

Thinglyfied – everything simply connected

In the age of Industry 4.0 technical requirements are still increasing. Existing products as well as future products have to meet these. Solutions have to be found that offer a high degree of cross-linking and IoT ability.

The technology stack Thinglyfied by SSV turns sensors, actuators and control systems into IoT compliant components. These can be connected to different cloud and IoT platforms.

The embedded module DNP/9535 by SSV as thing network device is integrated in existing products. The devices can be connected with various clouds via special function units, which are hosted in docker containers. These docker containers form a scalable overlay network. So all involved units can exchange information and data among each other and with the cloud.

This data exchange is configured via a uniformed user interface, the Things Configuration Web UI. Configuration can be executed directly on-site as well as remote from a distance.

The user interface is based on graphical function modules, which can be connected according to the application. Therefore it is very understandable. Special skills are not required

A secure public key infrastructure provides data security between all connected units and protect against badly manipulations.

An additional function is the visualisation via Thinglyfied app. This app supplies current data that can be represented in different ways. For example, data can be represented as a diagram with historical values. Furthermore actuators can be influenced from the interface. The Thinglyfied app is available for smart phones and PCs.

Thinglyfied offers users a wide range of applications. For example, in sensor technology processes can be automated and potential problems can be recognized on time. In this case sensors are connected with the cloud via the docker containers. With any change sensors transmit their current measured values to the cloud. From there the values are forwarded to other software and will be inspect for differences. In the event of any deviation from the limit the cloud service platform sends a message to take measures.

Moreover measured values can be continually monitored. Deviations will be early recognized and users can react immediately. Besides the continue data storage enables an extensive analysis to make predictions about future phases.

All in all, with Thinglyfied vendors and users will obtain a secure and scalable solution that makes their products connected without the need to engineer it by themselves. Through individual function modules the overall architecture is extendable – making every domain specific use case possible.