

Sensors



Susi Gateway



Raspberry Pi 2

LoRa RF module

SUSI

WiFi Connection

I²C / SPI

The lean application server for the Internet of Things and distributed systems.

SUSI is an open source application server under the MIT licensing developed for resource-efficient usage on various hardware platforms. Due to its event-based and service-oriented architecture, SUSI is the key to easily developing distributed systems. Further, since it becomes easy to realise custom solutions across systems, departments and organisational borders, it is those qualities that make SUSI eminently useful in the context of IoT and IIoT. The decentralisation of modular functionalities is thereby the core concept of SUSI. It combines the ease of expandability and the trouble-free dealing with dynamically changing systems.

The underlying implementation integrates program code of various program languages with ease and thereby actively supports the development process in heterogeneous teams as well as the integration of already existing implementations. Therefore developers have an innovative communication platform at hand, providing inherently TLS 1.2 encrypted connections and the support of their standard components for mastering typical tasks right from the beginning. This allows a view on solution-oriented products and in addition exempts barriers of lack of standardisation. This effective approach, as part of the development process, in terms of communication at technological level as well as on a human level by developers, makes SUSI innovative and supports current and future challenges in the transition of the next industrial age.

Fields of application of the current approach are the use for the implementation of HMI for Devices, networking of various components as a gateway (as well as clustering), connecting various gateways to a cloud instance.

latest features

Languages / Engines: C++, node.js, Go

Performance / Efficiency: Non-blocking architecture, application server architecture

Protocols: HTTP 1.0 / 1.1, TLS 1.2, Websocket

Platforms / OS: x86, x64, ARM / Linux

Networking: Clustering

Event-Core: Passive & active observers

Transportlayer: UDP, Serial, TCP

Support: MQTT



webvariants

<http://susi.io>

<https://github.com/webvariants/susi>