

Press Release



Telefónica Tech partners with Fibocom and aitos.io to bring IoT solutions integrated with Blockchain

- The three companies have collaborated to develop the first 5G Blockchain IoT module that natively record information gathered by devices to blockchain networks.
- By linking the aitos.io BoAT SDK and the Telefónica Tech's TrustOS platform, a new IoT solution backed by blockchain can be developed and deployed just in a couple of weeks.
- The combination of IoT and Blockchain provides an increased transparency and an efficient way of tracing and verifying information gathered by the sensors.

Madrid, March, 24, 2021. Telefónica Tech, the Unit that encompasses the digital businesses of Cloud, Cybersecurity and IoT & Big Data & Blockchain; Fibocom Wireless Inc., a leading global supplier of wireless communication modules and solutions in the sector of IoT, and aitos.io, a technology start-up focusing on the integrated innovation of IoT and Blockchain have signed a collaboration partnership to create joint solutions combining IoT and Blockchain technologies.

The adoption of Internet of Things technology is growing quickly, and it's predicted that by 2025 there will be 55.7 billion connected devices in the world collecting information. So, it is becoming critical for companies to ensure the veracity of the information that the devices collect, but also the identity of the devices, their integrity and that they have not been tampered with. Blockchain emerges as the right technology that can help to verify the information, as well as mitigate the scalability and security issues associated with IoT.

This collaboration has started with the creation of a Proof of Concept to integrate the software implemented by aitos.io, BoAT blockchain application framework SDK, Fibocom's 5G devices and the Telefonica Tech's TrustOS platform. As a result, we have accomplished the first 5G IoT Blockchain integration success story in a matter of weeks, thanks to TrustOS and its identity module, TrustID, that easily connects with blockchain technology and enables the device to directly interact to the blockchain ledger eliminating any type of intermediary. It confirms Blockchain's potential to complement other technologies such as the Internet of Things or 5G.

Internet of Things brings us a link between the physical world and the digital world, and combined with blockchain technology provide us an increased transparency and an efficient way of tracing and verifying any kind of information gathered by the sensors embedded in the devices. 5G technology low latency and ubiquity enables the IOT Blockchain-backed solutions to record immutable evidence of what is going on surrounding the devices with zero infrastructure in real time. This cannot only be applied to industry 4.0 use cases like supply chain management or manufacturing processes monitoring. Thanks to this implementation and how TrustOS manages the authentication and access to the system, it's possible to avoid unauthorized tampering or unexpected updates.

Jose Luis Núñez, Head of Blockchain in Telefónica Tech, stays: "The convergence of two technologies such as IOT and blockchain plus 5G connectivity is inevitable. As connected devices multiply, it is critical to demonstrate the trustworthiness of the information that devices exchange. Blockchain can play a relevant role to build trust in these ecosystems. This proof of concept is the first successful case where it is demonstrated that Blockchain technology adds value and adds that extra layer of trust to operations. Telefónica is very excited about this collaboration with aitos.io and Fibocom and we look forward to continue advancing and positioning ourselves with this type of solutions in Industry 4.0",

Ronnie Cohen, SVP sales & Business Development of Fibocom, declares: "We are glad and proud to collaborate with Telefonica and aitos.io on introducing this cutting edge blockchain technology for the Internet of Things (IoT). "This unique synergy with Fibocom's advanced 5G module integrated with aitos.io BoAT SDK + TrustOS and implemented via Telefonica Tech's 5G networks marks a new IoT era where securing the data is no longer a nice option to have - it is a must. We are ready to support Telefonica and aitos.io with enabling innovative blockchain solutions via its various wireless modules ranging from 4G (NB, CAT-M, CAT-1, etc.) all the way to 5G "

Leo Lin, CEO of aitos.io, says: "We are proud to cooperate with Telefonica Tech and Fibocom to promote the concept of Blockchain IoT module globally using our BoAT blockchain application framework embedded into Fibocom's 5G IoT Module to easily access Telefonica's TrustOS Blockchain network and TrustID decentralized Identity service. This PoC builds upon the successes of integrating the Internet of Things with the Blockchain to prove monetized value with data ownership, integrity and provenance. We are looking forward to expanded cooperation with Telefonica and Fibocom to enable more and more IoT devices with strong cryptographically verifiable decentralized identity of their origin on the blockchain which will build in great value for trust and identity in broadening Industrial IoT sectors for Industry 4.0".

About Telefónica Tech

Telefónica Tech is a key holding of the Telefónica Group. The company offers a wide range of integrated technology services and solutions in Cyber Security, Cloud, IoT, Big Data and

Telefónica, S.A.

Dirección de Comunicación Corporativa Tel: +34 91 482 38 00 email: prensatelefonica@telefonica.com saladeprensa.telefonica.com Blockchain. Telefónica Tech's capabilities reach more than 300,000 customers in 175 countries every day."

About Fibocom Wireless Inc.

Founded in 1999, Fibocom is a leading global provider of IoT (Internet of Things) wireless solution and wireless communication modules. We are committed to bringing reliable, accessible, secure, and intelligent wireless solutions to every IoT application scenario for the increasingly digitalized industries and enriched smart life of the whole society. In 2017, Fibocom become the first stock-listed (Stock Code: 300638) wireless module provider in China.

We provide technically advanced and high-performance 5G, 4G, NB-IoT/eMTC, 3G, and 2G, smart, auto-grade, GNSS, Wi-Fi/BT wireless modules. By technically embedding Fibocom's wireless solutions into IoT devices that will become smart and remotely manageable with stable data transmission between devices and operation center, we empower the intelligent future of all industries that mainly include smart retail, ACPC (Always Connected PC), industry 4.0, smart grid, smart homes, smart agriculture, smart cities, telemedicine, metering, smart security surveillance, and the intelligently connected cars, etc. We have many long-term industry customers including Fortune Global 500 enterprises, which is an important driven power of our fast development.

Fibocom is headquartered in Shenzhen, China, and has R&D centers in both Shenzhen and Xi'an. We are globally located with more than 30 subsidiaries and regional operation centers in China, Americas, EMEA, and Asia Pacific Regions. Currently, we have more than 1000 global employees, and provide products and services in more than 100 countries and regions.

About aitos.io

aitos.io is a technology start-up focusing on the integrated innovation of IoT and Blockchain. By combining its own rich resources in the IoT industry, aitos.io has raised the standard for a blockchain application framework BoAT (Blockchain of AI Things) with delivered via cellular IoT module to enable IoT devices quickly implement trusted data on-chain and access the blockchain services. At the end of 2019, aitos.io and nine mainstream cellular wireless module manufacturers jointly initiated the Blockchain IoT Module alliance, and successively released their own brands of BoAT blockchain module products. This resulted in hundreds of millions of IoT devices equipped with the capability of blockchain services access as a trusted entry of IoT+Blockchain application. aitos.io's vision is to leverage an alliance of global cellular IoT vendors to empower them to tap the value of applications and data. http://aitos.io/