

ERC20 API

Version

All API in this reference accept version argument which specifies version of API requested. The latest version of API is described in this document. Previous versions are used for backward compatibility during transitioning periods and deprecated as long as no server is using them. version argument is optional and if not specified, it resolves to the latest version.

Current API version: 2

GetPrimaryCoins

Description

Retrieves a list of primary coins available where each coin represents an entirely new market on the exchange.

GET parameter	Value	Notes
<code>action</code>	<code>get_primary_coins</code>	Should be always <code>get_primary_coins</code> for this API call

Output

An array of symbols for primary coins.

Example

http://api.erc20.exchange/index.php?action=get_primary_coins

Response

```
[ "ETC" ]
```

GetSecondaryCoins

Description

Retrieves a list of secondary coins available for trading against a primary coin. As an input primary coin should be provided. A list of primary coins (markets) may be retrieved with [GetPrimaryCoins](#) API.

GET parameter	Value	Notes
<code>action</code>	<code>get_secondary_coins</code>	Should be always <code>get_secondary_coins</code> for this API call.
<code>primary</code>	A primary coin symbol name	One of the coins returned in response to GetPrimaryCoins API.

Output

Returns a list of secondary coins where every coin element is described by the following fields (all fields must present in the output):

- `Symbol` : A symbolic name which represents the coin (text)
- `Name` : A full name of the coin (text)
- `Approved` : An indicator that tells if coin has been reviewed by staff member (0 or 1)

Example

http://api.erc20.exchange/index.php?action=get_secondary_coins&primary=ETC

Response

```
[{
  "Symbol": "BAG",
  "Name": "Bagholder Coin",
  "Approved": 0
}, {
  "Symbol": "LGD",
  "Name": "Legendary Coin",
  "Approved": 1
}]
```

GetFees

Description

Retrieves fees applied on the exchange for trading.

GET parameter	Value	Notes
<code>action</code>	<code>get_fees</code>	Should be always <code>get_fees</code> for this API call
<code>primary</code>	Optional: A primary coin symbol name	One of the coins returned in response to GetPrimaryCoins API

Output

If primary coin is not specified, then always returns two float numbers:

- `MakerFee` : A float value which represents percent taken from the order for makers.
- `TakerFee` : A float value which represents percent taken from the order for takers.

If primary coin is specified, then always returns one float numbers:

- `DeployFee` : A float value (in primary coin units) which is a fee taken for coin creation.

Example

http://api.erc20.exchange/index.php?action=get_fees

Response

```
[{
  "MakerFee": 0.05,
  "TakerFee": 0.15
}]
```

GetBalance

Description

Retrieves how many primary and secondary coins are available for trading for a given address (level of allowance for secondary coins, actual balance for primary).

GET parameter	Value	Notes
<code>action</code>	<code>get_balance</code>	Should be always <code>get_balance</code> for this API call.
<code>primary</code>	A primary coin symbol name	One of the coins returned in response to GetPrimaryCoins API.
<code>address</code>	A user address which is checked for coins balance	A hexadecimal string representing user address.

Output

Always returns:

- `Balance` : The amount of primary coins available for a given address.
- All balances for secondary coins where field names match tickers of secondary coins.
- Future balances for coins in case if there is a pending transaction which is planning to change user's balance. This data is contained in `Pending` dictionary. Every key in this dictionary is one of secondary coins listed for the marked. Not every secondary coin is listed in "Pending" dictionary, but only the ones which are expected to change user's balance. `Pending` dictionary is always present in the response.

Example

http://api.erc20.exchange/?action=get_balance&primary=ETC&address=0xef7b8Ec0afAc38faf6b89480767878811f66A7b8

Response

```
[{
  "Balance": 10.1283,
  "Coins": {
    "BAG": 33.1,
    "TOP": 3.1,
    "BUG": 303.1,
    "LBC": 33.11
  },
  "Pending": {
    "BAG": 330
  }
}]
```

GetCoinInfo

Description

Retrieves real-time information about coins: current price, 24 hours volume, 24 hours change in price.

GET parameter	Value	Notes
action	get_coin_info	Should be always get_coin_info for this API call.
primary	A primary coin symbol name	One of the coins returned in response to GetPrimaryCoins API.

Output

Always returns the following fields:

- Status : Status of the market (One of the following: Active , Disabled , Slow , Very Slow).
- Reason : Optional field which is available only when market is disabled. Contains code of the problem (pls, see all codes and their meaning below).
- Coins : Array which contains all secondary coins where each element of array contains the following fields:
 - Ticker : Ticker of secondary coin.
 - Status : Active or Disabled depending on if trades are running for a coin.
 - Price : Current price of the coin (a float number expressed in units of primary coin).
 - Volume : 24 hours trading volume (a float number expressed in units of primary coin).
 - Change : 24 hours change in price (percent).

Reasons

Code	Description
1	Backend node is not functioning properly.
2	Backend node is not syncing.
3	Infrastructure error.
4	Node is lagging behind the network.

Example

http://api.erc20.exchange/index.php?action=get_coin_info&primary=ETC

Response

```
{
  "Status": "Active",
  "Coins": [{
    "Ticker": "PTOY",
    "Status": "Active",
    "Price": 0.1,
    "Volume": 0.1,
    "Change": -10
  }, {
    "Ticker": "LBC",
    "Status": "Active",
    "Price": 0.1,
    "Volume": 0.1,
    "Change": -10
  }]
}
```

GetOpenOrders

Description

Retrieves all open orders for a given secondary coin. If address is provided then output will consists of open orders belonging to a given address.

GET parameter	Value	Notes
<code>action</code>	<code>get_open_orders</code>	Should be always <code>get_open_orders</code> for this API call.
<code>primary</code>	A primary coin symbol name	One of the coins returned in response to GetPrimaryCoins API.
<code>secondary</code>	A secondary coin symbol name.	One of the coins returned in response to GetSecondaryCoins API.
<code>address</code>	Optional: A hexadecimal string representing user address	If provided, only open orders associated with a given address will be returned.

Output

Returns an array of open orders where each of them consists of the following fields:

- `Id` : A integer number to represent order ID which unique for an order. Negative Id means that order is being cancelled, but it is not confirmed yet.
- `Date` : A integer number of seconds since 1st, January 1970 (Epoch Unix Time).
- `Type` : Can be one of the following values:
 - `Sell` : A sell order registered on the blockchain.
 - `Buy` : A buy order registered on the blockchain.
 - `Incoming Sell` : A sell order which is found in pending tx.
 - `Incoming Buy` : A buy order which is found in pending tx.
- `Price` : Price of the coin (a float number expressed in primary coin units).
- `Amount` : Amount of coins bought or sold with an order (float number).

Example

http://api.erc20.exchange/index.php?action=get_open_orders&primary=ETC&secondary=BAG

Response

```
[{
  "Id": 10,
  "Date": 23872383,
  "Type": "Sell",
  "Price": 0.00000019,
  "Amount": 10.1283
}]
```

GetHistory

Description

Retrieves information about executed orders. If address is provided then output will consists of executed orders belonging to a given address.

GET parameter	Value	Notes
action	get_history	Should be always get_history for this API call.
primary	A primary coin symbol name	One of the coins returned in response to GetPrimaryCoins API.
secondary	A secondary coin symbol name.	One of the coins returned in response to GetSecondaryCoins API.
address	Optional: A hexadecimal string representing user address	If provided, only executed orders associated with a given address will be returned.

Output

Returns an array of open orders where each of them consists of the following fields:

- Date : A integer number of seconds since 1st, January 1970 (Epoch Unix Time).
- Type : Either Sell or Buy representing a type of the order.
- Price : Price of the coin (a float number expressed in primary coin units).
- Amount : Amount of coins bought or sold with an order (float number).

Example

http://api.erc20.exchange/index.php?action=get_history&primary=ETC&secondary=BAG

Response

```
[ {
  "Date": 23872383,
  "Type": "Sell",
  "Price": 0.00000019,
  "Amount": 10.1283
}]
```

GetChartData

Description

Retrieves real-time information about secondary coin price. Data is requested by providing a starting point in time, a type of the interval and number of interval to report back from API. Intervals are returned in sorted order starting from the oldest.

GET parameter	Value	Notes
action	get_chart_data	Should be always get_chart_data for this API call.
primary	A primary coin symbol name	One of the coins returned in response to GetPrimaryCoins API.
secondary	A secondary coin symbol name.	One of the coins returned in response to GetSecondaryCoins API.
start	Timestamp for the first interval	Timestamp is expressed in "YYYY-MM-DD HH:MM" format.
interval	Type of the interval as a string (e.g., 5min).	The following types of intervals are supported: 5min , 15min , 30min , 1h , 3h , 6h , 12h , 1d , 3d , 1w , 3w
count	A integer number	Number of interval to report back

Output

Returns an array of intervals where each of them consists of the following fields:

- Date : Start date of the interval in "YYYY-MM-DD HH:MM" format.
- Open : Opening price (a float number).
- High : The highest price for the interval (a float number).

- **Low** : The lowest price for the interval (a float number).
- **Close** : Closing price (a float number).
- **Volume** : Volume expressed in primary coin units (a float number).

Response

http://api.erc20.exchange/index.php?action=get_chart_data&primary=ETC&secondary=BAG&start=1993-01-29 16:00&interval=1h&count=2

JSON output:

```
[
  {
    "Date": "1993-01-29 16:00",
    "Open": 43.97,
    "High": 43.97,
    "Low": 43.75,
    "Close": 43.94,
    "Volume": 1003200
  },
  {
    "Date": "1993-01-29 17:00",
    "Open": 43.97,
    "High": 44.25,
    "Low": 43.97,
    "Close": 44.25,
    "Volume": 480500
  }
]
```

GetCoinStaticInfo

Description

Retrieves static information about the coin: ABI, address, number of decimals, etc.

GET parameter	Value	Notes
action	<code>get_coin_static_info</code>	Should be always <code>get_coin_static_info</code> for this API call.
primary	A primary coin symbol name	One of the coins returned in response to <code>GetPrimaryCoins</code> API.

Output

Always returns the following:

- **Digits** : A number of fraction digits used for coin representation.
- **Address** : Address of the ERC20 contract published for this primary coin.
- **ABI** : ABI of published ERC20 contract to use for contract function invocation.
- **MinimumOrder** : A minimal order which is accepted by the exchange.
- **TxLink** : Transaction link pattern to use for transaction tracking.
- **MarkBlock** : Which block needs to be tested to recognize the coin.
- **MarkHash** : Hash associated with a MarkBlock block number.
- **Trezor** : **Yes** if this market is active for Trezor users, **No** otherwise.
- **TrezorPath** : Optional and available only if Trezor field equals **Yes** . Specified Trezor path for transaction signing.
- **ERC20_ABI** : It is an ABI to use with all token contracts
- **ERC20** : An array describing all secondary coins where each elements contains the following fields:
 - **Digits** : A number of fraction digits used for coin representation.
 - **Address** : Address of the coin contract represented as a text string.
 - **MinimumOrder** : A minimal order which is accepted by the exchange.

Example

http://api.erc20.exchange/index.php?action=get_coin_static_info&primary=ROPSTEN

Response

```
[{
  "Digits": 18,
  "Address": "0x52a8c02f5472c59422498C3e1cCeCcc1d0d3C57E",
  "ABI": "...",
  "MinimumOrder": 0.000000000000000000,
  "TxLink": "https://ropsten.etherscan.io/tx/#TX#",
  "MarkBlock": 1920000,
  "MarkHash": "0x9a5fc0d8ac0fb3f73e781256fe0119daf54324bef79c5b387662944b13e5a9b0",
  "Trezor": "Yes",
  "ERC20_ABI": "...",
  "ERC20": [{
    "Ticker": "TOP",
    "Digits": 8,
    "Address": "0x0f006d0E4928Da6A0e361F5D51ac9cfA16Db07a5",
    "MinimumOrder": 0.00000000
  }, {
    "Ticker": "COOL",
    "Digits": 8,
    "Address": "0x6dC33bCD0657eE434A7C1e78629e653B95E0fbB2",
    "MinimumOrder": 0.00000000
  }, {
    "Ticker": "ABC",
    "Digits": 8,
    "Address": "0xC695381457C00E09917a686c3A04ffb03484356B",
    "MinimumOrder": 0.00000000
  }],
  "TrezorPath": "m/44'/1'/0'/0/0"
}]
```

Broadcast

Description

Broadcasts signed transaction to the network. This API is used to execute "buy", "sell", "create coin", "set allowance" functionality as they all represent transaction to a contract.

GET parameter	Value	Notes
action	broadcast	Should be always broadcast for this API call.
primary	A primary coin symbol name	One of the coins returned in response to GetPrimaryCoins API.
data	A hexadecimal string representing signed transactions	Transaction signed by a user to be broadcasted to a primary coin network.

Output

Returns a transaction number:

- tx : A hexadecimal string representing transaction number.

Example GET request:

<http://api.erc20.exchange/index.php?action=broadcast&primary=ETC&data=0x76487237692388236>

Response

```
[{
  "tx": "0xef7b8Ec0afAc38faf6b89480767878811f66A7b8"
}]
```

GetTxData

Description

Provides transaction data required for signing for a desired type of user's action.

time, get positive response and both submits a transaction. One tx will eventually fail.

GET parameter	Value	Notes
action	test_new_coin	Should be always test_new_coin for this API call.
primary	Primary coin market	One of the coins returned in response to GetPrimaryCoins API.
ticker	Ticker of a coin which user is about to add.	

Output

Output always contain the following field:

- Result : Code which defines if coin with proposed ticker can be added to the exchange.

Code	Description
0	Coin can be added to the exchange.
-1	There is already an ongoing transaction to add a coin with the same ticker.
-2	Coin with this ticker already scheduled for the review.
-3	Coin with this ticker already listed on the exchange.

Example

http://api.erc20.exchange/index.php?action=test_new_coin&ticker=ABC

Response

```
{
  "Result": 0
}
```