

# Beyond the Blockchain Silo

Expanding Enterprise Networks Without Compromising Control



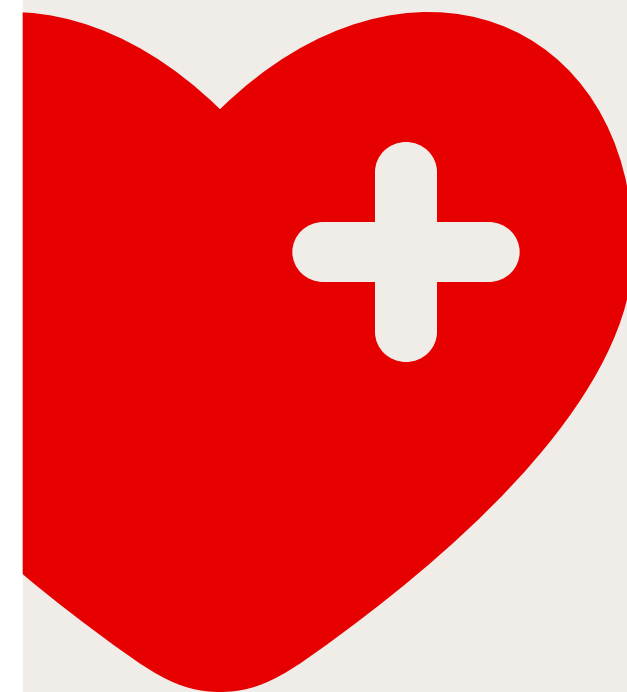
# Early Enterprise Blockchains

## We.Trade Consortium



**Key players:** Deutsche Bank, HSBC, KBC, Natixis, Rabobank, Societe Generale and UniCredit  
**Officially Launched:** 2018  
**Use case:** Cross-border trade finance

## Change Healthcare



**Key players:** US health insurers, hospitals and clinics.  
**Officially Launched:** 2017  
**Use case:** health care

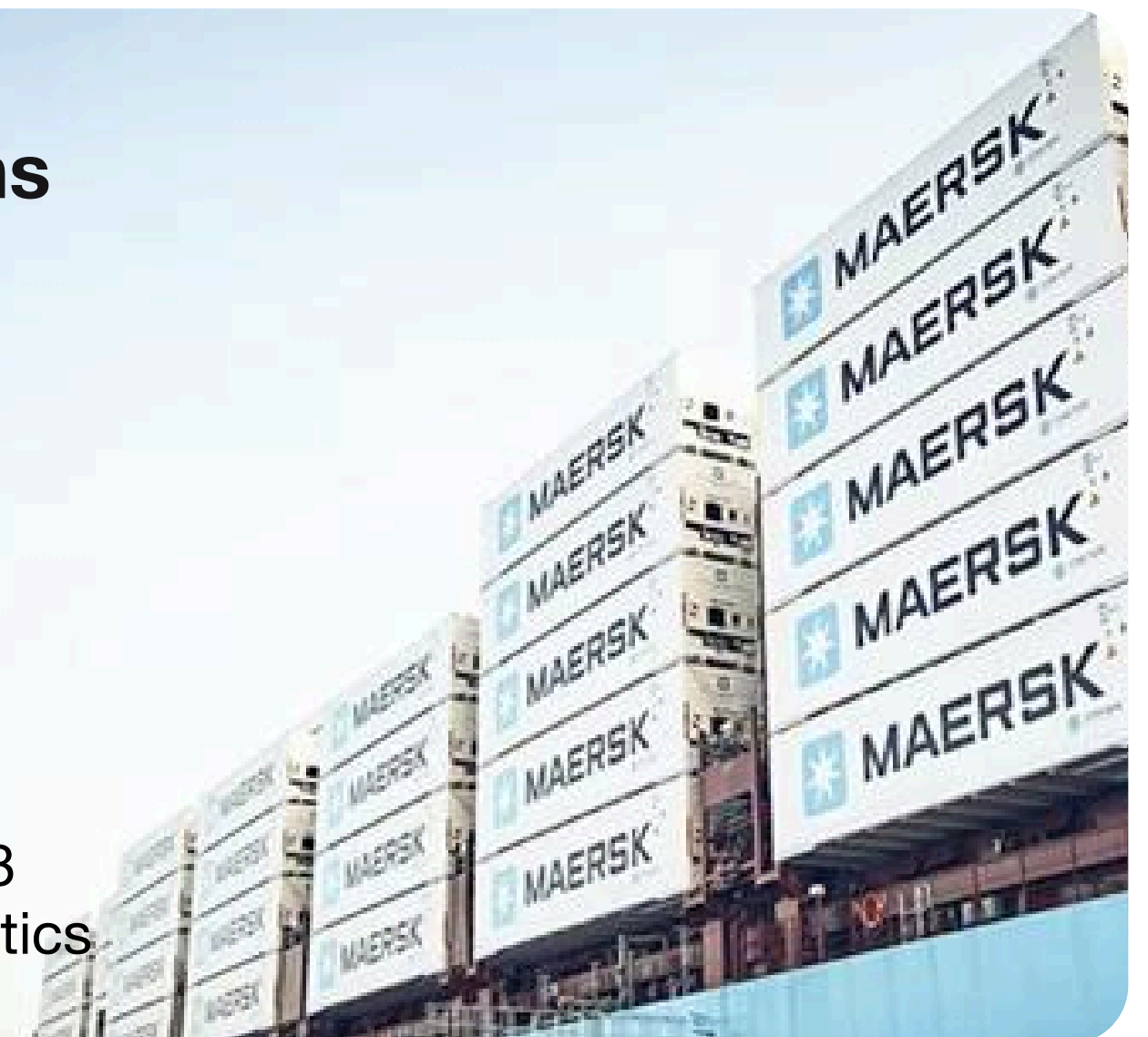
## Walmart & IBM case

# Walmart

**Key players:** Walmart, IBM.  
**Officially Launched:** 2017  
**Use case:** Supply Chain Traceability

## Maersk TradeLens



**Key players:** Maersk  
**Officially Launched:** 2018  
**Use case:** Shipping Logistics






# Approaches to enterprise blockchain architecture

	Tech stack example	Interoperability with Ethereum	Operational costs	Operational complexity	Network effects	Decentralization	Intergation with legacy IT systems complexity and costs
Private permissioned non-evm blockchain		NO	High	High	Limited	Low	High

# Approaches to enterprise blockchain architecture

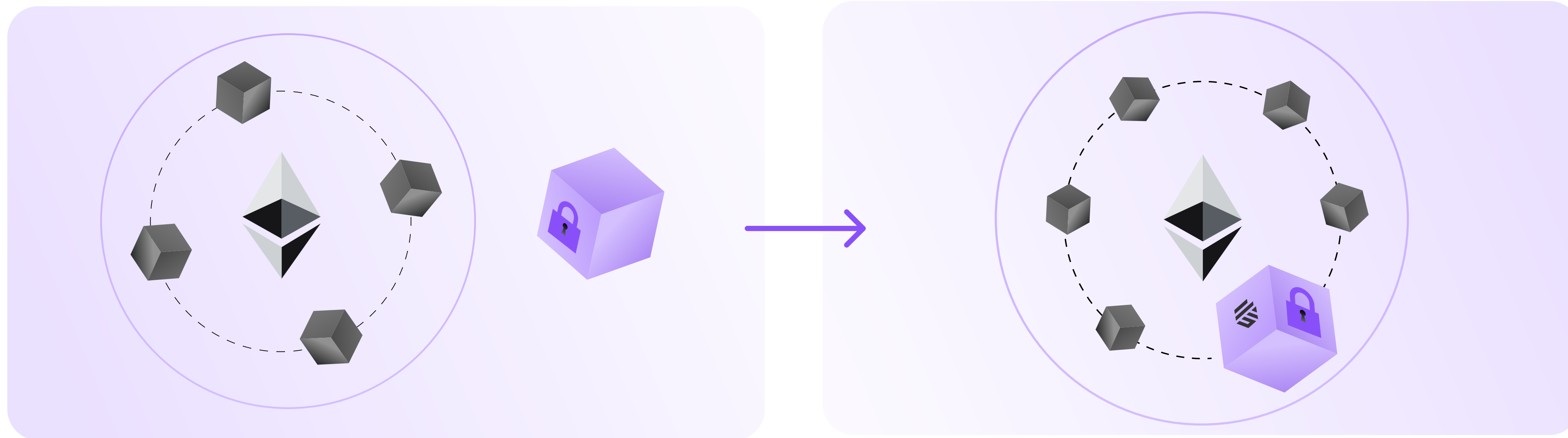
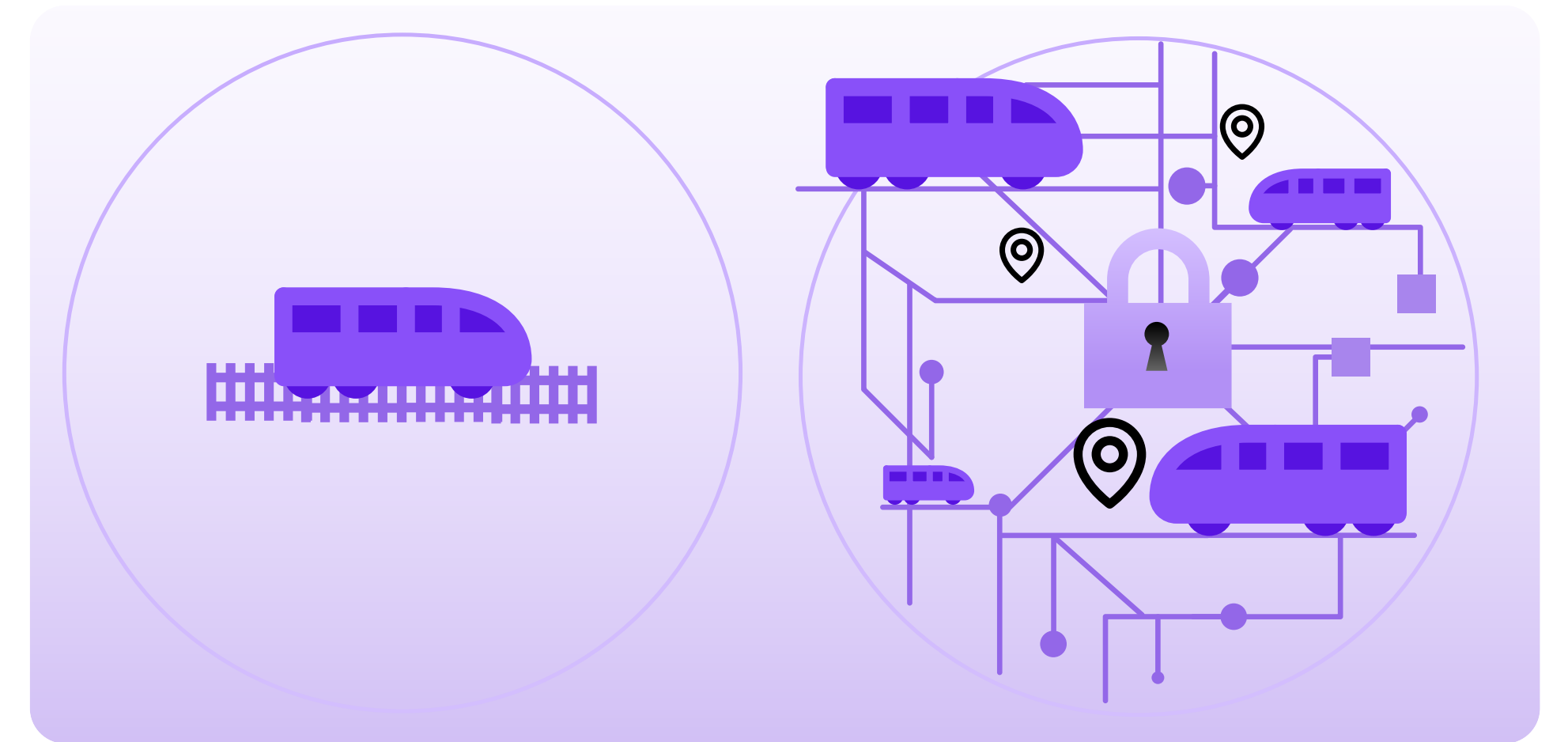
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Private permissioned non-evm blockchain		NO	High	High	Limited	Low	High
Private permissioned evm blockchain		YES	High	High	Limited	Low	Medium-High

# Approaches to enterprise blockchain architecture

	Tech stack example	Interoperability with Ethereum	Operational costs	Operational complexity	Network effects	Decentralization	Intergation with legacy IT systems complexity and costs
Private permissioned non-evm blockchain		NO	High	High	Limited	Low	High
Private permissioned evm blockchain		YES	High	High	Limited	Low	Medium-High
Public permissioned evm blockchain	 CDK Enterprise	YES	Low	Low	Unlimited	High	Low-Medium

# From Private to Public Permissioned

Public permissioned blockchains combine the privacy and control of private networks with the interoperability and scalability of Ethereum, enabling enterprises to move beyond isolated systems into a global, standardized ecosystem.





# Many have started

Public permissioned blockchains are rapidly gaining traction, with leading enterprises already launching or developing their own networks.

## **DAMA 2**

Launched: November 2024

Use case: RWA tokenization platform for wealth managers, fund issuers, and custodians



## **Nightfall, EY**

Launched: June 2019

Use case: Supply Chain & Logistics, Payments, Tokenized Assets & Financial Instruments, Intercompany Settlements



In developement

**Use case:** proprietary Layer2 blockchain, designed for tokenizing real-world assets like US stocks and ETFs



# Nice to meet you, we're Gateway!

Gateway is the infrastructure company behind core protocols including Ethereum, Polygon, Gnosis, and Linea. We provide enterprise-grade Web3 networks and comprehensive platform services including RPC, staking, and advanced tooling while consistently reducing infrastructure costs.

**1'000'000'000**  
transactions processed

**\$1'300'000'000**  
total value locked

**750 MGas/s**

175 stable, 750 at peak loads

**65 talents**  
Distributed globally

 Member of Ethereum Enterprise Alliance

 Member of Linux Foundation Decentralised Trust

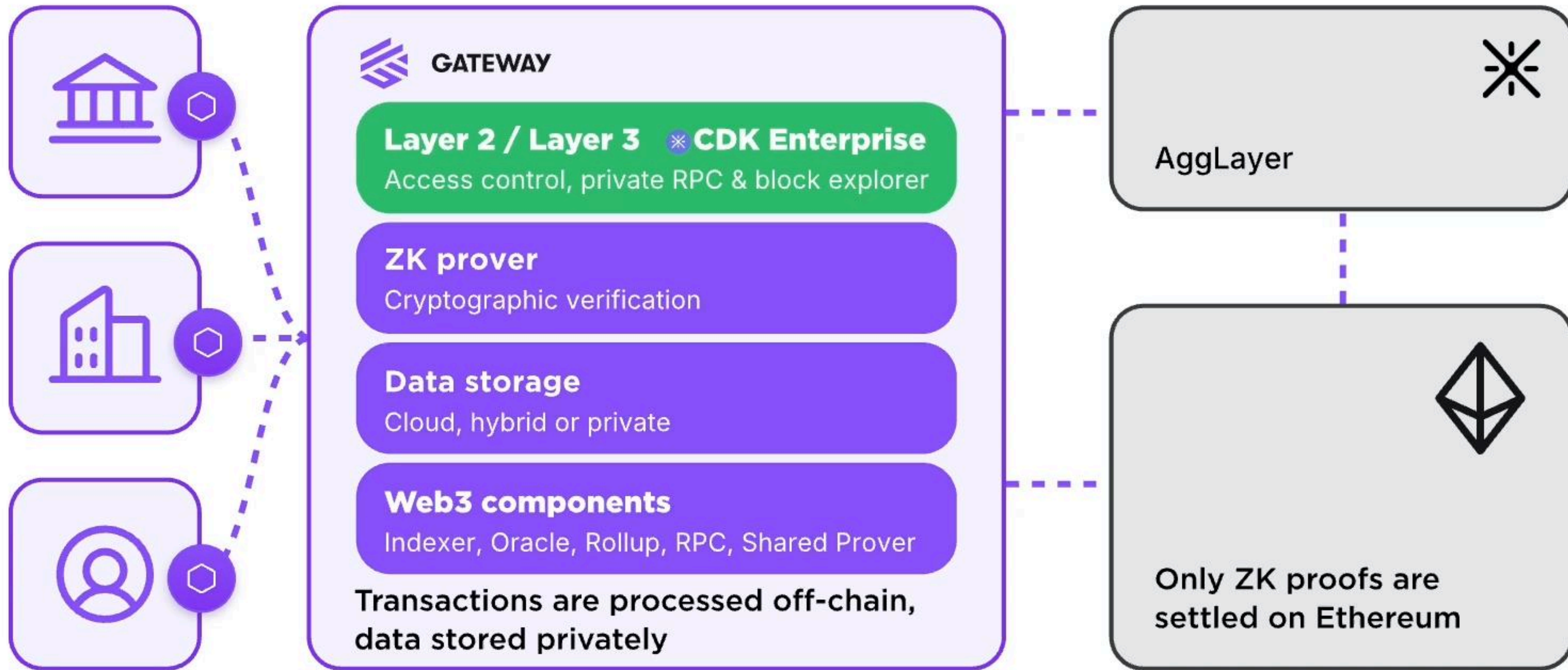


**Core Protocol  
Developers**



# Architecture

Infrastructure as comprehensive and wide as Base,  
and it's private, secure and compliant






# Rollup-as-a-Service Platform

Easy, hassle-free launch with no development effort


← Deploy new network


By Stack


By Use Case




**Digital Bank** ?


Stack  CDK-erigon


Token  POL




**Supply chain** ?


Stack  CDK-erigon


Token  POL




**Gaming** ?


Stack  CDK-erigon


Token  ETH




**Dex** ?


Stack  CDK-erigon


Token  ETH




**Digital passport** ?


Stack  CDK-erigon

Token  POL



**Stablecoin** ?

Stack  CDK-erigon

Token  ETH

**START FREE TRIAL**

3 days, no credit card required

**Summary**

**What's included** ?

✓ Private blockchain network

✓ RPC

✓ Block explorer

✓ Bridge

✓ Analytics

✓ Metamask integration

✓ Hardhat config

✓ Gas settings

✓ Balances

**Extras** ? 3 days trial upon activation

✓ Indexer

✓ Oracle

✓ Account abstraction

✓ Branding

**Payment** ?

Free trial

Pay after trial

Pay now


3 days

\$250 /week

\$0

**Total today**

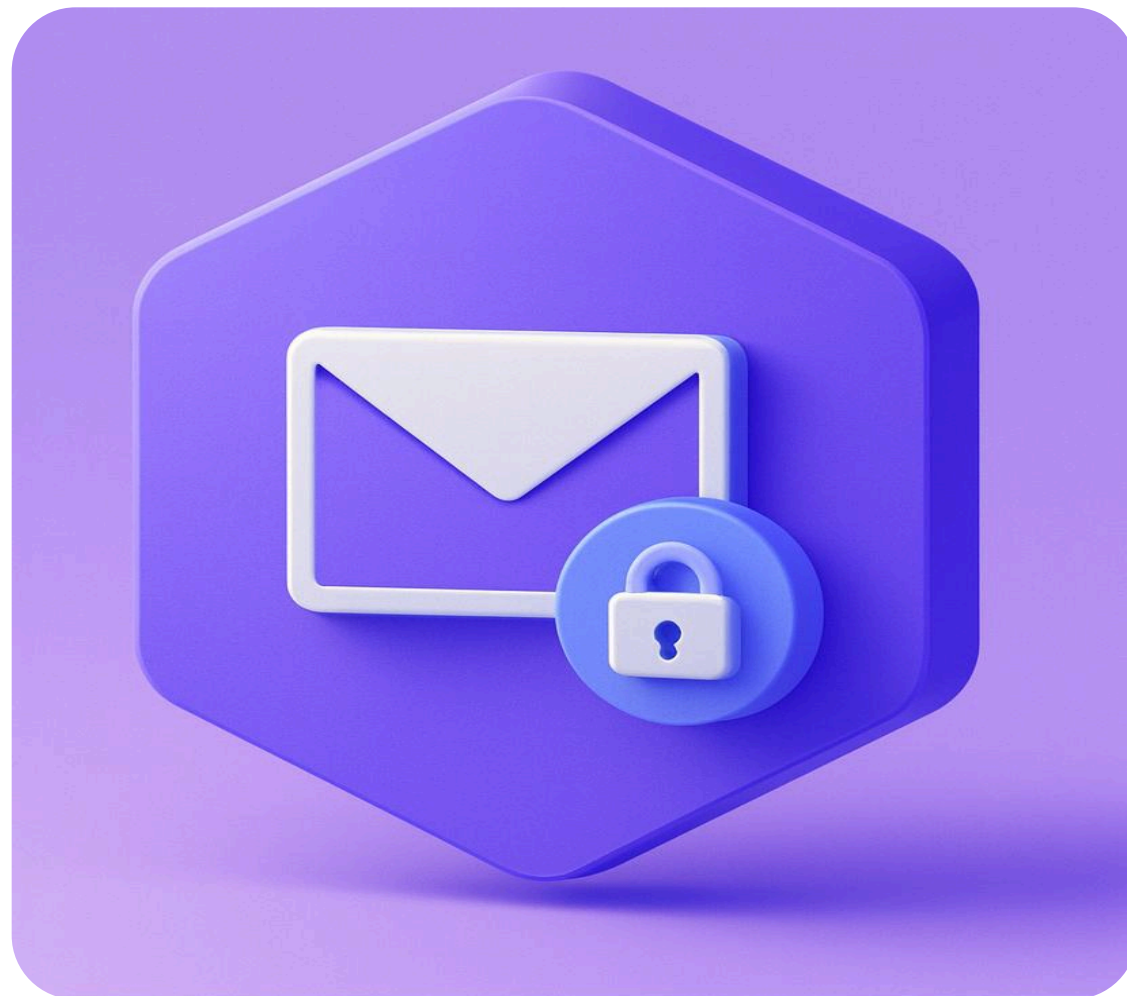
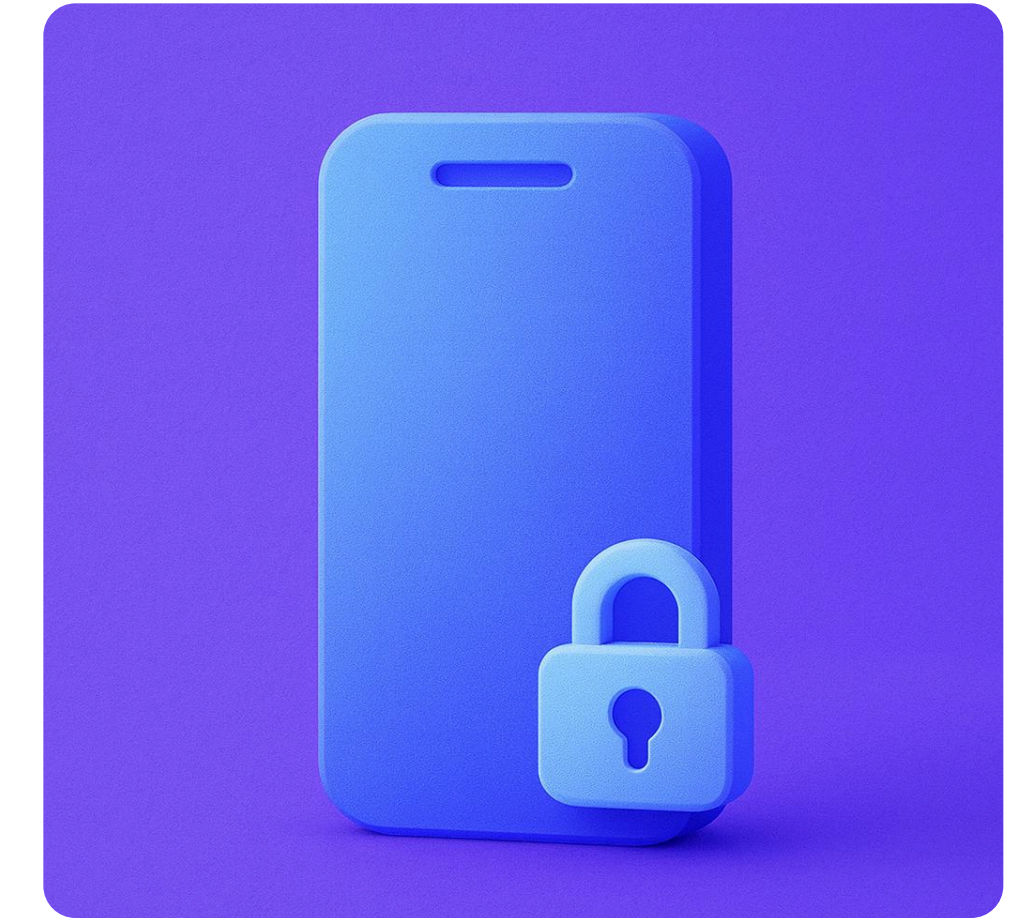
**\$0**

 Gateway FM



# The Privacy Challenge

- Fine-grained role-based access control
- Seamless integration with current IAM systems
- Full transparency to authorized third parties for auditing





# Privacy solutions landscape

- IP Filtering
- Restricted Access to Bridge, RPC, Block Explorer
- Access Control Lists (ACLs)
- RPC API Keys
- Fully Private Data Availability (DA)

**Perimeter privacy**

**Private  
chain**

**ZK-rollup**





# Privacy solutions landscape

- Private token transfers (ERC-20, ERC-721, ERC-1155, ERC-3525)
- x.509 certificate-based participant allowlisting

**Programmable  
Selective disclosure**



**Perimeter privacy**

**Private  
chain**

**Nightfall**

**EY**

**ZK-rollup**

# Privacy solutions landscape

## Self-sovereign identity (SSI)

- Decentralized Identities (DIDs)
- Verifiable Credentials (VCs)
- ZK proofs for Authorization



## Programmable Selective disclosure



## Perimeter privacy

**Private  
chain**

**Nightfall**

**EY**

**ZK-rollup**



# User-friendly experience

- Simple login with Microsoft Entra
- Familiar recovery options
- Session management

**Login in to blockchain apps** using your Microsoft email



Sign in with Microsoft



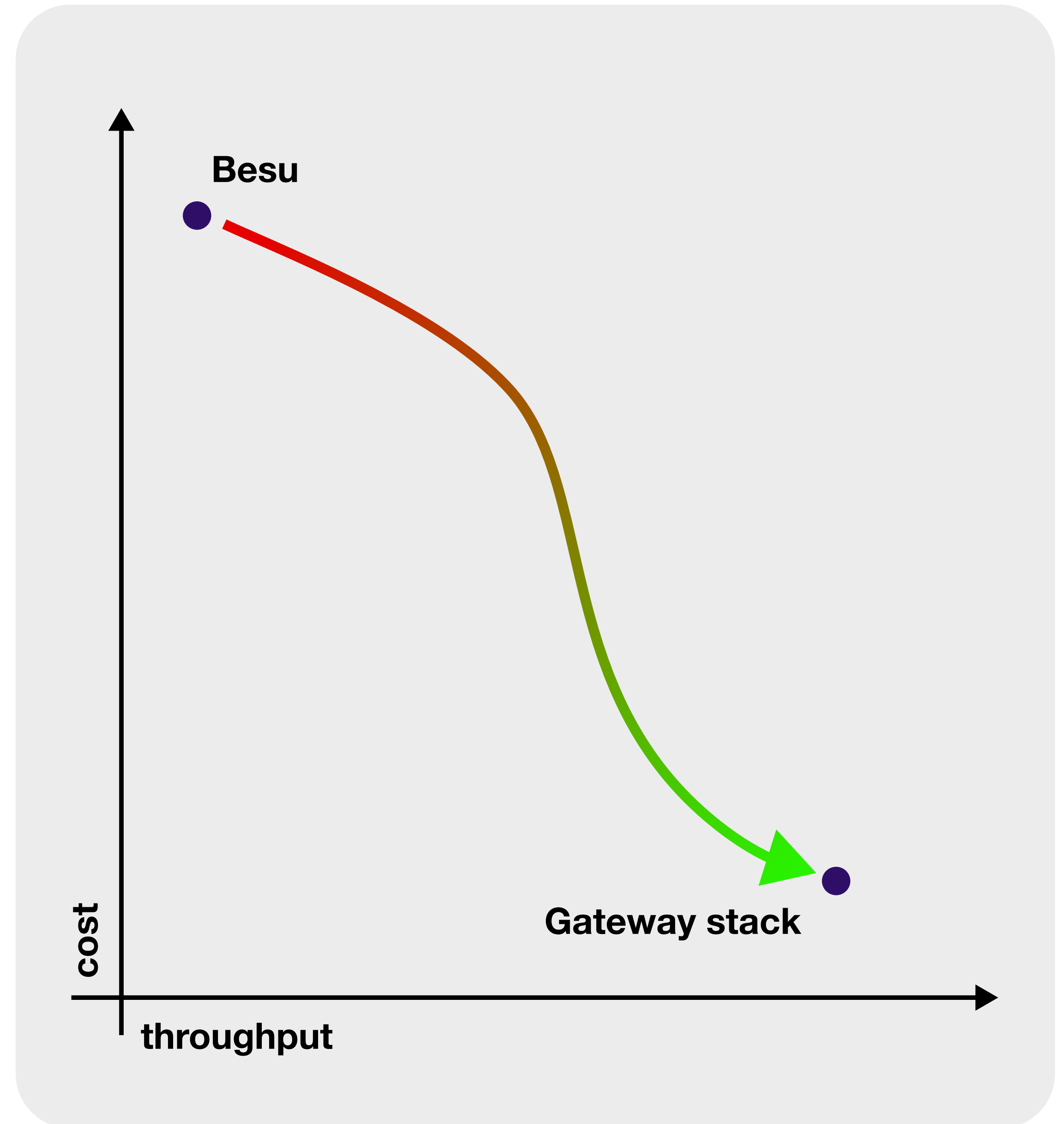
Sign in with Google

# Breaking the Limits of Besu with Gateway stack



# Breaking the Limits of Besu with Gateway Stack

- **Increased throughput**  
50–200 TPS --> 1700 TPS  
with spikes up to 10 000 TPS
- **Costs reduced by 70%+**  
due to a smarter and leaner setup
- **Reduced operational complexity**
- **Next-generation privacy solution**  
ZK-proofs instead of Tesseract
- **Tighter integration with Ethereum ecosystem**
  - Security of the chain guaranteed by Ethereum
  - Support of broad community of engineers
  - Wide choice of tools and components



# Case study. PALM Network

Migrating an operational blockchain network is like changing an engine mid-flight. With extensive research, thorough preparation, and rigorous testing, we achieved a seamless transition to a new chain technology—with zero downtime, no transaction loss, and full preservation of both on-chain state and transaction history.



**Besu**

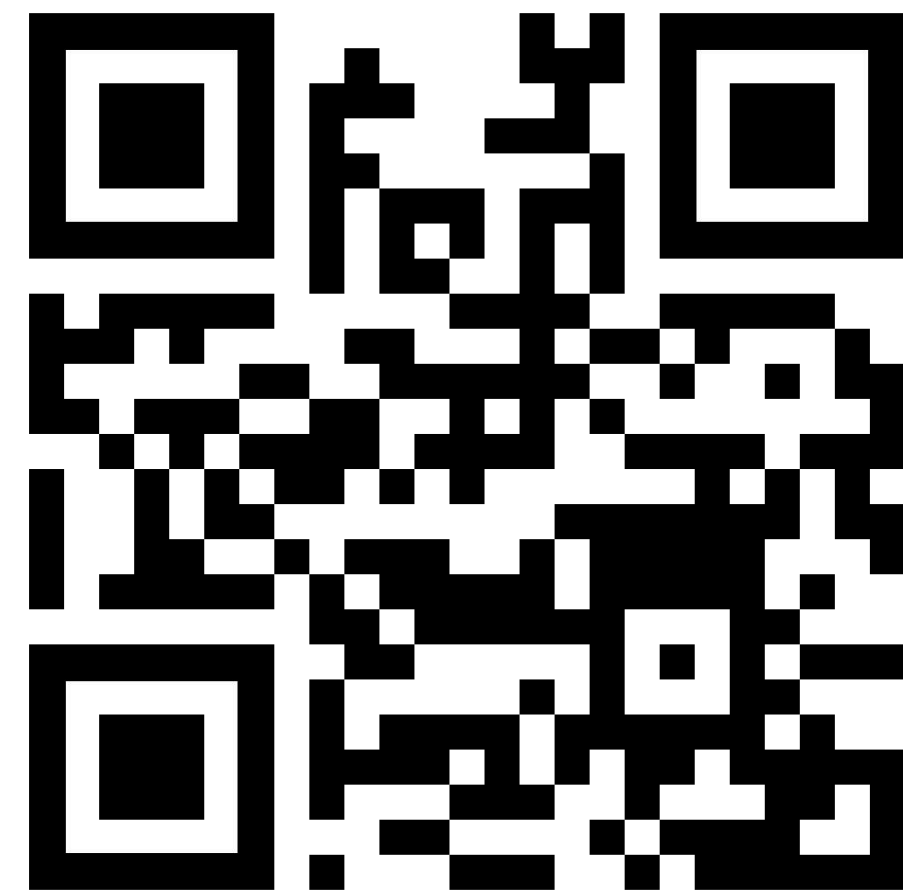
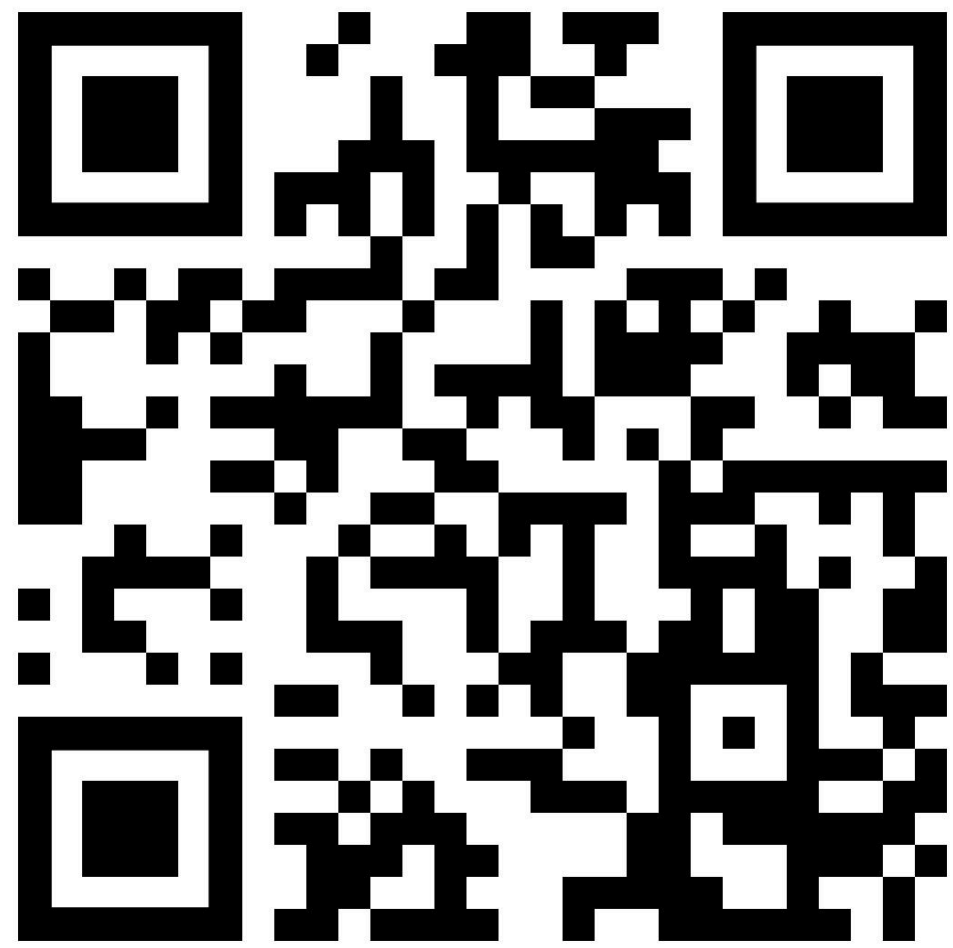
**6 months**

**research, preparation, testing**

**Public permissioned  
L2 chain**

- ✓ Full transaction history preserved
- ✓ Bridges operate uninterrupted
- ✓ Privacy and regulatory compliance maintained





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