

Status draft

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INTERNET COMPUTER

A beautiful dream emerged in 2014. One team set itself to realizing that dream. It required years of R&D, a world-renowned team of scientists and engineers, the complete reimagination of blockchain architecture, consensus, smart contracts and development of "chain key cryptography", then finally, in May 2021, the first...



Changes The Game	ethereum	SOLANA	INTERNET COMPUTER
Smart Contracts serve web/HTTP	×	×	\checkmark
Interaction without tokens	×	×	\checkmark
Infinite scaling	×	×	\checkmark
Blockchain nodes in cloud			0%
Cost of storing 1 GB of data on a blockchain	⚠ \$ 350,000,000	⚠ \$ 800,000	~\$5 GB/year

300 Phone photos 1GB of data = 17 mins Phone video

1/350th History of all Bitcoin transactions 1/4,000,000th Facebook's daily new data



Chat dapp is also a crypto wallet providing SocialFi functionality

Contracts randomly airdrop governance tokens to online users

Real Web3 DAPPS Do Not Run On The Cloud

Web2 applications running on the cloud that interact with a blockchain are often misleadingly described as Web3 "dapps running on blockchain X"

Dapps on other blockchains are really cloud applications



GOOGLE CAN STOP ALL DAPPS

The wallet is a browser extension that is downloaded from Google's Chrome Web Store. In 2018, they banned MetaMask for a while, preventing new downloads. Google can also insert malcious code to steal the cryptocurrency.

USERS MUST ACQUIRE TOKENS TO INTERACT MEANINGFULLY

User interactions involving smart contracts on the blockchain, even, for example, to store a simple username, require a browser wallet loaded with cryptocurrency. The wallet must be downloaded from the Chrome Web Store and the cryptocurrency purchased and installed in advance. This creates a barrier to entry that slows down user adoption and growth.

THE ARCHITECTURE IS INSECURE AND **DISASTERS ARE ACCELERATING**

Whereas blockchains host tamperproof code, which does not need to be protected by a firewall, the same cannot be said for cloud services, and private server computers. If a hacker gains access to these traditional IT systems, they can modify how they serve user interface code into the user's web browser, in such a way that they can steal all their tokens. In the winter of 2021, hackers gained access to the IT systems of BadgerDAO, and inserted malicious code into the user interface that stole \$120m worth of bitcoin and ether cryptocurrency from its users.

CLOUD CAN BAN ALL DAPPS

Without the cloud, dapps stop working, and their data is lost (for example, NFT content is stored on the cloud). In early 2021, AWS banned the Parler social media service, causing it to go offline. They can also insert malcious code.

DEVELOPERS BECOME LEGALLY LIABLE BECAUSE IT'S NOT REALLY DECENTRALIZED

When dapps process tokens, if they are not truly decentralized, then regulatory considerations become an issue. This often forces their developers to self-censor. For example, in the summer of 2021, Uniswap, a major "decentralized exchange", delisted more than 100 tokens. Although their smart contract code was controlled by governance tokens, naturally their website and much of the processing really ran on the cloud, and naturally these centralized services were paid for by the developers, making them liable, resulting in them self-censoring to avoid legal issues.

USERS ARE NOT ANONYMOUS AND CAN BE TRACKED

Each interaction the user has with the blockchain involves their wallet key, which means that they can be tracked across the different dapps that they use. This is a privacy and security concern.

The internet computer blockchain solves these problems by supporting real web3 - convenient for users, secure, unstoppable and censorship resistant

Revolutionary Smart Contracts Serve WEB/HTTPS



Users

don't need tokens

don't need wallets authenticate using modern devices

control dapp accounts using

Internet Identity. Accounts hold tokens

HTTPS

Canister Smart Contracts



Smart Contracts

- pay for their own computation
- can keep data private

securely serve web experiences directly to users

no tracking

Internet Identity is anonymizing Tamperproof and unstoppable No cloud is involved

Blockchain is now the entire stack. Time to forget the cloud, servers, web servers and databases for...

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DeFi	GameFi	SocialFi	NFT	Streaming	Enterprise	loT	Storage	Anything

Only the Internet Computer makes it possible to build anything end-to-end on a blockchain

	Motoko Playground	Toniq Labs	🕴 Fleek	O DSCVR	distrikt Distrikt	Origyn	DpenChat	👹 Plug	Internet Identity	IC Rocks	🕫 NNS Dapp	
	C DeckDeckGo	Aedile	Canlista	GSRY0 Agryo	O Sudograph	O ● Reversi	Contraction of the second seco	NNS C	Calculator	TOIC Stoic Wallet		
IC	DFinance	Rise of the Magni	Welco	me Into the Metaverse	A HexGL	ICPunks	🚴 Entrepot	Departure	e Labs	Axon Zeart	h Wallet	ar

December 2021, 7 months since genesis...

1000+ Developers Building



Now Build Anything On Infinite WEB3 Blockchain

Smart contracts can now be the entire stack



Network Nervous System

The Internet Computer blockchain runs under the control of a permissionless algorithmic governance system called the "Network Nervous System" (or NNS) that is resident within its protocols. The NNS processes proposals anyone can submit, either rejecting them, or adopting and executing them automatically. Voting is performed by "neurons" that earn "voting rewards", which can be created by staking the ICP utility token within the NNS. It can induct nodes, form subnet blockchains, upgrade the protocol by updating the software on node machines, tweak economic parameters, repair cryptography schemes, and much more.

ICP

ICP

It has already processed thousands of proposals. Through the NNS, the Internet Computer self-directs and evolves in real-time without hard forks.



Dapp assignment

The developers of a dapp or service on the Internet Computer blockchain can assign control to a newly created Service Nervous System (SNS) DAO with 1-click.

Governance ledger

The newly created SNS creates an associated ledger of governance tokens, which play a similar role to ICP tokens within the NNS (the same technology is involved).

Auction

The SNS sells its governance tokens in a public decentralization auction, thereafter running under the control of the community, which manages its financial reserves and updates. The NNS itself can participate in the auction, drawing on staked funds worth tens of \$billions.

Founder tokens

The SNS grants the project founders (entrepreneurs / developers) "founder tokens".

DFINITY Blockchain's Largest R&D Operation



The DFINITY Foundation is committed to realizing the most disruptive vision in tech: the adoption of public blockchain as a single technology stack that hosts all of humanity's systems and services

Туре	Foundatio
Motive	Not-for-p
Founded	October
Funded	2017-2018
Purpose	R&D, Inte
Mission	Blockcha
Headquarters	Zurich, S

Endowment	ICP (\$billions)
#1 prev employer	Google
Research centers	3 (CH, CA)
Research citations	100,000+
Remote teams	10+
Team size	200+

BLOCKCHAIN SINGULARITY

Help us reimagine the world on blockchain



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