

انواع توکن‌های جدید
و کاربردها و
فرصت‌های آنها



رویداد ۹ ژانویه

Jan 9

اندر چیستی توکن

- قرارداد هوشمندی به عنوان یک دفتر کل
- استانداردها



www.openzeppelin.com/contracts

```

// SPDX-License-Identifier: MIT
pragma solidity ^0.8.20;

import "@openzeppelin/contracts/token/ERC20/ERC20.sol";
import "@openzeppelin/contracts/token/ERC20/extensions/ERC20Permit.sol";
import "@openzeppelin/contracts/token/ERC20/extensions/ERC20Votes.sol";
import "@openzeppelin/contracts/access/Ownable.sol";

/// @custom:security-contact Security@kavehmoshtagh.com
contract Moshtagh is ERC20, ERC20Permit, ERC20Votes, Ownable {
    constructor(address initialOwner)
        ERC20("Moshtagh", "MSH")
        ERC20Permit("Moshtagh")
        Ownable(initialOwner)
    {
        _mint(msg.sender, 85000000 * 10 ** decimals());
    }

    // The following functions are overrides required by Solidity.

    function _update(address from, address to, uint256 value)
        internal
        override(ERC20, ERC20Votes)
    {
        super._update(from, to, value);
    }

    function nonces(address owner)
        public
        view
        override(ERC20Permit, Nonces)
        returns (uint256)
    {
        return super.nonces(owner);
    }
}

```

قرارداد هوشمند ایجاد توکن

EIP چیست؟

- EIP
- **E**thereum **I**mprovement **P**roposals

Core

Interface

Meta

Networking

ERC

Informational

ERC چیست؟

- ERC
- **E**thereum **R**equ^est for **C**omment

Ethereum Improvement Proposals

All Core Networking Interface ERC Meta Informational

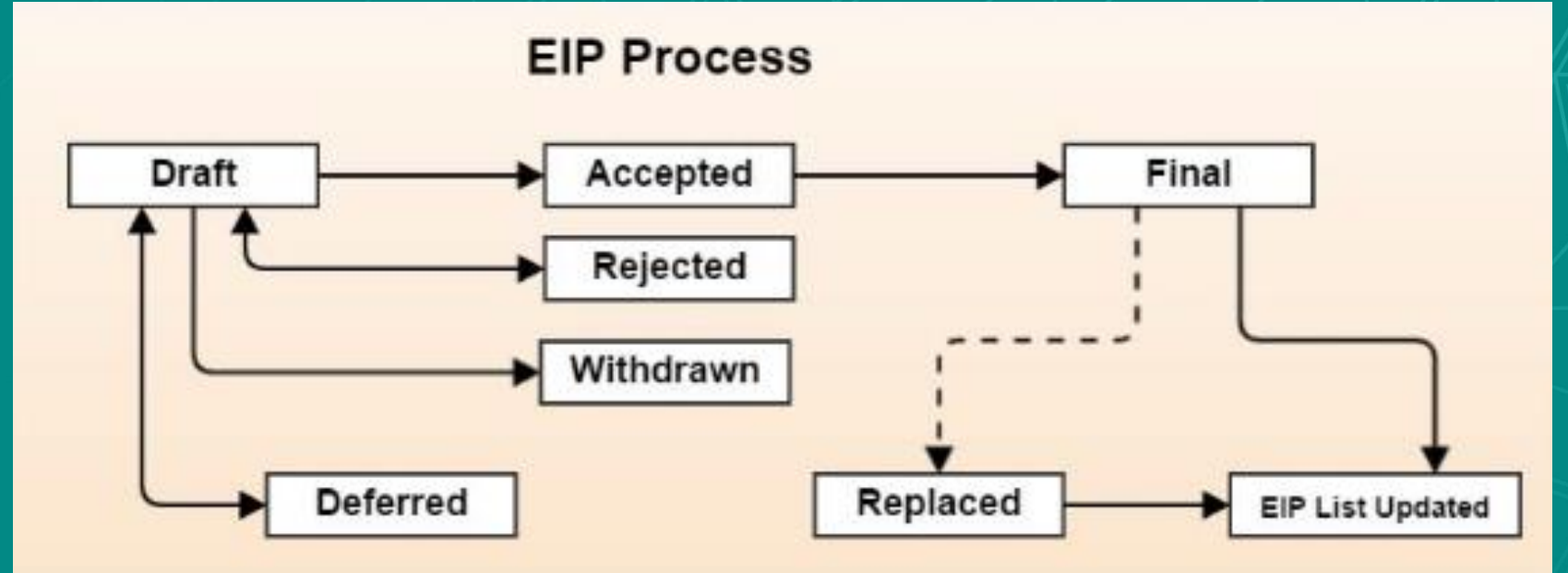
ERC

Final

Number	Title	Author
20	Token Standard	Fabian Vogelsteller <fabian@ethereum.org>, Vitalik Buterin <vitalik.buterin@ethereum.org>
55	Mixed-case checksum address encoding	Vitalik Buterin <vitalik.buterin@ethereum.org>, Alex Van de Sande <avsa@ethereum.org>
137	Ethereum Domain Name Service - Specification	Nick Johnson <arachnid@notdot.net>
162	Initial ENS Hash Registrar	Maurelian, Nick Johnson <nick@ethereum.org>, Alex Van de Sande <avsa@ethereum.org>
165	Standard Interface Detection	Christian Reitwießner <chris@ethereum.org>, Nick Johnson <nick@ethereum.org>, Fabian Vogelsteller <fabian@lukso.network>, Jordi Baylina <jordi@baylina.cat>, Konrad Feldmeier <konrad.feldmeier@brinbot.com>

فاز

- Draft
- Review
- Last Call
- Final
- Stagnant
- Withdrawn



✨ Fellowship of Ethereum Magicians ✨

تعداد استانداردهای توکن

مرحله	کل	توکن‌ها
Final	90	48
Last Call	13	5
Review	29	9
Draft	66	34
Stagnat	177	71
Withdrawn	5	1
مجموع	380	168

۵ توکن مورد بررسی

ERC 3525

• SFT

ERC 4626

• Tokenized Vaults

ERC 5192

• SBT

ERC 5570

• Digital Receipt Non-Fungible Tokens

ERC 6065

• Real Estate Token

توکن‌های پایه

ERC 1155

- مختلط

ERC 721

- **NFT**
- غیر همگن

ERC 20

- توکن معمولی
- همگن

ERC 3525

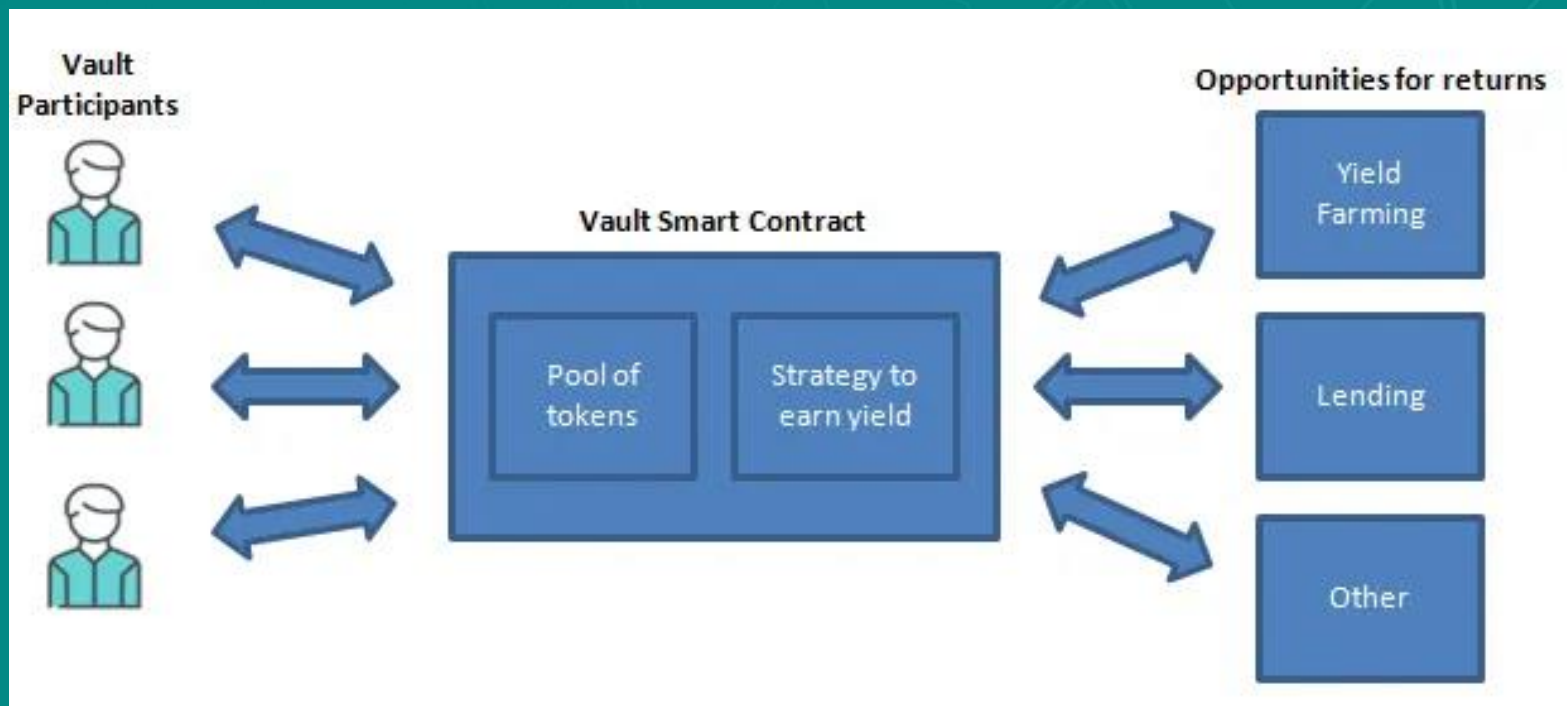
- SFT (**S**emi-**F**ungible **T**okens)

• توکن‌های شبه مثلی



ERC 4626

• توکن خزانہ اشتراکی



ERC 5192

- SBT (**S**oul **B**ound **T**oken)

Soulbound Token Use Cases



Academics



Identity
Verification



Criminal
History



Credit
Verification



Awards



Medical
History



Exclusive
Memberships

ERC 5570

- Digital Receipt Non-Fungible Tokens


• رسید یکتای دیجیتالی

Sales Receipt

Transaction #: 80188
Account #: 000008
Date: 4/28/2015 Time: 2:08:18 PM
Cashier: 004 Register: 1

Item	Description	Amount
008188	McAllister Wingtip	\$385.00
001008	Cotton Rib Dress Socks	\$14.50
	Sub Total	\$399.50
	Tax	\$31.98
		\$431.48

Credit: MasterCard
Acct# *****8888
Auth# 800001



80082

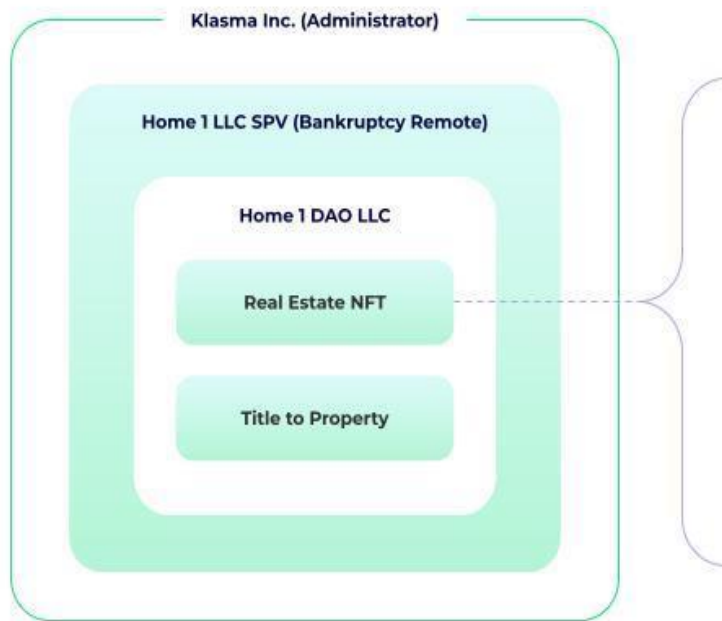
ERC 6065

• توکن املاک

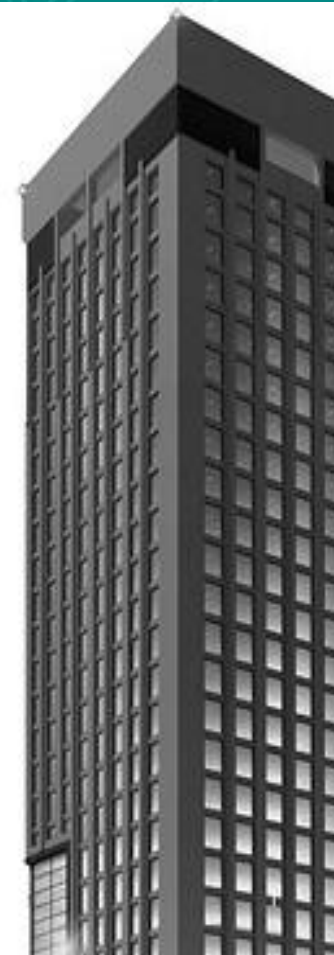
ERC-721 Real Estate Extension

Home Ownership Legal Structure

DeFi-Enabled Real Estate Token



- ERC-721 Real Estate Token**
- Backwards Compatible ERC-721
 - Hashed Operating Agreement
 - Rent Payee Ethereum Address
 - Change Admin/Bridge Property Off-Chain
 - Blocklist Function



سایر توکن‌های پیشنهادی

ERC 223

- Token with transaction handling model

ERC 4519

- Non-Fungible Tokens Tied to Physical Assets

ERC 2981

- NFT Royalty Standard

ERC 5006

- Rental NFT, NFT User Extension

ERC 6366

- Real Estate Token

ERC 6596

- Cultural and Historical Asset Token

منابع

- **A. M. Antonopoulos, G. Wood, and O'reilly Media, Mastering Ethereum : building smart contracts and DApps. Beijing ; Boston ; Farnham ; Sebastopol ; Tokyo: O'reilly, Copyright, 2019.**
- **github.com/ethereum/ERCs/blob/master/ERCs/eip-1.md**
- **[Eips.ethereum.org/erc](https://eips.ethereum.org/erc)**
- **ethereum-magicians.org/**

با تشکر از توجه شما!