Aqua Token Smart Contract User Guide

Introduction

Aqua Token Smart contract is a software deployed on Ethereum blockchain. It implements the following functions:

1. Keeps track of Aqua Token holding of each Aqua token holder.
2. Keeps track of token holders' payouts such as dividends and redemptions and allows for withdrawals of these payments by token holders.
3. Specifies the procedure for profit distributions to token holders.
4. Provides for requesting and cancellation of token redemptions (buy-backs).
5. Provides standard interface (ERC20) for Ethereum tokens that allows the tokens to be tradeable on any cryptocurrency exchange supporting the standard.
6. Wind up procedure.

Part 1 – Viewing your Aqua Token balance and transferring tokens

In this part, we will describe how to view your Aqua Token holding and how to send your Aqua tokens to another address. We will illustrate this using **My Ether Wallet**. Even though you may be using another wallet software, the concepts remain broadly the same so other wallets will work similarly. We assume that you have read our guide on **How To Create Ethereum Wallet Guide** (https://iaqua.com.au/documents?name=how-to-create-ethereum-wallet-guide) so you have the Keystore file for your wallet, and also our **How to Buy Aqua Tokens** guide (https://iaqua.com.au/documents?name=how-to-buy-aqua-tokens-guide)

Viewing your Aqua Token Balance

To view your Aqua Token balance, you need to have an Aqua Token Smart Contract address. It was provided to you when you participated in our ICO. After successful completion of the ICO, your Aqua Token Smart Contract address is going to be published on our website: https://iaqua.com.au

In your web browser, navigate to My Ether Wallet website: https://www.myetherwallet.com/ . Please make sure the link is spelled correctly and the connection is secure:
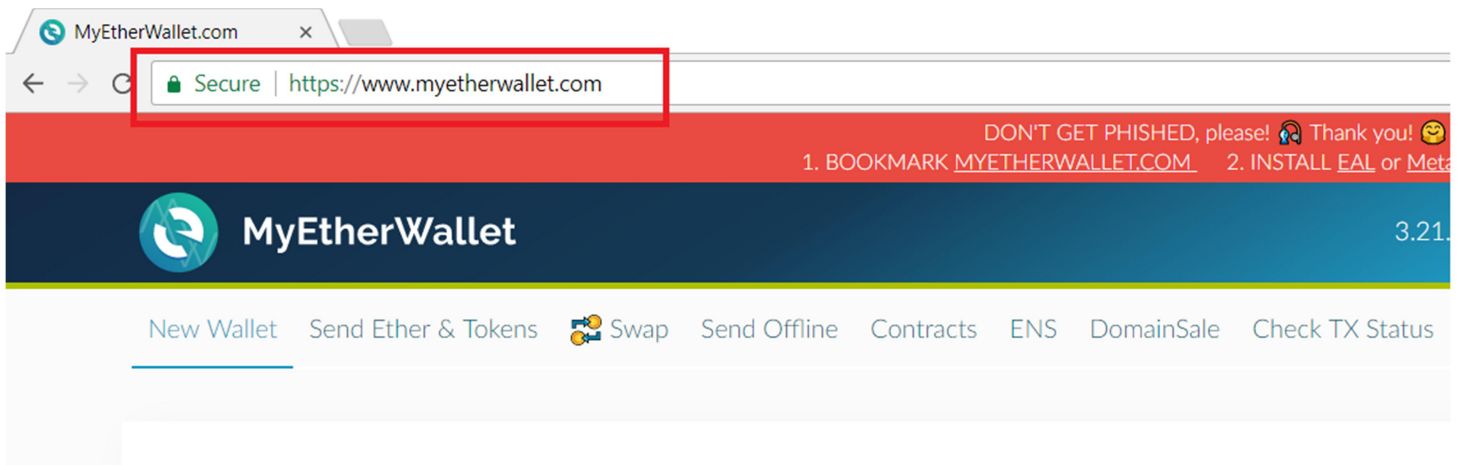
Click on the **Send Ether & Tokens** link in the top menu strip. **Send Ether & Tokens** page will be displayed. Select the **View w/ Address Only** option. Your Address input field will appear on the right side of the page:
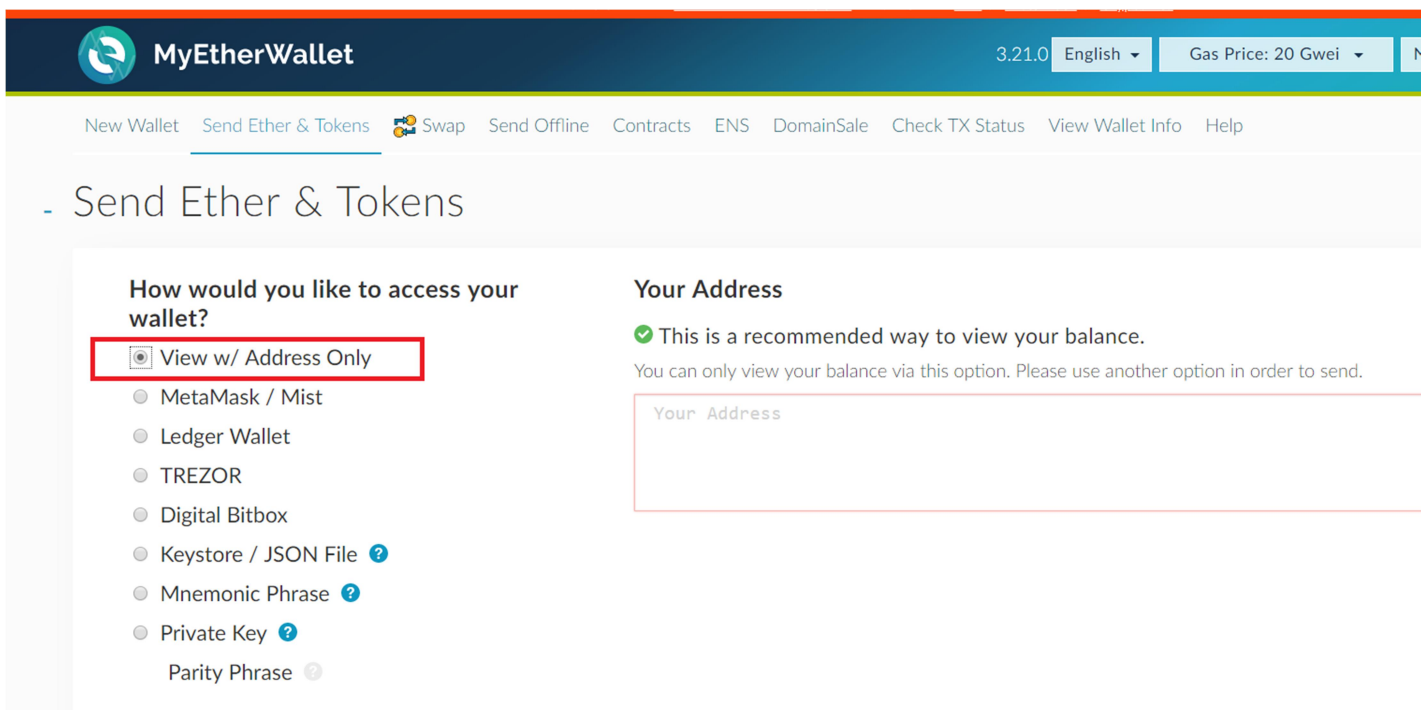
Paste your wallet address in the field. Never type Ethereum addresses manually, since it's very easy to make a mistake. Always use copy/paste function on your computer or device. Once you paste the address, the **View Balance** button will appear:

Your Address

✓ This is a recommended way to view your balance.

You can only view your balance via this option. Please use another option in order to send.

0x█████████████████████

View Balance

Press the **View Balance** button. Your Ether balance for the entered address will be displayed on the right side of the page. Under account details section you should see **Token Balances** section.

Adding Aqua Token

Click on the **Add Custom Token** button:

Three token details fields should appear:

Token Contract Address – please paste the Aqua Token Smart Contract address into this field. This address was provided to your when you participated in our ICO, or alternatively, it is going to be published on our website https://iaqua.com.au after the successful completion of the ICO.

Token Symbol – please enter **AQUAX**

Decimals – please enter **0**

Press the **Save** button. Your Aqua Token balance should display next to AQUAX symbol:

Transferring your tokens to another address

In your web browser navigate to My Ether Wallet website: https://www.myetherwallet.com/ . Please make sure the link is spelled correctly and the connection is secure:
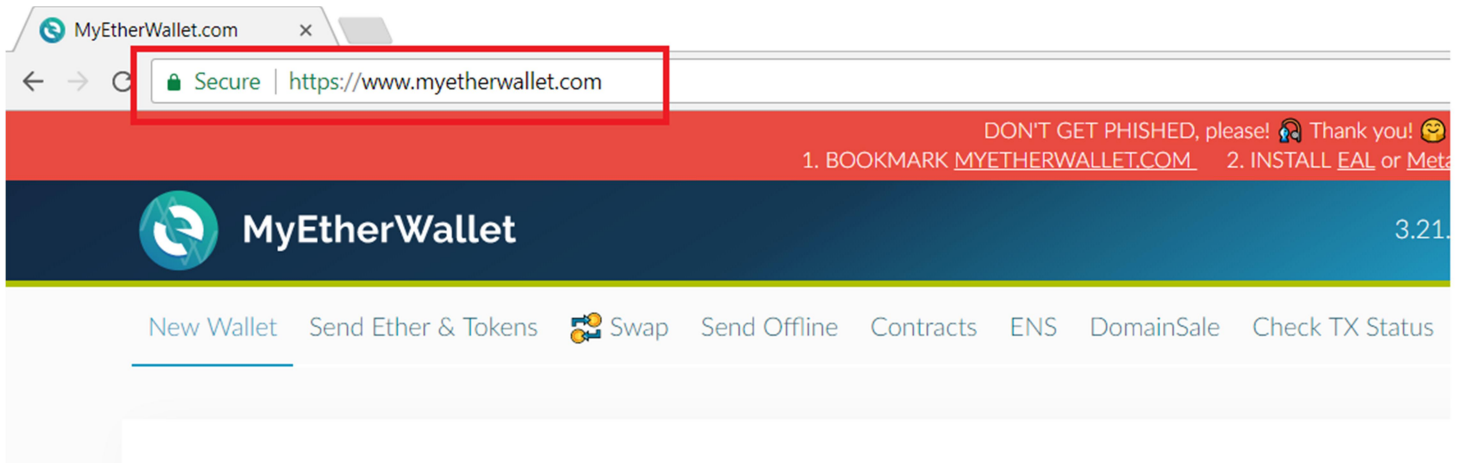
Click on the **Send Ether & Tokens** link in the top menu strip. The **Send Ether & Tokens** page will be displayed. Please choose the way you want to access your wallet. In this guide we assume you followed our instructions on how to create Ethereum wallet (that are available under this link: https://iaqua.com.au/documents?name=how-to-create-ethereum-wallet-guide), so select **Keystore / JSON File** option:

Select Your Wallet File interface should appear. Click on the **SELECT WALLET FILE…** button and choose your wallet file:

Select Your Wallet File

❌ This is not a recommended way to access your wallet.

Entering your private key on a website dangerous. If our website is compromised or you accidentally visit a different website, your funds will be stolen. Please consider:

- MetaMask or A Hardware Wallet or Running MEW Offline & Locally
- Learning How to Protect Yourself and Your Funds

If you must, please double-check the URL & SSL cert. It should say `https://www.myetherwallet.com` & `MYETHERWALLET LLC` in your URL bar.

SELECT WALLET FILE...

Once your wallet file is loaded the password entry field should appear:

SELECT WALLET FILE...

Your wallet is encrypted. Good! Please enter the password.

Password

Enter your wallet password and hit the **Unlock** button:

SELECT WALLET FILE...

Your wallet is encrypted. Good! Please enter the password.

•••••••••••

Unlock

The wallet gets unlocked and you should see **Send Ether & Tokens page**. Your Ether and token balances should display on the right side of the page. You should see your Aqua Token (AQUAX) balance in the **Token Balances** section at the bottom-right side of the page:

If you don't see AQUAX token balance like this then please follow steps described in **Adding Aqua Token** section of this guide.

Now fill in the transfer details of the **Send Ether & Tokens** form.

To Address – paste the destination address for your tokens.

Amount To Send – enter the number of Aqua Tokens you wish to send. Make sure you choose AQUAX as units of the amount to send.

Gas Limit - My Ether Wallet should estimate the gas required automatically. In case your client doesn't estimate gas then enter at least 130000.

After you the details press **Generate Transaction** button.

Your transaction will be signed by your private key and displayed below together with the **Send Transaction** button.

Generate Transaction

Raw Transaction

{"nonce":"0x00","gasPrice":"0x04a817c8
00","gasLimit":"0x03025a","to":"0x6Fb3
f0Ca2cd110961e416a831dD2f1249B1F675A",
"value":"0x0de0b6b3a7640000","data":""

Signed Transaction

0xf86d808504a817c8008303025a946fb3f0ca
2cd110961e416a831dd2f1249b1f675a880de0
b6b3a76400008029a09442d011f3073b3799f6
ae80146d1257ee78fa5d7a2ebe2e359c8f165e

Send Transaction

Now press the **Send Transaction** button. The **You are about to send…** confirmation dialog should popup:

You are about to send...

-> **AQUAX**

To Address:	0x▪▪▪▪▪▪▪▪▪▪▪
	If sending tokens, this should be the token contract address.
From Address:	▪▪▪▪▪▪▪▪▪▪▪▪
Amount to Send:	0 ETH
Account Balance:	▪▪▪▪▪▪▪
Coin:	AQUAX
Network:	▪▪▪▪▪▪▪
Gas Limit:	124218
Gas Price:	20 GWEI (0.00000002 ETH)
Max TX Fee:	0.00248436 ETH (2484360 GWEI)
Nonce:	4
Data:	0xa9059cbb0000000000000000000000000d8dc3681089b5bf41863abb1d03a7025d754df640000000000000000000000000

You are about to send ▪▪▪▪▪ AQUAX to address 0x▪▪▪▪▪▪▪▪▪▪▪

Are you sure you want to do this?

No, get me out of here!	Yes, I am sure! Make transaction.

The network is a bit overloaded. If you're having issues with TXs, please read me.

Please check the transaction details and press the **Yes, I am sure! Make transaction.** button. The transaction will be sent to Ethereum network for processing and, a confirmation message should pop up at the bottom of the screen:

Your TX has been broadcast to the network. This does not mean it has been mined & sent. During times of extreme volume, it may take 3+ hours to send. 1) Check your TX below. 2) If it is pending for hours or disappears, use the Check TX Status Page to replace. 3) Use ETH Gas Station to see what gas price is optimal. 4) Save your TX Hash in case you need it later: 0x0▪▪▪▪▪▪▪▪▪▪▪▪

Verify Transaction	Check TX Status

Please save the transaction hash for your records in case you need to refer to it later. The transaction hash uniquely identifies your transaction on the Ethereum blockchain, and can be used to track the transaction on Ethereum blockchain information websites such as https://etherscan.io/

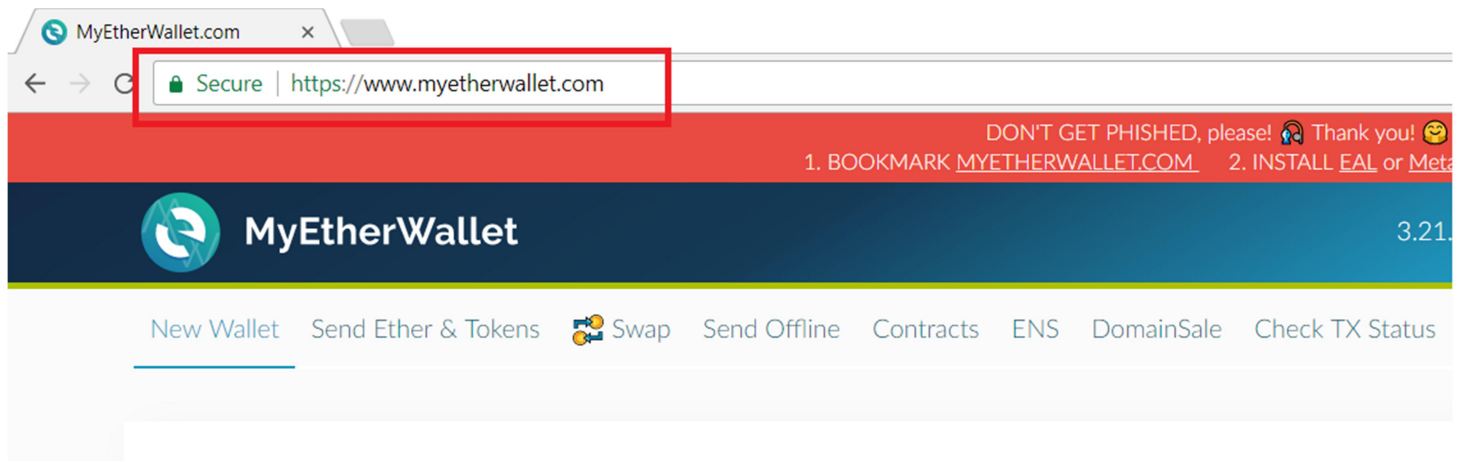You can also click **Check TX Status** or **Verify Transaction** buttons to track your transaction

 It usually takes a few minutes to confirm your transaction, but can take longer depending on network load. Once the transaction is confirmed (included in a block and mined), your balances will be updated.

Part 2 – Interacting with Aqua Token Smart Contract

Setting up the contract interaction interface

In order to interact with Aqua Token Smart contract beyond basic operations such as viewing your token balance and transferring tokens (described in Part 1 of this guide), you need the contract's address as well as Application Binary Interface (ABI). You can find Aqua Token ABI and address published under this link: https://iaqua.com.au/smart-contracts/aqua-token/

In your web browser navigate to My Ether Wallet website: https://www.myetherwallet.com/. Please make sure the link is spelled correctly and the connection is secure:

Click on the **Contracts** link from the top menu. **Interact with Contract** page should open:

In another browser window navigate to https://iaqua.com.au/smart-contracts/aqua-token/

Copy the contract address and ABI by clicking the copy button (or by selecting the field contents) and paste them in the relevant fields of the **Interact with Contract** form on My Ether Wallet site:

Then on the **Interact with Contract** form, press **Access** button. The **Read/Write Contract** section should appear:

Now you can interact with the contract by selecting a relevant function from the **Select a function** dropdown and filling in required parameters if any and hitting Read or Write button if required.

If you select a function that requires the state of the blockchain changed, e.g. transfer tokens of withdraw payouts then you will be required to access your Ethereum wallet. The **How would you like to access your wallet?** dialog will appear. Select **Keystore / JSON file** option:

How would you like to access your wallet?

- ○ MetaMask / Mist
- ○ Ledger Wallet
- ○ TREZOR
- ○ Digital Bitbox
- ○ Keystore / JSON File ❓
- ○ Mnemonic Phrase ❓
- ○ Private Key ❓
-   Parity Phrase ❓

Select Your Wallet File interface should appear. Click on the **SELECT WALLET FILE...** button and choose your wallet file:

Select Your Wallet File

❌ This is <u>not</u> a recommended way to access your wallet.

Entering your private key on a website dangerous. If our website is compromised or you accidentally visit a different website, your funds will be stolen. Please consider:

- MetaMask or A Hardware Wallet or Running MEW Offline & Locally
- Learning How to Protect Yourself and Your Funds

If you must, please <u>double-check the URL & SSL cert</u>. It should say `https://www.myetherwallet.com` & `MYETHERWALLET LLC` in your URL bar.

SELECT WALLET FILE...

Once your wallet file is loaded, the password entry field should appear:

Enter your wallet password and hit the **Unlock** button:


The wallet will be unlocked and you should be able to call function.

Viewing your token holdings and dividend or redemption payments available for withdrawal

Please follow the instructions of the previous section *Setting up the contract interaction interface*.

Once the **Read / Write Contract** section appears click on the **Select a function** dropdown and choose **getHolding** function:
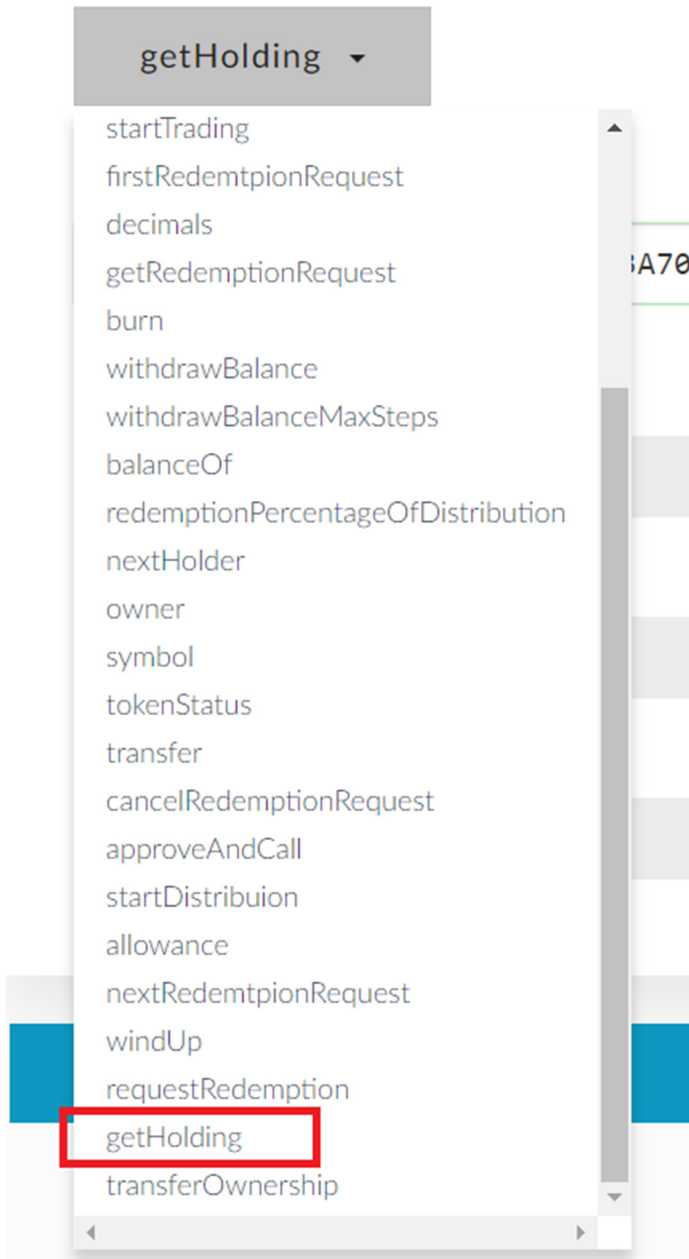
_holder input field should appear. Please paste your wallet address into this field. This must be the address that you used to participate in the Aqua Sale (the one that you send Ether from and the one that holds your tokens). Then press **READ** button. The following three fields should populate with values reflecting your holdings:

totalTokens – this is the total number of Aqua Tokens that you hold.

lockedTokens – this is the number of tokens (out of the total number of tokens you hold) that you requested to redeem, but the redemption request hasn't been processed as yet.

weiBalance – the amount of dividends and redemption payouts available for withdrawal. Please note that the displayed amount is in wei. 1 wei is equivalent to 10^{-18} Ether:

Withdrawing payouts

Please follow the instructions of the previous section *Setting up the contract interaction interface*.

Once the **Read / Write Contract** section appears click on the **Select a function** dropdown and choose **withdrawBalance** function:

Read / Write Contract

0x████████████████████████████████

Select a function ▾

firstHolder
transferFrom
priceOracle
startTrading
firstRedemtpionRequest
decimals
getRedemptionRequest
burn
withdrawBalance
withdrawBalanceMaxSteps
balanceOf
redemptionPercentageOfDistribution

You will be asked to access your wallet. Follow the instructions from the previous section to unlock your wallet.

Once the wallet is unlocked, click the **Write** button. A warning dialog will popup. Leave the **Amount to send** at 0. Gas Limit should be estimated automatically. If it doesn't, then set it to 200000. Click **Generate Transaction** button. Then click **Yes, I am sure! Make transaction**.

Warning!   ×

You are about to **execute a function on contract.**

It will be deployed on the following network: ████████████

Amount to Send *In most cases you should leave this as 0.*

> 0

Gas Limit

> 163325

[**Generate Transaction**]

Raw Transaction

```
{"nonce":"0x02","gasPrice":"0x04a8
17c800","gasLimit":"0x027dfd","to"
:"0xddF5A936F90E525aA5A57aE380D398
```

Signed Transaction

```
0xf889028504a817c80083027dfd94ddf5
a936f90e525aa5a57ae380d3987da4a35e
c280a4eeb3c910000000000000000000000
```

[No, get me out of here!]   [**Yes, I am sure! Make transaction.**]

Your transaction will be sent to the network and confirmation should pop up. On the confirmation, click **View your transaction** link to track your transaction:

👍 Your TX has been broadcast to the network. This does not mean it has been mined & sent. During times of extreme volume, it may take 3+ hours to send. 1) Check your TX below. 2) If it is pending for hours or disappears, use the Check TX Status Page to replace. 3) Use ETH Gas Station to see what gas price is optimal. 4) Save your TX Hash in case you need it later:

0xd███████████████████████████████

View your transaction   ×

Once your transaction is successfully confirmed you should see your wallet balance updated reflecting the withdrawn amount.
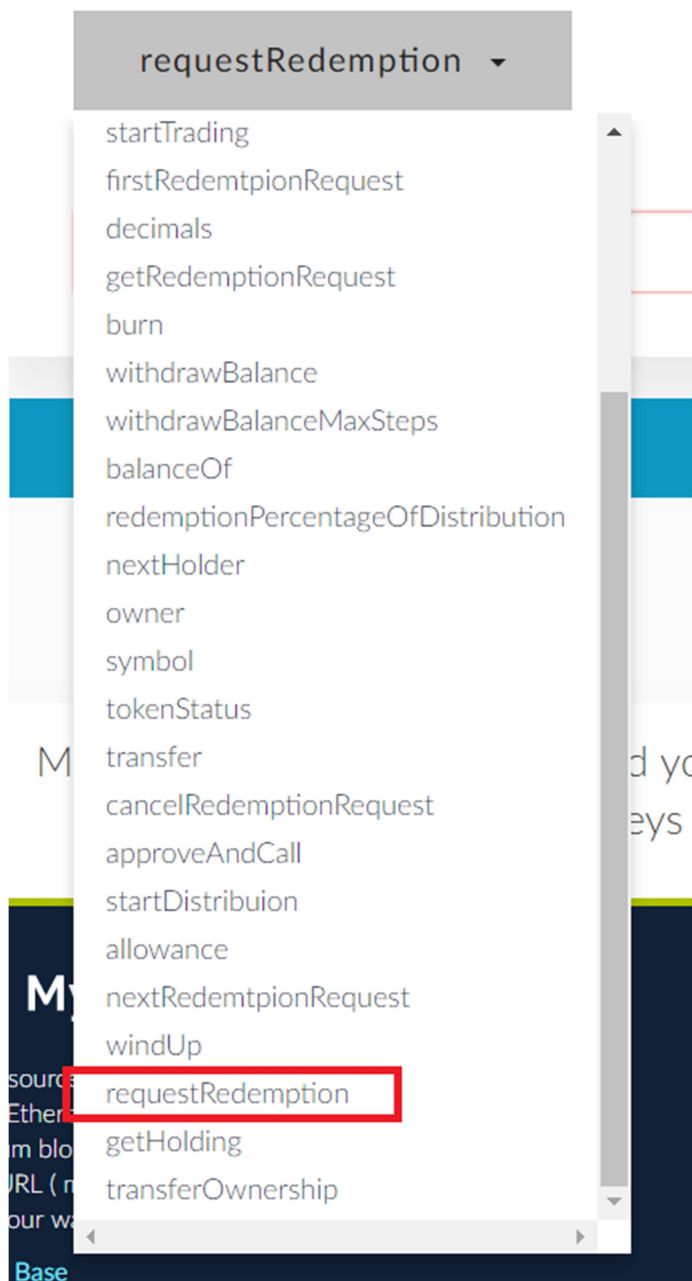
Requesting redemptions and cancelling redemption requests

Requesting redemption

Please follow the instructions of the section *Setting up the contract interaction interface*.

Once the **Read / Write Contract** section appears click on the **Select a function** dropdown and choose **requestRedemption** function:

_numberOfTokens input field should appear. Please enter the number of tokens you want to redeem.

You may be asked to access your wallet. Follow the instructions from the **Setting up contract interaction interface** section to unlock your wallet.

Once the wallet is unlocked press the **Write** button. A warning dialog will popup. Leave the **Amount to send** at 0. Gas Limit should be estimated automatically. If it doesn't, then set it to 200000. Click the **Generate Transaction** button. Then click **Yes, I am sure! Make transaction**. Your transaction will be sent to the network and confirmation should popup. On the confirmation click **View your transaction** link to track your transaction
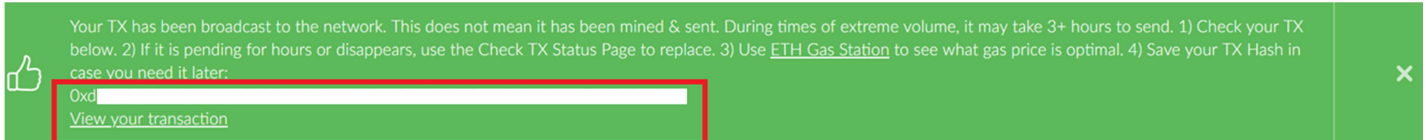
Etherscan.io should open with your transaction details

Once your transaction is successfully confirmed, you can switch to Event Logs tab to view your Redemption Request ID.

Click on the **Event Logs** tab, then change data type of the two of the data fields from **Hex** to **Number**:
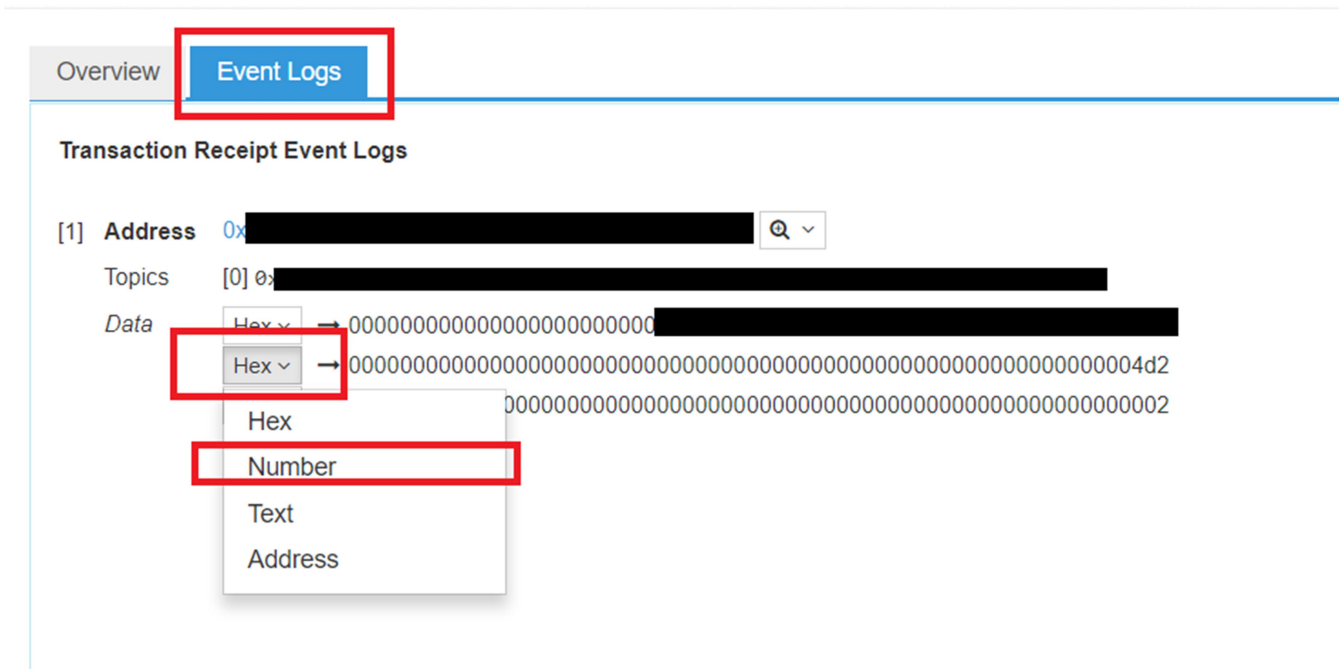
The second field displays the number of tokens you requested to redeem, whereas the third data field displays your Redemption Request ID. Please make a record of your Redemption request ID, since you will need it in case you decide to cancel your redemption request:

Cancelling redemption

You can cancel your previous redemption request at any time before it's completely redeemed. You need to have Redemption request ID on record, from the time you submitted the redemption request. To cancel your Redemption request please do the following:

Please follow the instructions of the section *Setting up the contract interaction interface*.

Once the **Read / Write Contract** section appears click on the **Select a function** dropdown and choose **cancelRedemptionRequest** function:
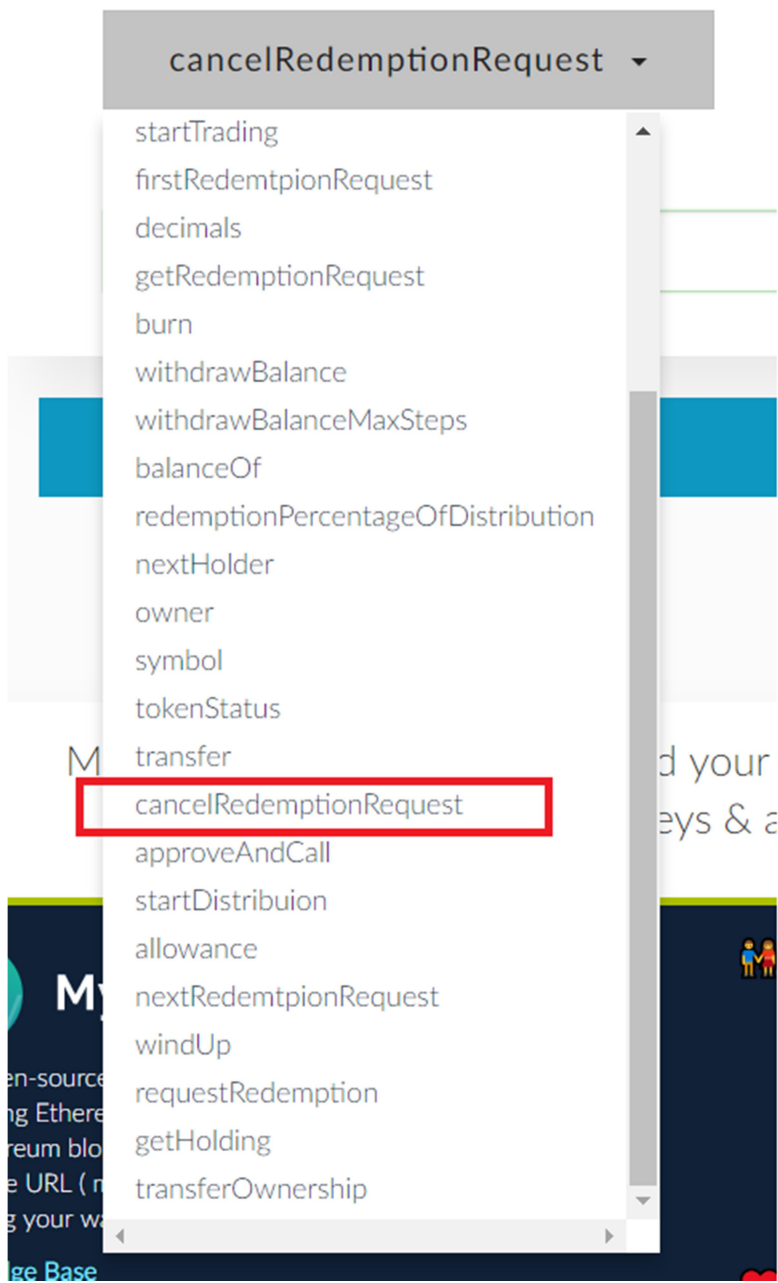
_requestId input box should appear. Enter your Redemption request ID of the redemption request that you wish to cancel.

You may be asked to access your wallet. Follow the instructions from the *Setting up the contract interaction interface* section to unlock your wallet.

Once the wallet is unlocked, press **Write** button. A warning dialog will pop up. Leave the **Amount to send** at 0. Gas Limit should be estimated automatically. If it doesn't, then set it to 200000. Click **Generate Transaction** button. Then click **Yes, I am sure! Make transaction**. Your transaction will be sent to the network and confirmation should popup. On the confirmation click **View your transaction** link to track your transaction

Etherscan.io should open with your transaction details

Once your transaction is successfully confirmed, your redemption request should be canceled.