

Creació d'un contracte intel·ligent de Crowdfunding o donacions usant Blockchain a MultiversX.

Les condicions del contracte serien les següents:

- Import mínim per donant (en 1 sola transacció): 0.1 \$EGLD per transacció.
- Import màxim per donant (acumulat en totes les transaccions del mateix donant): 0.4 \$EGLD en totes les transaccions del mateix donant.
- Import màxim per al projecte (sumant totes les transaccions de tots els donants):
 - Mínim de 50 \$EGLD de finançament.
 - Màxim de 100 \$EGLD.

Codi del contracte (donacions.rs)

```
#![no_std]

use multiversx_sc::derive_imports::*;
#[allow(unused_imports)]
use multiversx_sc::imports::*;

#[type_abi]
#[derive(TopEncode, TopDecode, PartialEq, Clone, Copy)]
pub enum Status {
    FundingPeriod,
    Successful,
    Failed,
}

#[multiversx_sc::contract]
pub trait CrowdfundingSc {

    // --- MODIFICACIÓ 1: INIT ARA REP ELS NOUS PARÀMETRES ---
    #[init]
    fn init(
        &self,
        target: BigUint,
        deadline: u64,
        min_contribution: BigUint, // Mínim per transacció
        max_per_user: BigUint,      // Màxim acumulat per usuari
        max_cap: BigUint            // Màxim total del projecte (Hard
Cap)
    ) {
        require!(target > 0, "Target must be more than 0");
        require!(max_cap >= target, "Max cap must be >= Target");
        require!(max_per_user >= min_contribution, "Max per user must be
>= Min contribution");
    }
}
```

```

        self.target().set(target);
        self.min_contribution().set(min_contribution);
        self.max_per_user().set(max_per_user);
        self.max_cap().set(max_cap);

        require!(
            deadline > self.get_current_time(),
            "Deadline can't be in the past"
        );
        self.deadline().set(deadline);
    }

    #[upgrade]
    fn upgrade(&self) {}

    #[endpoint]
    #[payable("EGLD")]
    fn fund(&self) {
        let payment = self.call_value().egld().clone_value();

        // --- CONDICIÓN 1: Import mínim per transacció ---
        require!(
            payment >= self.min_contribution().get(),
            "L'import es inferior al mínim permès per transaccio"
        );

        let current_time = self.blockchain().get_block_timestamp();
        require!(
            current_time < self.deadline().get(),
            "cannot fund after deadline"
        );

        // --- CONDICIÓN 2: Màxim total del projecte (Hard Cap) ---
        // get_current_funds inclou el pagament actual perquè és un
mètode payable
        let current_funds = self.get_current_funds();
        require!(
            current_funds <= self.max_cap().get(),
            "S'ha superat el límit màxim de finançament del projecte
(Hard Cap)"
        );
    }

```

```

    let caller = self.blockchain().get_caller();
    let deposited_amount = self.deposit(&caller).get();
    let new_user_total = &deposited_amount + &payment;

    // --- CONDICIÓN 3: Màxim acumulat per usuari ---
    require!(
        new_user_total <= self.max_per_user().get(),
        "Superes el limit maxm d'aportacio per usuari"
    );

    // Si tot és correcte, actualitzem el dipòsit de l'usuari
    self.deposit(&caller).set(new_user_total);
}

#[endpoint]
fn claim(&self) {
    match self.status() {
        Status::FundingPeriod => sc_panic!("cannot claim before
deadline"),
        Status::Successful => {
            let caller = self.blockchain().get_caller();
            require!(
                caller == self.blockchain().get_owner_address(),
                "only owner can claim successful funding"
            );

            let sc_balance = self.get_current_funds();
            self.send().direct_egld(&caller, &sc_balance);
        }
        Status::Failed => {
            let caller = self.blockchain().get_caller();
            let deposit = self.deposit(&caller).get();

            if deposit > 0u32 {
                self.deposit(&caller).clear();
                self.send().direct_egld(&caller, &deposit);
            }
        }
    }
}

#[view]
fn status(&self) -> Status {

```

```

        if self.get_current_time() <= self.deadline().get() {
            Status::FundingPeriod
        } else if self.get_current_funds() >= self.target().get() {
            Status::Successful
        } else {
            Status::Failed
        }
    }
}

#[view(getCurrentFunds)]
fn get_current_funds(&self) -> BigUint {
    self.blockchain()
        .get_sc_balance(&EgldOrEsdtTokenIdentifier::egld(), 0)
}

// private

fn get_current_time(&self) -> u64 {
    self.blockchain().get_block_timestamp()
}

// storage

#[view(getTarget)]
#[storage_mapper("target")]
fn target(&self) -> SingleValueMapper<BigUint>;

#[view(getDeadline)]
#[storage_mapper("deadline")]
fn deadline(&self) -> SingleValueMapper<u64>;

#[view(getDeposit)]
#[storage_mapper("deposit")]
fn deposit(&self, donor: &ManagedAddress) ->
SingleValueMapper<BigUint>;

// --- MODIFICACIÓ 2: NOUS STORAGE MAPPERS ---

#[view(getMinContribution)]
#[storage_mapper("minContribution")]
fn min_contribution(&self) -> SingleValueMapper<BigUint>;

#[view(getMaxPerUser)]

```

```

#[storage_mapper("maxPerUser")]
fn max_per_user(&self) -> SingleValueMapper<BigUInt>;

#[view(getMaxCap)]
#[storage_mapper("maxCap")]
fn max_cap(&self) -> SingleValueMapper<BigUInt>;
}

```

1. Realitzem la creació del nou contracte intel·ligent.

```

pwd_is_123@ubuntu24-vbox: ~/codigo/ejemplos/donacions ×
pwd_is_123@ubuntu24-vbox:~/codigo/ejemplos/donacions$ sc-meta all build
/home/pwd_is_123/codigo/ejemplos/donacions

Found 1 contract crates.

1/1)
/home/pwd_is_123/codigo/ejemplos/donacions/meta
Building 'cargo run build'
Compiling multiversx-sc-meta-lib v0.58.0
Compiling donacions v0.0.0 (/home/pwd_is_123/codigo/ejemplos/donacions)
Compiling donacions-meta v0.0.0 (/home/pwd_is_123/codigo/ejemplos/donacions/meta)
Finished 'dev' profile [unoptimized + debuginfo] target(s) in 4.49s
Running '/home/pwd_is_123/codigo/ejemplos/donacions/target/debug/donacions-meta build'
Using workspace target directory: /home/pwd_is_123/codigo/ejemplos/donacions/target ...
Building donacions.wasm in /home/pwd_is_123/codigo/ejemplos/donacions/wasm ...
RUSTFLAGS="-C link-arg=-s -C link-arg=-zstack-size=131072" cargo build --target=wasm32v1-none --release --target-dir /home/pwd_is_123/codigo/ejemplos/donacions/target
Updating crates.io index
Blocking waiting for file lock on package cache
Locking 25 packages to latest compatible versions
Adding multiversx-sc-wasm-adapter v0.58.0 (available: v0.63.1)
Blocking waiting for file lock on package cache
Blocking waiting for file lock on package cache
Compiling proc-macro2 v1.0.103
Compiling unicode-ident v1.0.22
Compiling quote v1.0.42
Compiling hex v0.4.3
Compiling rustversion v1.0.22
Compiling typenum v1.19.0
Compiling smallvec v1.15.1
Compiling autocfg v1.5.0
Compiling endian-type v0.1.2
Compiling nibble_vec v0.1.0
Compiling unwrap-infallible v0.1.5
Compiling bitflags v2.10.0
Compiling arrayvec v0.7.6
Compiling radix_trie v0.2.1
Compiling num-traits v0.2.19
Compiling hex-literal v1.1.0
Compiling syn v2.0.111
Compiling generic-array v1.3.5
Compiling multiversx-sc-codec-derive v0.22.1
Compiling multiversx-sc-derive v0.58.0
Compiling multiversx-sc-codec v0.22.1
Compiling multiversx-chain-core v0.15.0
Compiling multiversx-sc v0.58.0
Compiling multiversx-sc-wasm-adapter v0.58.0
Compiling donacions v0.0.0 (/home/pwd_is_123/codigo/ejemplos/donacions)
Compiling donacions-wasm v0.0.0 (/home/pwd_is_123/codigo/ejemplos/donacions/wasm)

```



```

mirem@ubuntu24-vbox:~/codigo/empleos/donacions$ mpxy contract call erd1qqqqqqqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy --function fund --value 1000000000000000000 --recall-nonce --pem=walletdiego.pem --gas-limit=10000000 --proxy="https://devnet-gateway.multiversx.com" --chain="D" --send
WARNING: cli: The --recall-nonce flag is DEPRECATED. The nonce is fetched from the network by default.
INFO: utils: View this transaction in the MultiversX Devnet Explorer: https://devnet-explorer.multiversx.com/transactions/37278692b8788259b7eb4402a51f708fadd71d11e6ed428c13c7e9b56c59ff42
{
  "emittedTransaction": {
    "nonce": 9,
    "value": "6000000000000000000",
    "receiver": "erd1qqqqqqqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy",
    "sender": "erd13p62plk4htgy3h0mqzhyz12qp6sm0jdlpp9jzwm7f7g3vyqaw54sxcnz49",
    "senderUsername": "",
    "receiverUsername": "",
    "gasPrice": 100000000,
    "gasLimit": 10000000,
    "data": "ZnVuZGUi",
    "chainID": "D",
    "version": 2,
    "options": 0,
    "guardian": "",
    "signature": "22e5c1e3c859546a1e590db12f8331ac441759c549ac8a7abb78e659568f45bcd98d18e2b73359c1e05087dd77c86af8a4e4c143e7cd9109dd5bb7c8a0109",
    "guardianSignature": "",
    "relay": "",
    "relaySignature": ""
  },
  "emittedTransactionData": "fund",
  "emittedTransactionHash": "37278692b8788259b7eb4402a51f708fadd71d11e6ed428c13c7e9b56c59ff42",
  "contractAddress": "erd1qqqqqqqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy"
}
mirem@ubuntu24-vbox:~/codigo/empleos/donacions$

```

Mirem les transaccions realitzades.

The screenshot shows the Devnet Explorer interface. At the top, there's a search bar and a navigation menu with options like Dashboard, Blocks, Transactions, Accounts, Apps, Tokens, NFTs, Validators, and Devnet. The main content area displays the details of a transaction for the address **erd1qqqqqqqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy**. The transaction is labeled as **Invalid: Insufficient funds: 1554400000000000**. Below this, there's a table with columns for Transaction ID, From, To, Method, and Value. The table shows a transaction with ID **3727869...6c59ff42**, from **erd13p62...4sxcnz49**, to **erd1qqqq...sg424yy**, with a value of **× 6 xEGLD**. The transaction is marked as **Fund**.

Missatge: *Insuficient funds:15540000000000*. (Superat el límit de la wallet).

Cas2: Transacció amb l'aportació del mínim de 0,1\$EGLD per donant.

```

mpxy contract call erd1qqqqqqqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy
--function fund --value 1000000000000000000 --recall-nonce --pem=walletdiego.pem
--gas-limit=10000000 --proxy="https://devnet-gateway.multiversx.com" --chain="D" --send

```

```

pwd@ts_123@ubuntu24-vbox:~/codigo/empleos/donacions$ npx contract call erd1qqqqqqqqqqqqqqqqqqqq4fpaah85j3ekpdst3e0xgdjz4lpxw54sg424yy --function fund --value 1000000000000000000 --recall-nonce --pen-wall
etdioego.pen --gas-limit=10000000 --proxy=https://devnet-gateway.multiversx.com --chain=0 --send
WARNING: cli: The --recall-nonce flag is DEPRECATED. The nonce is fetched from the network by default.
INFO: cli: View this transaction in the MultiversX Devnet Explorer: https://devnet-explorer.multiversx.com/transactions/bf78af52674743e01f63771ca9dbb4821a4be26def912ac63688634f3bd4ecd0 cli.py:79
utils.py:161
{
  "emittedTransaction": {
    "nonce": 10,
    "value": "1000000000000000000",
    "receiver": "erd1qqqqqqqqqqqqqqqqqqqq4fpaah85j3ekpdst3e0xgdjz4lpxw54sg424yy",
    "sender": "erd13p62plk4htgy3h0mqzhyzl2qp6sm0jdlpp9jzwm7f7g3vyqaw54xcnz49",
    "senderUsername": "",
    "receiverUsername": "",
    "gasPrice": "1000000000",
    "gasLimit": "100000000",
    "data": "ZnVuZGZ=",
    "chainID": "0",
    "version": 2,
    "options": 0,
    "guardian": "",
    "signature": "3f37c26e783e0eb1fc67f16faf4c1dcad8f8a1b3ce973e1dce3b5896895b13fc177fb0f8ae858d21241567f358024e893fbee9738eed4adda68e63f6fab01",
    "guardianSignature": "",
    "relayer": "",
    "relayerSignature": ""
  },
  "emittedTransactionData": "fund",
  "emittedTransactionHash": "bf78af52674743e01f63771ca9dbb4821a4be26def912ac63688634f3bd4ecd0",
  "contractAddress": "erd1qqqqqqqqqqqqqqqqqqqq4fpaah85j3ekpdst3e0xgdjz4lpxw54sg424yy"
}
pwd@ts_123@ubuntu24-vbox:~/codigo/empleos/donacions$

```

Mirem les transaccions realitzades.

Dashboard
Blocks
Transactions
Accounts
Apps
Tokens
NFTs
Validators
Devnet

Search for an address, @herotag, transaction/block hash, validator key or token id
Epoch 4,877
1,468 Rounds Left

erd1qqqqqqqqqqqqqq ... z4lpxw54sg424yy

Address

erd1qqqqqqqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy
(Shard 1)

Owner

erd13p62plk4htgy3h0mqzhyzl2qp6sm0jdlpp9jzwm7f7g3vyqaw54xcnz49

Properties

Upgradeable

Readable

Payable

Payable by Smart Contract

Balance

× 0.1 xEGLD

≈\$0.66

Rewards

× 0.000036 xEGLD

≈\$0.00024

Total Transactions

2

First Deployed

10 mins ago

Latest Upgrade

N/A

Transactions
ESDT Tokens
NFTs
Staking
Analytics
Upgrades
Code

Txn Hash
Age
Shard
From
To
Method
Value

bf78af526 ... 3bd4ecd0
34 secs
Shard 1 → Shard 1
erd13p62 ... 4xcnz49
IN
erd1qqqq ... sg424yy
Fund
× 0.1 xEGLD

3727869 ... 6c59ff42
2 mins
Shard 1 → Shard 1
erd13p62 ... 4xcnz49
IN
erd1qqqq ... sg424yy
Fund
× 6 xEGLD

Show 25 records

Missatge: Transacció realitzada.

Cas3: Transacció que supera l'aportació màxima de 0,4 \$EGLD per donant. (El donant ja havia donat 0,1 \$EGLD)


```

pwd_ls_123@ubuntu24-vbox:~/codigo/ejemplos/donacions$ mpy contract call erd1qqqqqqqqqqqqqqqqqq4fpaah85j3ekpdst3e0xgdjz4lxpw54sg424yy --function fund --value 400000000000000000 --recall-nonce --pem-wall
etdlego.pem --gas-limit=100000000 --proxy=https://devnet-gateway.multiversx.com --chain=D --send
WARNING: cli: The --recall-nonce flag is DEPRECATED. The nonce is fetched from the network by default.
INFO: utils: View this transaction in the MultiversX Devnet Explorer: https://devnet-explorer.multiversx.com/transactions/ec92c10b801c5ea99ea49fedbcbf568e803300b160c5de87cb510cb40bcc6548
{
  "emittedTransaction": {
    "nonce": 11,
    "value": "400000000000000000",
    "receiver": "erd1qqqqqqqqqqqqqqqqqq4fpaah85j3ekpdst3e0xgdjz4lxpw54sg424yy",
    "sender": "erd13p62plk4htgy3h0mqzhyz12qp6sm0jdlpp9jzwm7f7g3vyqaw54sxcnz49",
    "senderUsername": "",
    "receiverUsername": "",
    "gasPrice": 100000000,
    "gasLimit": 10000000,
    "data": "ZnVudA==",
    "chatID": "D",
    "version": 2,
    "options": 0,
    "guardian": "",
    "signature": "ea86aff2bb01d999753267a1ef31dfaafbe2699804896dc7d1ece8ef00fbd18dd6b4c00a1b4b7b663d50936d9e64de13997125e2be8596545ca39bdb8af2b0b",
    "guardianSignature": "",
    "relay": "",
    "relaySignature": ""
  },
  "emittedTransactionData": "fund",
  "emittedTransactionHash": "ec92c10b801c5ea99ea49fedbcbf568e803300b160c5de87cb510cb40bcc6548",
  "contractAddress": "erd1qqqqqqqqqqqqqqqqqq4fpaah85j3ekpdst3e0xgdjz4lxpw54sg424yy"
}
pwd_ls_123@ubuntu24-vbox:~/codigo/ejemplos/donacions$

```

Mirem les transaccions realitzades.

Devnet Explorer

Dashboard
Blocks
Transactions
Accounts
Apps
Tokens
NFTs
Validators
Devnet

Search for an address, @herotag, transaction/block hash, validator key or token id

Epoch 4,877
1,446 Rounds Left

erd1qqqqqqqqqqqqqq ... z4lxpw54sg424yy

Address

erd1qqqqqqqqqqqqqqqqqq4fpaah85j3ekpdst3e0xgdjz4lxpw54sg424yy (Shard 1)

Owner

erd13p62plk4htgy3h0mqzhyz12qp6sm0jdlpp9jzwm7f7g3vyqaw54sxcnz49

Properties

Upgradeable

Readable

Payable

Payable by Smart Contract

Balance

× 0.1 xEGLD

≈\$0.66

Rewards

× 0.000036 xEGLD

≈\$0.00024

Total Transactions

3

First Deployed

13 mins ago

Latest Upgrade

N/A

Transactions
ESDT Tokens
NFTs
Staking
Analytics
Upgrades
Code

Fail: Superes el límit màxim d'aportació per usuari

Shard 1 → Shard 1

erd13p62 ... 4sxcnz49

IN

erd1qqqq ... sg424yy

Fund

× 0.4 xEGLD

bf78af526 ... 3bd4ecd0

2 mins

Shard 1 → Shard 1

erd13p62 ... 4sxcnz49

IN

erd1qqqq ... sg424yy

Fund

× 0.1 xEGLD

3727869 ... 6c59ff42

5 mins

Shard 1 → Shard 1

erd13p62 ... 4sxcnz49

IN

erd1qqqq ... sg424yy

Fund

× 6 xEGLD

Show 25 records

Prev

1

Next

Missatge: *Superes el límit màxim d'aportació per usuari.*

Cas3: Transacció que supera l'aportació màxima de 0,4 \$EGLD per donant. (El donant ja havia donat 0,1 \$EGLD)

Transacció de 0,31 \$EGLD. (Transacció màxima fins al límit del donant 0,3 \$EGLD)

```

swd_ls_123@ubuntu24-vbox:~/codlgo/ejemplos/donacions$ mwp contract call erd1qqqqqqqqqqqqqqqqqqqq4fpaah85j3ekpdst3e0xgdjz4lpxw54sg424yy --function fund --value 3100000000000000000 --recall-nonce --pem=wall
stdiego.pem --gas-limit=100000000 --proxy="https://devnet-gateway.multiversx.com" --chain="D" --send
WARNING: cli: The --recall-nonce flag is DEPRECATED. The nonce is fetched from the network by default.
INFO: utils: View this transaction in the MultiversX Devnet Explorer: https://devnet-explorer.multiversx.com/transactions/f10899a9623da3ab15bc874beb619690c3bf9e7d1d6889293cddbaccdd23a16f3 cli.py:79
utils.py:161

"emittedTransaction": {
  "nonce": 12,
  "value": "3100000000000000000",
  "receiver": "erd1qqqqqqqqqqqqqqqqqqqq4fpaah85j3ekpdst3e0xgdjz4lpxw54sg424yy",
  "sender": "erd13p62plk4htgy3h0mqzhyzl2qp6sm0jdlpp9jzmw7f7g3vyqaw54sxcnz49",
  "senderUsername": "",
  "receiverUsername": "",
  "gasPrice": 1000000000,
  "gasLimit": 100000000,
  "data": "ZNVuZA==",
  "chainID": "D",
  "version": 2,
  "options": 0,
  "guardian": "",
  "signature": "d8a67aa26ef88833b04a6de07ee6f7aed2c5cf96155ca0e7806d10f53c394f7dbebbe0ece266ef50f798103718738a358642fc893b00beba6220cfff888e4e306",
  "guardianSignature": "",
  "relayer": "",
  "relayerSignature": ""
},
"emittedTransactionData": "fund",
"emittedTransactionHash": "f10899a9623da3ab15bc874beb619690c3bf9e7d1d6889293cddbaccdd23a16f3",
"contractAddress": "erd1qqqqqqqqqqqqqqqqqqqq4fpaah85j3ekpdst3e0xgdjz4lpxw54sg424yy"
swd_ls_123@ubuntu24-vbox:~/codlgo/ejemplos/donacions$

```

Mirem les transaccions realitzades.

Devnet Explorer

Dashboard
Blocks
Transactions
Accounts
Apps
Tokens
NFTs
Validators
Devnet

Search for an address, @herotag, transaction/block hash, validator key or token id
Epoch 4,877
1,426 Rounds Left

erd1qqqqqqqqqqqqqq ... z4lpxw54sg424yy

Address

erd1qqqqqqqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy (Shard 1)

Owner

erd13p62plk4htgy3h0mqzhyzl2qp6sm0jdlpp9jzmw7f7g3vyqaw54sxcnz49

Properties

Upgradeable

Readable

Payable

Payable by Smart Contract

Balance

× 0.1 xEGLD

≈ \$0.66

Rewards

× 0.000036 xEGLD

≈ \$0.00024

Total Transactions

4

First Deployed

15 mins ago

Latest Upgrade

N/A

Transactions
ESDT Tokens
NFTs
Staking
Analytics
Upgrades
Code

Fail: Superes el límit màxim d'aportació per usuari

Shard 1

From

To

Method

Value

× f10899a9... 23a16f3

28 secs

Shard 1 → Shard 1

erd13p62 ... 4sxcnz49

IN

erd1qqqq ... sg424yy

Fund

× 0.31 xEGLD

× ec92c10 ... bcc6548

2 mins

Shard 1 → Shard 1

erd13p62 ... 4sxcnz49

IN

erd1qqqq ... sg424yy

Fund

× 0.4 xEGLD

bf78af526 ... 3bd4ecd0

4 mins

Shard 1 → Shard 1

erd13p62 ... 4sxcnz49

IN

erd1qqqq ... sg424yy

Fund

× 0.1 xEGLD

× 3727869 ... 6c59ff42

7 mins

Shard 1 → Shard 1

erd13p62 ... 4sxcnz49

IN

erd1qqqq ... sg424yy

Fund

× 6 xEGLD

Show
25
records

Missatge: *Superes el límit màxim d'aportació per usuari.*

Cas4: Transacció amb l'aportació exacta restant de 0,3 \$EGLD del donant. (El donant ja havia donat 0,1 \$EGLD)

```

pud_ls_123@ubuntu24-vbox:~/codigo/ejemplos/donacions$ mvy contract call erd1qqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy --function fund --value 3000000000000000000 --recall-nonce --pem-wall
etdiego.pem --gas-limit=100000000 --proxy=https://devnet-gateway.multiversx.com --chain=0 --send
WARNING: cli: The --recall-nonce flag is DEPRECATED. The nonce is fetched from the network by default.
INFO: utils: View this transaction in the MultiversX Devnet Explorer: https://devnet-explorer.multiversx.com/transactions/5c89f09543af94374a596e61ea78e5f0b051fc7be76ee84eb3f11ee9fd838e6
{
  "emittedTransaction": {
    "nonce": 13,
    "value": "3000000000000000000",
    "receiver": "erd1qqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy",
    "sender": "erd13p62plk4htgy3h0mqzhyzl2qp6sm0jdlpp9jzmw7f7g3vyqaw54sxcnz49",
    "senderUsername": "",
    "receiverUsername": "",
    "gasPrice": 1000000000,
    "gasLimit": 10000000,
    "data": "ZmVudA==",
    "chainID": "0",
    "version": 2,
    "options": 0,
    "guardian": "",
    "signature": "28b4b88f62e13eae49db8d858cfc6df049ce708fb1271db805a22f366482685cc53dbfdb38499379b432c9b1b2c63d12e238c13bd50b341db6b16b7cf81cf04",
    "guardianSignature": "",
    "relayer": "",
    "relayerSignature": ""
  },
  "emittedTransactionData": "fund",
  "emittedTransactionHash": "5c89f09543af94374a596e61ea78e5f0b051fc7be76ee84eb3f11ee9fd838e6",
  "contractAddress": "erd1qqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy"
}
pud_ls_123@ubuntu24-vbox:~/codigo/ejemplos/donacions$

```

Mirem les transaccions realitzades.

Dashboard
Blocks
Transactions
Accounts
Apps
Tokens
NFTs
Validators
Devnet

Search for an address, @herotag, transaction/block hash, validator key or token id
Epoch 4,877
1,410 Rounds Left

erd1qqqqqqqqqqqqqqq ... z4lpxw54sg424yy

Address

erd1qqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy
(Shard 1)

Owner

erd13p62plk4htgy3h0mqzhyzl2qp6sm0jdlpp9jzmw7f7g3vyqaw54sxcnz49

Properties

Upgradeable

Readable

Payable

Payable by Smart Contract

Balance

× 0.4 xEGLD
≈\$2.67

Rewards

× 0.000066 xEGLD
≈\$0.00044

Total Transactions

5

First Deployed

16 mins ago

Latest Upgrade

N/A

Transactions
ESDT Tokens
NFTs
Staking
Analytics
Upgrades
Code

Txn Hash
Age
Shard
From
To
Method
Value

5c89f095 ... 9fd838e6

10 secs

Shard 1 → Shard 1

erd13p62 ... 4sxcnz49

IN

erd1qqqq ... sg424yy

Fund

× 0.3 xEGLD

f10899a9 ... 23a16f3

2 mins

Shard 1 → Shard 1

erd13p62 ... 4sxcnz49

IN

erd1qqqq ... sg424yy

Fund

× 0.31 xEGLD

ec92c10 ... bcc6548

4 mins

Shard 1 → Shard 1

erd13p62 ... 4sxcnz49

IN

erd1qqqq ... sg424yy

Fund

× 0.4 xEGLD

bf78af526 ... 3bd4ecd0

6 mins

Shard 1 → Shard 1

erd13p62 ... 4sxcnz49

IN

erd1qqqq ... sg424yy

Fund

× 0.1 xEGLD

3727869 ... 6c59ff42

8 mins

Shard 1 → Shard 1

erd13p62 ... 4sxcnz49

IN

erd1qqqq ... sg424yy

Fund

× 6 xEGLD

Show 25 records

Missatge: Transacció realitzada.

Cas5: Transacció (0,0000000000000000001\$EGLD)que no arriba al límit de les transaccions permeses per donant. (El donant no arriba als 0,1 \$EGLD)

```

pud_ls_123@ubuntu24-vbox:~/codigo/ejemplos/donacions$ mpy contract call erd1qqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy --function fund --value 1000 --recall-nonce --pem-wallet:diego.pem --
gas-limit:10000000 --proxy=https://devnet-gateway.multiversx.com --chain=0 --send
WARNING cli: The --recall-nonce flag is DEPRECATED. The nonce is fetched from the network by default. cli.py:70
INFO utils: View this transaction in the MultiversX Devnet Explorer: https://devnet-explorer.multiversx.com/transactions/78e88cb35dc88ba7167e672ddaa3aac11e2f3b6e3095bce96db1ef7b20e95280 utils.py:161
{
  "emittedTransaction": {
    "nonce": 14,
    "value": "1000",
    "receiver": "erd1qqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy",
    "sender": "erd13p62plk4htgy3h0mqzhyzl2qp6sm0jdlpp9jzwm7f7g3vyqaw54sxcnz49",
    "senderUsername": "",
    "receiverUsername": "",
    "gasPrice": 1000000000,
    "gasLimit": 10000000,
    "data": "ZnVudA==",
    "chainID": "0",
    "version": 2,
    "options": 0,
    "guardian": "",
    "signature": "7f74c276ecbd94bb4a7d1ffa70bb1a94a23b72126689afd7ea8f592ba1ac2e225f8f786cf6f76846eacdc7571769359a07d9b783b88831f02c522ae087b76006",
    "guardianSignature": "",
    "relayer": "",
    "relayerSignature": ""
  },
  "emittedTransactionData": "fund",
  "emittedTransactionHash": "78e88cb35dc88ba7167e672ddaa3aac11e2f3b6e3095bce96db1ef7b20e95280",
  "contractAddress": "erd1qqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy"
}
pud_ls_123@ubuntu24-vbox:~/codigo/ejemplos/donacions$

```

Mirem les transaccions realitzades.

Devnet Explorer
Dashboard
Blocks
Transactions
Accounts
Apps
Tokens
NFTs
Validators
Devnet
Epoch 4,877
1,389 Rounds Left

Search for an address, @herotag, transaction/block hash, validator key or token id

erd1qqqqqqqqqqqqqq ... z4lpxw54sg424yy

Address: **erd1qqqqqqqqqqqqqqq4fpaah05j3ekpdst3e0xgdjz4lpxw54sg424yy** (Shard 1)

Owner: **erd13p62plk4htgy3h0mqzhyzl2qp6sm0jdlpp9jzwm7f7g3vyqaw54sxcnz49**

Properties: Upgradeable Readable Payable Payable by Smart Contract

Balance: **× 0.4 xEGLD**
≈\$2.67

Rewards: **× 0.000066 xEGLD**
≈\$0.00044

Total Transactions: **6**

First Deployed: **18 mins ago**

Latest Upgrade: **N/A**

Transactions
ESDT Tokens
NFTs
Staking
Analytics
Upgrades
Code

Fail: L'import es inferior al mínim permès per transacció

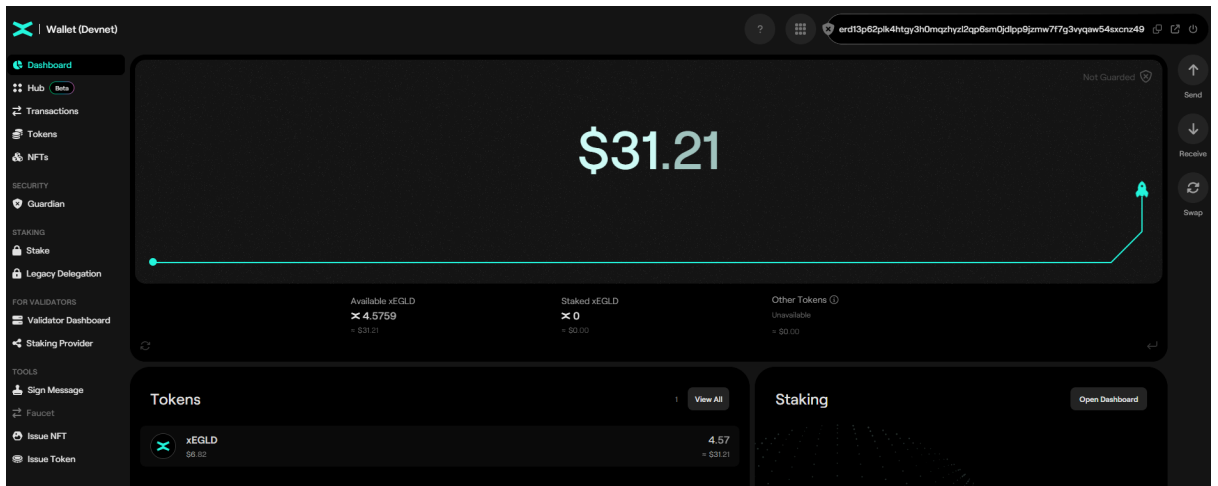
	Shard	From	To	Method	Value
70e80cb ... 0e95280	22 secs	Shard 1 → Shard 1	erd13p62 ... 4sxcnz49	erd1qqqq ... sg424yy	× 0.01201 xEGLD
5c89f095 ... 9fd838e6	2 mins	Shard 1 → Shard 1	erd13p62 ... 4sxcnz49	erd1qqqq ... sg424yy	× 0.3 xEGLD
f10899a9 ... 23a16f3	4 mins	Shard 1 → Shard 1	erd13p62 ... 4sxcnz49	erd1qqqq ... sg424yy	× 0.31 xEGLD
ec92c10 ... bcc6548	6 mins	Shard 1 → Shard 1	erd13p62 ... 4sxcnz49	erd1qqqq ... sg424yy	× 0.4 xEGLD
bf78af526 ... 3bd4ecd0	8 mins	Shard 1 → Shard 1	erd13p62 ... 4sxcnz49	erd1qqqq ... sg424yy	× 0.1 xEGLD
3727869 ... 6c59ff42	10 mins	Shard 1 → Shard 1	erd13p62 ... 4sxcnz49	erd1qqqq ... sg424yy	× 6 xEGLD

Show 25 records

Missatge: *L'import és inferior al mínim permès per transacció.*

5. Wallet amb la que s'han realitzat les donacions.

erd13p62plk4htgy3h0mqzhyzl2qp6sm0jdlpp9jzwm7f7g3vyqaw54sxcnz49



6. Transaccions realitzades per la Wallet amb la que s'han realitzat les donacions.

Transactions			
Age	Action	Details	Value
hace 13 horas	Failed Fund	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	Failed
hace 13 horas	Failed Fund	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	Failed
hace 13 horas	Fund	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	-0.1 xEGLD
hace 13 horas	Failed Fund	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	Failed
hace 13 horas	Failed Fund	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	Failed
hace 13 horas	Fund	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	-0.1 xEGLD
hace 13 horas	Invalid Fund	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	Invalid
hace 13 horas	Smart Contract Deploy	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	
hace 14 horas	Failed Fund	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	Failed
hace 14 horas	Invalid Fund	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	Invalid
hace 14 horas	Failed Fund	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	Failed
hace 14 horas	Invalid Fund	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	Invalid
hace 15 horas	Failed Fund	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	Failed
hace 15 horas	Invalid Fund	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	Invalid
hace 15 horas	Failed Fund	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	Failed
hace 15 horas	Failed Smart Contract Deploy	To <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	Failed
hace 27 dias	Received xEGLD	From <code>erd3p62pk4htgy3h0mqghyz2gpbem0jdlpp9jmw77g3vycaw54axcz49</code>	+5 xEGLD