iExec

THE DECENTRALIZED CLOUD MARKETPLACE

iExec is a decentralized marketplace for computing resources. It allows individuals and enterprises to monetize their applications and datasets, and to trade computing power.

iExec is an open market. Cloud providers and requesters transact directly in a peer-to-peer network, free of any central authority. The company develops the technology and protocols that organize the exchanges between stakeholders, with the maximum level of trust, security and flexibility.

To do so, iExec leverages blockchain technology, distributed computing and trusted execution environments (TEE). Payments between stakeholders are made in RLC, iExec's cryptocurrency.

DATA	APPS	COMPUTING POWER
DATA STORE	DAPP STORE	MARKETPLACE

HOW IEXEC IS BUILDING THE DECENTRALIZED CLOUD

• **Open market** | Anyone can become a cloud provider or requester

• **Data renting** | Data providers generate revenues by renting datasets

• **Unstoppable applications** | Developers can deploy decentralized applications and decentralized oracles that run on off-chain compute

• **Scalable computing** | Requesters and developers have access to cloud computing as a commodity

• **Free pricing** | Providers freely set their pricing strategy

• **Pay-per-task** | Requesters only pay for what they consume

• **Improved efficiency** | Blockchain's smart contracts streamline and automate processes such as payments or results validation

• **High-grade security** | Results are encrypted, and host machines are never able to inspect, copy or tamper with data

• **Custom permissioning** | Providers can decide who has access to their resources, and revoke it when needed

• **Immutable ownership** | Data providers remain the only owners of their datasets when renting them thanks to hardware enclaves

• **Real-time monitoring** | Every transaction is recorded on the blockchain

IEXEC ENTERPRISE EDITION

The iExec Enterprise Edition addresses the needs of enterprises and consortiums that want to improve their processes and create businesses by leveraging blockchain paradigms. iEE refers to **private, consortium**, and hybrid implementations of the iExec stack for business applications.

This integration and consulting service allows corporates to optimize their computing infrastructure, orchestrate the sharing of data and deploy applications with no downtime, fraud, or third-party interference.

DATA WALLET

The iExec Data Wallet allows individuals and enterprises to monetize their datasets. This opens up new business models through **'data renting'.** Data providers can list their valuable datasets, and through iExec, these can be used with an application combined with remote computing power.

Data providers also keep full ownership of their data, choose who can access it, and are paid automatically each time their resources are used.

Trained AI models are an example of valuable datasets that can be rented and monetized through iExec. They are highly valuable as their training requires time, money and huge amounts of data, and have applications in a wide range of industries.

ROADMAP

2017: V1 - DApp Store and SDK
2018: V2 - Cloud Computing Marketplace
2019: V3 - Data Wallet and TEE Solution
2019: V4 - GPU and HPC
2020: V5 - IoT, Edge Computing and Smart City Solution

KEY TECHNOLOGIES

Blockchain, smart contracts, distributed computing, dapps, computing power, data renting, data wallet, RLC, PoCo, hardware enclaves, Intel SGX, TEE, Docker, Kubernetes

PARTNERS

parity

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