Introduction

- Alchemy API Reference Overview
- - Chain APIs Overview
- - Enhanced APIs Overview
- Alchemy Quickstart Guide

Resources

- FAQ
- - Feature Support By Chain
- - Throughput
- - Batch Requests
- - Gas Limits
- - Error Reference
- Compute Units
- - Pricing Plans
- - Compute Unit Costs

NFT API

- NFT API Quickstart
- NFT API Endpoints Overview
- NFT API FAQ
- Ownership & Token Gating
- - getNFTsForOwner get
- - getOwnersForNFT get
- - getOwnersForContract get
- - isHolderOfContract get
- - getContractsForOwner get
- - getCollectionsForOwner get
- NFT Metadata Access
- - getNFTMetadata get
- - getNFTMetadataBatch post
- - getContractMetadata get
- - getCollectionMetadata get
- - invalidateContract get
- - getContractMetadataBatch post
- - getNFTsForContract get
- - getNFTsForCollection get
- - searchContractMetadata get
- - refreshNftMetadata post

- Spam Detection
  - getSpamContracts get
  - isSpamContract get
  - isAirdropNFT get
  - reportSpam get
- Rarity Data
  - summarizeNFTAttributes get
  - computeRarity get
- Sales & Marketplace Data
  - getFloorPrice get
  - getNFTSales get
- NFT API V2 to V3 Migration Guide
  - NFT API V2 vs. V3 Endpoint Differences
- NFT API V2 Methods (Older Version)
  - getNFTs get
  - getNFTMetadata get
  - getNFTMetadataBatch post
  - getContractMetadata get
  - getContractMetadataBatch post
  - getNFTsForCollection get
  - getOwnersForToken get
  - getOwnersForCollection get
  - getSpamContracts get
  - isSpamContract get
  - isAirdrop get
  - invalidateContract get
  - getFloorPrice get
  - computeRarity get
  - searchContractMetadata get
  - summarizeNFTAttributes get
  - isHolderOfCollection get
  - getNFTSales get
  - getContractsForOwner get
  - reportSpam get

Transfers API (Tx History)

- Transfers API Quickstart
- Transfers API Endpoints

-
  - alchemy_getAssetTransfers post

Transaction Receipts API

- Transaction Receipts Endpoints
-
  - alchemy_getTransactionReceipts post

Token API

- Token API Quickstart
- Token API Endpoints
-
  - alchemy_getTokenBalances post
-
  - alchemy_getTokenMetadata post
-
  - alchemy_getTokenAllowance post

Alchemy Rollups

- Rollups Quickstart
- Supported Stacks

Subgraphs

- Subgraphs Quickstart
- Supported Subgraph Chains
- Developing a Subgraph
-
  - Graph CLI
-
  - Creating a Subgraph
-
  - Project Structure
-
  - Data Sources
-
  - Writing Mappings
- Moving your Subgraph to Production
-
  - Deploying a Subgraph
-
  - Subgraph Versioning
-
  - Querying a Subgraph
-
  - Deleting a Subgraph
-
  - Direct Database Access
- Community subgraphs

Webhooks

- Notify API Quickstart
-
  - Notify Tutorials and Applications
-
  - Notify API FAQ
- Custom Webhooks Quickstart
-
  - Custom Webhooks FAQ
-
  - Custom Webhooks GraphQL Examples
-

    - Custom Webhook Filters
    - Custom Webhook Variables
- Custom Webhook API Methods
    - Read Variable Elements get
    - Create a Variable post
    - Delete a Variable delete
    - Update a Variable patch
- Notify API Methods
    - Get all webhooks get
    - Get all addresses for an Address Activity webhook get
    - Create webhook post
    - Add and remove webhook addresses patch
    - Replace webhook addresses put
    - Update webhook status put
    - Update webhook NFT filters patch
    - Update NFT metadata webhook filters patch
    - Get all webhook NFT filters get
    - Delete webhook delete
- Webhook Types
    - Custom Webhook
    - Address Activity Webhook
    - Mined Transaction Webhook
    - Dropped Transaction Webhook
    - NFT Activity Webhook
    - NFT Metadata Updates Webhook

Websockets

- Subscription API Quickstart
- Best Practices for Using WebSockets in Web3
- Subscription API Endpoints
    - alchemy_minedTransactions
    - alchemy_pendingTransactions
    - newPendingTransactions
    - newHeads
    - logs

Trace API

- Trace API Quickstart
- Trace API Endpoints

- trace_block post
- trace_call post
- trace_get post
- trace_rawTransaction post
- trace_replayBlockTransactions post
- trace_replayTransaction post
- trace_transaction post
- trace_filter post

- Trace API Resources
  - What are EVM Traces?
  - Trace API vs. Debug API
  - What is trace_transaction?
  - What is trace_block?
  - What is trace_filter?
  - trace_call vs debug_traceCall

Debug API

- Debug API Quickstart
- Debug API Endpoints
  - debug_traceCall post
  - debug_traceTransaction post
  - debug_traceBlockByNumber post
  - debug_traceBlockByHash post

ACCOUNT ABSTRACTION

- Bundler API Quickstart
- Bundler API Endpoints
  - eth_getUserOperationReceipt post
  - eth_supportedEntryPoints post
  - eth_getUserOperationByHash post
  - eth_sendUserOperation post
  - rundler_maxPriorityFeePerGas post
  - eth_estimateUserOperationGas post
- Bundler API Fee Logic
- Bundler RPC Errors
- Factory Addresses
- Gas Manager Coverage API Quickstart
- Gas Manager Coverage API Endpoints
  - alchemy_requestPaymasterAndData post

    - alchemy_requestGasAndPaymasterAndData post
- Gas Manager Coverage API Fee Logic & Usage Limits
- Gas Manager Deployment Addresses
- UserOperation Simulation Endpoints
    - alchemy_simulateUserOperationAssetChanges post
- AA-SDK
- Account Abstraction FAQ

Embedded Accounts

- Accounts API Endpoints
    - Create Account post
    - Send Auth Email post
    - Authenticate User post
    - Get User post
    - Sign Message post
    - Register New Authenticator post

Gas Manager Admin API

- Gas Manager Admin API Quickstart
- Gas Manager Admin API Endpoints
    - Create Policy post
    - Get Policy get
    - Delete Policy delete
    - Replace Policy put
    - Get All Policies get
    - Update Policy Status put
    - Get Policy Stats get
    - Get Sponsorships get

Alchemy Transact

- Transact Quickstart
- Reinforced Transactions
- Transaction Simulation
    - Asset Changes
    - Execution Simulation
    - Bundle Simulation
    - Transaction Simulation Examples
    - Transaction Simulation FAQs
- Transaction Simulation Endpoints
    - alchemy_simulateAssetChanges post
    - alchemy_simulateAssetChangesBundle post

- alchemy_simulateExecution post
- alchemy_simulateExecutionBundle post
- Gas Optimized Transactions
- alchemy_getGasOptimizedTransactionStatus post
- alchemy_sendGasOptimizedTransaction post
- Private Transactions
- eth_cancelPrivateTransaction post
- eth_sendPrivateTransaction post

Alchemy SDK

- Alchemy SDK Quickstart
- How to use Alchemy SDK with Typescript
- Examples Using the Alchemy SDK
- How to Manage a Multichain Project Using Alchemy SDK
- Alchemy SDK Surface Overview
- Alchemy SDK vs. Raw API Methods
- SDK Core Methods
- call - SDK
- send - SDK
- estimateGas - SDK
- findContractDeployer - SDK
- getBalance - SDK
- getBlock - SDK
- getBlockNumber - SDK
- getBlockWithTransactions - SDK
- getCode - SDK
- getFeeData - SDK
- getGasPrice - SDK
- getLogs - SDK
- getStorageAt - SDK
- getTokenBalances - SDK
- getTokenMetadata - SDK
- getTokensForOwner - SDK
- getTransactionCount - SDK
- getTransactionReceipt - SDK
- getTransactionReceipts - SDK
- isContractAddress - SDK

    - getAssetTransfers - SDK
- SDK NFT Methods
    - getNftsForOwner - SDK
    - getNftMetadata -SDK
    - getNftMetadataBatch - SDK
    - refreshNftMetadata - SDK
    - getNftSales - SDK
    - searchContractMetadata - SDK
    - summarizeNftAttributes - SDK
    - getNftsForOwnerIterator - SDK
    - getNftsForContractIterator - SDK
    - getContractMetadata - SDK
    - getNftsForContract -SDK
    - getTransfersForOwner - SDK
    - getTransfersForContract - SDK
    - getMintedNfts - SDK
    - getOwnersForNft - SDK
    - getOwnersForContract - SDK
    - getSpamContracts -SDK
    - isSpamContract - SDK
    - refreshContract - SDK
    - getContractsForOwner - SDK
    - getFloorPrice - SDK
    - computeRarity - SDK
    - verifyNftOwnership - SDK
- SDK Transact Methods
    - getTransaction - SDK
    - sendTransaction - SDK
    - sendPrivateTransaction - SDK
    - cancelPrivateTransaction - SDK
    - waitForTransaction - SDK
    - estimateGas - SDK
    - getMaxPriorityFeePerGas - SDK
    - simulateAssetChanges - SDK
    - simulateAssetChangesBundle - SDK

- simulateExecution - SDK
- simulateExecutionBundle - SDK
- SDK Debug Methods
- traceCall - SDK
- traceTransaction - SDK
- traceBlock - SDK
- SDK Notify Methods
- getAllWebhooks - SDK
- getAddresses - SDK
- getNftFilters - SDK
- createWebhook - SDK
- updateWebhook - SDK
- deleteWebhook - SDK
- SDK WebSockets Endpoints
- SDK Ethers Utils
- arrayify
- formatUnits
- concat
- hexConcat
- dnsEncode
- hexDataLength
- formatEther
- hexDataSlice
- hexStripZeros
- hashMessage
- isHexString
- isValidName
- joinSignature
- splitSignature
- toUtf8Bytes
- hexValue
- toUtf8String
- hexZeroPad
- zeroPad
- hexlify
- id

- isBytes
- isBytesLike
- Interface
- namehash
- parseEther
- parseUnits
- stripZeros

Alchemy SDK V2 to V3 Migration Guide

- Alchemy SDK V2 vs. V3 Method Differences

SDK V2 Methods

- call - SDK
- getAssetTransfers - SDK
- getMintedNfts - SDK
- verifyNftOwnership - SDK
- getOwnersForNft - SDK
- computeRarity - SDK
- getTransfersForContract - SDK
- getNftsForOwner - SDK
- refreshContract - SDK
- getOwnersForContract - SDK
- getFloorPrice - SDK
- isSpamContract - SDK
- findContractDeployer -SDK
- getSpamContracts - SDK
- getGasPrice - SDK
- getBalance - SDK
- getBlock -SDK
- getBlockWithTransactions - SDK
- estimateGas - SDK
- getBlockNumber - SDK
- getCode - SDK
- getFeeData - SDK
- getLogs - SDK
- getNftMetadataBatch - SDK
- getTokensForOwner - SDK

- getStorageAt - SDK
- getTokenBalances - SDK
- getTransactionCount - SDK
- getTokenMetadata - SDK
- getTransactionReceipt - SDK
- send - SDK
- getTransactionReceipts - SDK
- getTransaction - SDK
- isContractAddress - SDK
- getNftMetadata - SDK
- getNftSales - SDK
- cancelPrivateTransaction - SDK
- sendPrivateTransaction - SDK
- traceTransaction - SDK
- simulateExecutionBundle - SDK
- simulateExecution - SDK
- getMaxPriorityFeePerGas - SDK
- simulateAssetChangesBundle - SDK
- estimateGas - SDK
- simulateAssetChanges - SDK
- traceBlock - SDK
- waitForTransaction - SDK
- traceCall - SDK
- sendTransaction - SDK
- updateWebhook - SDK
- refreshNftMetadata -SDK
- createWebhook - SDK
- getNftFilters - SDK
- getAddresses - SDK
- summarizeNftAttributes - SDK
- deleteWebhook - SDK
- searchContractMetadata - SDK
- getAllWebhooks - SDK
- getNftsForOwnerIterator - SDK

- getNftsForContractIterator -SDK
- getContractMetadata - SDK
- getTransfersForOwner - SDK
- getNftsForContract - SDK

Ethereum

- Ethereum API Quickstart
- Ethereum API FAQ
  - Ethereum Developer Guide to the Merge
  - How to decode an eth_call response
  - How do I distinguish between a contract address and a wallet address?
- Ethereum API Endpoints
  - eth_blockNumber - Ethereum post
  - eth_getBalance - Ethereum post
  - eth_getLogs - Ethereum post
  - eth_chainId - Ethereum post
  - eth_getBlockByNumber - Ethereum post
  - eth_accounts - Ethereum post
  - eth_feeHistory - Ethereum post
  - eth_estimateGas - Ethereum post
  - eth_gasPrice - Ethereum post
  - eth_getBlockTransactionCountByHash - Ethereum post
  - eth_getBlockTransactionCountByNumber - Ethereum post
  - eth_getCode - Ethereum post
  - eth_getProof - Ethereum post
  - eth_getStorageAt - Ethereum post
  - eth_getTransactionByBlockHashAndIndex - Ethereum post
  - eth_getTransactionByHash - Ethereum post
  - eth_getTransactionCount - Ethereum post
  - eth_getTransactionReceipt - Ethereum post
  - eth_getUncleByBlockHashAndIndex - Ethereum post
  - eth_getUncleByBlockNumberAndIndex - Ethereum post
  - eth_getUncleCountByBlockHash - Ethereum post
  - eth_getUncleCountByBlockNumber - Ethereum post
  - eth_maxPriorityFeePerGas - Ethereum post
  - eth_protocolVersion - Ethereum post

- eth_sendRawTransaction - Ethereum post
- net_listening - Ethereum post
- net_version - Ethereum post
- web3_clientVersion - Ethereum post
- web3_sha3 - Ethereum post
- eth_getTransactionByBlockNumberAndIndex - Ethereum post
- eth_call - Ethereum post
- eth_getBlockByHash - Ethereum post
- eth_createAccessList - Ethereum post
- eth_newFilter - Ethereum post
- eth_getFilterChanges - Ethereum post
- eth_getFilterLogs - Ethereum post
- eth_newBlockFilter - Ethereum post
- eth_newPendingTransactionFilter - Ethereum post
- eth_uninstallFilter - Ethereum post
- eth_getBlockReceipts - Ethereum post
- eth_subscribe
- eth_unsubscribe

Polygon PoS

- Polygon PoS API Quickstart
  - Polygon SDK Examples
- Polygon PoS API FAQ
- Polygon PoS API Endpoints
  - bor_getAuthor - Polygon PoS post
  - bor_getCurrentProposer - Polygon PoS post
  - bor_getCurrentValidators - Polygon PoS post
  - bor_getRootHash - Polygon PoS post
  - eth_accounts - Polygon PoS post
  - eth_call - Polygon PoS post
  - eth_chainId - Polygon PoS post
  - eth_estimateGas - Polygon PoS post
  - eth_gasPrice - Polygon PoS post
  - eth_getBalance - Polygon PoS post
  - eth_getBlockByHash - Polygon PoS post
  - eth_getBlockByNumber - Polygon PoS post

- eth_getBlockTransactionCountByHash - Polygon PoS post
- eth_getBlockTransactionCountByNumber - Polygon PoS post
- eth_getCode - Polygon PoS post
- eth_getFilterChanges - Polygon PoS post
- eth_getFilterLogs - Polygon PoS post
- eth_getLogs - Polygon PoS post
- eth_getRootHash - Polygon PoS post
- eth_getSignersAtHash - Polygon PoS post
- eth_getStorageAt - Polygon PoS post
- eth_getTransactionByBlockHashAndIndex - Polygon PoS post
- eth_getTransactionByBlockNumberAndIndex - Polygon PoS post
- eth_getTransactionByHash - Polygon PoS post
- eth_getTransactionCount - Polygon PoS post
- eth_getTransactionReceipt - Polygon PoS post
- eth_getTransactionReceiptsByBlock - Polygon PoS post
- eth_sendRawTransaction - Polygon PoS post
- eth_uninstallFilter - Polygon PoS post
- net_listening - Polygon PoS post
- eth_getUncleCountByBlockHash - Polygon PoS post
- eth_getUncleCountByBlockNumber - Polygon PoS post
- eth_newBlockFilter - Polygon PoS post
- eth_newFilter - Polygon PoS post
- eth_newPendingTransactionFilter - Polygon PoS post
- web3_clientVersion - Polygon PoS post
- eth_createAccessList - Polygon PoS post
- eth_blockNumber - Polygon PoS post
- bor_getSignersAtHash - Polygon PoS post
- net_version - Polygon PoS post
- eth_getProof - Polygon PoS post
- eth_getUncleByBlockNumberAndIndex - Polygon PoS post
- eth_maxPriorityFeePerGas - Polygon PoS post
- eth_getBlockReceipts - Polygon PoS post
- eth_subscribe - Polygon PoS
- eth_unsubscribe - Polygon PoS

Polygon zkEVM

- Polygon zkEVM API Quickstart
- Polygon zkEVM API FAQ
  - What is the difference between Polygon zkEVM and Ethereum?
  - What is the difference between Polygon zkEVM and Polygon PoS?
- Polygon zkEVM Endpoints
  - eth_getTransactionCount - Polygon zkEVM post
  - eth_call - Polygon zkEVM post
  - eth_chainId - Polygon zkEVM post
  - eth_newBlockFilter - Polygon zkEVM post
  - eth_estimateGas - Polygon zkEVM post
  - eth_newFilter - Polygon zkEVM post
  - eth_gasPrice - Polygon zkEVM post
  - eth_sendRawTransaction - Polygon zkEVM post
  - eth_getBalance - Polygon zkEVM post
  - eth_uninstallFilter - Polygon zkEVM post
  - eth_getBlockByHash - Polygon zkEVM post
  - net_version - Polygon zkEVM post
  - eth_getBlockByNumber - Polygon zkEVM post
  - web3_clientVersion - Polygon zkEVM post
  - eth_getBlockTransactionCountByHash - Polygon zkEVM post
  - eth_getBlockTransactionCountByNumber - Polygon zkEVM post
  - zkevm_batchNumber - Polygon zkEVM post
  - eth_getCode - Polygon zkEVM post
  - eth_getFilterChanges - Polygon zkEVM post
  - eth_getFilterLogs - Polygon zkEVM post
  - zkevm_getBatchByNumber - Polygon zkEVM post
  - eth_getLogs - Polygon zkEVM post
  - zkevm_getBroadcastURI - Polygon zkEVM post
  - eth_getStorageAt - Polygon zkEVM post
  - zkevm_isBlockConsolidated - Polygon zkEVM post
  - eth_getTransactionByBlockHashAndIndex - Polygon zkEVM post
  - zkevm_isBlockVirtualized - Polygon zkEVM post
  - eth_getTransactionByBlockNumberAndIndex - Polygon zkEVM post
  - zkevm_verifiedBatchNumber - Polygon zkEVM post

- eth_getTransactionByHash - Polygon zkEVM post
- zkevm_virtualBatchNumber - Polygon zkEVM post
- eth_getCompilers - Polygon zkEVM post
- eth_getUncleByBlockHashAndIndex - Polygon zkEVM post
- eth_getUncleByBlockNumberAndIndex - Polygon zkEVM post
- eth_getUncleCountByBlockHash - Polygon zkEVM post
- eth_getUncleCountByBlockNumber - Polygon zkEVM post
- eth_protocolVersion - Polygon zkEVM post
- eth_blockNumber - Polygon zkEVM post
- eth_getTransactionReceipt - Polygon zkEVM post
- zkevm_batchNumberByBlockNumber - Polygon zkEVM post
- zkevm_consolidatedBlockNumber - Polygon zkEVM post
- zkevm_estimateFee API - Polygon zkEVM post
- zkevm_estimateGasPrice API - Polygon zkEVM post

Arbitrum

- Arbitrum API Quickstart
- Arbitrum SDK Examples
- Arbitrum API FAQ
- Arbitrum vs. Ethereum API Differences
- Arbitrum API Endpoints
- eth_call - Arbitrum post
- eth_estimateGas - Arbitrum post
- eth_accounts - Arbitrum post
- eth_blockNumber - Arbitrum post
- eth_chainId - Arbitrum post
- eth_gasPrice - Arbitrum post
- eth_getBalance - Arbitrum post
- eth_getBlockTransactionCountByHash - Arbitrum post
- eth_getBlockTransactionCountByNumber - Arbitrum post
- eth_getCode - Arbitrum post
- eth_getFilterChanges - Arbitrum post
- eth_getFilterLogs - Arbitrum post
- eth_getLogs - Arbitrum post
- eth_getStorageAt - Arbitrum post
- eth_getTransactionByBlockHashAndIndex - Arbitrum post

- eth_getTransactionCount - Arbitrum post
- eth_getUncleByBlockNumberAndIndex - Arbitrum post
- eth_getUncleCountByBlockHash - Arbitrum post
- eth_getUncleCountByBlockNumber - Arbitrum post
- eth_newBlockFilter - Arbitrum post
- eth_newFilter - Arbitrum post
- eth_newPendingTransactionFilter - Arbitrum post
- eth_uninstallFilter - Arbitrum post
- net_listening - Arbitrum post
- net_version - Arbitrum post
- web3_clientVersion - Arbitrum post
- web3_sha3 - Arbitrum post
- eth_sendRawTransaction - Arbitrum post
- eth_createAccessList - Arbitrum post
- eth_maxPriorityFeePerGas - Arbitrum post
- eth_getBlockByHash - Arbitrum post
- eth_getBlockByNumber - Arbitrum post
- eth_getTransactionByBlockNumberAndIndex - Arbitrum post
- eth_getTransactionByHash - Arbitrum post
- eth_getProof - Arbitrum post
- eth_getTransactionReceipt - Arbitrum post
- eth_getUncleByBlockHashAndIndex - Arbitrum post
- eth_getBlockReceipts - Arbitrum post
- eth_feeHistory - Arbitrum post
- eth_subscribe
- eth_unsubscribe

Optimism

- Optimism API Quickstart
- Optimism SDK Examples
- Optimism API FAQ
- Optimism Error Codes
- Optimism API Endpoints
- eth_call - Optimism post
- eth_estimateGas - Optimism post
- eth_accounts - Optimism post

- eth_blockNumber - Optimism post
- eth_chainId - Optimism post
- eth_gasPrice - Optimism post
- eth_getBalance - Optimism post
- eth_getBlockTransactionCountByHash - Optimism post
- eth_getBlockTransactionCountByNumber - Optimism post
- eth_getCode - Optimism post
- eth_getFilterChanges - Optimism post
- eth_getFilterLogs - Optimism post
- eth_getLogs - Optimism post
- eth_getStorageAt - Optimism post
- eth_getTransactionByBlockHashAndIndex - Optimism post
- eth_getTransactionByBlockNumberAndIndex - Optimism post
- eth_getTransactionByHash - Optimism post
- eth_getTransactionCount - Optimism post
- eth_getTransactionReceipt - Optimism post
- eth_getUncleByBlockHashAndIndex - Optimism post
- eth_getUncleByBlockNumberAndIndex - Optimism post
- eth_getUncleCountByBlockHash - Optimism post
- eth_getUncleCountByBlockNumber - Optimism post
- eth_newBlockFilter - Optimism post
- eth_newFilter - Optimism post
- eth_newPendingTransactionFilter - Optimism post
- eth_protocolVersion - Optimism post
- eth_sendRawTransaction - Optimism post
- eth_syncing - Optimism post
- eth_uninstallFilter - Optimism post
- net_listening - Optimism post
- net_version - Optimism post
- web3_clientVersion - Optimism post
- web3_sha3 - Optimism post
- eth_getBlockByHash - Optimism post
- eth_getBlockByNumber - Optimism post
- eth_getProof - Optimism post

- eth_getBlockReceipts - Optimism post
- eth_subscribe
- eth_unsubscribe

Base

- Base API Quickstart
- Base API FAQ
- Base API Endpoints
- eth_accounts - Base post
- eth_blockNumber - Base post
- eth_call - Base post
- eth_chainId - Base post
- eth_estimateGas - Base post
- eth_feeHistory - Base post
- eth_gasPrice - Base post
- eth_getBalance - Base post
- eth_getBlockByHash - Base post
- eth_getBlockByNumber - Base post
- eth_getBlockTransactionCountByHash - Base post
- eth_getBlockTransactionCountByNumber - Base post
- eth_getCode - Base post
- eth_getFilterChanges - Base post
- eth_getFilterLogs - Base post
- eth_getLogs - Base post
- eth_getProof - Base post
- eth_getStorageAt - Base post
- eth_getTransactionByBlockHashAndIndex - Base post
- eth_getTransactionByBlockNumberAndIndex - Base post
- eth_getTransactionByHash - Base post
- eth_getTransactionCount - Base post
- eth_getTransactionReceipt - Base post
- eth_getUncleByBlockHashAndIndex - Base post
- eth_getUncleByBlockNumberAndIndex - Base post
- eth_getUncleCountByBlockHash - Base post
- eth_getUncleCountByBlockNumber - Base post
- eth_maxPriorityFeePerGas - Base post

- eth_newBlockFilter - Base post
- eth_newFilter - Base post
- eth_newPendingTransactionFilter - Base post
- eth_protocolVersion - Base post
- eth_sendRawTransaction - Base post
- eth_syncing - Base post
- eth_uninstallFilter - Base post
- net_listening - Base post
- web3_sha3 - Base post
- eth_getBlockReceipts - Base post

✻ Solana

- Solana API Quickstart
- Solana API FAQ
- Solana API Endpoints
- getAccountInfo post
- simulateTransaction post
- getBalance post
- getBlock post
- getBlockCommitment post
- getBlockProduction post
- getBlocks post
- getBlocksWithLimit post
- getBlockTime post
- getClusterNodes post
- getEpochInfo post
- getEpochSchedule post
- getFeeForMessage post
- getFirstAvailableBlock post
- getGenesisHash post
- getHealth post
- getHighestSnapshotSlot post
- getIdentity post
- getInflationGovernor post
- getInflationRate post
- getInflationReward post

- getLargestAccounts post
- getMaxRetransmitSlot post
- getMaxShredInsertSlot post
- getMinimumBalanceForRentExemption post
- getMultipleAccounts post
- getProgramAccounts post
- getRecentPerformanceSamples post
- getSignaturesForAddress post
- getSignatureStatuses post
- getSlot post
- getSlotLeader post
- getSlotLeaders post
- getSupply post
- getTokenAccountBalance post
- getTokenAccountsByOwner post
- getTokenSupply post
- getTransaction post
- getVersion post
- getVoteAccounts post
- isBlockhashValid post
- minimumLedgerSlot post
- sendTransaction post
- requestAirdrop post
- getBlockHeight post
- getRecentBlockhash post
- getRecentPrioritizationFees post

Astar

- Astar API Quickstart
- Astar API FAQ
- Astar API Endpoints
- eth_accounts - Astar post
- eth_getTransactionReceipt - Astar post
- eth_maxPriorityFeePerGas - Astar post
- eth_blockNumber - Astar post
- eth_call - Astar post

- eth_chainId - Astar post
- eth_gasPrice - Astar post
- eth_getBalance - Astar post
- eth_getBlockByHash - Astar post
- eth_getBlockByNumber - Astar post
- eth_getBlockTransactionCountByHash - Astar post
- eth_getBlockTransactionCountByNumber - Astar post
- eth_getCode - Astar post
- eth_getStorageAt - Astar post
- eth_getTransactionByBlockHashAndIndex - Astar post
- eth_getTransactionByBlockNumberAndIndex - Astar post
- eth_getTransactionByHash - Astar post
- eth_getTransactionCount - Astar post
- eth_getUncleByBlockNumberAndIndex - Astar post
- eth_sendRawTransaction - Astar post
- net_version - Astar post
- web3_clientVersion - Astar post
- web3_sha3 - Astar post
- eth_getLogs - Astar post
- eth_getFilterChanges - Astar post
- eth_getFilterLogs - Astar post
- eth_newFilter - Astar post
- eth_newPendingTransactionFilter - Astar post
- eth_uninstallFilter - Astar post
- eth_newBlockFilter - Astar post
- eth_estimateGas - Astar post
- eth_getBlockReceipts - Astar post
- eth_subscribe
- eth_unsubscribe

STARKNET

- Starknet API Quickstart
- Starknet API FAQ
- Starknet API Endpoints
- starknet_addDeclareTransaction post
- starknet_getClassAt post

- starknet_addDeployAccountTransaction post
- starknet_getClassHashAt post
- starknet_addInvokeTransaction post
- starknet_getEvents post
- starknet_blockHashAndNumber post
- starknet_getNonce post
- starknet_blockNumber post
- starknet_getStateUpdate post
- starknet_call post
- starknet_getStorageAt post
- starknet_chainId post
- starknet_getTransactionByBlockIdAndIndex post
- starknet_estimateFee post
- starknet_getTransactionByHash post
- starknet_getBlockTransactionCount post
- starknet_getTransactionReceipt post
- starknet_getBlockWithTxHashes post
- starknet_pendingTransactions post
- starknet_getBlockWithTxs post
- starknet_syncing post
- starknet_getClass post
- starknet_estimateMessageFee post

zksync

- zkSync Era API Quickstart
- zkSync Era API FAQ
- zkSync Era API Endpoints
- eth_accounts - zkSync post
- eth_blockNumber - zkSync post
- eth_call - zkSync post
- eth_chainId - zkSync post
- eth_createAccessList - zkSync post
- eth_estimateGas - zkSync post
- eth_feeHistory - zkSync post
- eth_gasPrice - zkSync post
- eth_getBalance - zkSync post

- eth_getBlockByHash - zkSync post
- eth_getBlockByNumber - zkSync post
- eth_getBlockTransactionCountByHash - zkSync post
- eth_getBlockTransactionCountByNumber - zkSync post
- eth_getCode - zkSync post
- eth_getFilterChanges - zkSync post
- eth_getFilterLogs - zkSync post
- eth_getLogs - zkSync post
- eth_getProof - zkSync post
- eth_getStorageAt - zkSync post
- eth_getTransactionByBlockHashAndIndex - zkSync post
- eth_getTransactionByBlockNumberAndIndex - zkSync post
- eth_getTransactionByHash - zkSync post
- eth_getTransactionCount - zkSync post
- eth_getTransactionReceipt - zkSync post
- eth_getUncleByBlockHashAndIndex - zkSync post
- eth_getUncleByBlockNumberAndIndex - zkSync post
- eth_getUncleCountByBlockHash - zkSync post
- eth_getUncleCountByBlockNumber - zkSync post
- eth_maxPriorityFeePerGas - zkSync post
- eth_newBlockFilter - zkSync post
- eth_newFilter - zkSync post
- eth_newPendingTransactionFilter - zkSync post
- eth_protocolVersion - zkSync post
- eth_sendRawTransaction - zkSync post
- eth_uninstallFilter - zkSync post
- net_listening - zkSync post
- net_version - zkSync post
- web3_clientVersion - zkSync post
- web3_sha3 - zkSync post
- zks_estimateFee - zkSync post
- zks_estimateGasL1ToL2 - zkSync post
- zks_getAllAccountBalances - zkSync post
- zks_getBlockDetails - zkSync post

- zks_getBridgeContracts - zkSync post
- zks_getBytecodeByHash - zkSync post
- zks_getL1BatchBlockRange - zkSync post
- zks_getL1BatchDetails - zkSync post
- zks_getL2ToL1LogProof - zkSync post
- zks_getL2ToL1MsgProof - zkSync post
- zks_getMainContract - zkSync post
- zks_getProof - zkSync post
- zks_getRawBlockTransactions - zkSync post
- zks_getTestnetPaymaster - zkSync post
- zks_getTransactionDetails - zkSync post
- zks_L1BatchNumber - zkSync post
- zks_L1ChainId - zkSync post
- eth_getBlockReceipts - zkSync post

Bundler RPC Errors

Learn about the different Bundler error codes.

This document provides a list of the JSON-RPC errors that you might encounter when using the Bundler API. These are in addition to thestandard JSON-RPC error codes returned by a bad method call.

-32500

: Rejected by EntryPoint’s simulateValidation

- Description
- : The
- userOp
- is rejected by entryPoint's
- simulateValidation
- , during account creation or validation. The
- -32500
- error code may be accompanied by an additionalAAxx revert code
- provided by the EntryPoint to give additional guidance.

Data Fields :

- reason
- : Optional string providing the main reason for the rejection.
- inner_reason
- : Optional string providing additional details for the rejection.
- revert_data
- : Optional bytes containing additional data related to the rejection.

-32501

: Rejected by paymaster's validatePaymasterUserOp

- Description
- : The
- userOp
- is rejected by paymaster's
- validatePaymasterUserOp
- .

Data Fields :

- paymaster
- : Address of the paymaster.
- reason
- : String providing the reason for the rejection.

-32502

: Opcode violation

- Description
- : The
- userOp
- does an Opcode violation or tries to access inaccessible storage. Before submitting
- userOps
- , bundlers must make sure
- userOps
- don't grief the bundler by accessing banned opcodes when checking a signature.

Data Fields :

- entity
- : Type of entity (e.g., paymaster, sender) accessing the storage.
- opcode
- : Opcode that caused the violation.
- Additional fields (when associated with
- StakeTooLow
-):* needs_stake
-
    - : Entity that needs staking.
-
    - accessing_entity
-
    - : Type of entity accessing the storage.
-
    - accessed_address
-
    - : Address of the accessed storage.
-
    - accessed_entity
-
    - : Optional type of accessed entity.
-
    - slot
-
    - : Storage slot accessed.
-
    - minimum_stake
-
    - : Minimum required stake.
-
    - minimum_unstake_delay
-
    - : Minimum required unstake delay.

-32503

: Out of time range

- Description
- : Either the account or the paymaster returned a time-range, and it is already expired or will expire soon.

Data Fields :

- valid_until
- : Timestamp indicating the valid until time.
- valid_after
- : Timestamp indicating the valid after time.

- paymaster
- : Optional address of the paymaster.

-32504

: Throttled or banned

- Description
- : The
- userOp
- was rejected because the paymaster or aggregator is throttled or banned.

Data Fields :

- entity
- : Type of entity (e.g., paymaster, aggregator) that is throttled or banned.
- address
- : Address of the entity.

-32505

: Stake or unstake-delay too low

- Description
- : The
- userOp
- was rejected because the paymaster's or signature aggregator's stake or unstake delay was too low.

Data Fields :

- needs_stake
- : Entity that needs staking.
- accessing_entity
- : Type of entity accessing the storage.
- accessed_address
- : Address of the accessed storage.
- accessed_entity
- : Optional type of accessed entity.
- slot
- : Storage slot accessed.
- minimum_stake
- : Minimum required stake.
- minimum_unstake_delay
- : Minimum required unstake delay.

-32506

: Unsupported aggregator

- Description
- : The
- userOp
- was rejected because the wallet specified unsupported signature aggregator.

Data Fields :

- aggregator
- : Address of the unsupported aggregator.

-32507

: Invalid signature

- Description
- : The
- userOp
- was rejected because it contains an invalid signature from the sender or the paymaster.

Data Fields :

- No additional data fields.

-32521

: Execution reverted

- Description
- : The
- userOp
- was reverted during the execution phase.

Data Fields :

- revert_data
- : Optional bytes containing additional data related to the revert.

-32602

: Invalid userOp

- Description
- : The
- userOp
- struct/fields sent to the bundler were invalid.

Data Fields :

- current_max_priority_fee
- : Optional U256 containing the current maximum priority fee.
- current_max_fee
- : Optional U256 containing the current maximum fee.

-32603

: Internal error

Description: Internal JSON-RPC error.

Data Fields :

- No additional data fields.

Updated about 4 hours ago

Bundler API Fee Logic Factory Addresses Did this page help you?Yes No