

stUSDT

The first rebasing RWA stable yield protocol on TRON and Ethereum networks

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Abstract

stUSDT stands as an innovative rebasing Real World Asset (RWA) protocol that operates across both the TRON and Ethereum networks. The platform's native token, stUSDT, serves as a decentralized asset, offering tangible validation of investments within the realm of RWAs. As a decentralized intermediary for real-world assets, stUSDT enables holders to engage in real-world investments and subsequently reap rewards. Powered by smart contracts, stUSDT prominently showcases decentralized investment strategies, transparent disclosure protocols, and a robust asset management mechanism. This whitepaper provides a comprehensive outline of the stUSDT protocol, elucidating its advantages, architectural intricacies, and prudent risk considerations.

Introduction

1.1 Background and Motivation

Real World Assets (RWAs) encompass tangible assets often confined within traditional financial (TradFi) systems. The blockchain industry consistently forges ahead by integrating RWAs with blockchain technology to catalyze and amplify the adoption of blockchain within both the retail and conventional finance spheres.

The genesis of stUSDT on TRON marks a pioneering milestone as the first rebasing RWA protocol on the TRON network. This initiative draws inspiration from Alipay's Yu'e Bao market fund, a product by Alibaba known for investing residual funds from online payments, which derived its name from "leftover treasures." In this context, stUSDT takes on the role of Web3's Yu'e Bao, signifying a new phase for the TRON ecosystem. This protocol acts as a bridge, connecting traditional markets with the blockchain realm and consequently offering users a broader range of investment opportunities.

stUSDT is dedicated to ensuring the accessibility of RWAs on both the TRON and Ethereum networks, further promoting the seamless integration of cryptocurrency within the contours of traditional finance.

1.2 Challenges with RWA on Blockchain

The integration of RWAs into the blockchain landscape presents several formidable challenges. Among these challenges, liquidity emerges as a primary concern. Ensuring users' unrestricted ability to enter and exit an RWA with ample liquidity at any given time is paramount.

Another challenge pertains to navigating the intricate web of regulations spanning various countries. These regulatory complexities can dissuade potential investors from participating and can pose substantial obstacles to protocols striving to adhere to all pertinent regulations.

Risk management constitutes yet another significant challenge. A comprehensive risk management strategy is integral for sustained success. Establishing and maintaining appropriate collateralization, safeguards, and hedging mechanisms is imperative to mitigate potential risks effectively.

stUSDT is committed to providing a solution that addresses these challenges.

1.3 stUSDT RWA Staking Solution

The stUSDT platform is dedicated to bridging the divide between retail and institutional investors, fostering a connection between the crypto realm and the real world. Through the utilization of smart contracts, stUSDT ensures an equitable landscape where all individuals can engage in investments within real-world assets.

The stUSDT platform features a comprehensive and user-friendly UI interface, streamlining the exchange process between USDT and stUSDT via convenient staking and unstaking procedures. As users engage, the quantity of stUSDT in their possession grows incrementally, driven by the smart contract's allocation of rewards through the Rebase mechanism. Concurrently, the exchange rate between these two tokens will perpetually remain at 1:1, thereby ensuring profitability.

stUSDT is accessible on both the TRON and Ethereum networks, and its availability may potentially expand to include more blockchain platforms in the future.

RWA Staking Overview

2.1 What is an RWA?

RWA, an acronym for Real-World Assets, functions as a gateway for introducing real-world investment opportunities to the realm of cryptocurrencies. In a landscape where the majority of investment prospects and yields within the crypto domain stem from internal sources, RWAs provide a more diverse array of options for investors. Within the stUSDT platform, assets will be allocated to investments in RWAs, which encompass various assets such as short-term government bonds.

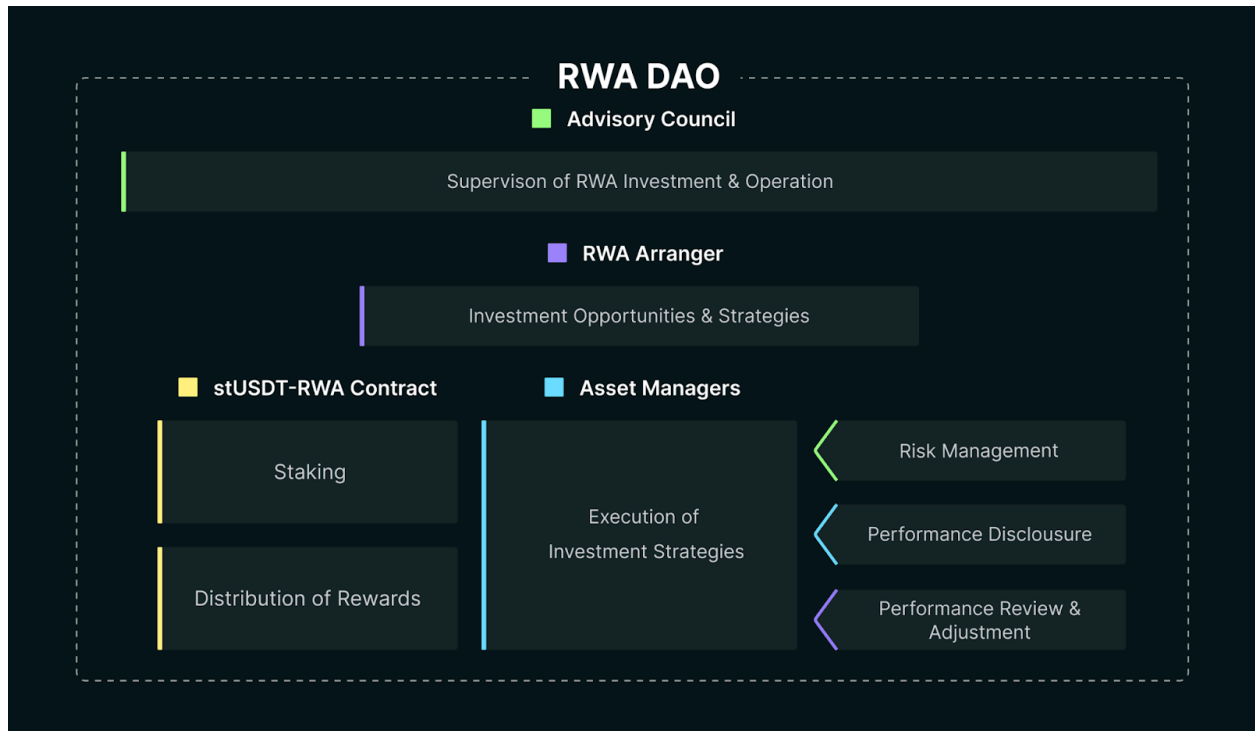
2.2 Benefits of RWA Staking with stUSDT

1. Tokenized stUSDT can flow seamlessly on-chain, boasting substantial liquidity without encountering the limitations inherent to TradFi. This tokenization offers a heightened level of flexibility within the investment landscape.
2. stUSDT eradicates the entry barriers and constraints often tied to premier investment targets within TradFi, thereby fostering a realm of more equitable and accessible investment prospects.
3. Fueled by the foundation of its smart contract, stUSDT investments implement a transparent and robust management mechanism, effectively mitigating investment risks for users.
4. The stUSDT investment framework harnesses the inherent advantages ingrained in blockchain technology, encompassing cost-effectiveness and operational efficiency. With its continuous 24/7 operation, users are enabled to commence accruing rewards promptly upon their entry.
5. Users' investments in RWAs are made transparent and safeguarded by the management and oversight mechanisms of the RWA DAO. This framework guarantees optimal asset allocation through meticulously devised strategies.

2.3 Role of RWA DAO

RWA DAO, a Decentralized Autonomous Organization, serves as a decentralized and self-governing community with a dedicated focus on RWA investments. The DAO structure proves optimal for stUSDT as it encourages collective participation, eliminating reliance on a single or few individuals. This approach ensures significant importance for every stakeholder and member, granting them a voice in decision-making.

The mission of RWA DAO encompasses safeguarding the interests and rights of community investors, while simultaneously providing an accessible, equitable, and secure avenue for RWA investments to all users. Additionally, RWA DAO assumes the responsibility of managing the smart contract associated with RWAs, thereby ensuring its stability, transparency, and operational efficiency. Presently, JustLend DAO is entrusted with the custody of RWA DAO.



Roles in RWA DAO and Their Functions:

Advisory Council

- Elected by RWA DAO and composed of professionals from both the TradFi and DeFi investment sectors.
- Oversees day-to-day RWA investments and operations, while also presenting significant proposed adjustments to RWA DAO for voting when necessary.
- Monitors RWA investment risks and effectively mitigates potential risks.
- Appoints RWA Arrangers and evaluates their performance.

RWA Arranger

- Identifies investment opportunities and formulates investment strategies.
- Recruits candidates for the Asset Manager role and verify their qualifications.
- Evaluates RWA investment performance and adjust strategies as required.

Asset Managers

- Execute the investment strategy provided by RWA Arrangers and make necessary adjustments within specified limits during implementation.
- Performance Oracle: Regularly discloses RWA investment performance and asset holdings on-chain.

stUSDT-RWA Contract

- RWA Arrangers deploy the stUSDT-RWA Contract to secure assets in accordance with established strategies and to distribute RWA investment rewards.

stUSDT Protocol Architecture

3.1 Tokenized Staked Stablecoin

stUSDT is a receipt token that users acquire through RWA investments by staking USD stablecoins.

USD stablecoins staked in the contract are invested in low-risk RWAs, such as short-term government bonds.

stUSDT maintains an equivalent value to USD stablecoins. It possesses the characteristics of TRC-20 or ERC-20 tokens, facilitating seamless on-chain transfers and garnering compatibility with the majority of smart contracts. The contract enables stUSDT to be unstaked and claimed as USDT at a 1:1 ratio (subject to specific rules that may apply). Through the Rebase mechanism, stUSDT periodically dispenses rewards to holders, implying that prolonged possession leads to increased reward accrual.

3.2 What is wstUSDT?

To enhance the trading convenience of stUSDT on exchanges, it is imperative to encapsulate this RWA-backed token as a TRC-20 token named wstUSDT (Wrapped stUSDT). This strategic step empowers investors with heightened ease and flexibility when engaging with stUSDT.

wstUSDT is obtained by depositing stUSDT into the Wrapper contract, accessible on the stUSDT.io platform. By holding wstUSDT, users can receive the same staking rewards as they would with stUSDT. However, in contrast to stUSDT, the staking rewards obtained through wstUSDT will not directly influence the quantity of tokens held within a wallet, as the wstUSDT balance remains constant. Instead, these rewards will be reflected in the price of wstUSDT. Moreover, as price fluctuations reflect the interest income, investors will benefit from enhanced convenience compared to frequently settling stUSDT.

3.3 Token and Contract Addresses

stUSDT platform is committed to providing transparency and safeguarding users' funds. However, malicious actors are constantly vigilant. Therefore, we strongly encourage users to consistently interact through the official site and diligently verify the contract addresses of tokens associated with stUSDT.

Official website	https://stusdt.io/
stUSDT	TThzxNRLrW2Brp9DcTQU8i4Wd9udCWEEdZ3
wstUSDT	TGkxzkDKyMeq2T7edKnyjZoFypyziKkssg
USDT	TR7NHqjeKQxGTCi8q8ZY4pL8otSzgijL6t
TUSD	TUpMhErZL2fh4sVNULAbNKLokS4GjC1F4

3.4 How It Works

stUSDT engages in RWA investment through the following process:

1. Pre-investment discussion: The Advisory Council will deliberate on potential RWA investment opportunities and the investment strategy proposed by RWA Arrangers. A determination will be made whether to proceed or not.
2. Pre-vote: RWA DAO will initiate a pre-vote to determine the feasibility of implementing a proposal by RWA Arrangers.
3. Contract creation and execution vote: Upon the proposal's success in the pre-vote, developers from RWA Arrangers will craft the stUSDT-RWA Contract and initiate a vote to decide on executing the proposal.
4. Execution: Following the approval of the execution vote, the stUSDT-RWA Contract will be automatically activated, and RWA Arrangers will establish the initial contract parameters.

The day-to-day operation and management of RWA investments involve the following steps:

1. Staking: Users will stake USDT into the stUSDT-RWA Contract to participate in RWA investments.
2. Execution of Investment Strategy: Asset Managers will allocate funds in line with the pre-defined strategy.
3. Rewards Distribution: Asset Managers will distribute rewards acquired through the stUSDT-RWA Contract to users.
4. Disclosure: Asset Managers are obligated to periodically disclose the performance of RWA investments and asset holdings.
5. Performance Review and Strategy Adjustment: RWA Arrangers will assess the performance of RWA investments and make necessary adjustments to the strategy.
6. Oversight and Risk Control: The Advisory Council will supervise RWA investments and daily operations. It also monitors potential risks to ensure effective risk control.

Tokenomics and Governance

4.1 Governance Structure

The governance framework of the stUSDT protocol is thoughtfully designed to cultivate decentralization, inclusivity, and transparency. Central to this structure is the establishment of the RWA DAO, an entity that empowers members within it to play an active role in the decision-making process. This approach ensures that the protocol's evolution remains harmonized with the collective interests of its user base.

Within this framework, key roles include the Advisory Council panel, which is elected by members within the RWA DAO. The council comprises experts from both traditional finance and decentralized finance, contributing valuable insights. Additionally, RWA Arrangers formulate investment strategies, while Asset Managers execute these strategies. The stUSDT-RWA Contract is instrumental in facilitating rewards and ensuring investment security.

The governance token integral to the stUSDT ecosystem is known as JST. JST serves as the exclusive token for dApp governance and various protocols within the broader JUST ecosystem. This token also plays a pivotal role in steering the governance dynamics within the stUSDT protocol, enabling active participation and decision-making from token holders.

Furthermore, the seamless integration between RWA DAO and JustLend DAO, which boasts the highest Total Value Locked (TVL) on TRON and ranks among the top DeFi projects, has cemented the collaboration between the stUSDT protocol and the JUST ecosystem. In fact, stUSDT operates under the stewardship of JustLend DAO, and this collaborative effort is solidified through a custody agreement binding both parties. This alignment ensures a cohesive and well-coordinated approach to managing and expanding the stUSDT ecosystem, bolstering its resilience and growth prospects.

The stUSDT governance framework places a significant emphasis on consensus, fostering transparency, inclusivity, and adaptability in decision-making processes. This approach enriches the platform's adaptability and utility, contributing to its overall strength and user-centric nature.

4.2 RWA disclosures

At the core of the stUSDT protocol lies a commitment to transparency and accountability. This is underscored by an intricate economic model that integrates two critical components: underlying RWA disclosures and rebase disclosures.

Underlying RWA Disclosures: To uphold the integrity of the protocol, the RWA DAO collaborates with a reputable third-party attestation entity. This partnership ensures the

validation of the underlying RWA investments. This meticulous verification process provides the community with the assurance that each stUSDT is backed by tangible assets. This practice aligns with stUSDT's mission of fostering trust through openness.

Rebase Disclosures: The rebase mechanism, a cornerstone of stUSDT's functionality, is characterized by its periodic disclosures. These disclosures encompass a comprehensive array of details, including investment dates, maturity dates, total investments, bank fees, interest earned upon maturity, and daily net profit, among other pertinent information. By unveiling these facets, the protocol not only maintains its transparency but also empowers users with a comprehensive understanding of the protocol's performance.

In essence, stUSDT's economic model operates as a symphony of disclosure, ensuring that users and stakeholders are well-informed about the assets underpinning the protocol and the dynamics of its rebase mechanism. This commitment to openness not only bolsters confidence but also elevates the protocol's role as a beacon of accountability in the realm of blockchain finance.

Risks

5.1 Smart Contracts Security

While the stUSDT protocol is designed with security in mind, the inherent complexity of smart contracts introduces certain risks that users and stakeholders must be aware of. Smart contracts govern various aspects of the stUSDT ecosystem, from staking and rewards distribution to RWA investments. Therefore, meticulous attention is given to the development, auditing, and ongoing monitoring of these contracts to mitigate potential vulnerabilities.

To address smart contract security risks:

Robust Audits: All smart contracts undergo a rigorous and comprehensive audit conducted by industry-leading experts in blockchain security. These audits aim to identify and rectify vulnerabilities that could be exploited by malicious actors. [The initial audit, performed by ChainSecurity](#) and involving thorough code analysis and vulnerability assessments, demonstrates the project's commitment to ensuring the integrity and security of its smart contracts. Notably, the audit identifies and addresses potential vulnerabilities, showcasing the project's dedication to maintaining a robust and secure ecosystem.

Ongoing Monitoring: Post-deployment, the RWA DAO development team maintains a vigilant approach, closely monitoring the smart contracts for any unusual activity or anomalies. This proactive stance ensures that any potential issues are promptly addressed.

Community Vigilance: The stUSDT community plays a crucial role in identifying and reporting potential security concerns. The stUSDT contract is openly published and verified on the

blockchain. Any community member can examine the smart contract code and report vulnerabilities, fostering a collective effort to maintain the platform's integrity.

Despite these measures, it's important for users to understand that no system is entirely immune to risks. As the blockchain space evolves, the RWA DAO remains committed to adapting and enhancing the protocol's security measures to counter emerging threats.

5.2 Stablecoin Price Risk

stUSDT is the receipt token users receive upon staking USD stablecoins on the platform. Stablecoins currently supported on the stUSDT.io platform, such as USDT and TUSD, used for staking, are issued and managed by third-party entities. Stablecoins are designed to maintain a steady value relative to a specific reference asset, usually a fiat currency like the US Dollar (USD). However, stablecoins can still be influenced by external factors that may impact their stability. Users should be aware of the potential risks associated with stablecoin prices:

Market Fluctuations: While stablecoins strive to maintain stability, sudden and significant fluctuations in the broader cryptocurrency market can impact their value. These fluctuations may result from factors such as regulatory developments, market sentiment shifts, or macroeconomic events.

Underlying Asset Backing: Stablecoins are typically backed by reserves of the reference asset (e.g., USD) or other collateral. Users should carefully assess the stability and credibility of the underlying collateral to gauge the overall risk associated with the stablecoin.

Counterparty Risk: Some stablecoins involve a level of trust in third-party custodians or issuers responsible for maintaining the underlying reserves. Users should consider the reputation and security practices of these entities.

Mitigation Strategies: While stUSDT employs mechanisms to maintain stability, it's crucial for users to diversify their holdings, stay informed about market trends, and consider risk management strategies to mitigate potential stablecoin price risks.

5.3 Regulatory Risk

In addition to the risks outlined above, users should also be attuned to regulatory challenges when holding stUSDT tokens. Regulatory changes and uncertainties within the cryptocurrency space could potentially impact the value and operation of stablecoins or stUSDT. Cryptocurrency regulations vary significantly across jurisdictions and can evolve rapidly. Users are strongly advised to research and understand the regulatory environment in their own countries or regions, and to consult with legal experts if needed, before acquiring and holding

stUSDT tokens. This proactive approach will help users make informed decisions while considering their local regulatory context.

Recognizing and understanding these risks enables stUSDT users to make informed decisions and navigate the dynamic cryptocurrency landscape prudently.

Future Outlook and Scalability

6.1 Role in the Crypto Ecosystem

stUSDT's inception marks a significant stride towards bridging the chasm between the crypto realm and traditional finance. As the first rebasing RWA protocol on the TRON network, stUSDT offers a novel path to include real-world assets within the blockchain domain. Its role extends beyond being a mere stablecoin; it serves as an access point for users seeking to diversify their portfolios and engage in real-world investments, all while preserving the benefits of blockchain technology.

As the adoption of stUSDT grows, its influence within the crypto ecosystem is poised to expand. With its DAO governance structure, strategic investments, and user-centric design, stUSDT is paving the way for a more inclusive and interconnected financial landscape.

6.2 Potential Applications

stUSDT's versatility unlocks a multitude of potential applications across both the crypto and traditional finance sectors. Aside from exposure to RWAs, other potential applications include:

Cross-Border Transactions: stUSDT facilitates frictionless cross-border transactions with its stable value, reducing reliance on intermediaries and decreasing transaction costs, especially when transacting over the TRON network.

Collateral for DeFi: stUSDT can serve as a reliable collateral option within decentralized finance platforms, enhancing the efficiency and liquidity of the ecosystem.

Hedging: Traders can utilize stUSDT as a stable store of value to hedge against market volatility, thereby minimizing risk exposure.

6.2 Progress and Future Enhancements

RWA DAO is committed to an agile and adaptive approach to development, aiming to continually elevate the protocol's functionality, security, and user experience. The evolving journey encompasses the following key aspects:

Broadened RWA Portfolio: Expanding the scope of available Real World Assets (RWAs) for investment, thereby presenting users with a more diverse selection of investment opportunities.

Interoperability Explorations: Investigating interoperability with diverse blockchain networks, thereby amplifying stUSDT's reach and accessibility. It's noteworthy that stUSDT's presence has already transcended the TRON blockchain to include the Ethereum blockchain.

Extended Staking Landscape: Beyond its origins as a platform primarily designed for USDT token holders to engage in RWA investments, stUSDT has progressed to provide staking opportunities for TUSD users as well. This expansion underscores the platform's dedication to serving a more extensive user base.

By synergizing these enhancements with stUSDT's inherent strengths, the roadmap is poised to augment the protocol's value proposition and contribute to its sustained expansion within the cryptocurrency ecosystem. The stUSDT platform remains keenly attuned to market trends and user preferences, an approach that drives the constant optimization of its capabilities. Furthermore, the platform steadfastly explores new investment prospects to provide users with unmatched flexibility and portfolio diversification.

Conclusion

7.1 Recap of stUSDT's RWA Staking Solution

In summary, the stUSDT protocol introduces a transformative paradigm, fusing the power of blockchain technology with the tangibility of Real World Assets. Designed with meticulous attention to governance, security, and transparency, stUSDT reshapes investment possibilities for both traditional and crypto-savvy individuals. This whitepaper has elucidated the protocol's architecture, its innovative Rebase mechanism, its comprehensive governance framework, and its dedication to disclosure.

The stUSDT platform sets a new standard for decentralized investments by enabling users to stake stablecoins and engage with real-world assets seamlessly. Through innovative mechanisms like the Rebase mechanism and the decentralized governance of RWA DAO, stUSDT pioneers a path of balanced risk and reward, offering a bridge to a realm of diversified investment opportunities.

7.2 The Role of stUSDT in the Evolving Crypto Landscape

As the blockchain landscape evolves, stUSDT emerges as a guiding light, propelling us toward an era of decentralized finance and redefined investment strategies. Its role expands beyond being a mere token; it represents an entry point to the world of RWAs, a cornerstone of interoperability, and a beacon of trust and accountability in the DeFi ecosystem. The stUSDT protocol's journey mirrors the trajectory of innovation, adaptation, and inclusivity within the crypto ecosystem.

In an ever-changing financial realm, stUSDT champions the transformation of investment dynamics, empowering individuals with accessibility, security, and the promise of a more interconnected financial future. The protocol's narrative extends beyond these pages, inviting each reader to participate in shaping the future of finance—one where traditional boundaries are dissolved, and new horizons of opportunity are realized.

Join us in the journey of stUSDT, where the convergence of blockchain and RWAs paves the way for a harmonized and empowered financial landscape.