



The Blockchain for Things

data exchange with IoT edge devices – with guaranteed integrity and trustworthiness

UBIRCH's blockchain for things enable the creation of 100% trustworthy records for data-dependent business models – whenever and wherever accuracy, integrity or authenticity is essential for your business.

the UBIRCH protocol seals data packets right on the edge device applying hard cryptography. Undetected manipulation, deletion, duplication is impossible after this sealing process – even, when the data is transmitted over unsecured com channels. die Each data packet can be attributed without doubt to a unique originating device. Implementation through (1) a firmware library running on the edge device and (2) a cloud-based service for the integrity check of data packets received from secured sensors.



Trustworthiness & Integrity for IoT-based data

- Create digital processes based on trustworthy data/records
- Efficiently comply with regulatory obligation with digital records
- Red reduce costs caused by manual control of digitally measurable data

Immutable data/ records, which you and your partners can depend on 100% to build stable, trustworthy relationships.

Hardening of IoT-Systems against all kinds of attacks

- Avoid damage to your bottom line and reputation
- Create a secure coms channel between sensors/actors and systems in the cloud
- Avoid take overs (botnets) through hijacking of your devices/products.

Secure, trustworthy communication with devices in the field for control commands, software updates etc.)

Your advantages

ubirch extends the reach of the trustworthiness typical for a blockchain to the “edge”, starting right on the smallest sensor.

- Mutual *Ground Truth* for data-dependent business models,
- Improved resilience against attacks of edge devices and IoT infrastructure.
- Most efficient way to comply with with legal or regulatory regulations for record keeping.
- Enabling of new, digital or smart contract-based business models.

Enabling of new business models

- Create new, secure, data-based business models.
- Create product-as-a-service offers with existing products.

Use smart contracts to execute transaction-related processes secure and efficiently.

„Logistics and Supply Chain Management is getting more complex and will need a more data-driven approach in the future. The ubirch solution helps to secure IoT data from the source and stores it in a blockchain – a very promising solution to the problem.“

- Peter Weichsel, Senior Vice President Digital Technologies, Deutsche Post DHL Groupe

Where and how you can create tangible added value for you business with absolutely trustworthy data



Industry 4.0

- securing production-related data
- risk-free application of principles like tolerance allocation
- Proof of origin
- ...



Infrastructure providers

- secure condition monitoring of production & consumption
- trustworthy exchange of energy, water, gas and accompanying transaction data locally or in the net
- hardening of infrastructure against take-over & manipulation
- ...

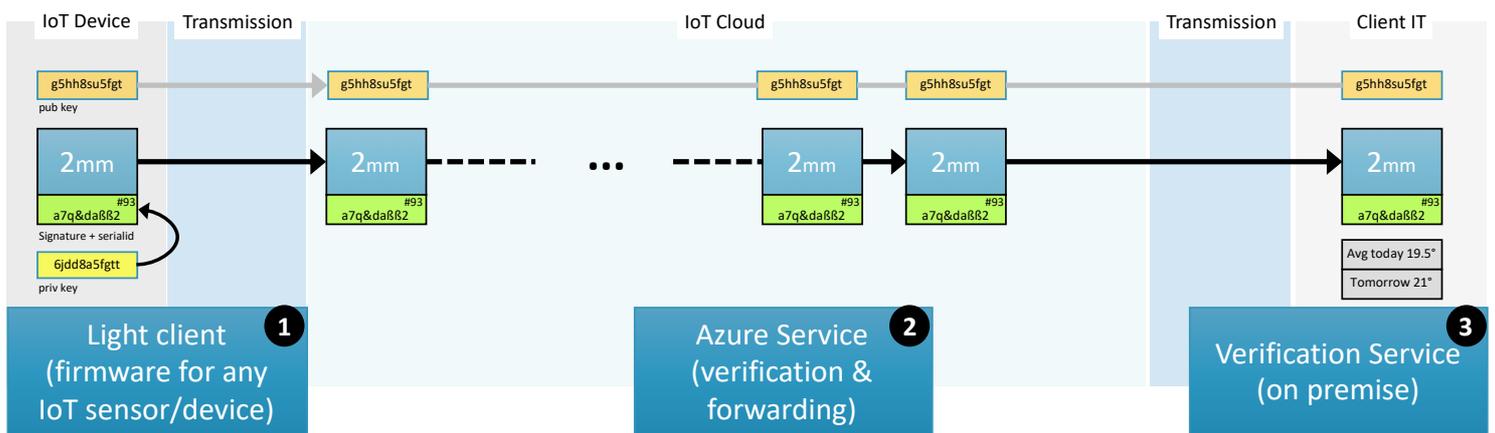


Logistik & Supply Chain

- Tamper-proof asset tracking; locally or worldwide
- Securing coldchain and similarly sensitive logistics processes
- More efficient claims management for logistics insurance
- ...

Our Promise

With ubirch's blockchain for things you will be creating absolutely trustworthy, immutable records of IoT-generated data which have the character of real "proof" for you and your business partners.



Benefits across application areas

- efficient, technologically-generated trust in digital records
- cost reduction by digitizing manual business processes
- reduction in processing times (esp. with high-volume processes)
- Secure, trustworthy digitization of processes
- enabling new, highly automated business models
- more revenue through attractive new products and services

Why ubirch?

ubirch is a young company with offices in Cologne and Berlin, which made it its mission to provide integrity, trust & security to the Internet of Things, to create auditable records, transform data into proven facts and enable new business models by sealing data packets right on the smallest device with military-grade cryptography and blockchain technology. The team consists of specialists in the areas of blockchain, IT-security, cryptography and data-based business models with decades of experience in their field.

