# JSON-RPC

Find out how to manage and interact with the Filecoin network using the standard JSON-RPC API.

Quick start

The easiest way to test the API is to use Curl commands. A Curl command to the Filecoin network looks something like this:

```

Copy curl --location --request POST ' \ --header 'Content-Type: application/json' \ --data-raw '{ "jsonrpc":"2.0", "method":"", "params": [], "id":1 }'

```

Step-by-step example

1. In a terminal window, use Curl to request the current chain head from a public Glif
2. node.\
3. 
4. ```
5. Copy
6. curl-XPOST'https://api.node.glif.io'\
7. -H'Content-Type: application/json'\
8. --data'{"jsonrpc":"2.0","id":1,"method":"Filecoin.ChainHead","params":[]}'
9. ```
10. ```
11. Copy
12. {"jsonrpc":"2.0","result":{"Cids":[{"/":"bafy2bzaceayoigaf3v5muqmknpjfkguse43jp4t2zxhpmykhqynqhkdgpgybc"},
    {"/":"bafy2bzacecnrtzlhn6h75gm7tozhzuw77plvdhniwzfj7wgmyuju6wn573h22"},{"/":"bafy2bzacecygiaxfsqv7ecb2gvodzh74eret3pchwe5e4j5a3mzlwasvndi6i"},
    {"/":"bafy2bzacebe477tdmijfse4je2g63gnnkdgzj3ftq6zbygd7toszkrsjts6uu"},{"/":"bafy2bzacedoe6hcxy2cgqzbg4p7qolbd5imbjpjnz2tj4n7o3kw2md4uv2ttq"},
    {"/":"bafy2bzacec7wbqvskwvolireljmufszdu5nk37yyg4qtxgnrwbyipgoenmhc6"},{"/":"bafy2bzaceahxdiauteywlbjnwj3ntr72qcbamtq3nbvjzyn5wruithpyqyxbm"}],"Blocks":
    [{"Miner":"f0693008","Ticket":
    {"VRFProof":"uLR0LHfNBAfQzyYUVBiIEXzyblPv3yPIEsJQGTpaAvO1ZriPZ7wC2IFpw7mrz1RvDQEfsgRXGxb6APTRvrPiFEAe35RFNLKC9SYb64PNcDYwGY4de5LdlHfyUv+Ovwg5"}...
13. ```
14. The ChainHead endpoint doesn't require any input parameters, so we've leftparams
15. an empty array[]
16. .
17. The above command will output a large chunk of JSON data. You can use JSON processor JQ
18. toprettify
19. the output:
20. ```
21. Copy
22. ```
23. 
24. ```
25. Copy
26. curl-XPOST'https://api.node.glif.io'\
27. -H'Content-Type: application/json'\
28. --data'{"jsonrpc":"2.0","id":1,"method":"Filecoin.ChainHead","params":[]}'\
29. |jq
30. ```
31. ```
32. Copy
33. {
34. "jsonrpc":"2.0",
35. "result":{
36. "Cids":[
37. {
38. "/":"bafy2bzacecrbhy67by4upktab6rvbgd3w5jml7zog4ifoaupo35yo4rbbc4am"
39. },
40. {
41. "/":"bafy2bzacecm42csr2ysmgpj54lz762iom4n4gcafkerijirzsfzq3jni2gqyu"
42. }
43. ],
44. "Blocks":[
45. {
46. "Miner":"f0152747",
47. "Ticket":{
48. ...
49. ```
50. 

Permissions

Each method has specific permissions that must be met before you can receive a response from a Filecoin node. Methods with theread permission can be called by anyone at anytime, without the need for a token. All other permissions require you to send an authentication along with you request.

- read
- : Read node state, no private data.
- write
- : Write to local store / chain, and read permissions.
- sign
- : Use private keys stored in wallet for signing, read and write permissions.
- admin
- : Manage permissions, read, write, and sign permissions.
- 

Authentication

Each node implementation has different ways to generate and manage authentication tokens. Take a look at your node's specific documentation:

- Lotus
- Venus
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If you are using a node provider service like Glif , take a look at your providers documentation to find out how to manage authentication tokens.

Previous Filecoin.sol Next Auth

Last updated14 days ago