UUOS

Living for a Better Smart Contract Platform

Introduction

As a good Smart Contract blockchain platform, how to attract more developers to develop DApp on it, is the key to the success of this Smart Contract platform. To attract more developers, a good Smart Contract language is the key.

A good Smart Contract language can not only improve the efficiency of development, save developers valuable time and energy, but can also reduce the chance of error in the development of Smart Contracts, improve the robustness and maintainability of Smart Contract code.

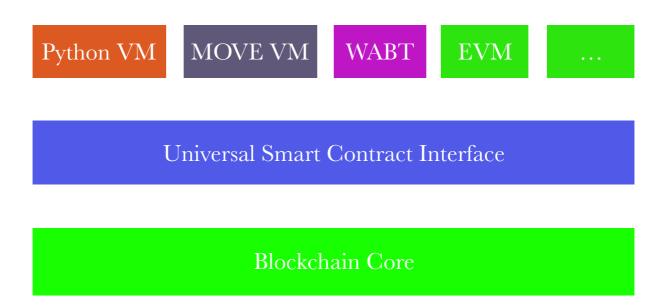
Just like Apple and Android, the future of a Smart Contract development platform depends on how many developers are developing software on it. Developers can develop applications on Apple systems using Objective C and Swift, and supported by powerful Xcode development tools. Java is preferred as the development language on Android, and powerful IDE tools such as Eclipse and Android Studio can be used as development tools.

However, compared to the current thriving general software development industry, the blockchain world seems to be much behind. Most of the time, debugging of Smart Contracts can only be done through the output log. And this indicate that the development of the blockchain really at a very early stage. However, on the other hand, it also shows that the blockchain has great potential.

The reason for this is largely because blockchain, as a financial software, has a very high security requirement, and the implementation of Smart Contracts should not be too complicated. The more complex the Smart Contract means the higher the development difficulty, and the higher the security risk.

How to improve the ease of use and development efficiency of Smart Contracts while ensuring the security of Smart Contracts is a problem that must be solved in the current blockchain world.

Project Structure



UUOS proposes the concept of a generic Smart Contract interface through which you can interact with the underlying layer of the blockchain. Under this architecture, the Smart Contract support of the blockchain is no longer limited to a Smart Contract virtual machine, and the development of Smart Contracts is no longer limited to a certain language. Any Smart Contract virtual machine can be quickly accessed as long as it implements a Smart Contract interface.

Project Introduction

1. support Python as a Smart Contract language

UUOS uses Python as its main Smart Contract development language. Python has a large number of applications in the fields of artificial intelligence, scientific computing, data processing, and network programming. Python has become the most popular language in the world. Below is the popular language rankings of July 2019:

Worldwide, Jul 2019 compared to a year ago:

Rank	Change	Language	Share	Trend
1		Python	28.24%	4.4%
2		Java	19.99%	-2.1%
3		Javascript	8.55%	0.1%
4	^	C#	7.43%	-0.5%
5	V	PHP	6.92%	-1.1%
6		C/C++	5.99%	-0.1%
7		R	4.14%	0.0%
8		Objective-C	2.82%	-0.6%
9		Swift	2.52%	-0.3%
10		Matlab	1.85%	-0.4%
11	^	TypeScript	1.72%	0.2%
12	\checkmark	Ruby	1.42%	-0.2%
13		VBA	1.41%	0.0%
14	^	Kotlin	1.41%	0.5%

As you can see from the above graph, Python has ranked first, surpassing languages such as Java and C/C++. Python is popular among developers because of its ease of use, efficient development, and quick start-up. So the ability to develop Smart Contracts in Python will provide great convenience to Smart Contract developers.

2. support Move virtual machine

UUOS supported the Move virtual machine of Facebook's Libra blockchain project at the time of Libra project publish its source code at Github, that demonstrating the scalability and flexibility of UUOS. This means that Smart Contracts on Libra can be ported to UUOS to promote the entire ecosystem of UUOS.

3. support WASM virtual machine

UUOS retains the WASM virtual machine on Eos, allowing developers to develop Smart Contracts in C++.

4. support EVM virtual machine

UUOS already supports the EVM virtual machine at the beginning. This shows the scalability of UUOS, and consider many developers are still develop Smart Contract on Ethereum, this is a wise choice to support EVM on UUOS. That means Developers can also develop Smart Contracts using the Solidity and Vyper languages.

6. Support mutual calling of Smart Contracts between accounts

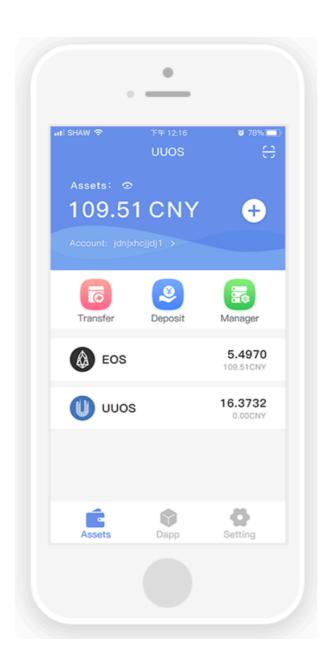
Until now, the Smart Contracts on Eos can't directly call the code of other Smart Contracts, which greatly limits the flexibility of the program. UUOS can already call the code of another Smart Contract from the code of a Smart Contract, thus improving the Smart Contract development. That can saves RAM resources. The storage space on the chain is very valuable, and there are actually quite a lot of duplicate code between different Smart Contracts. These duplicate codes can be said to be a huge waste of storage space on the chain. With this feature, Smart Contracts can save storage space by calling code from other Smart Contracts.

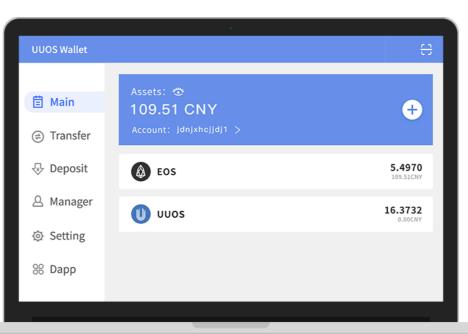
7. support Ethereum and other account systems

UUOS not only supports EVM virtual machines, but also attempts to directly support the Ethereum blockchain account system and the Libra blockchain account system, which means that users can directly transfer funds at UUOS using Ethereum's address and Libra's address, which means developers can publish Smart Contracts directly with Ethereum's address and Libra's address. This also means that the UUOS network can be accessed via Ethereum wallet or Libra wallet with a little configuration.

8. cross-platform wallet system

The UUOS independently developed wallet can support Android system, IOS system, Windows system, Mac OS X system, Linux system, which brings great convenience to the use of digital assets.





9. PyEosKit toolbox

UUOS will package some common functions that interact with blockchain nodes into PyEosKit, which will facilitate the development of the client.

10. Smart Contract SDK

UUOS will encapsulate the commonly used smart contract functionality into the SDK for Python smart contracts to further reduce the development burden of smart contracts.

Reference link:

http://pypl.github.io/PYPL.html