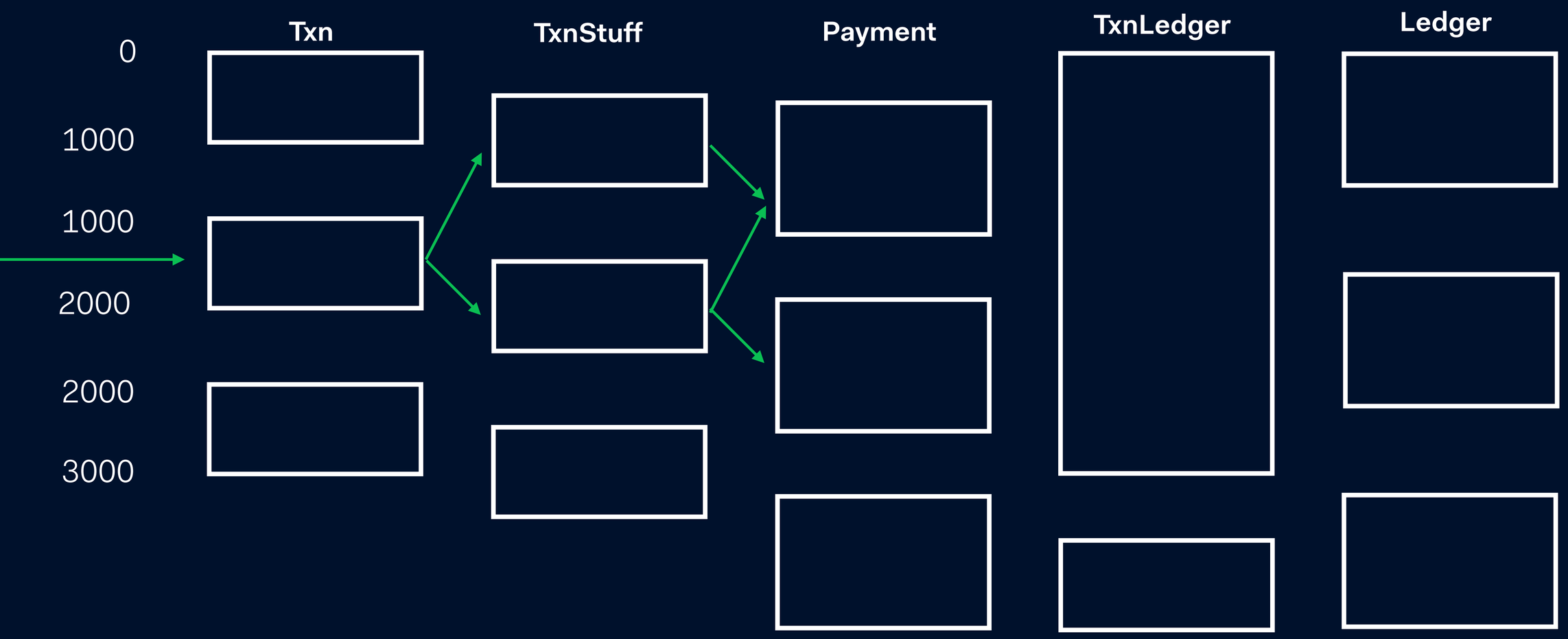

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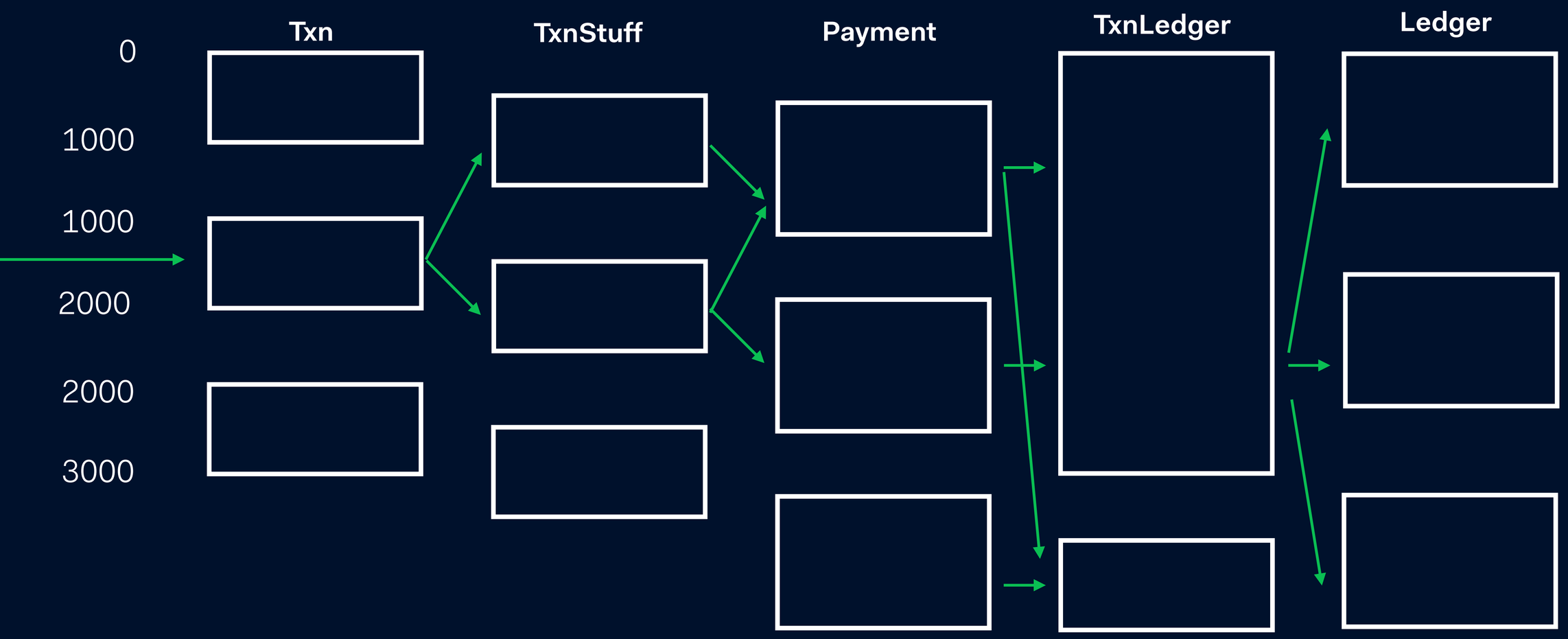
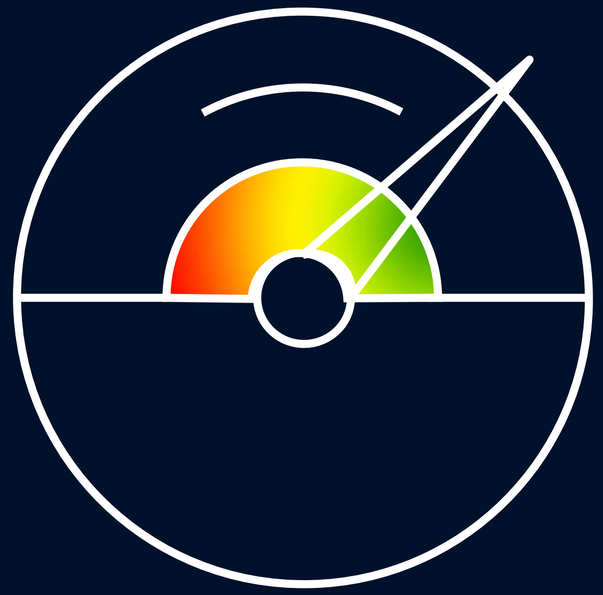
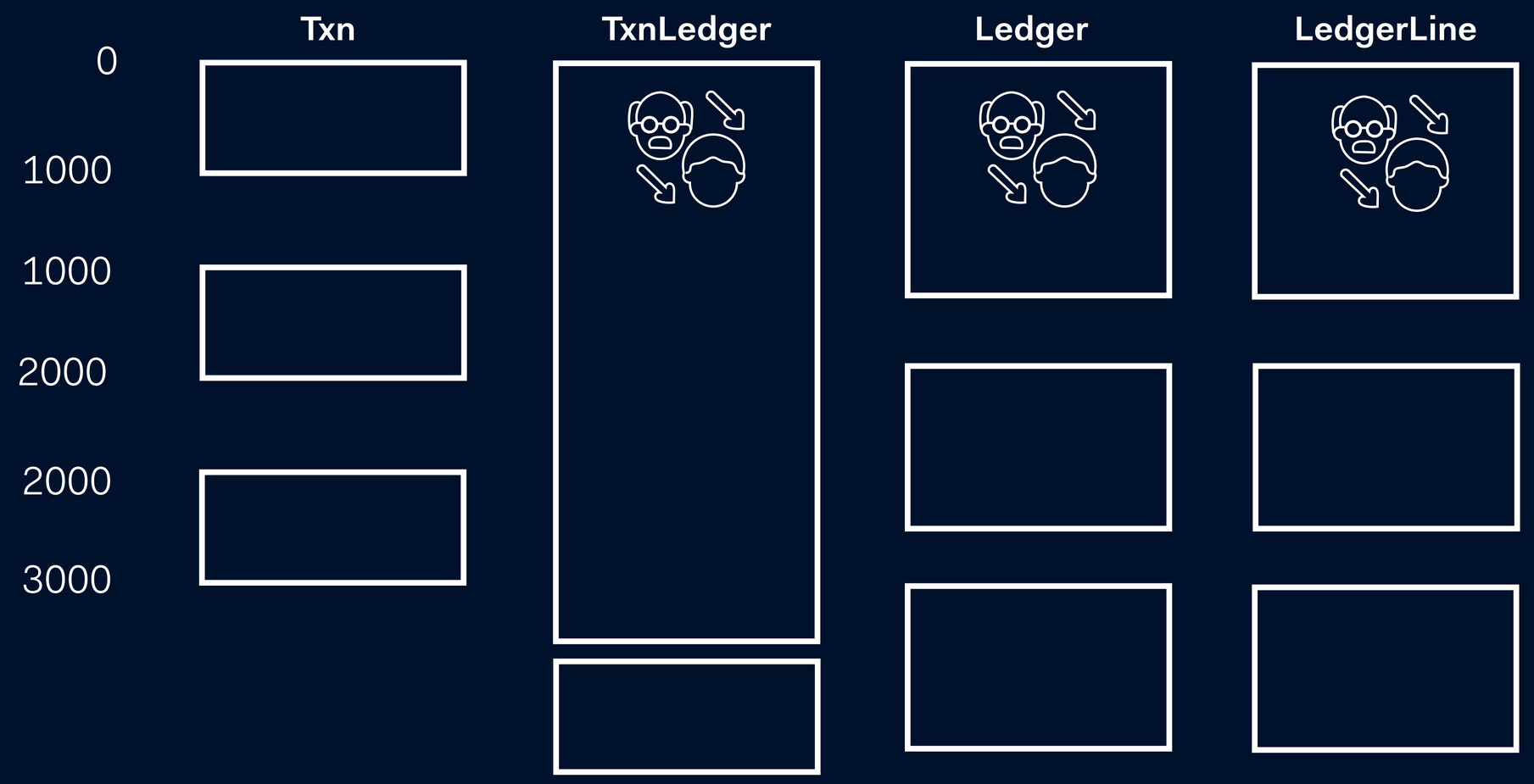




Target setup

Better pruning?
Native partitioning!

First improvement



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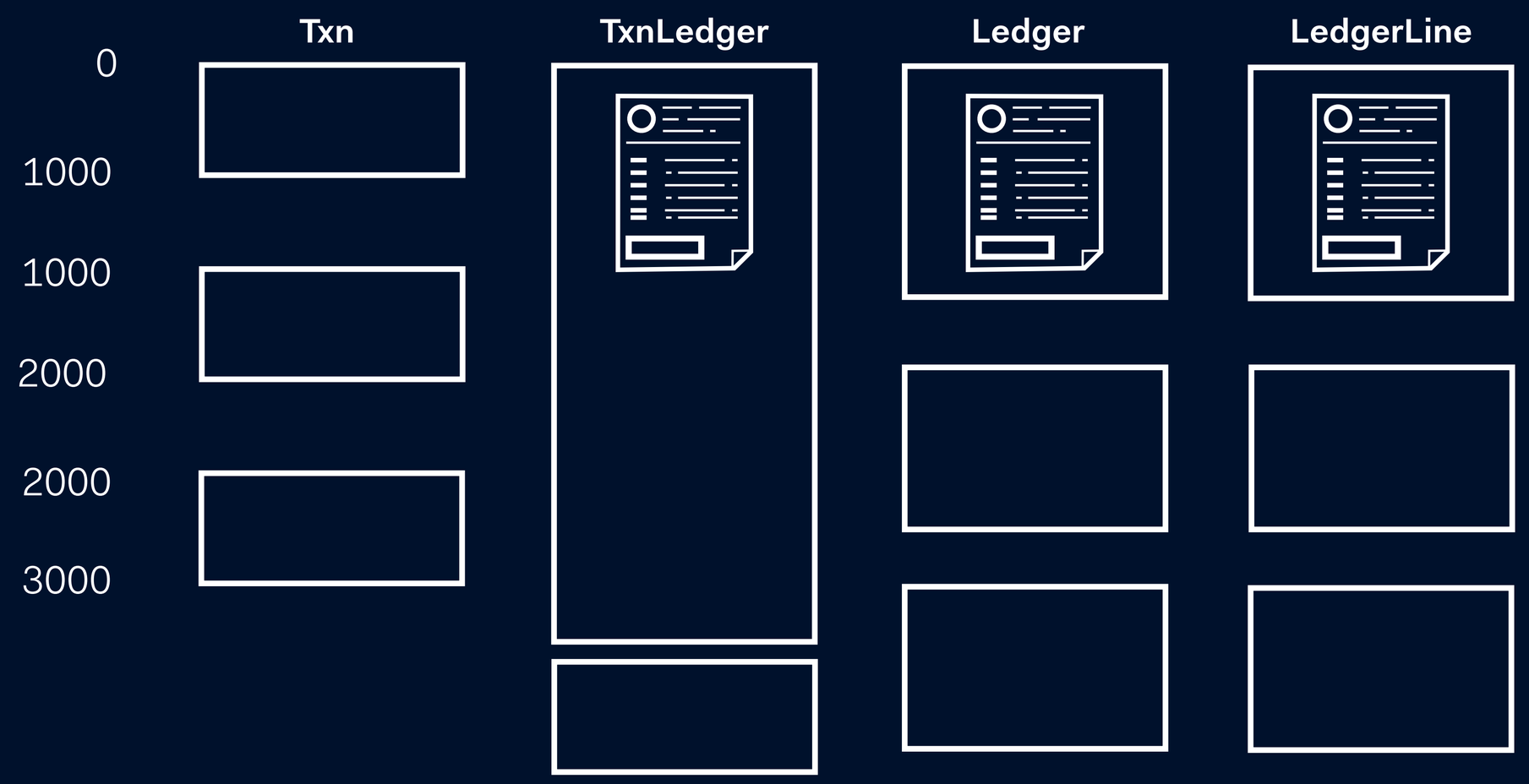

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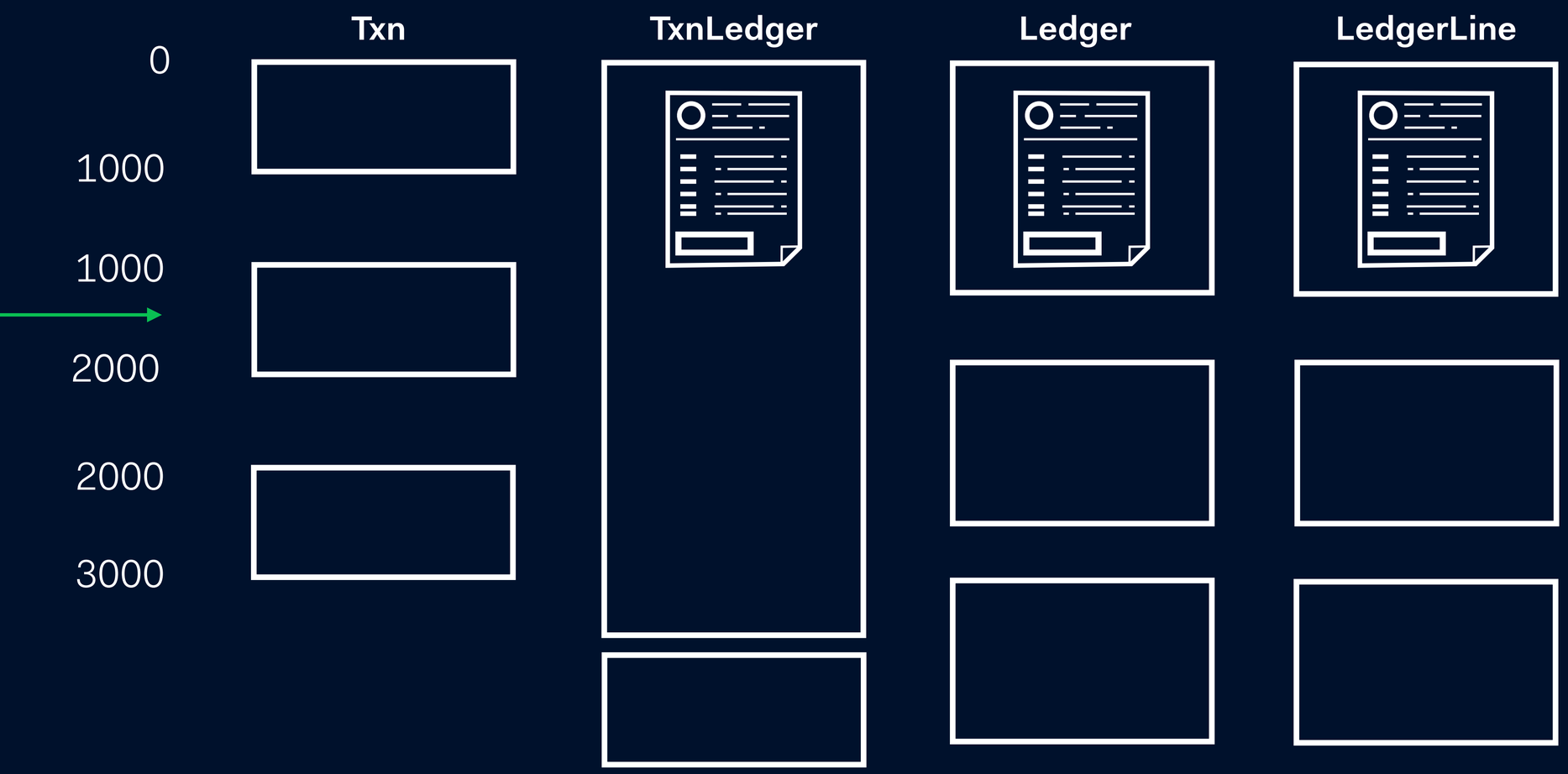

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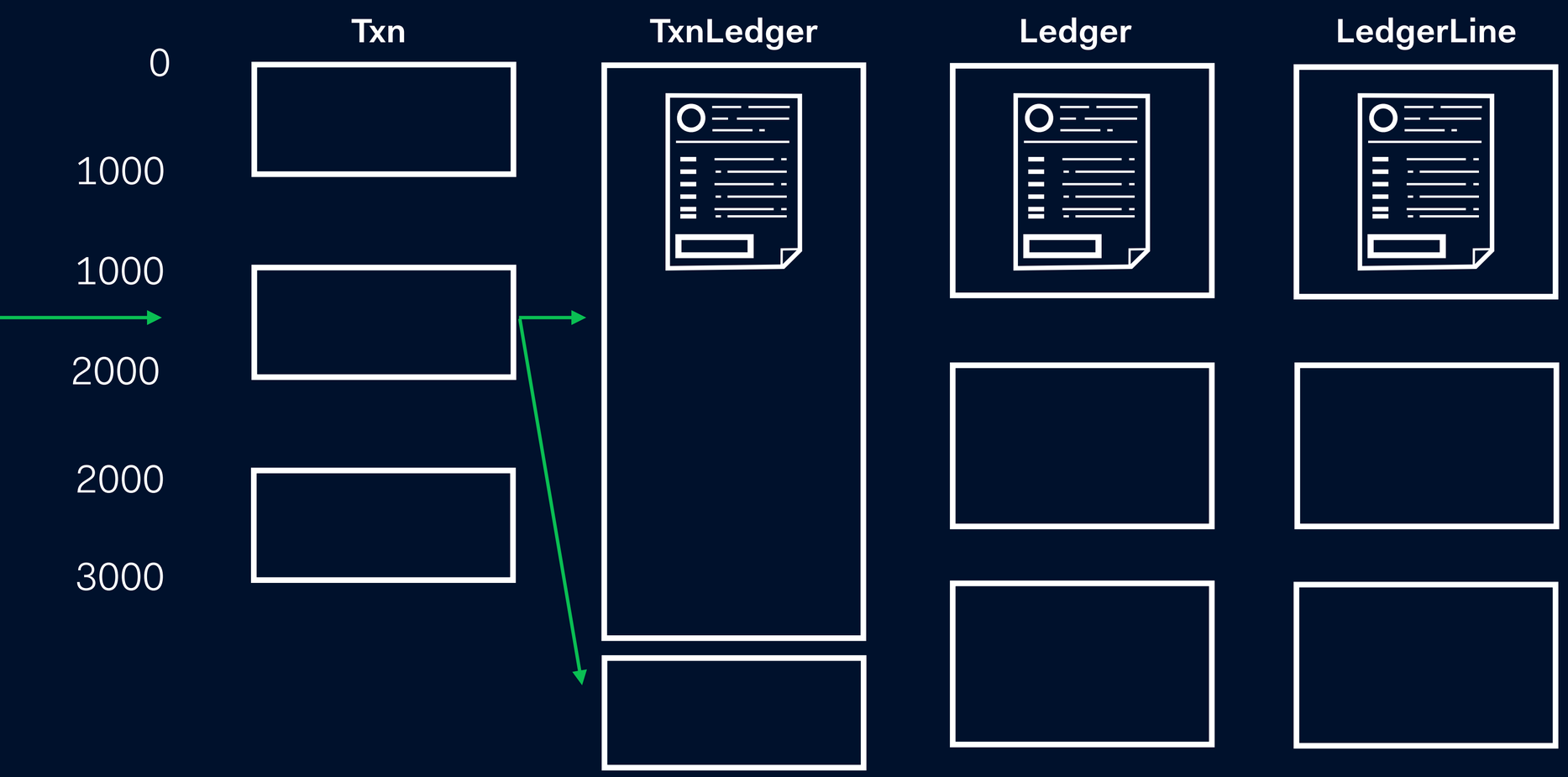

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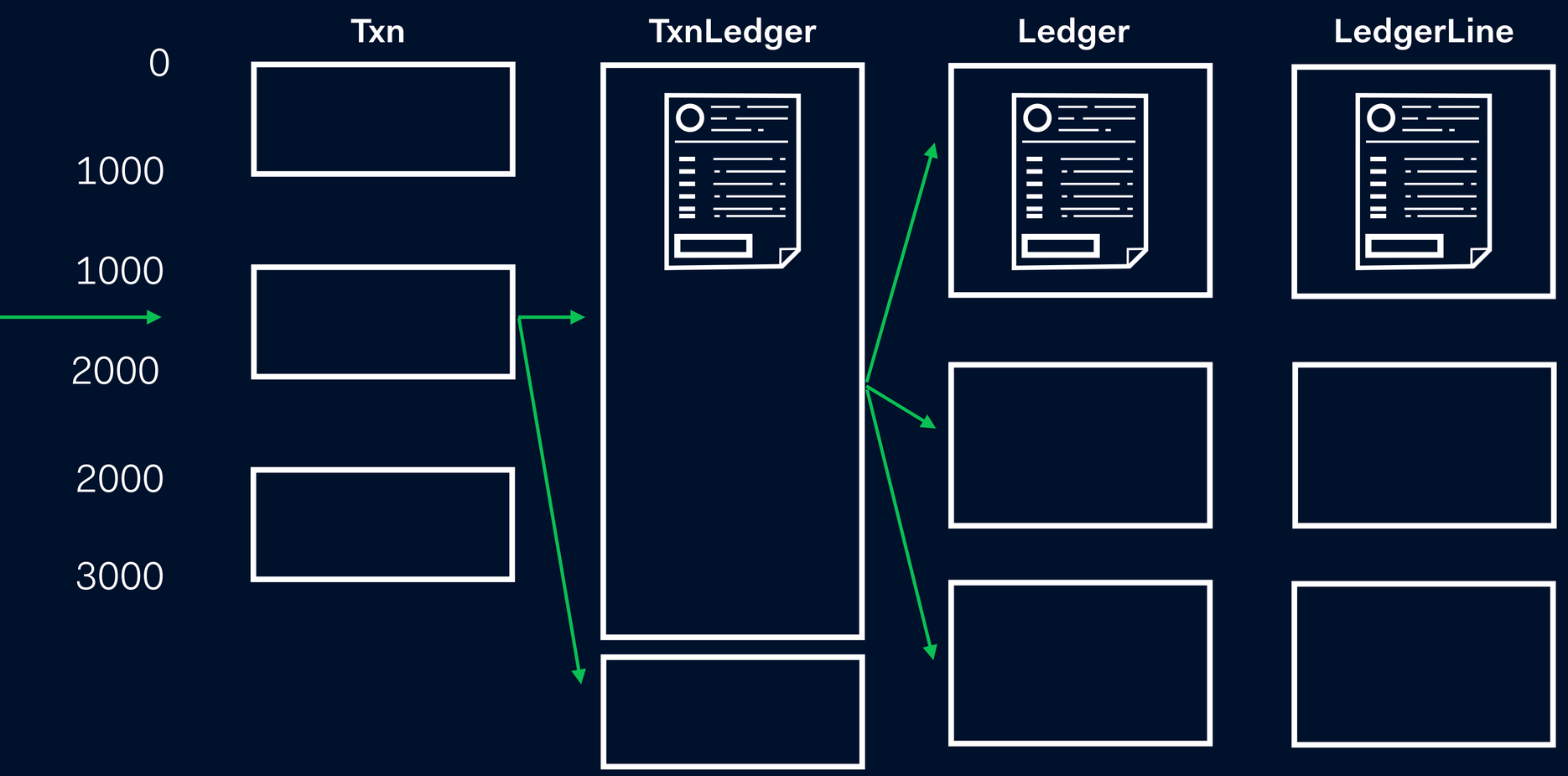

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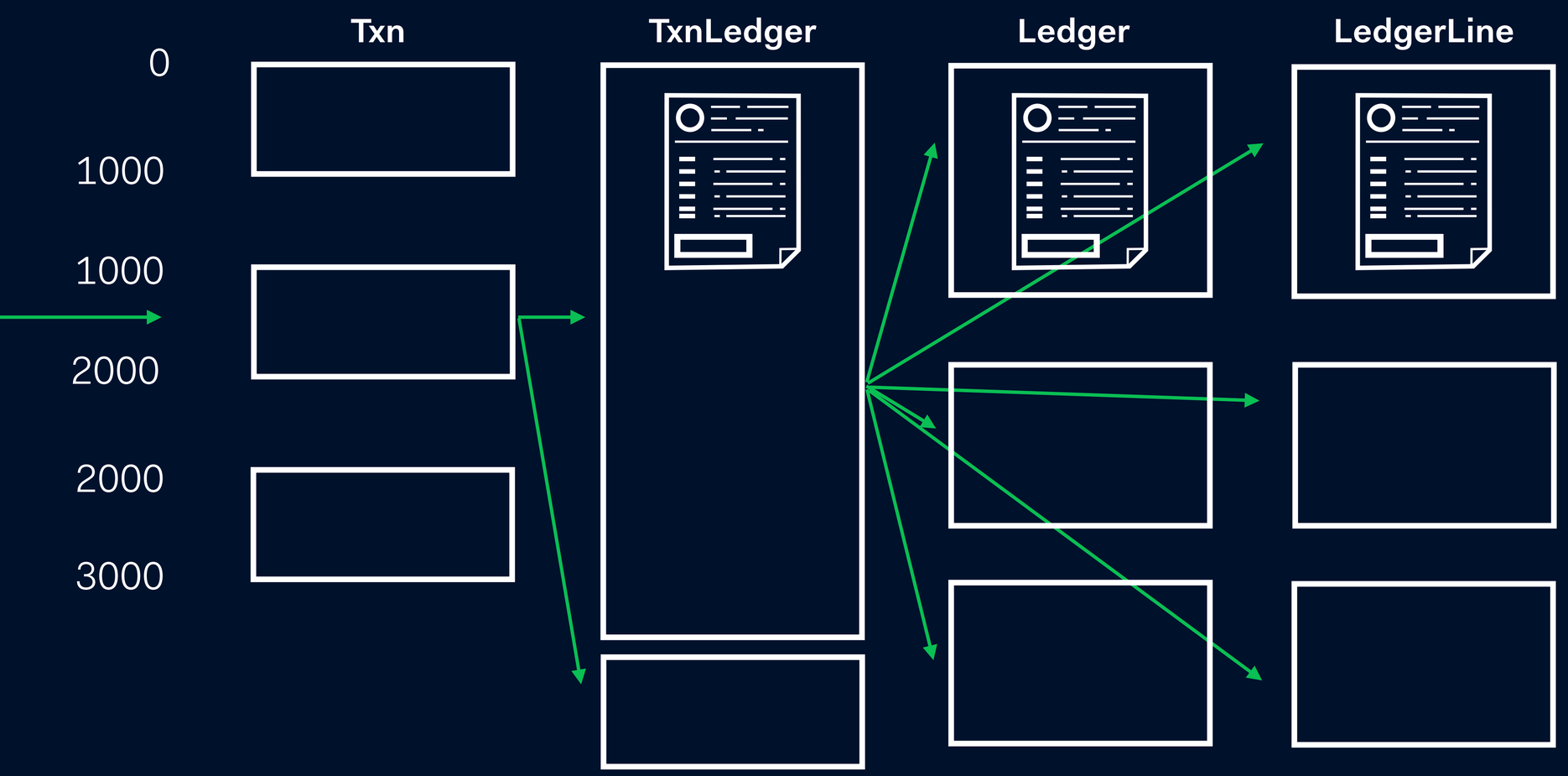

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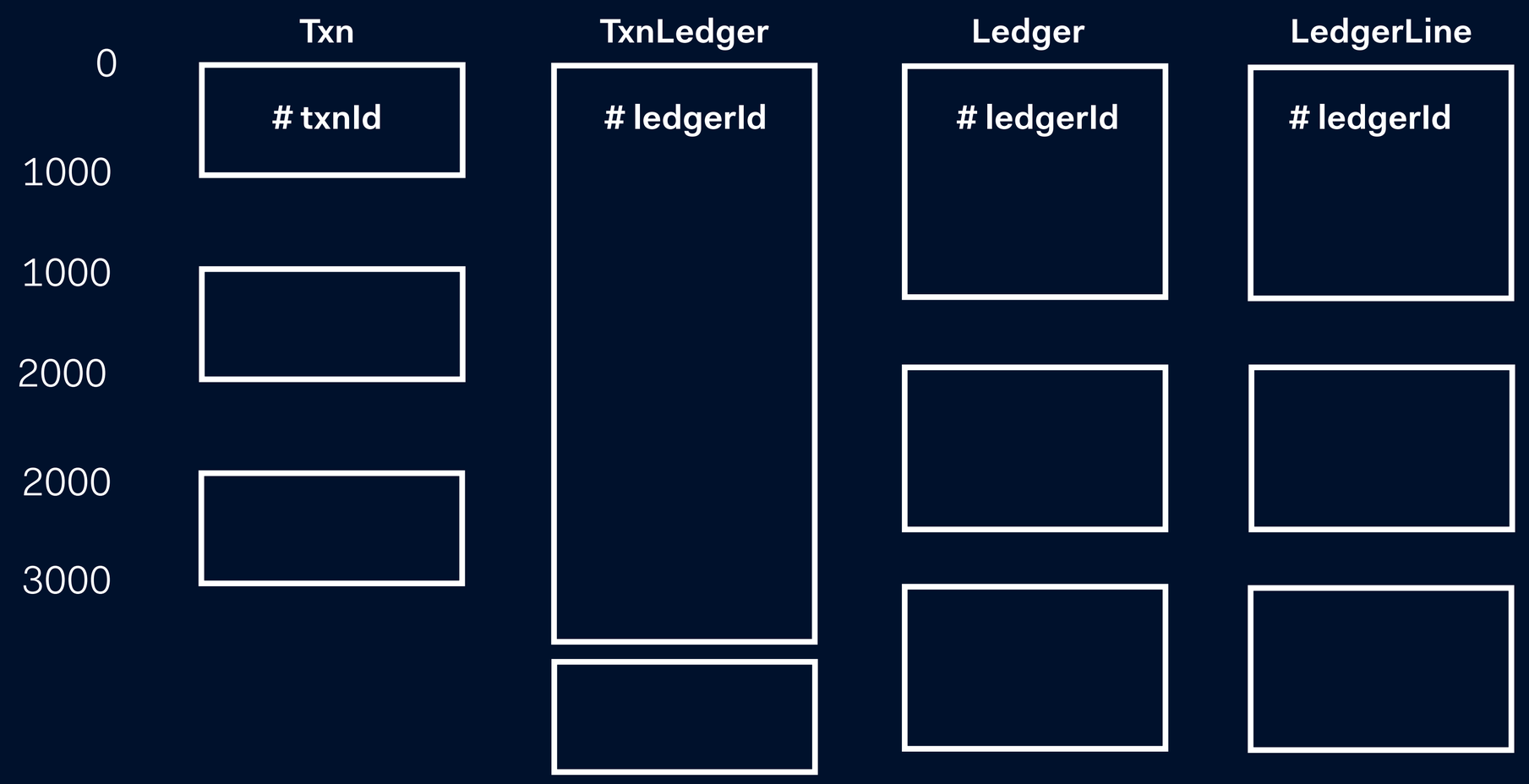
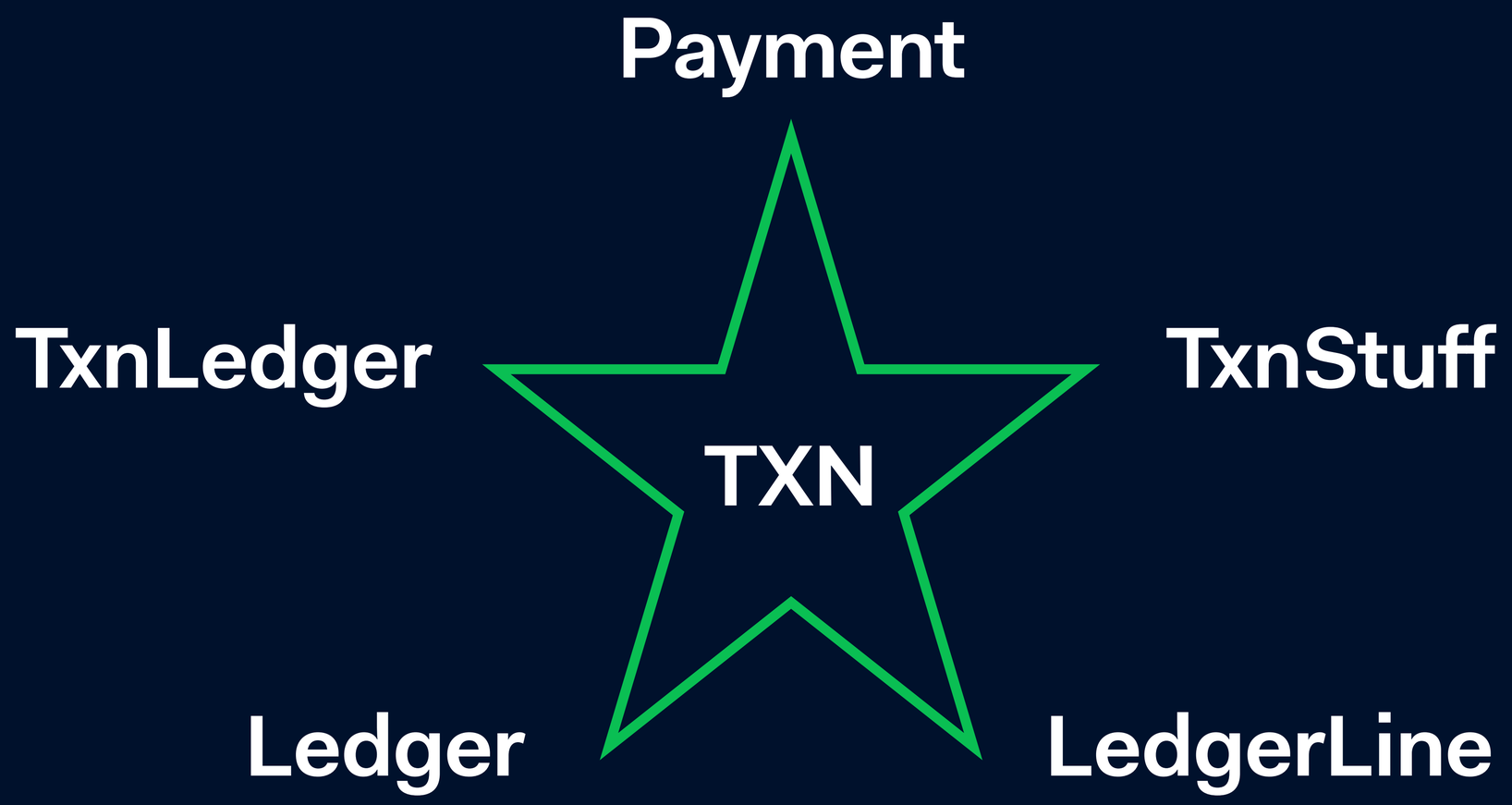
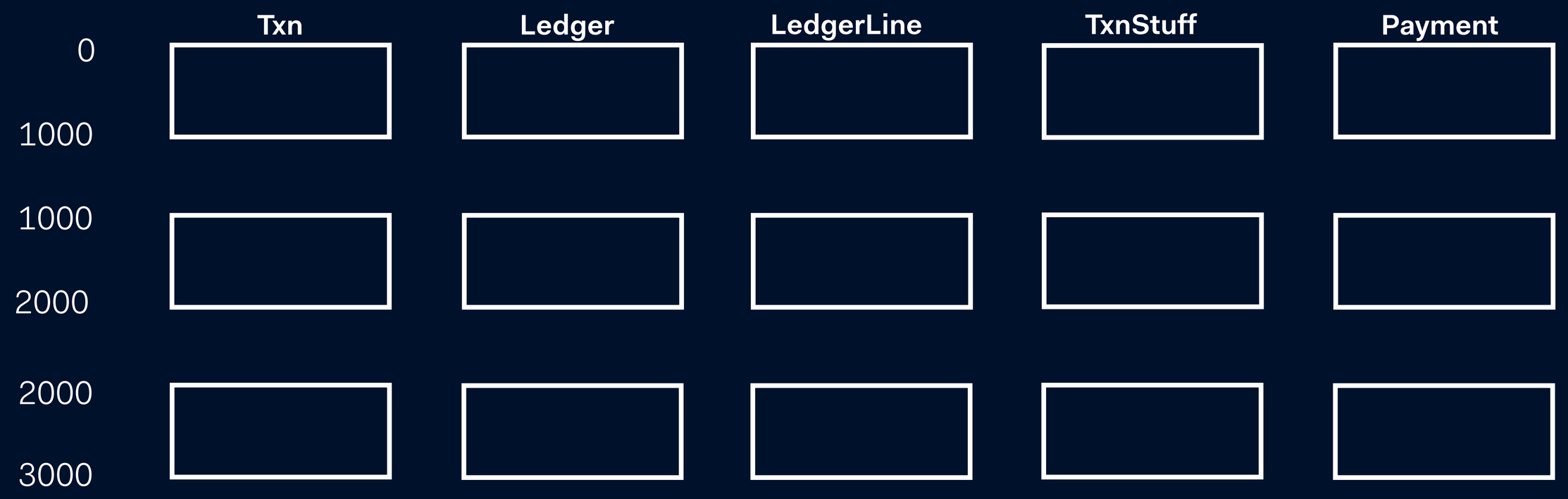



Payment
TxnLedger
TxnStuff
TXN
Ledger
LedgerLine

Optimal situation



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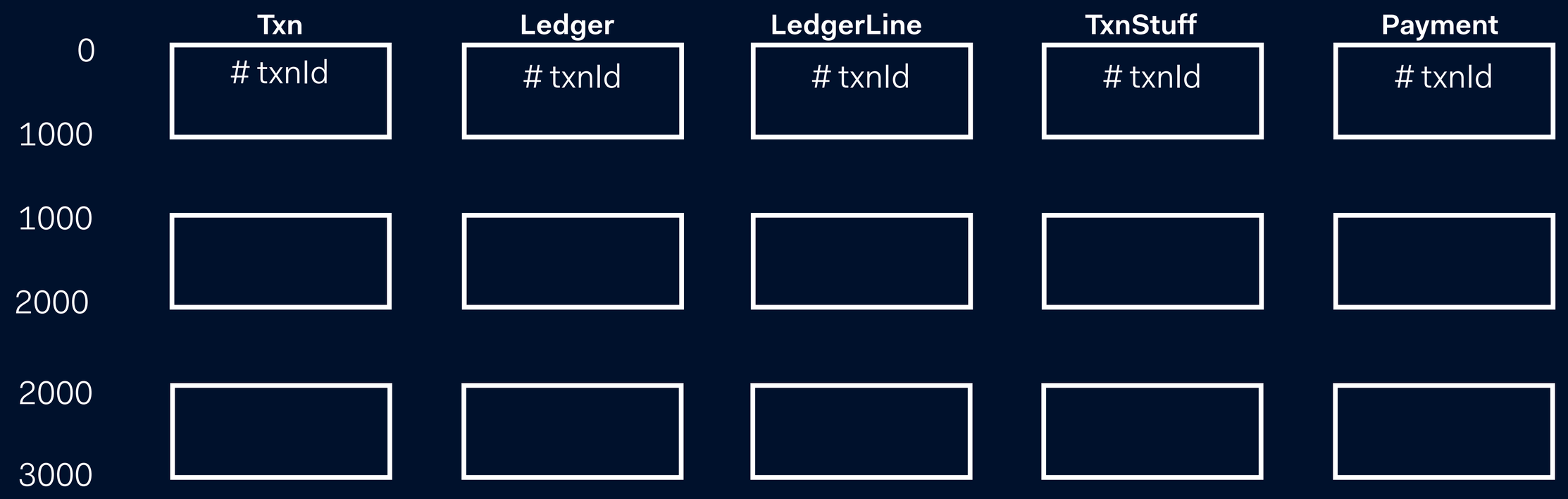

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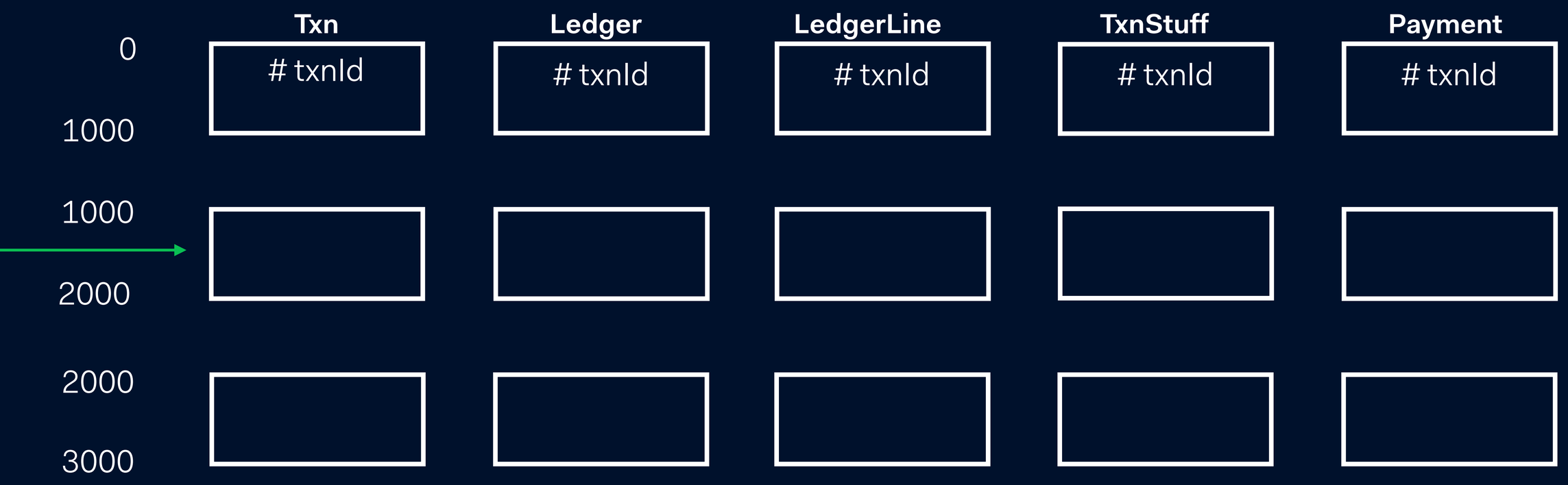

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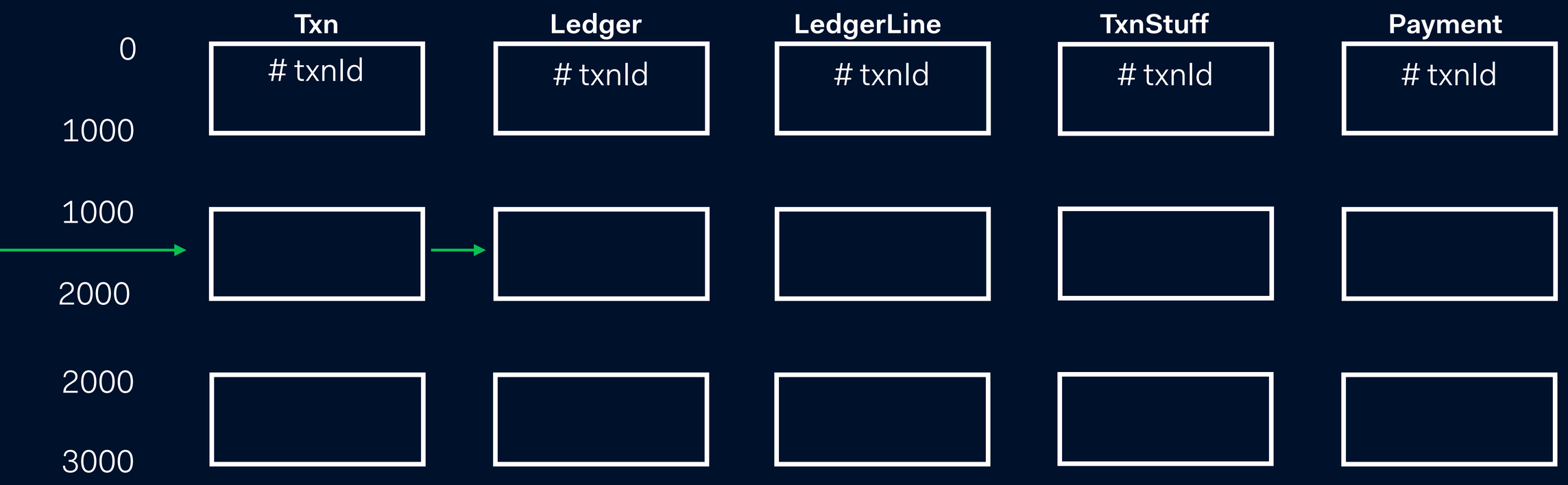

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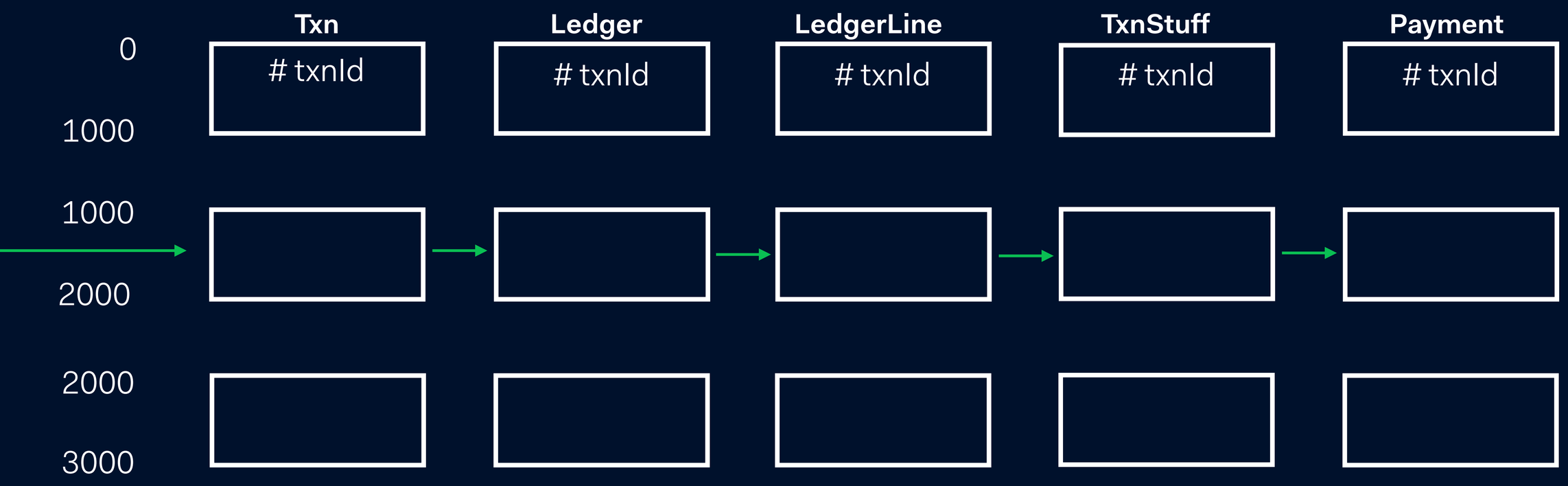

Conclusion