

TikTok Technical White Paper

A distributed network for the Smart Economy



TikTok design goals: Smart Economy

TT is the use of blockchain technology and digital identity to digitize assets, the use of smart contracts for digital assets to be self-managed, to achieve "smart economy" with a distributed network.



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1/ Digital Assets

Digital assets are programmable assets that exist in the form of electronic data. With blockchain technology, the digitization of assets can be decentralized, trustful, traceable, highly transparent, and free of intermediaries. Users are able to register, trade, and circulate multiple types of assets. Proving the connection between digital and physical assets is possible through digital identity. Assets registered through a validated digital identity are protected by law.

TikTok has two forms of digital assets: global assets and contract assets. Global assets can be recorded in the system space and can be identified by all smart contracts and clients. Contract assets are recorded in the private storage area of the smart contract and require a compatible client to recognize them. Contract assets can adhere to certain standards in order to achieve compatibility with most clients.

2/ Smart Contract

The smart contract was first proposed by the cryptographer Nick Szabo in 1994, only five years after the creation of the World Wide Web. According to Szabo's definition: When a pre-programmed condition is triggered, the smart contract will execute the corresponding contract terms. Blockchain technology provides us with a decentralized, tamper-resistant, highly reliable system in which smart contracts are very useful.

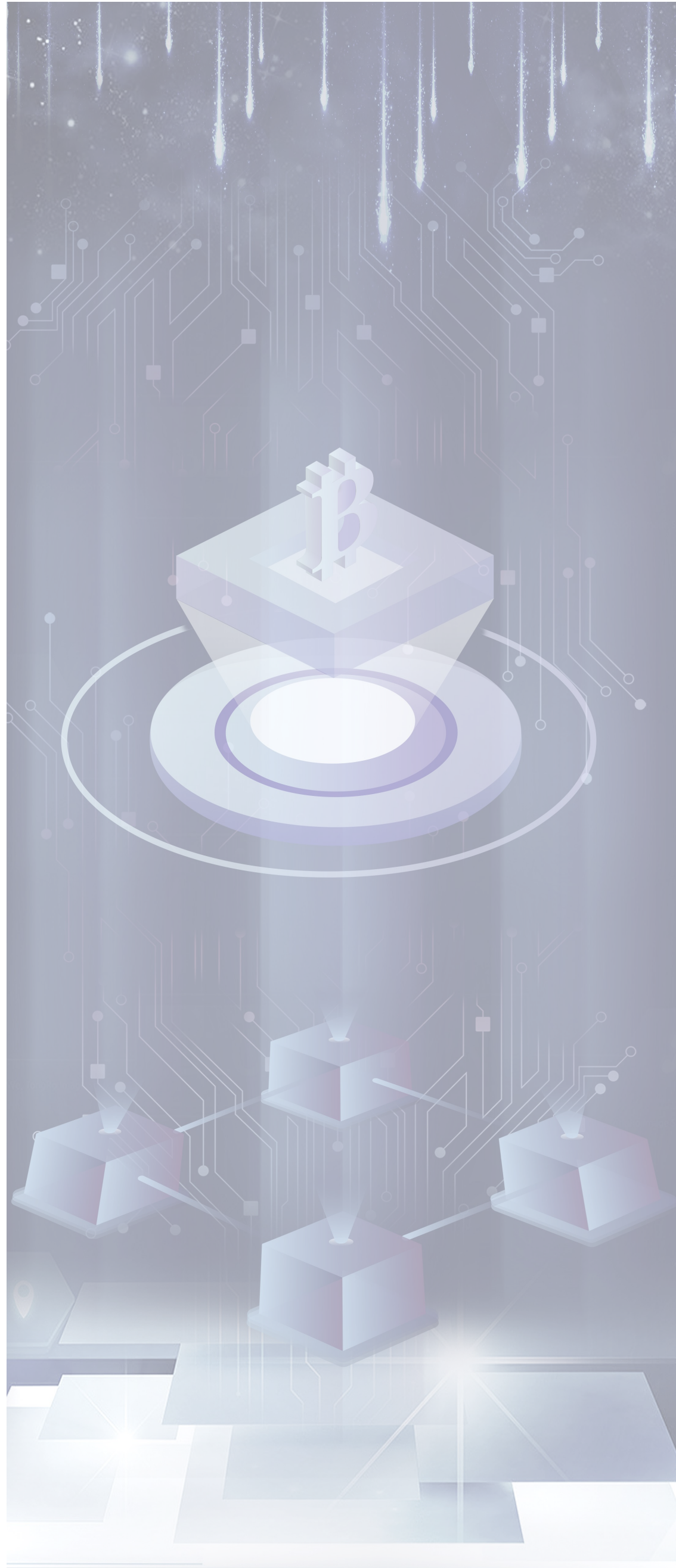
Blockchain technology was introduced in 2008 with the launch of the Bitcoin currency, and since then entrepreneurs and developers have attempted to generalize the technology to support a wider range of applications on a single blockchain platform.

While a number of blockchain platforms have struggled to support functional decentralized applications, application specific blockchains such as the BitShares decentralized exchange (2014) and Steem social media platform (2016) have become heavily used blockchains with tens of thousands of daily active users. They have achieved this by increasing performance to thousands of transactions per second, reducing latency to 1.5 seconds, eliminating per-transaction fees, and providing a user experience similar to those currently provided by existing centralized services.

Bitcoin has created an era of blockchain and private decentralized money. Ethereum has created an era of smart contracts. Currently the Ethereum platform (ERC-20) has deployed many decentralized applications, And Tron has also created a new platform TRC-20, with a faster speed and cheaper transaction fees. TRC-20 is a token standard issued based on smart contracts on the TRON blockchain. One thing is that TRC20 is fully compatible with Ethereum's ERC20 standard, so tokens issued on ERC20 can switch SmartContract to use TRC20.

3/ Decentralized Applications

- Smart fund
- Social networking
- Payment and gifts
- Decentralized exchange
- Automated tokens liquidity providers
- AI-assisted legal smart contract
- Secure communication protocol
- Prediction market
- Intellectual property trading market
- Hashpower market
- Data exchange market
- Advertising market
- GAS market



4/ Requirements for Blockchain Applications

In order to gain widespread use, applications on the blockchain require a platform that is flexible enough to meet the following requirements:

4.1 Support Millions of Users

Competing with businesses such as eBay, Uber, AirBnB, and Facebook, require blockchain technology capable of handling tens of millions of active daily users. In certain cases, an application may not work unless a critical mass of users is reached and therefore a platform that can handle very large numbers of users is paramount.

4.2 Free Usage

Application developers need the flexibility to offer users free services; users should not have to pay in order to use the platform or benefit from its services. A blockchain platform that is free to use for users will likely gain more widespread adoption. Developers and businesses can then create effective monetization strategies.

4.3 Easy Upgrades and Bug Recovery

Businesses building blockchain based applications need the flexibility to enhance their applications with new features. The platform must support software and smart contract upgrades.

All non-trivial software is subject to bugs, even with the most rigorous of formal verification. The platform must be robust enough to fix bugs when they inevitably occur.

4.4 Low Latency

A good user experience demands reliable feedback with a delay of no more than a few seconds. Longer delays frustrate users and make applications built on a blockchain less competitive with existing non-blockchain alternatives. The platform should support low latency of transactions.

4.5 Sequential Performance

There are some applications that just cannot be implemented with parallel algorithms due to sequentially dependent steps. Applications such as exchanges need enough sequential performance to handle high volumes. Therefore, the platform should support fast sequential performance.

4.6 Parallel Performance

Large scale applications need to divide the workload across multiple CPUs and computers.

5/ Emerging Apps: TikTok

5.1 What is it ?

TikTok is the world's leading destination for short-form mobile videos. tiktok's mission is to present the world's creativity and knowledge by capturing moments that matter in everyday life.

5.2 Why does it matter ?

In our constantly changing media landscape, many platforms come and go. In late 2017, TikTok merged with Musical.ly after being acquired by the Chinese company ByteDance. While TikTok doesn't appear to differ much from other short-form videos-sharing apps, it has captivated consumers with a proclivity for binge-watching video content. Its focus on quick, catchy, vertical video content is both user and smartphone friendly, which may be the reason it has grown so rapidly since its release.

TikTok is a HOT video social network where people share short clips inspired by music. Regardless of whether it's dancing, dancing, free-style or talented performance, users are encouraged to let their imagination fly away and show off their individuality. Designed for the younger generation who loves music and creativity, TikTok allows users to easily and quickly create unique short videos to share with friends and young people around the world. TikTok is the new video social networking standard for creative young people. We work to make the creative minds a part of the content revolution.

5.2.1 [Sharp quality]

Instant download, smooth interface and lag free.

Every detail is displayed in perfect quality.

5.2.2 [Mobile Studio]

The perfect combination of artificial intelligence and video recording.

Features synchronized melodies, special effects and advanced technology.

Turn your phone into a creative home studio!

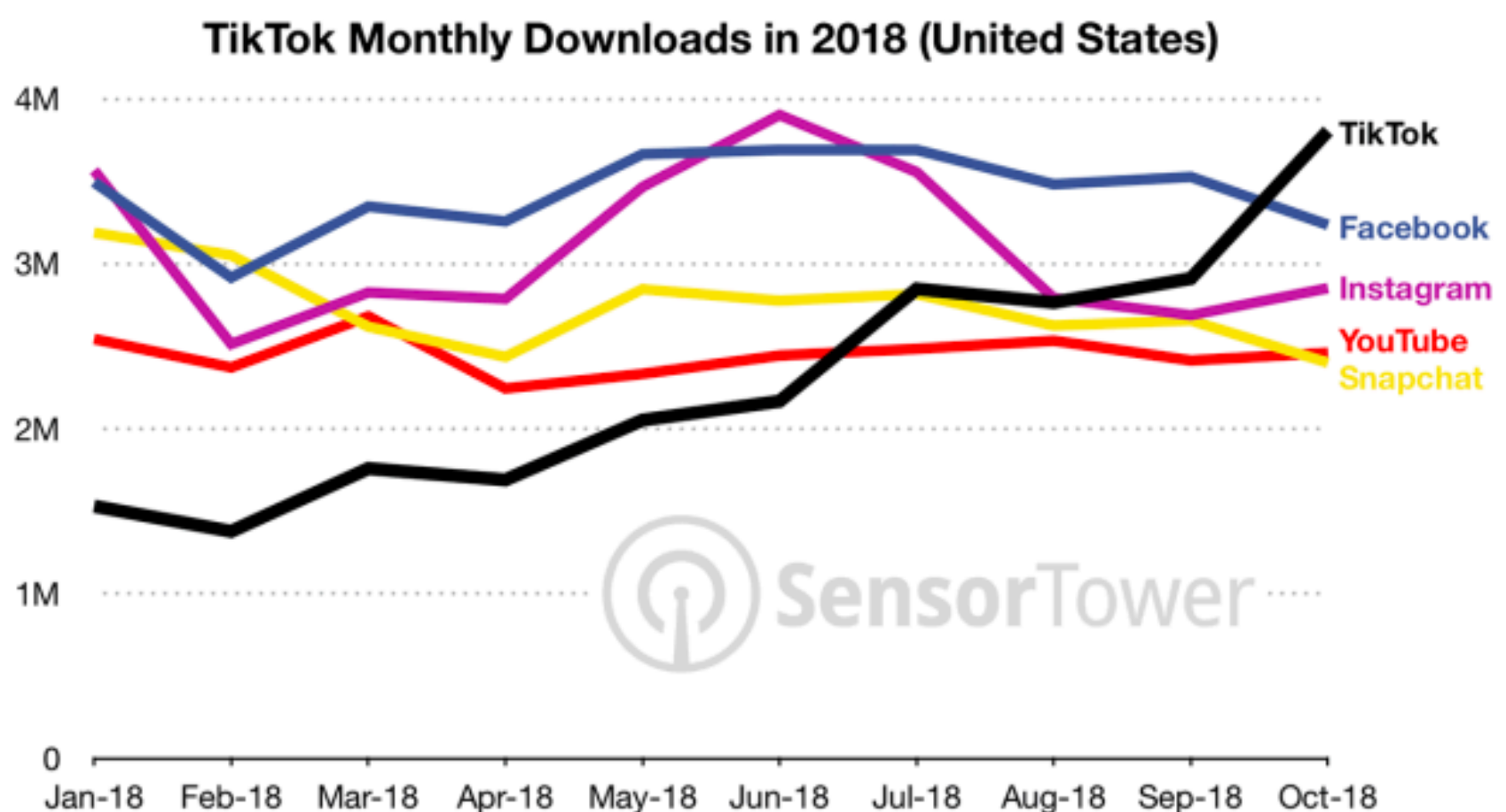
5.2.3 [Massive Music Library]

Take your creative potential to new heights and unlock a world of millions of new tracks updated every second.

TikTok app hit 1 download rate in February 2019. By April 2020, the number of downloads reached more than 2 billion in the world. After 1 year, the number of downloads for the TikTok app has doubled. By the end of the first quarter of 2020, TikTok reached 58% with 315 million downloads.

On the Apple App Store, TikTok beat big names like Youtube, Instagram, Whatapss... with 33 million downloads. Advised on the list of most downloaded app games in 2018.

To meet the trend demand of payment and gift applications in the large ecosystem, Tiktok launched 157 billion TT tokens.



6/ Instruction: Basics

1. Create an account
2. Start recording and sharing videos (videos can be up to 15 seconds long, but users can chain clips together for up to 60 seconds)
3. Select a popular song or sticker to attract viewers

Users' videos if loved by many people, they can receive a gift with TT Token or can buy transactions from other members as well as an exchange.

7/ Distribution TT

TT distribution is diversified, through smart contract-based mining and many ways to mine

Step 1: **Airdrop**

Users just need to follow the Twitter page to send their personal wallet on the tronlink wallet to receive 5000 TT for free, within 24 hours will automatically receive TT Token.

Step 2: **Register the user.**

KYC receives 5000 TT instantly for free and can be withdrawn to personal wallet immediately.

Step 3: **Swap**

Users can exchange from Tiktok Token Erc20 to TT Trc20 according to a limited total supply ratio.

Step 4: **Buy TT**

Users can buy TT with the smallest starting price, and withdraw to their personal wallet instantly. Payment method for internal transactions, or transfer to an exchange.

During regular mining, TRX, JST, USDT, SUN, USDJ, WIN, BTT

High quality community projects and liquid mining pools will be set up. Users can Join mining by betting different tokens on justSwap

7.1 Connection bonus program

Users subscribe to tiktokswap.net to buy TT coin for \$ 0.00005 / 1 TT,

They will receive an additional 10 rewards on the total amount purchased.

- In addition, users can send referral links to friends, they will receive a 3-level direct bonus

Level 1: Receive 10% bonus

Level 2: Receive 5% bonus

Level 3: Receive 3% bonus

They can choose to withdraw to USDT or TT Token with this bonus. . .

8/ Roadmap

Phase 1

Allocating TT Token to the community in the airdrop program and registering members at website tiktokswap.net,
In 24 hours, all users with TT, will be returned to the Tronlink wallet, users Self-Governance

Phase 2

Continue to allocate until full 5 billion TT, swap from TikTok token ERC-20 to TT TRC-20 enough to be 30 billion Tokens. at the same time selling TT Token presale, bonus available to each community connector.

Phase 3

Applying to the ecosystem, free trade transactions, community connection, blockchain knowledge education, bringing TikTok Token TT to each person in the community

Phase 4:

List TikTok Token TT on 5 exchanges
Use for game, forex exchange, e-commerce etc
Especially dating with your idol on tiktok application

9/ Community

This community will be based on the existing Tiktok community
Hundreds of millions of players, and billions of people, have downloaded the app.

We understand the importance of elements in social media, so there are quite a few
Big update in the works. Over the next year, the development team will roll out a number
Improved system of creating accounts, list of friends and redeeming gifts, circulation of TT strongly. Our goal
is to foster a sense of community where users can come together to share
ideas of interesting activities, cryptocurrencies or anything else they would like to discuss.

Developers will have direct access to interact with these social channels to offer
services, support and even community participation events such as promotions
campaign or gift.

Payment service

Developers can integrate TikTok TT's platform payment services into their DApps. The purpose of
This function is to make any payment as easy as possible, comparable with simplicity
Make in-app purchases on the iOS and Android app stores. Users can pay
use cryptocurrencies in their wallet or from their credit, debit or bank card
account. Users will be able to easily withdraw their cryptocurrencies to their personal wallets at any time
they want.

9.1 Wallet

The team will work closely with the TRONLink team to provide premium wallets
services will be optimized and extended to the audience of the TT platform. inside
In the future, TT will expand access to the platform so that everyone can play regardless of type
cryptocurrency they hold.

9.2 Regulatory compliance

TT will fully comply with the rules of the game for different jurisdictions. The group is also planning to work
with regulators
around the world to obtain all necessary documents and permits.
TT has worked hard to ensure compliance with our interactive case platform.
All of our licenses will be fully updated, expected to be received before the paid games and App project is
officially launched.

10/ Team

Together, the team behind TT has decades of experience in social networks, games, and blockchain many other industries.

We unite together by our passion for blockchain technology and it could revolutionize the inclusion of blockchain in service commerce, online shopping, and the exchange of gifts that replace conventional bonus points.

Like many others, Bitcoin's dramatic rise in 2017 caught our attention and learned about Technology's potential fully captures our imagination.

With members from teams around the world, TikTok is truly a global project, we are the creative pieces of the official Tiktok.

2 out of 7 team members are from gaming and social media management platforms, while the remaining five are blockchain veterans, entering the industry as Developers in addition to operations and business development managers.

Several teams

Other members with more than 10 years of experience in the affiliate marketing industry have joined hands to develop and we are pleased to announce that it is these people who contributed to the design of the long-term plan direction with TikTok TT.

The TikTok Crypto team is extremely grateful for this opportunity to create this product for millions of blockchain enthusiasts globally. We are confident that we will create the best, fairest opportunity for our users to succeed as expected and will continue to add top talent to ensure the highest growth.



11/ TikTok (TT) Token TRC-20

The crypto market has surpassed one trillion US dollars and we are currently on the strongest track in the world.

TikTok TT, Tiktokswap.net are the crystallization of social TikTok, short music videos. Cryptocurrency is a new upgrade, aimed at meeting payments in the global ecosystem, replacing gifts, and bonus points for millions of users.

TikTok TT will bring community closer to crypto and become richer than ever, Promises to bring a bustling environment, good economy, helps many people become rich thanks to technology, generation 4.0.

Linking, connecting consumers on all countries without borders. With a mission to bring happiness to everyone.

TikTok (TT) is written on the TRON platform, the TRC-20 algorithm is trusted by the crypto world.

Total Supply: 157,000,000,000

<https://tronscan.org/#/token20/TPfTB22ny1cgvuJkaBF6V4pUVSD2Mv8oZX>

12/ What is TRON

TRON is a robust blockchain ecosystem designed and developed by blockchain developers over the world, which follows the philosophy of "Decentralize the Web". There are multiple kinds of products involved in TRON ecosystem, including public chain, wallet client, decentralized applications(DAPPs), Etc. These products are closely related to each other, and together, this supports the stability of the whole ecosystem.

12.1 TRON Public Chain

12.1.1 Overview

TRON public chain is a decentralized blockchain network implemented based on TRON protocol, performs as the core of TRON ecosystem, launched on Jun 25th 2018. Many things can be done through TRON public chain, including token assets issuing, DAPP deployment and running, stake and vote for gains, assets transferring, Etc.

TRON public chain is one of the most secure public chain systems at present. The reason it is outstanding is that the blockchain runs in a decentralized network environment, in which creation and storage of the data do not rely on specific individuals or organizations, and the data is ensured to be never changed by cryptography.

TRON public chain has better operational efficiency and stability than most public chains due to a well-designed architecture and code.

12.1.2 Present

TRON ecosystem has set itself a 10-year roadmap in the original [TRON whitepaper](#):

- Exudos 2017.8~2018.12
- Odyssey 2019.1~2020.6
- Great Voyage 2020.7~2021.7
- Apollo 2021.8~2023.3
- Star Trek 2023.4~2025.9
- Eternity 2025.4~2027.9

The design for the top-level of the system and protocols of the public chain was made in Exudos.

Odyssey is an essential stage of the large-scale practical development of the TRON public chain. There are some key versions, including:

- TRON public chain (test net version) [Odyssey-v1.0](#)
- TRON public chain (main net version) [Odyssey-v2.0](#)
- TRON Virtual Machine(TVM), making Ethereum smart contracts fully compatible [Odyssey-v3.0](#)
- In-memory database for accessing TRON public data [Odyssey-v3.2](#)
- Supporting multi-signature and account authority management [Odyssey-v3.5](#)
- Adding RocksDB as a new underlying data engine [Odyssey-v3.5.1](#)
- New decentralized incentive mechanism [Odyssey-v3.6.5](#)
- New consensus mechanism TPos [Great Voyage-v4.0](#)

The development of TRON public chain has reached the stage of the Great Voyage.