HBTC Whitepaper

Bridge Between Centralized and DeFi Mrkets

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Abstract

HBTC is a standard ERC20 token backed by 100% BTC. While maintaining the equivalent value as Bitcoin, it also has the flexibility of Ethereum. As a bridge between the centralized market and the DeFi① market, HBTC enables users to participate in DeFi market conveniently and seamlessly using Bitcoin, providing high-quality assets to the DeFi market, and promoting the prosperity of the entire DeFi market.

Background

With the development of DeFi, digital assets on blockchain have become one of the important asset classes. Users can easily and transparently check the issuers, holders, transaction details, and contract execution results of digital assets. The standardization (such as ERC20) brings composability to digital assets. Financial products obtained from a decentralized financial application can easily participate in other financial applications. DeFi opens a new market where transactions can be made by traders and financial service providers across all regions.

With these advantages, DeFi's business expanded rapidly in 2019, with rapid development in the fields of lending, trading, insurance, and fund. By December 2019, the lock value of the entire DeFi system is $650 million, 148% higher than the $262 million in early January 2019. Currently, 2.7% of total circulating ETH are locked in DeFi services.

However, Bitcoin is not widely adopted in existing DeFi market. Bitcoin is the largest and most famous digital asset in the blockchain world. Due to the limited functions of the Bitcoin Script and the fact that the hash algorithm used by others. Blockchains is not supported, it is difficult for Bitcoin chain to verify the information on other blockchains. In order to enable Bitcoin to adapt to more application scenarios (such as fast micropayments) and add the function of smart contracts, the blockchain technology community has launched a multi-directional technical research in the purpose of using Bitcoin in Ethereum. But existing technical solutions introduce other complications:

1. Longer Bitcoin Confirmation Time

Taking common cross-chain projects as an example, if a one-way bitcoin cross-chain transfer is initiated from bitcoin, it takes about 100 bitcoin blocks, or about 16.7 hours.

2. Cannot Achieve Full Decentralization

Since it is impossible to verify other blockchain transactions on the bitcoin chain, cross-chain technology can only compromise this in the form of semi-decentralized federation without adding new operators to bitcoin.

3. Potential Financial Risks

Taking the atomic swap technology as an example, when two different blockchain asset swaps are involved, atom swap naturally provides an American option to the participant who executes later. Post-executors can choose to exercise or abandon the swap based on the price changes of the two assets within the time when the hash time lock expires, thereby profiting from it.

In addition to the lack of bitcoin, synthetic assets② in the DeFi market have also exposed some problems:

1. Low Utilization of Funds

In DeFi, the pledge rate is set much higher than that of common centralized service. One of the main reasons is that the price of blockchain digital assets fluctuates sharply. If a low pledge rate is set, the collateral cannot be fully liquidated when the price fluctuates sharply. Even if the oracle machine submits price data for each block, it takes 15 seconds to update. Margin calls will not take effect in time due to Ethereum's bandwidth limitations. Therefore, a high pledge rate is a necessary design for security. However, the high pledge rate brings the problem of low fund utilization. Compared with traditional financial loan products, although DeFi assets can flow freely, it is still difficult for users to benefit from interest rate spread among different financial services, and the interest rate spread convergence rate of different financial services on the same asset is also very slow now. One of the reasons for this is the low utilization of funds. Currently the pledge rate of financial services in Ethereum is generally above 200%.

2. Asset Scale Cap

Another side effect of the high pledge rate is the restriction on the upper limit of scale. Ethereum's market value is around $16 billion now, and the total value of assets constructed using Ethereum as collateral cannot exceed this cap. Ethereum's total market value will become a potential bottleneck to the development of DeFi services.

HBTC Introduction

HBTC aims to solve the lack of Bitcoin in DeFi market. By issuing HBTC digital assets based on the ERC20 standard, the value of Bitcoin is transferred to Ethereum, which injects Bitcoin's liquidity and stability into the Ethereum ecosystem. HBTC backed 1:1 by Bitcoin makes its value consistent with that of Bitcoin, preventing

problems that may occur in synthetic assets. Through HBTC's bridge between the centralized market and the DeFi market, transactions between Bitcoin and ERC20 standard digital assets have become simple and convenient in DeFi market.

HBTC Features

1. High Speed and Low Cost

With HBTC as the Bitcoin deposit and withdrawal channel, the transaction confirmation time will be reduced from one hour to five minutes, and the handling fee will be lower. HBTC will automatically conduct two-way acceptance business in compliance with relevant laws and regulations, and only charge low service fees.

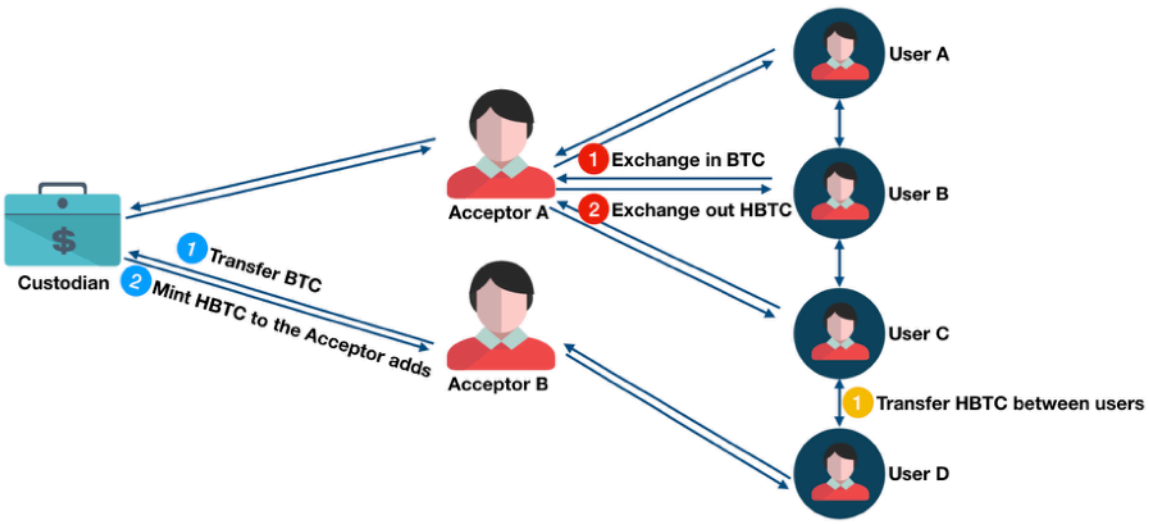
2. Transparent and Auditable

HBTC asset data will remain transparent and open, whether it is about Bitcoin assets or HBTC assets on Ethereum. All acceptance details will be published on HBTC official website, and anyone can freely initiate an audit of HBTC assets.

3. Multi-Acceptor Service

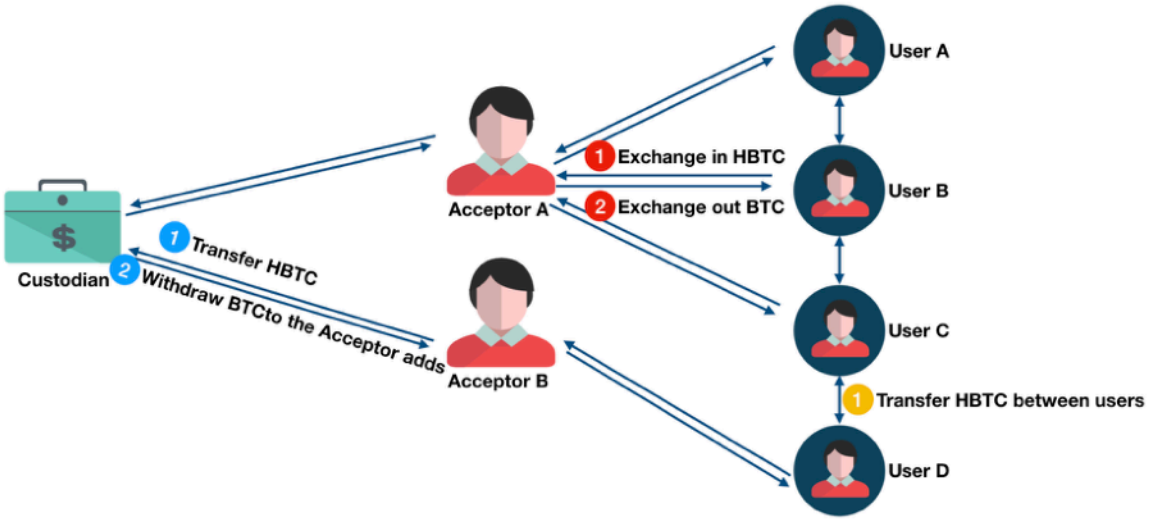
HBTC supports multi-acceptor acceptance, so users can choose acceptor to transfer in (out) HBTC more conveniently.

Acceptor Get / Refund HBTC



Acceptors who comply with relevant laws and regulations can apply to obtain independent Bitcoin address and Ethereum address in the HBTC project for the acquisition and redemption of HBTC. Correspondingly, acceptors also need to provide Bitcoin address and Ethereum address to receive Bitcoin and HBTC assets.

When the acceptor needs to obtain HBTC, he only needs to transfer to the Bitcoin address of HBTC, and the HBTC asset management system will immediately notify the transfer and automatically mint the same number of HBTC to the corresponding HBTC address. The acceptor can then control the use of HBTC, such as withdrawing Bitcoins for his users or use it on Ethereum network.



When the acceptor needs to exchange HBTC into Bitcoin, he only needs to transfer HBTC assets to the system's HBTC address, and HBTC asset management system will immediately detect the HBTC transfer, automatically complete the destruction of these HBTCs, and transfer the same amount of Bitcoin to acceptor's corresponding Bitcoin address.

Bitcoin Asset Custody

HBTC has 100% full margin, so users need not worry about the asset acceptance of HBTC. The team has years of experience in risk control and asset management in the blockchain industry, ensuring that HBTC asset holders can timely convert HBTC into Bitcoin at any time.

Vision

The HBTC project provides a more efficient financial service by bringing highly liquid Bitcoin assets into Ethereum's DeFi to connect the centralized market with the DeFi market, reducing the cost of DeFi users. The HBTC team will work with

partners to expand the application of HBTC, and work with acceptors to provide users with better experience.

Glossary

①DeFi: Abbreviation of Decentralized Finance.

②Synthetic Assets: A method of simulating other assets to construct new assets. In the blockchain industry, it refers to digital assets that anchor off-chain assets to the blockchain without mastering any original assets by combining technologies such as oracle machines, algorithmic incentives, and mortgaged blockchain assets.