

eth_subscribe

Creates a new subscription for particular events. The node returns a subscription ID. For each event that matches the subscription, a notification with relevant data is sent together with the subscription ID.

Parameters

Specify the subscription event parameters, including the following:

- newHeads
 - : Subscribing to this returns a notification each time a new header is appended to the chain, including chain reorganizations. In a chain reorganization, the subscription emits all new headers for the new chain. Therefore the subscription can emit multiple headers at the same height.
- logs
 - : Returns logs that are included in new imported blocks and match the given filter criteria. In case of a chain reorganization, previously sent logs that are on the old chain are resent with the removed property set to true
 - : Logs from transactions that ended up in the new chain are emitted. Therefore a subscription can emit logs for the same transaction multiple times. This parameter has the following fields: "address"
 - : (optional)
 - : Either an address or an array of addresses. Only logs that are created from these addresses are returned.
 - topics
 - : (optional)
 - : Only logs that match these specified topics are returned.

Infura Recommendation We strongly recommend specifying a filter (address ortopics or both) when subscribing to thelogs event. * newPendingTransactions * : Returns the hash for all transactions that are added to the pending state and are signed with a key that's available in the node. When a transaction that was previously part of the canonical chain isn't part of the new canonical chain after a reorganization, it's emitted again.

Returns

- subscription ID
- : The ID of the newly created subscription on the node.

Example

Replace YOUR-API-KEY with an API key from your [Infura dashboard](#).

WebSocket connections only Subscription methods are available for [WebSocket](#) connections only.

Request

- newHeads
- logs
- newPendingTransactions

```
wscat -c wss://optimism-mainnet.infura.io/ws/v3/YOUR-API-KEY -x '{"jsonrpc":"2.0","id":1,"method":"eth_subscribe","params":["newHeads"]}' wscat -c wss://optimism-mainnet.infura.io/ws/v3/YOUR-API-KEY -x '{"jsonrpc":"2.0","id":1,"method":"eth_subscribe","params":["logs","{\"address\":\"0x8320fe7702b96808f7bbc0d4a888ed1468216cf\",\"topics\"
```

```
["0xd78a0cb8bb633d06981248b816e7bd33c2a35a6089241d099fa519e361cab902"]}]}' wscat -c wss://optimism-mainnet.infura.io/ws/v3/YOUR-API-KEY -x '{"jsonrpc":"2.0","id":1,"method":"eth_subscribe","params":["newPendingTransactions"]}'
```

Response

- New subscription
- newHeads
- logs subscription
- New pending transaction subscription

[illegible]

Last updated on Apr 19, 2024 [Previous](#) [Subscription methods](#) [Next](#) [eth_unsubscribe](#)