Arbitrum Orbit

Optimistic Scaling Solutions: Arbitrum Orbit

Arbitrum Orbit is an advanced, adaptable, and open-source framework, enabling developers to deploy their own customized Arbitrum Rollup and AnyTrust chains. This solution is tailored for Ethereum's ecosystem, leveraging the unique strengths of Arbitrum's technology. By using Orbit, developers can create chains that meet specific needs with high performance, cost efficiency, and Ethereum compatibility.

Arbitrum Rollup is a protocol implemented by Arbitrum One. It stores raw transaction data on Ethereum's Layer 1 (L1) blockchain. This approach ensures complete security by leveraging Ethereum's security model while improving scalability through off-chain computation.

Arbitrum Orbit Features

Enhanced Throughput and Isolation

Orbit chains offer dedicated throughput and traffic isolation, ensuring reliable gas prices and improved performance for endusers. This is especially beneficial for applications demanding high performance or consistent resource availability.

Versatility and interoperability

Orbit chains can be used for a range of purposes, from hosting a single dApp to an ecosystem of dApps, with the capability to communicate with other Orbit chains.

Cut Customizable Chain Architecture

Orbit's architecture allows for the creation of chains using either Arbitrum Rollup or AnyTrust protocols. This provides developers with the flexibility to choose the optimal proof system for their specific requirements, ensuring effective and efficient operation.

EVM+ Compatibility

Orbit supports EVM+ compatibility via Stylus, enabling the deployment of smart contracts in multiple programming languages without moving away from existing workflows.

Custom Gas Token

Orbit supports the use of alternative ERC-20 tokens for gas fees, allowing seamless integration with different app ecosystems.

Gas Price Stability

Orbit's isolated chains provide more predictable gas prices, enhancing the user experience and cost management for dApps.

Independent Data Availabiliy

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

For Arbitrum orbit, Gelato RaaS Supports: Celestia modular data availability network

-Arbitrum AnyTrust

AnyTrust protocol differs from Rollup by using a Data Availability Committee (DAC) to store raw transaction data. This setup expedites settlement and reduces costs, introducing a slight security trade-off. AnyTrust is a good fit for projects seeking higher performance and lower costs,

Get more information about Arbitrum Orbit, or Schedule call to set up your custom Op Stack Gelato L2 testnet.

<u>Previous OP Stack Next Data Availability</u> Last updated2 months ago On this page *<u>Optimistic Scaling Solutions</u>: <u>Arbitrum Orbit *Independent Data Availability</u>