



PRESS RELEASE

G+D Mobile Security, Ubirch and 1NCE bring IoT security to mass production

- unique Blockchain on a SIM-solution
- managed connectivity included
- go-to-solution for data-driven architectures across supply-chains

Munich/Cologne, 04/02/2020. The blockchain-anchoring security specialist Ubirch, the provider of security technologies G+D Mobile Security and the Tier-1 IoT Carrier 1NCE will release an IoT security service that can easily be used with the IoT SIM Cards of 1NCE, combining the security standards of cellular and blockchain technology.

As of March 2020, 1NCE IoT SIM cards can be configurated with Ubirch's award-winning security technology right from the start. The Ubirch solution seals sensor data directly at its source – on the SIM Chip itself – and not after it has been stored in a blockchain in the cloud. Data packets that have been sealed this way can be verified whenever they are being processed later in any cloud or IT-systems, allowing for fully automated, data-driven architectures across supply-chains such as e.g. Insurance, Healthcare, Logistics and Smart Grids.

This new offering is based on the enterprise-grade customer proven SIGNiT solution from G+D Mobile Security. It combines proven SIM environments and secure operating systems with blockchain technology from Ubirch. SIGNiT is already used by enterprise customers such as Lufthansa Industry Solutions for transport damage detection.

Ubirch has developed a trust protocol, which ensures that data from IoT sensors cannot be falsified after their creation. The data packets of sensors are sealed and chained with strong cryptography in a way that it becomes technically impossible to manipulate them once stored in a Blockchain. This combination of offering Blockchain on a SIM including managed connectivity is unique and the first of its kind. Customers like Deutsche Messe AG appreciate the comprehensive solution, as Marcus Eibach, Project Director 5G confirmed: "IoT Data will be the core of our future business models while we are transforming into a fully connected smart venue here in Hanover. It's good to see that technologies like the Blockchain on a SIM-Card are available now and will help to deploy secure devices at scale."





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Protection against unauthorized access

The solution works like a Blockchain that starts right from the source of data-creation – the IoT sensor. IoT data is sealed by a private key that sits on the SIM-Card. In the backend these micro-certificates are then stored in a so called Merkle-Tree and anchored in public blockchains, thus creating an immutable and irrefutable record of that sensor. As the protocol is bidirectional, an IoT sensor can also verify incoming packets for authenticity and integrity, providing an efficient protection against unauthorized commands or unknown sources. The benefits for clients are huge – as IoT data can be verified whenever it is processed or new data-driven business models like smart contract insurances can be deployed. A prevention for major hacking attacks like "man in the middle" or packet duplication/suppression is also a built-in feature, as only verifiable packets are processed.

"With our constantly growing customer base of more than 2,300 we know exactly what IoT customers need. Security is one of the key features especially enterprise customers demand. By embedding the Ubirch nano client right on our 1NCE IoT SIM card, we further push the boundaries of what is possible in easy to use international cellular IoT connectivity," emphasized Kim Juchem, COO at 1NCE. "This is a giant leap forward, that demonstrates once again, how disruptive collaboration between leading industry players can be."

Stephan Noller, CEO of Ubirch states: "Transforming IoT into profitable business is clearly about two things – security and scaling. With this exciting cooperation we can offer a breakthrough solution for both. The best in class IoT connectivity combined with the leading IoT security solution. We believe that this offering will re-define how businesses will think about IoT."

Experience a detailed demonstration of the new 1NCE SIM cards with Ubirch's encryption firmware live during the Mobile World Congress in Barcelona, Spain from 24-27 February 2020: Booth CS60, Congress Square.

Ubirch CEO Stephan Noller and 1NCE COO Kim Juchem will be available for interviews at the booth from 24 to 27 February 2020 in Barcelona.





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About 1NCE:

1NCE GmbH is the first fully-fledged IoT network carrier in the world to offer fast, secure, and reliable connectivity services at low cost based on an IoT flat rate. This makes IoT applications such as tank maintenance, smart metering, or vehicle telematics affordable. The 1NCE IoT Flat Rate includes 500 MB data volume, 250 SMS, and free access to the 1NCE Connectivity Management Platform via Internet and API. To provide the service, 1NCE cooperates with Deutsche Telekom AG and its roaming partners and supports all common mobile communications standards (2G, 3G, 4G, NB-IoT). In addition to direct sales of IoT mobile connectivity, 1NCE also offers its technology to mobile network operators via a Platform-as-a-Service solution. The company headquartered in Cologne offers its flat rate almost world-wide. 1NCE was founded in 2017 together with Deutsche Telekom AG and have 60 staff in Cologne, Hamburg, London, Rome, Paris, and Riga. For more information, please see www.1nce.com

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About G+D Mobile Security:

G+D Mobile Security is a global mobile security technology company headquartered in Munich, Germany. The company is part of the Giesecke+Devrient group. G+D Mobile Security has a workforce of 5,300 employees and generated sales of EUR 868 MM in the 2018 fiscal year. More than 40 sales and partner offices as well as 20+ certified production and personalization sites and data centers ensure customer proximity worldwide.

G+D Mobile Security manages and secures billions of digital identities throughout their entire life cycle. Our products and solutions are used by commercial banks, mobile network operators, car and mobile device manufacturers, business enterprises, transit authorities and health insurances and their customers every day to secure payment, communication and device-to-device interaction. G+D Mobile Security is a technology leader in its markets and holds a strong competitive position. For more information, please visit: https://www.gi-de.com/de/de/mobile-security

About Ubirch:

Ubirch is the specialist for blockchain-based security technology in the field of IoT with locations in Cologne, Berlin and Munich. The team consists of experienced specialists in cryptography, blockchain and data-driven business models. Consisting of an extremely lightweight client for sensor firmware and the matching cloud backend, Ubirch's "Blockchain for Things" product enables military-grade data protection to deliver new business models for the Internet of Things. Innovative cryptography and blockchain technologies guarantee the trustworthiness of IoT data. Ubirch is aimed primarily at customers in the industrial, smart cities, insurance, IoT start-ups, energy supply and logistics segments. For more information, please see www.ubirch.com

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