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Ethereum Name Service

Overview

What ENS is & how it works

ENS resolvers in practice

Using ENS in DApps

Registrars & name registration

Deployment plans & the future

Hello
my name is

**0x112234455c3a32fd112
30c42e7bccd4a84e02010**

Hello
my name is

INIGOMONTOYA.ETH

More than just names

ENS names contracts and accounts, but also...

Swarm & IPFS records

Legacy DNS records - IP addresses, mail exchangers

Identity attestation

Stores contract interfaces

What is ENS?

eth

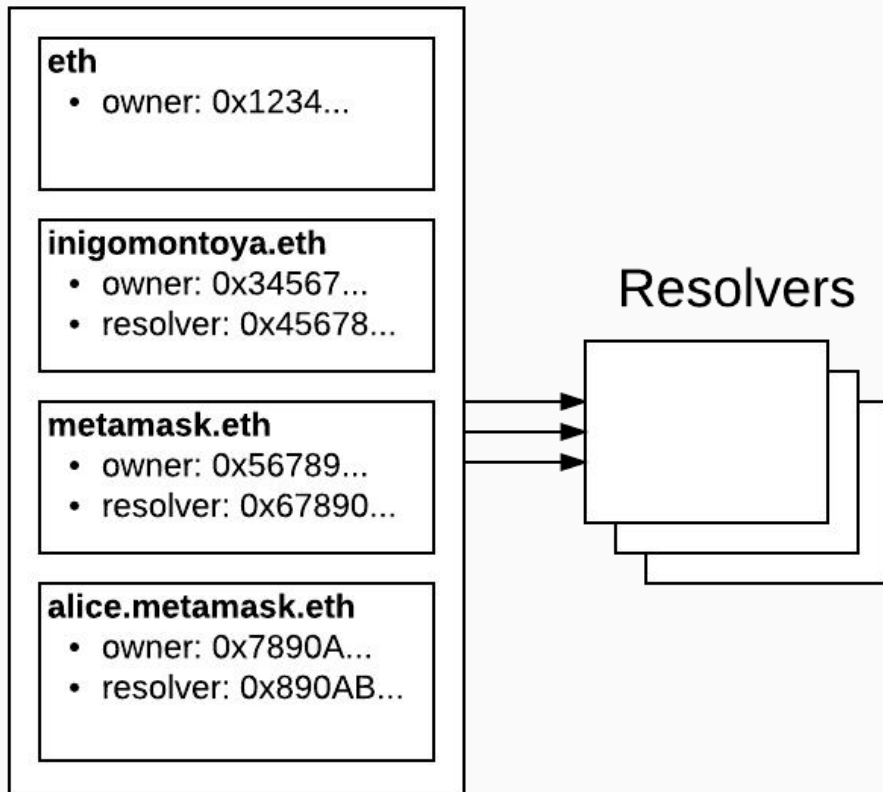
inigomontoya

wallet

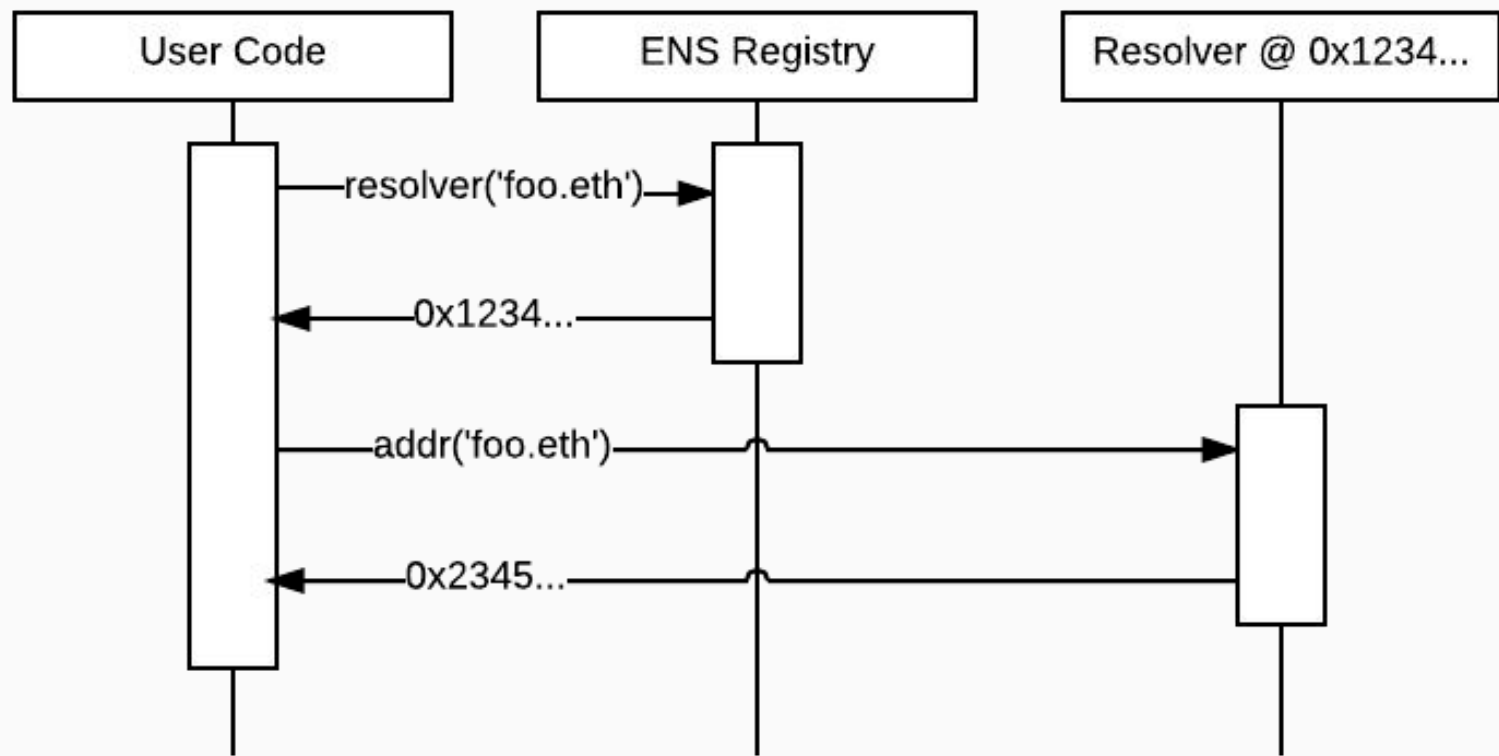
metamask

alice

ENS Registry



Resolving a name



ENS by example: Resolvers

```
Contract MyResolver {
    address me;

    function MyResolver() {
        me = msg.sender;
    }

    function addr(bytes32 node) constant returns (address) {
        return me;
    }
}
```

Owned by ENS

```
contract OwnedByENS {
    ENS ens;
    modifier owned(bytes32 name) {
        if(ens.owner(name) != msg.sender) throw;

        _
    }
    function doSomething() owned(myname) {
        // ...
    }
}
```

Using ENS from Javascript

```
var ENS = require('ethereum-ens');
```

```
var ens = new ENS(web3);
```

Looking up names

```
var address = ens.resolver('inigomontoya.eth').addr();
```

Reverse resolution

```
var name = ens.reverse(`0x112234455...`).name();
```

Enabling reverse resolution for contracts

In JS:

```
reverseRegistrar.claim(eth.accounts[0],  
                        {from: eth.accounts[0]});
```

In Solidity:

```
reverse.claim(msg.sender);
```

Contracts in web3

```
var testContract = web3.eth.contract(  
  [{"constant":true,"inputs":...}])  
var test = testContract.at("0x0904dac3347ea47d208f...");
```

Contracts in ENS

Storing:

```
ens.resolver('inigomontoya.eth')  
  .setAddr(contract.address, {from: eth.accounts[0]});  
ens.resolver('inigomontoya.eth')  
  .setABI(contract.abi, {from: eth.accounts[0]});
```

Fetching:

```
var test = ens.resolver('inigomontoya.eth').instance();
```




ENS by example: Registrars

```
contract SimpleRegistrar {
    ENS ens;
    bytes32 root;

    function claim(bytes32 label) {
        if(ens.owner(sha3(root, label)) != 0)
            throw;
        ens.setSubnodeOwner(root, label, msg.sender);
    }
}
```

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The .eth registrar

The screenshot shows a web browser window with a sidebar on the left and a main content area. The sidebar contains navigation options: BROWSE, HTTPS://WALLET.ET... (Pending Confirmation!), DEFAULT TITLE, and STAKE VOICE. The main content area has a dark red header with the text "Look up an Ethereum Name" and a search input field containing "construct.eth". Below the header, the main content area is divided into two columns. The left column displays the bid information for "construct.eth", including the current bid amount of 1.97 and the deposit of 1.00. The right column shows the time remaining until the reveal phase, which is 3 days, 0 hours, and 2017-01-26 18:33. A warning message states: "Attention: You must reveal your bid within 24 hours of the reveal phase, failing to do so will result in irreversible loss of funds". Below this, there are links for "Export Bids" and "Import Bids". At the bottom of the sidebar, there is a "Test-net" button and some statistics: 400,739, 8, and 26s.

myownname.eth

Look up an Ethereum Name

construct .eth

construct.eth is open for bids

You bid by submitting the maximum amount of ether you would be willing to lock in order to hold for this name. The top bidder will own the name, but you will be refunded of any amount more than the strictly necessary to overbid the second place, therefore you only need to bid once. Your maximum bid is kept secret until you reveal it.

YOUR BIDS

You are willing to pay at most: **1.00** Deposit (will be partially refunded when you reveal your bid): **1.97**

This bid was revealed

TIME REMAINING UNTIL REVEAL PHASE

3 days, 0 hours

2017-01-26 18:33

Attention: You must reveal your bid within 24 hours of the reveal phase, failing to do so will result in irreversible loss of funds

WATCHED NAMES

MORE OPTIONS

[Export Bids](#)

[Import Bids](#)

400,739 8 26s

Test-net

ENS status

Deployed now on Ropsten testnet (.eth, .test)

Coming soon on Mainnet (.eth)

4 week initial auction period, reducing to 1 week

Ready for deployment

Ready for deployment

March 14

Any questions?