



رویداد ۹ ژانویه
Jan 9

What are L2 solutions

- Layer 1 blockchain: consensus, execution, immutability, resistance to censorship
- blockchain trilemma: security, scalability and decentralization
- L2 solutions: scalability, off-chain computing

Why L2?

- Crucial for Dapps
- Introducing a new ecosystem
- Become ready for sharding

Types of L2 solutions

- Bitcoin Lightning
- Sidechains
- Plasma
- ZK rollups
- Optimistic rollups

Optimistic Rollups

- Low gas fees
- Increased throughput
- Smart contract capability
- Security (guaranteed by the Ethereum Mainnet)

- Long withdrawal time (challenge periods can last for weeks)
- If a fraudulent transaction is discovered, the rollup will automatically call a fraud-proof and run the transaction's computation using the available written data, leading to long withdrawal times if the transaction is challenged.

ZK Rollups

- Near instant transfers
- Not vulnerable to the attacks that optimistic rollups may be affected by
- Still secure and decentralized

- Validity proofs are extreme to compute for smaller applications with less on-chain activity
- A user can influence transaction ordering
- Some rollups don't offer Ethereum Virtual Machine (EVM) support



11 Best Ethereum Layer 2 Solutions for 2024

L2	Technology	TVL*	Max Daily TPS	30 Day Transactions	30 Days Fees
 ARBITRUM	Optimistic Rollup	8 B	31	22.6 M	5.9 M
OPTIMISM	Optimistic Rollup	4 B	11	9.20 M	3.4 M
 BASE	Optimistic Rollup	600 M	21	7.2 M	1.6 M
 erc	ZK Rollup	500 M	15	930 K	5.7 M
 dYdX	ZK Rollup	350 M	11	12 M	3.6 M
 MANTLE	Optimium	230 M	4	5.4 M	300 k
 Immutable	Validium	200 M	39	7.1 M	N/A
Linea	ZK Rollup	170 M	10	10 M	N/A
 STARKNET	ZK Rollup	160 M	10	12.7 M	N/A
 polygon zkEVM	ZK Rollup	110 M	1.4	1.4 M	3.3 M
 Scroll	ZK Rollup	48 M	5	2.7 M	N/A

Data is approximate and may not reflect real-time values.

*TPS Transactions Per Second.

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L2s for investment?

- TVL
- Roadmap
- Architecture and infrastructure
- Tokenomics

Resources, Tools and Websites

defillama.com

defisafety.com

12beat.com

tokenterminal.com

nansen.ai

12fees.info

dexscreener.com

debank.com

