

# Corion Foundation

## CorionX Token

Technical documentation

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# Code folder structure

The actual source code is to be found under the following git repo:

<https://github.com/CORIONplatform/CorionX>

Branching is kept simple at the moment, the master branch contains the major live version of the token and dependencies on the live network as dev branch contains elements under development.

The structure of the repo is the following:

- contracts : contain the solidity contracts
- deploy: contains deployment specific items
- docs: contains some minimal rather developers specific documentation
- migrations: standard library from Truffle for migration scripts
- misc: contains at the moment only the ABI file
- services: contains code to realize the initial token allocation
- test : is a standard library from truffle, containing unit tests in mocha

## Contracts

The following important solidity contracts were used during the development, most of them are standard OpenZeppelin implementations:

File	Description
ERC20Basic.sol	Simpler version of ERC20 interface
ERC20.sol	ERC20 interface
BasicToken.sol	Basic version of StandardToken, with no allowances.
BurnableToken.sol	Token that can be irreversibly burned (destroyed)
Ownable.sol	The Ownable contract has an owner address, and provides basic authorization control
StandardToken.sol	Implementation of the basic standard token
CorionXToken.sol	ERC20 token for the CorionX Token
SafeMath.sol	Math operations with safety checks that throw on error

## Stages

The token has been deployed and tested on all active Ethereum networks and finally on the live one. The latest addresses which used for the testing for the different stages are the followings:

- TEST1: 0x9b46BE2116F52f63B81bd98961efCDb4B0397540
- TEST2: 0x53cb49375f1A3f1331Cdf87054D73BBA08215634
- ROPSTEN: 0x18921a0F96805AbAEF9ce33ee0fD653f15f88B7d  
(CONTRACT: [0xe72f01A9d819C28C9b0A7c9cD6242224E5f73169](#))
- LIVE: [0x089aad9e9106624023ea15363dae8abf68b7b0c](#)  
(CONTRACT: [0x26a604dffe3ddab3bee816097f81d3c4a2a4cf97](#))

## ABI documentation

### ABI

```
[{"constant":false,"inputs":[{"name":"_spender","type":"address"}, {"name":"_value","type":"uint256"}], "name":"approve", "outputs":[{"name":"success","type":"bool"}], "type":"function"}, {"constant":true, "inputs": [], "name":"totalSupply", "outputs":[{"name":"total","type":"uint256"}], "type":"function"}, {"constant":false, "inputs":[{"name":"_from","type":"address"}, {"name":"_to","type":"address"}, {"name":"_value","type":"uint256"}], "name":"transferFrom", "outputs":[{"name":"success","type":"bool"}], "type":"function"}, {"constant":true, "inputs":[{"name":"_owner","type":"address"}], "name":"balanceOf", "outputs":[{"name":"balance","type":"uint256"}], "type":"function"}, {"constant":false, "inputs":[{"name":"_to","type":"address"}, {"name":"_value","type":"uint256"}], "name":"transfer", "outputs":[{"name":"success","type":"bool"}], "type":"function"}, {"constant":true, "inputs":[{"name":"_owner","type":"address"}, {"name":"_spender","type":"address"}], "name":"allowance", "outputs":[{"name":"remaining","type":"uint256"}], "type":"function"}, {"anonymous":false, "inputs":[{"indexed":true, "name":"from","type":"address"}, {"indexed":true, "name":"to","type":"address"}, {"indexed":false, "name":"value","type":"uint256"}], "name":"Transfer", "type":"event"}, {"anonymous":false, "inputs":[{"indexed":true, "name":"owner","type":"address"}, {"indexed":true, "name":"spender","type":"address"}, {"indexed":false, "name":"value","type":"uint256"}], "name":"Approval", "type":"event"}]
```

## Sendable methods

The method that needs to be mined and costs some ether

### approve

Approve an address to spend some token from owned tokens.

Parameters:

- `_spender`: The address who can spend the tokens
- `_value`: The amount of the spendable tokens.

### decreaseApproval

Decrease the approved amount of spendable token for the specified address.

Parameters:

- `_spender`: The address who can spend the tokens
- `_subtractedValue`: The amount of the change of spendable tokens.

### increaseApproval

Increase the approved amount of spendable token for the specified address.

Parameters:

- `_spender`: The address who can spend the tokens
- `_addedValue`: The amount of the change of spendable tokens.

### transfer

Transfer the specified amount of token to other address.

Parameters:

- `_to`: The receiver address
- `_value`: The amount of token

### transferFrom

Transfer the specified amount of token to other address from the specified address.

**The method caller need to have approvement from the sender address and the amount of the token!**

Parameters:

- `_from`: The sender address.
- `_to`: The receiver address
- `_value`: The amount of token

## Callable methods

The method thats don't need to be mined. It is doesn't cost any more ether.

### allowance

Check the allowed amount of the token, which can be send from the spender in the name of the owner.

Parameters:

- `_owner`: The owner address, who have the token amount
- `_spender`: The spender address who can handle the owner token

### balanceOf

Check the owned amount of the token from owner address.

Parameters:

- `_owner`: The owner address, who have the token amount

## Token properties

### name

CorionX utility token.

### symbol

CORX

### decimals

8

### INITIAL\_SUPPLY

400 000 000

owner

[0x089aad9e9106624023ea15363dae8abf6f8b7b0c](#)

totalSupply

400 000 000