

IoT Business Hub

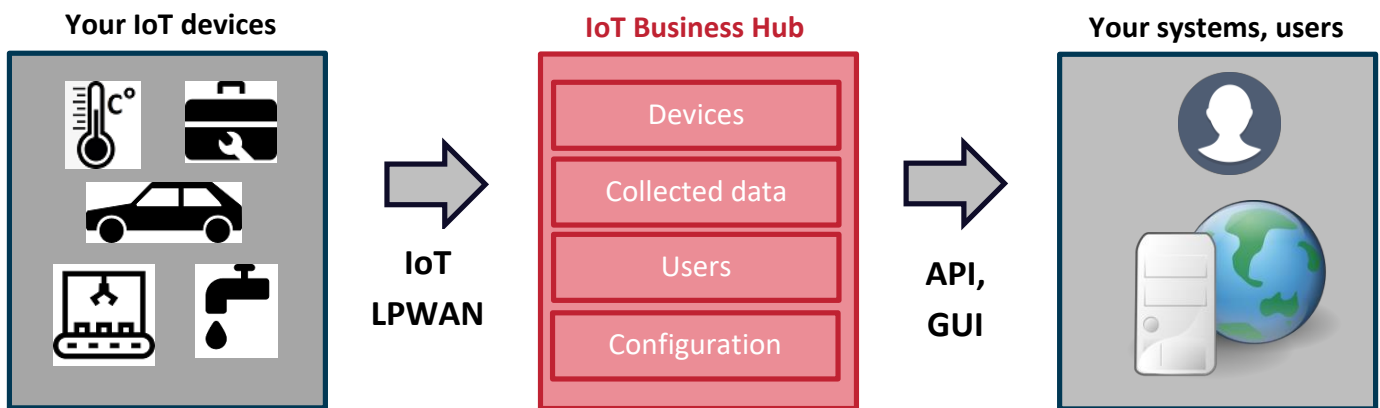


I.S.D.D. plus, s.r.o.

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IoT Business Hub

Universal platform for your data from any IoT device via any IoT network, easy-to-integrate to your systems



All you need for your IoT project

IoT Business Hub offers you all the functionality for fully automated data collection through any IoT:

- Device management – add, activate, configuration IoT devices, check the status
- Data management – display and visualize collected data, export to file
- Analyse data – identify anomalies
- Interface to your internal systems for sending data both directions

Support during installation of IoT devices, help with all the configuration and integration is part of our job. Our experts with extensive experience with multiple IoT projects will be happy to help you.

Licence model is based on the number of connected IoT devices, apart from the administration fee, which is subject to a fixed fee and includes initial integration.

The key features of our solution

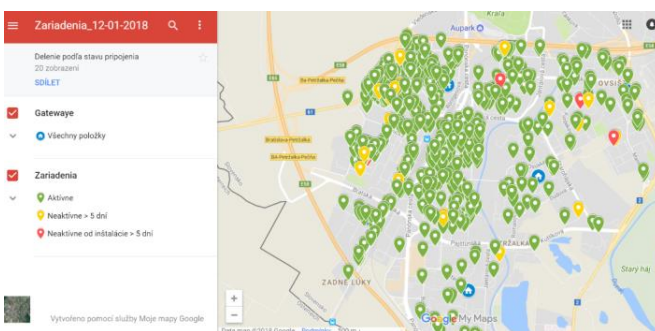
Independence from the IoT network – the solution allows you to connect IoT devices in parallel from different IoT networks. This results in the independence of business parts from the IoT network provider and the specificity of the network technology used.

Independence from device type – in our solution, it is possible to process various types of devices (measuring commodity, humidity, temperature ...). Each type of device just needs to be configured as well as decoding the raw data itself from the device to understandable business data that can be used for display and analysis. There is no need to change the application, so a new device type can be added very quickly.

Market standards – "Micro services" architecture is used. Advantages include scalability, availability and robustness. Of course, solution is secure and protects your data.

Analytics – various statistics are made of the collected data - transmission statistics, status of IoT devices (count of messages, transmission success rate, signal strength, battery level ...), alarm states of IoT devices and especially business analytics - behavioural patterns, anomalies, prediction and more.

The basic entity of the solution is the IoT device - transmitter with its serial number, which sends the message using the IoT network server. Messages contain meta information such as signal strength, sent time, identification of IoT gateway that received the message, message size, unambiguous message identifier, and business information (generally the state of a sensor, like water volume).



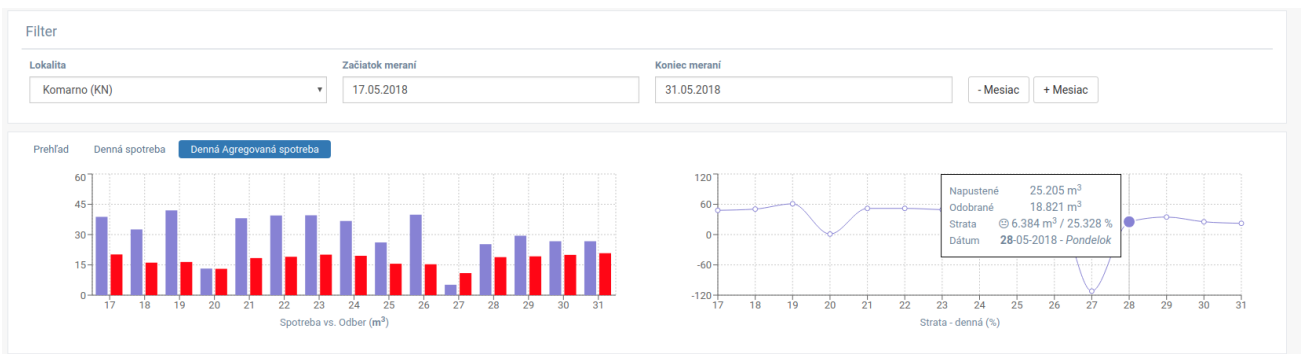
IoT Business Hub will provide you

- managing IoT devices and routing messages from IoT devices, visualizing devices on a map
- automatic reception of IoT data, automatic processing and display for the user, automatic sending of measured data to selected interface for further processing (monitoring, invoicing, etc.)
- recording of IoT supplementary data (status) and database with history of measured data
- common authentication and authorization policy provided by the SSO. It allows users to manage, assign defined roles, etc. It provides the possibility of integration into an existing user database, AD, LDAP...

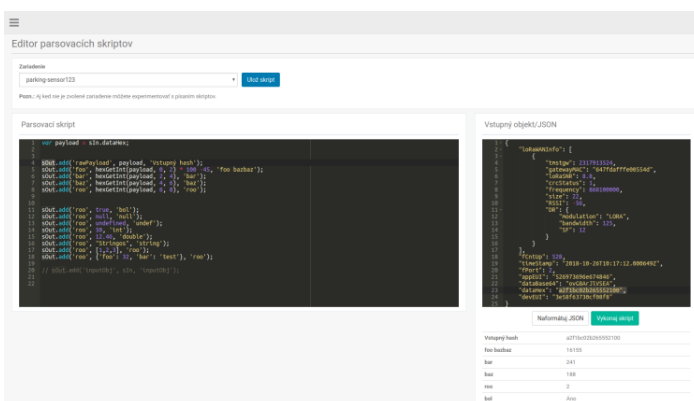
Our customer portal will allow you to

- display transparent device information, such as current values, the status of sending messages, time of the first and last message sent by device, frequency of sending messages and more
- view consolidated statistics over specific time periods, such as the value graphs sent for each day in the last month, where it is also seen if the device sends messages at the expected frequency on each day
- display aggregated charts and statistics to detect anomalies (for example, when measuring water consumption - difference between the measured entered water quantity and the sum of the quantity of water consumed identifies possible water leaks in the network)

Číslo	Typ	Hodnota	Prvý mesiac	Prvá hodnota	Prvá hodnota	Prvá hodnota
10000001	odborník	140,822 m ³	01.01.2018	01.01.2018	01.01.2018	01.01.2018
10000002	odborník	14,074 m ³	01.01.2018	01.01.2018	01.01.2018	01.01.2018
10000003	odborník	200,120 m ³	01.01.2018	01.01.2018	01.01.2018	01.01.2018
10000004	odborník	8 m ³	01.01.2018	01.01.2018	01.01.2018	01.01.2018
10000005	odborník	7,30 m ³	01.01.2018	01.01.2018	01.01.2018	01.01.2018
10000006	odborník	20,26 m ³	01.01.2018	01.01.2018	01.01.2018	01.01.2018
10000007	odborník	40,3 m ³	01.01.2018	01.01.2018	01.01.2018	01.01.2018
10000008	odborník	20,800 m ³	01.01.2018	01.01.2018	01.01.2018	01.01.2018
10000009	odborník	53,8 m ³	01.01.2018	01.01.2018	01.01.2018	01.01.2018
10000010	odborník	83,241 m ³	01.01.2018	01.01.2018	01.01.2018	01.01.2018
10000011	odborník	14,990 m ³	01.01.2018	01.01.2018	01.01.2018	01.01.2018
10000012	odborník	710,3 m ³	01.01.2018	01.01.2018	01.01.2018	01.01.2018



- configure decoding of raw data from the device to understandable business data. The device sends messages where in addition to the meta data (signal strength, send time, IoT gateway, message size, message identifier) are business data important to you. This data sends the device in binary form hexadecimal encoded. In order to be used for processing, it is necessary to decode them to understandable data / information in the form of name and value.



For example, the device sends binary data 5A0E and this can be converted using the decoder to the following values:

"pressure": 90
"temperature": 14

The first byte in hexa format 5A is equal to 90 in decimal format (value for "pressure"). The second byte in hexa format 0E equals 14 in decimal format (value for "temperature").

This entire decoding is configurable in the portal, without the need to change the application code. Just insert a short sequence of steps in the JAVA script. This script can also be tested on sample data and checked to see if it works properly, i.e. decoder output are required correct values.

About us

I.S.D.D. + is a software house that provides comprehensive information technology services from consulting, architecture, software development, testing to support.

Our solutions meet the highest standards of efficiency, scalability and security, regardless of whether they are deployed on a customer site or delivered as a service.

We are software and system integrator in the field of telecommunication, banking and e-commerce solutions.

We have expertise in multiple technologies and systems proven by a wide range of successful implementations around the world.

We have high competencies in IT management processes that are used to work with advanced companies (telecom operators, banks) in different countries (mostly in Central Europe, Western Europe, the Caribbean).

18 years on the market

100+ employees

10 million EUR average annual revenue for the last 3 years

More at www.isdd.sk