

# trace namespace

## trace\_block

- Parameters
- Request
- Response
- numberOrTag
- :string
- (block number or hash or either of earliest
- , finalized
- , latest
- , pending
- , or safe
- ) curl localhost:8545 \ -X POST \ -H

"Content-Type: application/json"

\ --data

'{ "jsonrpc": "2.0", "id": 0, "method": "trace\_block", "params": [numberOrTag] }' { "jsonrpc" :

"2.0", "id" :

0 , "result" : result } result : array of object

- action
- :object
- - author
- - :string
- - (address)
- - callType
- - :string
- - creationMethod
- - :string
- - error
- - :string
- - from
- - :string
- - (address)
- - gas
- - :string
- - (hex integer)
- - includeInTrace
- - :boolean
- - input
- - :string

- - (hex data)
- - isPrecompiled
- - :boolean
- - result
- - :object
- - - address
- - - :string
- - - (address)
- - - code
- - - :string
- - - (hex data)
- - - gasUsed
- - - :string
- - - (hex integer)
- - - output
- - - :string
- - - (hex data)
- - rewardType
- - :string
- - subtraces
- - : array ofobject
- - to
- - :string
- - (address)
- - traceAddress
- - : array ofstring
- - (hex integer)
- - type

- - :string
- - value
- - :string
- - (hex integer)
- blockHash
- :string
- (hash)
- blockNumber
- :string
- (hex integer)
- error
- :string
- result
- :object
- - address
- - :string
- - (address)
- - code
- - :string
- - (hex data)
- - gasUsed
- - :string
- - (hex integer)
- - output
- - :string
- - (hex data)
- subtraces
- :string
- (hex integer)
- traceAddress
- : array ofstring
- (hex integer)
- transactionHash
- :string
- (hash)
- transactionPosition
- :string
- (hex integer)
- type
- :string

## trace\_call

- Parameters
- Request
- Response
- call
- :object
- - accessList

- - : array ofobject
- - - address
- - - :string
- - - (address)
- - - storageKeys
- - - : array ofstring
- - - (hex integer)
- - blobVersionedHashes
- - : array ofstring
- - (hex data)
- - blockHash
- - :string
- - (hash)
- - blockNumber
- - :string
- - (hex integer)
- - chainId
- - :string
- - (hex integer)
- - data
- - :string
- - (hex data)
- - from
- - :string
- - (address)
- - gas
- - :string
- - (hex integer)
- - gasPrice
- - :string
- - (hex integer)

- - hash
- - :string
- - (hash)
- - input
- - :string
- - (hex data)
- - isSystemTx
- - :boolean
- - maxFeePerBlobGas
- - :string
- - (hex integer)
- - maxFeePerGas
- - :string
- - (hex integer)
- - maxPriorityFeePerGas
- - :string
- - (hex integer)
- - mint
- - :string
- - (hex integer)
- - nonce
- - :string
- - (hex integer)
- - r
- - :string
- - (hex integer)
- - s
- - :string
- - (hex integer)
- - sourceHash
- - :string
- - (hash)
- - to
- - :string

- - (address)
- - transactionIndex
- - :string
- - (hex integer)
- - type
- - :integer
- - v
- - :string
- - (hex integer)
- - value
- - :string
- - (hex integer)
- - yParity
- - :string
- - (hex integer)
- traceTypes
- : array ofstring
- blockParameter
- :string
- (block number or hash or either ofearliest
- ,finalized
- ,latest
- ,pending
- , orsafe
- ) curl localhost:8545 \ -X POST \ -H

"Content-Type: application/json"

\ --data

'{ "jsonrpc": "2.0", "id": 0, "method": "trace\_call", "params": [call, traceTypes, blockParameter] }' { "jsonrpc" :

"2.0", "id" :

0 , "result" : result } result :object

- action
- :object
- - author
- - :string
- - (address)
- - callType
- - :string
- - creationMethod
- - :string
- - error

- - :string
- - from
- - :string
- - (address)
- - gas
- - :string
- - (hex integer)
- - includeInTrace
- - :boolean
- - input
- - :string
- - (hex data)
- - isPrecompiled
- - :boolean
- - result
- - :object
- - - address
- - - :string
- - - (address)
- - - code
- - - :string
- - - (hex data)
- - - gasUsed
- - - :string
- - - (hex integer)
- - - output
- - - :string
- - - (hex data)

- - rewardType
- - :string
- - subtraces
- - : array ofobject
- - to
- - :string
- - (address)
- - traceAddress
- - : array ofstring
- - (hex integer)
- - type
- - :string
- - value
- - :string
- - (hex integer)
- output
- :string
- (hex data)
- stateChanges
- : map ofobject
- - balance
- - :object
- - - after
- - - :string
- - - (hex integer)
- - - before
- - - :string
- - - (hex integer)
- - code
- - :object
- - - after
- - - :string
-



- - (hex data)
- 
- - before
- 
- - :string
- 
- - (hex data)
- 
- nonce
- 
- :object
- 
- - after
- 
- - :string
- 
- - (hex integer)
- 
- - before
- 
- - :string
- 
- - (hex integer)
- 
- storage
- 
- : map ofobject
- 
- - after
- 
- - :string
- 
- - (hex data)
- 
- - before
- 
- - :string
- 
- - (hex data)
- transactionHash
- :string
- (hash)
- vmTrace
- :object
- 
- code
- 
- :string
- 
- (hex data)
- 
- operations

- - : array of object
- - - cost
- - - :string
- - - (hex integer)
- - - memory
- - - :object
- - - - data
- - - - :string
- - - - (hex data)
- - - - offset
- - - - :string
- - - - (hex integer)
- - - pc
- - - :string
- - - (hex integer)
- - - push
- - - : array of string
- - - (hex data)
- - - store
- - - :object
- - -

- key
- - - 
    - :string
- - - 
    - (hex data)
- - - 
    - value
- - - 
    - :string
- - - 
    - (hex data)
- - - sub
- - - :object
- - - used
- - - :string
- - - (hex integer)

## trace\_filter

- Parameters
- Request
- Response
- traceFilterForRpc
- :object
- - after
- - :string
- - (hex integer)
- - count
- - :string
- - (hex integer)
- - fromAddress
- - : array ofstring
- - (address)
- - fromBlock
- - :string

- - (block number or hash or either of earliest
- - ,finalized
- - ,latest
- - ,pending
- - , orsafe
- - )
- - toAddress
- - : array of string
- - (address)
- - toBlock
- - :string
- - (block number or hash or either of earliest
- - ,finalized
- - ,latest
- - ,pending
- - , orsafe
- - ) curl localhost:8545 \ -X POST \ -H

"Content-Type: application/json"

\ --data

'{ "jsonrpc": "2.0", "id": 0, "method": "trace\_filter", "params": [traceFilterForRpc] }' { "jsonrpc" :

"2.0", "id" :

0 , "result" : result } result : array of object

- action
- :object
- - author
- - :string
- - (address)
- - callType
- - :string
- - creationMethod
- - :string
- - error
- - :string
- - from
- - :string

- - (address)
- - gas
- - :string
- - (hex integer)
- - includeInTrace
- - :boolean
- - input
- - :string
- - (hex data)
- - isPrecompiled
- - :boolean
- - result
- - :object
- - - address
- - - :string
- - - (address)
- - - code
- - - :string
- - - (hex data)
- - - gasUsed
- - - :string
- - - (hex integer)
- - - output
- - - :string
- - - (hex data)
- - rewardType
- - :string
- - subtraces

- - : array ofobject
- - to
- - :string
- - (address)
- - traceAddress
- - : array ofstring
- - (hex integer)
- - type
- - :string
- - value
- - :string
- - (hex integer)
- blockHash
- :string
- (hash)
- blockNumber
- :string
- (hex integer)
- error
- :string
- result
- :object
- - address
- - :string
- - (address)
- - code
- - :string
- - (hex data)
- - gasUsed
- - :string
- - (hex integer)
- - output
- - :string
- - (hex data)
- subtraces
- :string
- (hex integer)
- traceAddress
- : array ofstring
- (hex integer)
- transactionHash
- :string
- (hash)
- transactionPosition

- :string
- (hex integer)
- type
- :string

## trace\_rawTransaction

Traces a call to eth\_sendRawTransaction without making the call, returning the traces

- Parameters
- Request
- Response
- data
  - :string
  - (hex data)
  - traceTypes
  - : array ofstring curl localhost:8545 \ -X POST \ -H

"Content-Type: application/json"

\ --data

{ "jsonrpc": "2.0", "id": 0, "method": "trace\_rawTransaction", "params": [data, traceTypes] } { "jsonrpc" :

"2.0", "id" :

0 , "result" : result } result :object

- action
- :object
- - author
- - :string
- - (address)
- - callType
- - :string
- - creationMethod
- - :string
- - error
- - :string
- - from
- - :string
- - (address)
- - gas
- - :string
- - (hex integer)
- - includeInTrace
- - :boolean
- - input
-

- :string
- 
- (hex data)
- 
- isPrecompiled
- 
- :boolean
- 
- result
- 
- :object
- 
- - address
- 
- - :string
- 
- - (address)
- 
- - code
- 
- - :string
- 
- - (hex data)
- 
- - gasUsed
- 
- - :string
- 
- - (hex integer)
- 
- - output
- 
- - :string
- 
- - (hex data)
- 
- rewardType
- 
- :string
- 
- subtraces
- 
- : array ofobject
- 
- to
- 
- :string
- 
- (address)
- 
- traceAddress
- 
- : array ofstring
- 
- (hex integer)
-



- type
- 
- :string
- 
- value
- 
- :string
- 
- (hex integer)
- output
- :string
- (hex data)
- stateChanges
- : map ofobject
- 
- balance
- 
- :object
- 
- 
- after
- 
- 
- :string
- 
- 
- (hex integer)
- 
- 
- before
- 
- 
- :string
- 
- 
- (hex integer)
- 
- code
- 
- :object
- 
- 
- after
- 
- 
- :string
- 
- 
- (hex data)
- 
- 
- before
- 
- 
- :string
- 
- 
- (hex data)
- 
- nonce
- 
- :object
- 
- 
- after
- 
- 
- :string

- - - (hex integer)
- - - before
- - - :string
- - - (hex integer)
- - storage
- - : map ofobject
- - - after
- - - :string
- - - (hex data)
- - - before
- - - :string
- - - (hex data)
- transactionHash
- :string
- (hash)
- vmTrace
- :object
- - code
- - :string
- - (hex data)
- - operations
- - : array ofobject
- - - cost
- - - :string
- - - (hex integer)
- - - memory
- - - :object
- - - - data

- - - - :string
- - - - (hex data)
- - - - offset
- - - - :string
- - - - (hex integer)
- - - - pc
- - - - :string
- - - - (hex integer)
- - - - push
- - - - : array ofstring
- - - - (hex data)
- - - - store
- - - - :object
- - - - - key
- - - - - :string
- - - - - (hex data)
- - - - - value
- - - - - :string
- - - - - (hex data)

- - - sub
- - - :object
- - - used
- - - :string
- - - (hex integer)

## trace\_replayBlockTransactions

- Parameters
- Request
- Response
- blockParameter
- :string
- (block number or hash or either of earliest
- ,finalized
- ,latest
- ,pending
- , orsafe
- )
- traceTypes
- : array of string curl localhost:8545 \ -X POST \ -H

"Content-Type: application/json"

\ --data

{ "jsonrpc": "2.0", "id": 0, "method": "trace\_replayBlockTransactions", "params": [blockParameter, traceTypes] } { "jsonrpc" :

"2.0", "id" :

0 , "result" : result } result : array of object

- action
- :object
- - author
- - :string
- - (address)
- - callType
- - :string
- - creationMethod
- - :string
- - error
- - :string
- - from
- - :string
-

- (address)
- 
- gas
- 
- :string
- 
- (hex integer)
- 
- includeInTrace
- 
- :boolean
- 
- input
- 
- :string
- 
- (hex data)
- 
- isPrecompiled
- 
- :boolean
- 
- result
- 
- :object
- 
- - address
- 
- - :string
- 
- - (address)
- 
- - code
- 
- - :string
- 
- - (hex data)
- 
- - gasUsed
- 
- - :string
- 
- - (hex integer)
- 
- - output
- 
- - :string
- 
- - (hex data)
- 
- rewardType
- 
- :string
- 
- subtraces
-

- : array ofobject
- 
- to
- 
- :string
- 
- (address)
- 
- traceAddress
- 
- : array ofstring
- 
- (hex integer)
- 
- type
- 
- :string
- 
- value
- 
- :string
- 
- (hex integer)
- output
- :string
- (hex data)
- stateChanges
- : map ofobject
- 
- balance
- 
- :object
- 
- 
- after
- 
- 
- :string
- 
- 
- (hex integer)
- 
- 
- before
- 
- 
- :string
- 
- 
- (hex integer)
- 
- code
- 
- :object
- 
- 
- after
- 
- 
- :string
- 
- 
- (hex data)
- 
- 
- before
- 
-

- :string
- - - (hex data)
- - nonce
- - :object
- - - after
- - - :string
- - - (hex integer)
- - - before
- - - :string
- - - (hex integer)
- - storage
- - : map ofobject
- - - after
- - - :string
- - - (hex data)
- - - before
- - - :string
- - - (hex data)
- transactionHash
- :string
- (hash)
- vmTrace
- :object
- - code
- - :string
- - (hex data)
- - operations
- - : array ofobject
- - - cost
- -

- :string
- - 
  - (hex integer)
- - 
  - memory
- - 
  - :object
- - 
  - - data
- - 
  - - :string
- - 
  - - (hex data)
- - 
  - - offset
- - 
  - - :string
- - 
  - - (hex integer)
- - 
  - pc
- - 
  - :string
- - 
  - (hex integer)
- - 
  - push
- - 
  - : array ofstring
- - 
  - (hex data)
- - 
  - store
- - 
  - :object
- - 
  - - key
- - 
  - - :string
- -



- (hex data)
- - value
- - :string
- - (hex data)
- - sub
- - :object
- - used
- - :string
- - (hex integer)

## trace\_replayTransaction

- Parameters
- Request
- Response
- txHash
- :string
- (hash)
- traceTypes
- : array ofstring curl localhost:8545 \ -X POST \ -H

"Content-Type: application/json"

\ --data

{ "jsonrpc": "2.0", "id": 0, "method": "trace\_replayTransaction", "params": [txHash, traceTypes] } { "jsonrpc" :

"2.0", "id" :

0 , "result" : result } result :object

- action
- :object
- - author
- - :string
- - (address)
- - callType
- - :string
- - creationMethod
- - :string

- - error
- - :string
- - from
- - :string
- - (address)
- - gas
- - :string
- - (hex integer)
- - includeInTrace
- - :boolean
- - input
- - :string
- - (hex data)
- - isPrecompiled
- - :boolean
- - result
- - :object
- - - address
- - - :string
- - - (address)
- - - code
- - - :string
- - - (hex data)
- - - gasUsed
- - - :string
- - - (hex integer)
- - - output
- - - :string
-

- - (hex data)
- 
- rewardType
- 
- :string
- 
- subtraces
- 
- : array ofobject
- 
- to
- 
- :string
- 
- (address)
- 
- traceAddress
- 
- : array ofstring
- 
- (hex integer)
- 
- type
- 
- :string
- 
- value
- 
- :string
- 
- (hex integer)
- output
- :string
- (hex data)
- stateChanges
- : map ofobject
- 
- balance
- 
- :object
- 
- - after
- 
- - :string
- 
- - (hex integer)
- 
- - before
- 
- - :string
- 
- - (hex integer)
- 
- code
- 
- :object
- 
- - after
- 
-

- :string
- - - (hex data)
- - - before
- - - :string
- - - (hex data)
- - nonce
- - :object
- - - after
- - - :string
- - - (hex integer)
- - - before
- - - :string
- - - (hex integer)
- - storage
- - : map of object
- - - after
- - - :string
- - - (hex data)
- - - before
- - - :string
- - - (hex data)
- transactionHash
- :string
- (hash)
- vmTrace
- :object
- - code
- - :string
- - (hex data)

- - operations
- - : array ofobject
- - - cost
- - - :string
- - - (hex integer)
- - - memory
- - - :object
- - - - data
- - - - :string
- - - - (hex data)
- - - - offset
- - - - :string
- - - - (hex integer)
- - - pc
- - - :string
- - - (hex integer)
- - - push
- - - : array ofstring
- - - (hex data)
- - - store
- - - :object
-

- - key
- - - :string
- - - (hex data)
- - - value
- - - :string
- - - (hex data)
- - - sub
- - - :object
- - - used
- - - :string
- - - (hex integer)

## trace\_transaction

- Parameters
- Request
- Response
- txHash
- :string
- (hash) curl localhost:8545 \ -X POST \ -H

"Content-Type: application/json"

\ --data

'{ "jsonrpc": "2.0", "id": 0, "method": "trace\_transaction", "params": [txHash] }' { "jsonrpc" :

"2.0" , "id" :

0 , "result" : result } result : array ofobject

- action
- :object
- - author
- - :string
- - (address)
-

- callType
- 
- :string
- 
- creationMethod
- 
- :string
- 
- error
- 
- :string
- 
- from
- 
- :string
- 
- (address)
- 
- gas
- 
- :string
- 
- (hex integer)
- 
- includeInTrace
- 
- :boolean
- 
- input
- 
- :string
- 
- (hex data)
- 
- isPrecompiled
- 
- :boolean
- 
- result
- 
- :object
- 
- - address
- 
- - :string
- 
- - (address)
- 
- - code
- 
- - :string
- 
- - (hex data)
- 
- - gasUsed
- 
- - :string
- 
- - (hex integer)

- - - output
- - - :string
- - - (hex data)
- - rewardType
- - :string
- - subtraces
- - : array ofobject
- - to
- - :string
- - (address)
- - traceAddress
- - : array ofstring
- - (hex integer)
- - type
- - :string
- - value
- - :string
- - (hex integer)
- blockHash
- :string
- (hash)
- blockNumber
- :string
- (hex integer)
- error
- :string
- result
- :object
- - address
- - :string
- - (address)
- - code
- - :string
- - (hex data)
- - gasUsed
- - :string
- - (hex integer)
-



- output
- - :string
- - (hex data)
- subtraces
- :string
- (hex integer)
- traceAddress
- : array ofstring
- (hex integer)
- transactionHash
- :string
- (hash)
- transactionPosition
- :string
- (hex integer)
- type
- :string [Edit this page](#) Last updated on Feb 17, 2024 [Previous proof](#) [Next txpool](#)