title: Backend API libraries description: An introduction to the Ethereum client APIs that let you interact with the blockchain from your application. lang: en

In order for a software application to interact with the Ethereum blockchain (i.e. read blockchain data and/or send transactions to the network), it must connect to an Ethereum node.

For this purpose, every Ethereum client implements the <u>JSON-RPC</u> specification, so there are a uniform set of <u>methods</u> that applications can rely on.

If you want to use a specific programming language to connect with an Ethereum node, there are many convenience libraries within the ecosystem that make this much easier. With these libraries, developers can write intuitive, one-line methods to initialize JSON-RPC requests (under the hood) that interact with Ethereum.

Prerequisites {#prerequisites}

It might be helpful to understand the Ethereum stack and Ethereum clients.

Why use a library? {#why-use-a-library}

These libraries abstract away much of the complexity of interacting directly with an Ethereum node. They also provide utility functions (e.g. converting ETH to Gwei) so as a developer you can spend less time dealing with the intricacies of Ethereum clients and more time focused on the unique functionality of your application.

Available libraries {#available-libraries}

Alchemy - Ethereum Development Platform.

- alchemy.com
- Documentation
- GitHub
- Discord

BlockCypher - Ethereum Web APIs.

- blockcypher.com
- <u>Documentation</u>

Blast by Bware Labs - Decentralized APIs for Ethereum Mainnet and Testnets.

- blastapi.io
- <u>Documentation</u>
- Discord

Infura - The Ethereum API as a service.

- infura.io
- Documentation
- GitHub

Cloudflare Ethereum Gateway.

cloudflare-eth.com

Coinbase Cloud Node - Blockchain Infrastructure API.

- Coinbase Cloud Node
- <u>Documentation</u>

DataHub by Figment - Web3 API services with Ethereum Mainnet and testnets.

- DataHub
- Documentation

NFTPort - Ethereum Data and Mint APIs.

- <u>nftport.xyz</u>
- Documentation
- GitHub
- Discord

Nodesmith - JSON-RPC API access to Ethereum Mainnet and testnets.

- nodesmith.io
- <u>Documentation</u>

Ethercluster - Run your own Ethereum API service supporting both ETH and ETC.

• ethercluster.com

Chainstack - Elastic and dedicated Ethereum nodes as a service.

- chainstack.com
- <u>Documentation</u>
- Ethereum API reference

QuickNode - Blockchain Infrastructure as a Service.

- quicknode.com
- <u>Documentation</u>
- Discord

Python Tooling - Variety of libraries for Ethereum interaction via Python.

- py.ethereum.org
- web3.py GitHub
- web3.py Chat

web3j - A Java/Android/Kotlin/Scala integration library for Ethereum.

- GitHub
- Docs
- Gitter

Rivet - Ethereum and Ethereum Classic APIs as a service powered by open source software.

- rivet.cloud
- <u>Documentation</u>
- GitHub

Nethereum - An open source .NET integration library for blockchain.

- <u>GitHub</u>
- <u>Documentation</u>
- Discord

Tatum - The ultimate blockchain development platform.

- Tatum
- GitHub

- <u>Documentation</u>
- Discord

Watchdata - Provide simple and reliable API access to Ethereum blockchain.

- Watchdata
- <u>Documentation</u>
- Discord

Zmok - Speed-oriented Ethereum nodes as JSON-RPC/WebSockets API.

- zmok.io
- GitHub
- Documentation
- Discord

NOWNodes - Full Nodes and Block Explorers.

- NOWNodes.io
- Documentation

Moralis - Enterprise-Grade EVM API Provider.

- moralis.io
- <u>Documentation</u>
- GitHub
- Discord
- Forum

Chainbase - All-in-one web3 data infrastructure for Ethereum.

- chainbase.com
- <u>Documentation</u>
- Discord

GetBlock- Blockchain-as-a-service for Web3 development

- GetBlock.io
- <u>Documentation</u>

BlockPi - Provide more efficient and fast RPC services

- blockpi.io
- <u>Documentation</u>
- GitHub
- Discord

Tokenview - The General Multi-Crypto Blockchain APIs Platform.

- services.tokenview.io
- <u>Documentation</u>
- GitHub

Further reading {#further-reading}

Know of a community resource that helped you? Edit this page and add it!

Related topics {#related-topics}

- Nodes and clients
- Development frameworks

Related tutorials {#related-tutorials}

- Set up Web3js to use the Ethereum blockchain in JavaScript- Instructions for getting web3.js set up in your project.
- Calling a smart contract from JavaScript Using the DAI token, see how to call contracts function using JavaScript.