Polygon CDK

Zero Knowledge Scaling Solution: Polygon CDK

Gelato pioneers the first public Chain Development Kit (CDK) testnet chain on Polygon, in collaboration with [Astar Network](#) .

Gelato L2 Chains can leverage the Polygon zkEVM execution environment a Layer Two (L2) scaling solution for Ethereum, that utilizes zero-knowledge (ZK) proofs. Its main features are:

Polygon CDK Features

Hyper Scalability

Gelato L2 chains leveraging Polygon CDK benefit from enhanced transaction speed and are fully aligned with Polygon 2.0's vision of a highly scalable ecosystem.

Lower Gas

86% cheaper than Ethereum Mainnet, Polygon zkEVM utilizes ZK proofs and a reduced zkSNARK footprint on L1 for user cost optimization, offering significantly lower transaction costs.

Privacy Options

CDK-developed Gelato chains allow for private app chains, prioritizing privacy. Clients can maintain data confidentiality while benefiting from blockchain technology.

EVM equvivalence

Enables deployment onto the Ethereum Virtual Machine without code changes, ensuring that the vast majority of existing smart contracts, developer tools, and wallets work seamlessly, allowing developers to concentrate on improving code rather than rewriting it.

Security

Polygon zkEVM utilizes ZK proofs to enhance transaction efficiency and throughput, inheriting Ethereum L1's robust security.

Unified Liquidity

Gelato L2 chains developed with Polygon CDK ensure unified liquidity, allowing fluid asset transfers across multiple chains within Polygon 2.0's L2 ecosystem.

Dedicated Data Availability

With a dedicated data availability layer and DAC, Gelato RaaS L2 chains utilizing Polygon's CDK framework offer independent off-chain data access and reliability, ensuring substantial data resilience and integrity.

Composable Interoperability

Gelato RaaS deployed L2 chains utilizing Polygon CDK enjoy enhanced interoperability through the LXLY Bridge, enabling seamless interaction and asset exchange across diverse blockchains.

Near Instant Finality

Gelato RaaS L2 Chains deployed using the Polygon CDK provide near-instant finality and robust security through cryptographic measures, eliminating the need for full nodes.

Independent Data Availability

Gelato provides support for Validium, a dedicated data availability layer for Polygon CDK that offers robust off-chain data access. It enables the launch of high-throughput and very low-cost, ZK-powered Layer 2 chains on the Ethereum network.

For Polygon CDK, Gelato RaaS Supports:

-[Celestia modular data availability network](#)

-[Avail modular data availability network](#)

-[Data Availability Committee (DAC)](#)

Get more information about [Polygon CDK here](#) , or [Schedule call](#) to set up your custom Polygon CDK Gelato L2 testnet.

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