# Eth

These methods are used for Ethereum-compatible JSON-RPC calls

EthAccounts will always return [] since we don't expect Lotus to manage private keys

EthAccounts

There are not yet any comments for this method.

Perms: read

Inputs:null

Response:

```

Copy ["0x5cbeecf99d3fdb3f25e309cc264f240bb0664031"]

```

EthAddressToFilecoinAddress

EthAddressToFilecoinAddress converts an EthAddress into an f410 Filecoin Address

Perms: read

Inputs:

```

Copy ["0x5cbeecf99d3fdb3f25e309cc264f240bb0664031"]

```

Response:"f01234"

EthBlockNumber

EthBlockNumber returns the height of the latest (heaviest) TipSet

Perms: read

Inputs:null

Response:"0x5"

EthCall

Perms: read

Inputs:

```

Copy [ { "from":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "to":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "gas":"0x5", "gasPrice":"0x0", "value":"0x0", "data":"0x07" }, "string value" ]

```

Response:"0x07"

EthChainId

Perms: read

Inputs:null

Response:"0x5"

EthEstimateGas

Perms: read

Inputs:

```
```

Copy [ { "from":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "to":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "gas":"0x5", "gasPrice":"0x0", "value":"0x0", "data":"0x07" } ]

```
```

Response:"0x5"

EthFeeHistory

Perms: read

Inputs:

```
```

Copy ["Bw=="]

```
```

Response:

```
```

Copy { "oldestBlock":"0x5", "baseFeePerGas":["0x0"], "gasUsedRatio":[12.3], "reward":[] }

```
```

EthGasPrice

Perms: read

Inputs:null

Response:"0x0"

EthGetBalance

Perms: read

Inputs:

```
```

Copy ["0x5cbeecf99d3fdb3f25e309cc264f240bb0664031","string value"]

```
```

Response:"0x0"

EthGetBlockByHash

Perms: read

Inputs:

```
```

Copy ["0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",true]

```
```

Response:

```
```

Copy { "hash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "parentHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",

"sha3Uncles":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"miner":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031",
"stateRoot":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"transactionsRoot":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"receiptsRoot":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "logsBloom":"0x07",
"difficulty":"0x5", "totalDifficulty":"0x5", "number":"0x5", "gasLimit":"0x5", "gasUsed":"0x5", "timestamp":"0x5",
"extraData":"0x07", "mixHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"nonce":"0x0707070707070707", "baseFeePerGas":"0x0", "size":"0x5", "transactions":[{}], "uncles":[
"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e" ] }

```

EthGetBlockByNumber

Perms: read

Inputs:

```

Copy ["string value",true]

```

Response:

```

Copy { "hash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"parentHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"sha3Uncles":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"miner":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031",
"stateRoot":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"transactionsRoot":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"receiptsRoot":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "logsBloom":"0x07",
"difficulty":"0x5", "totalDifficulty":"0x5", "number":"0x5", "gasLimit":"0x5", "gasUsed":"0x5", "timestamp":"0x5",
"extraData":"0x07", "mixHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"nonce":"0x0707070707070707", "baseFeePerGas":"0x0", "size":"0x5", "transactions":[{}], "uncles":[
"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e" ] }

```

EthGetBlockTransactionCountByHash

EthGetBlockTransactionCountByHash returns the number of messages in the TipSet

Perms: read

Inputs:

```

Copy ["0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e"]

```

Response:"0x5"

EthGetBlockTransactionCountByNumber

EthGetBlockTransactionCountByNumber returns the number of messages in the TipSet

Perms: read

Inputs:

```

Copy ["0x5"]

```

Response:"0x5"

## EthGetCode

Perms: read

Inputs:

```
Copy ["0x5cbeecf99d3fdb3f25e309cc264f240bb0664031","string value"]
```

Response:"0x07"

## EthGetFilterChanges

Polling method for a filter, returns event logs which occurred since last poll. (requires write perm since timestamp of last filter execution will be written)

Perms: read

Inputs:

```
Copy ["0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e"]
```

Response:

```
Copy [{}]
```

## EthGetFilterLogs

Returns event logs matching filter with given id. (requires write perm since timestamp of last filter execution will be written)

Perms: read

Inputs:

```
Copy ["0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e"]
```

Response:

```
Copy [{}]
```

## EthGetLogs

Returns event logs matching given filter spec.

Perms: read

Inputs:

```
Copy [ { "fromBlock":"2301220", "address":["0x5cbeecf99d3fdb3f25e309cc264f240bb0664031"], "topics":null } ]
```

```
```

Response:

```
```

Copy [{}]

```
```

EthGetMessageCidByTransactionHash

Perms: read

Inputs:

```
```

Copy ["0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e"]

```
```

Response:

```
```

Copy { "/":"bafy2bzacea3wsdh6y3a36tb3skempjoxqpuyompjbmfeyf34fi3uy6uue42v4" }

```
```

EthGetStorageAt

Perms: read

Inputs:

```
```

Copy ["0x5cbeecf99d3fdb3f25e309cc264f240bb0664031","0x07","string value"]

```
```

Response:"0x07"

EthGetTransactionByBlockHashAndIndex

Perms: read

Inputs:

```
```

Copy ["0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e","0x5"]

```
```

Response:

```
```

Copy { "chainId":"0x5", "nonce":"0x5", "hash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "blockHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "blockNumber":"0x5", "transactionIndex":"0x5", "from":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "to":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "value":"0x0", "type":"0x5", "input":"0x07", "gas":"0x5", "maxFeePerGas":"0x0", "maxPriorityFeePerGas":"0x0", "accessList":[ "0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e" ], "v":"0x0", "r":"0x0", "s":"0x0" }

```
```

EthGetTransactionByBlockNumberAndIndex

Perms: read

Inputs:

```
Copy ["0x5","0x5"]
```

Response:

```
Copy { "chainId":"0x5", "nonce":"0x5",
"hash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"blockHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "blockNumber":"0x5",
"transactionIndex":"0x5", "from":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031",
"to":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "value":"0x0", "type":"0x5", "input":"0x07", "gas":"0x5",
"maxFeePerGas":"0x0", "maxPriorityFeePerGas":"0x0", "accessList":[
"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e" ], "v":"0x0", "r":"0x0", "s":"0x0" }
```

EthGetTransactionByHash

Perms: read

Inputs:

```
Copy ["0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e"]
```

Response:

```
Copy { "chainId":"0x5", "nonce":"0x5",
"hash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"blockHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "blockNumber":"0x5",
"transactionIndex":"0x5", "from":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031",
"to":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "value":"0x0", "type":"0x5", "input":"0x07", "gas":"0x5",
"maxFeePerGas":"0x0", "maxPriorityFeePerGas":"0x0", "accessList":[
"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e" ], "v":"0x0", "r":"0x0", "s":"0x0" }
```

EthGetTransactionByHashLimited

Perms: read

Inputs:

```
Copy ["0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",10101]
```

Response:

```
Copy { "chainId":"0x5", "nonce":"0x5",
"hash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"blockHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "blockNumber":"0x5",
"transactionIndex":"0x5", "from":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031",
"to":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "value":"0x0", "type":"0x5", "input":"0x07", "gas":"0x5",
"maxFeePerGas":"0x0", "maxPriorityFeePerGas":"0x0", "accessList":[
"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e" ], "v":"0x0", "r":"0x0", "s":"0x0" }
```

```

EthGetTransactionCount

Perms: read

Inputs:

```

Copy ["0x5cbeecf99d3fdb3f25e309cc264f240bb0664031","string value"]

```

Response:"0x5"

EthGetTransactionHashByCid

Perms: read

Inputs:

```

Copy [ { "/":"bafy2bzacea3wsdh6y3a36tb3skempjoxqpuyompjbmfeyf34fi3uy6uue42v4" } ]

```

Response:"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e"

EthGetTransactionReceipt

Perms: read

Inputs:

```

Copy ["0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e"]

```

Response:

```

Copy { "transactionHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"transactionIndex":"0x5", "blockHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"blockNumber":"0x5", "from":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031",
"to":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031",
"root":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "status":"0x5",
"contractAddress":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "cumulativeGasUsed":"0x5", "gasUsed":"0x5",
"effectiveGasPrice":"0x0", "logsBloom":"0x07", "logs":[ { "address":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031",
"data":"0x07", "topics":[ "0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e" ], "removed":true,
"logIndex":"0x5", "transactionIndex":"0x5",
"transactionHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",
"blockHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "blockNumber":"0x5" } ],
"type":"0x5" }

```

EthGetTransactionReceiptLimited

Perms: read

Inputs:

```

Copy ["0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e",10101]

```

Response:

```
```

Copy { "transactionHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "transactionIndex":"0x5", "blockHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "blockNumber":"0x5", "from":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "to":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "root":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "status":"0x5", "contractAddress":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "cumulativeGasUsed":"0x5", "gasUsed":"0x5", "effectiveGasPrice":"0x0", "logsBloom":"0x07", "logs":[ { "address":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "data":"0x07", "topics":[ "0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e" ], "removed":true, "logIndex":"0x5", "transactionIndex":"0x5", "transactionHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "blockHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "blockNumber":"0x5" } ], "type":"0x5" }

```
```

EthMaxPriorityFeePerGas

Perms: read

Inputs:null

Response:"0x0"

EthNewBlockFilter

Installs a persistent filter to notify when a new block arrives.

Perms: read

Inputs:null

Response:"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e"

EthNewFilter

Installs a persistent filter based on given filter spec.

Perms: read

Inputs:

```
```

Copy [ { "fromBlock":"2301220", "address":["0x5cbeecf99d3fdb3f25e309cc264f240bb0664031"], "topics":null } ]

```
```

Response:"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e"

EthNewPendingTransactionFilter

Installs a persistent filter to notify when new messages arrive in the message pool.

Perms: read

Inputs:null

Response:"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e"

EthProtocolVersion

Perms: read

Inputs:null

Response:"0x5"

EthSendRawTransaction

Perms: read

Inputs:

```
```

Copy ["0x07"]

```
```

Response:"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e"

EthSubscribe

Subscribe to different event types using websockets eventTypes is one or more of:

- newHeads: notify when new blocks arrive.
- pendingTransactions: notify when new messages arrive in the message pool.
- logs: notify new event logs that match a criteria params contains additional parameters used with the log event type
  The client will receive a stream of EthSubscriptionResponse values until EthUnsubscribe is called.
- 

Perms: read

Inputs:

```
```

Copy ["Bw=="]

```
```

Response:"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e"

EthSyncing

Perms: read

Inputs:null

Response:false

EthTraceBlock

TraceAPI related methods

Returns traces created at given block

Perms: read

Inputs:

```
```

Copy ["string value"]

```
```

Response:

```
```

Copy [ { "action":{ "callType":"string value", "from":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "to":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "gas":"0x5", "input":"0x07", "value":"0x0" }, "result":{ "gasUsed":"0x5", "output":"0x07" }, "subtraces":123, "traceAddress":[123], "Type":"string value", "blockHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "blockNumber":9, "transactionHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "transactionPosition":123 } ]

```
```

EthTraceReplayBlockTransactions

Replays all transactions in a block returning the requested traces for each transaction

Perms: read

Inputs:

```
Copy ["string value",["string value"]]
```

Response:

```
Copy [ { "output":"0x07", "stateDiff":"string value", "trace":[ { "action":{ "callType":"string value",
"from":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031", "to":"0x5cbeecf99d3fdb3f25e309cc264f240bb0664031",
"gas":"0x5", "input":"0x07", "value":"0x0" }, "result":{ "gasUsed":"0x5", "output":"0x07" }, "subtraces":123, "traceAddress":
[123], "Type":"string value" } ],
"transactionHash":"0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e", "vmTrace":"string
value" } ]
```

EthUninstallFilter

Uninstalls a filter with given id.

Perms: read

Inputs:

```
Copy ["0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e"]
```

Response:true

EthUnsubscribe

Unsubscribe from a websocket subscription

Perms: read

Inputs:

```
Copy ["0x37690cfec6c1bf4c3b9288c7a5d783e98731e90b0a4c177c2a374c7a9427355e"]
```

Response:true

Last updated5 months ago