# Bertrandt

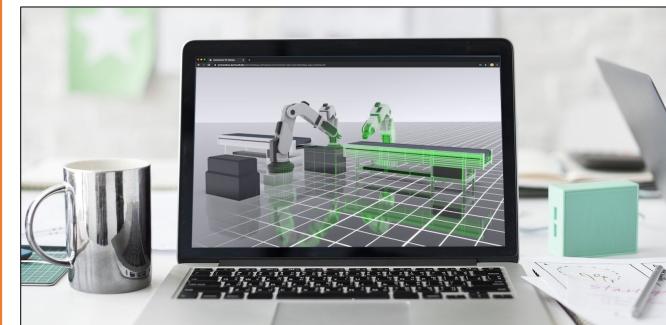
**CLIFE Digital Twin Solution** 











## **Process Overview**

You want to display static and real-time live data on a Digital Twin of your factory to streamline your processes and make your data more tangible? Meet CLIFE, the Digital Twin Solution.



## **CHALLENGES**

You want to have a transparent view about the status of your factory? Currently, you need to use many different tools to get the information about machine status, maintenance interval or possible faults?

## **IDEAL SOLUTION**

Use a 3D Digital Twin of your factory to have all relevant information clearly laid out and ready to hand. This is what CLIFE is about. View the live status and positioning of your factory components with the help of interactive 3D models.

## **DESIRED OUTCOMES**

CLIFE aggregates your data in the cloud and makes the desired information available to managers and technicians live via a gateway. This is your chance to make your factory smarter and more transparent.



## **Digital Twin Solution**

CLIFE is a state-of-the-art Digital Twin Solution for displaying static and dynamic real-time data of the Smart Factory. The CLIFE solution is composed of a basic module (CBM) and additional connectivity modules (CCM) and extension modules (CEM).

## **INTELLIGENT INTERFACE**

CLIFE has a high-performance 3D user interface that can be individually adapted to your special requirements. It can be used intuitively and allows quick access to all required data.

### **DEVICE NEUTRAL USE**

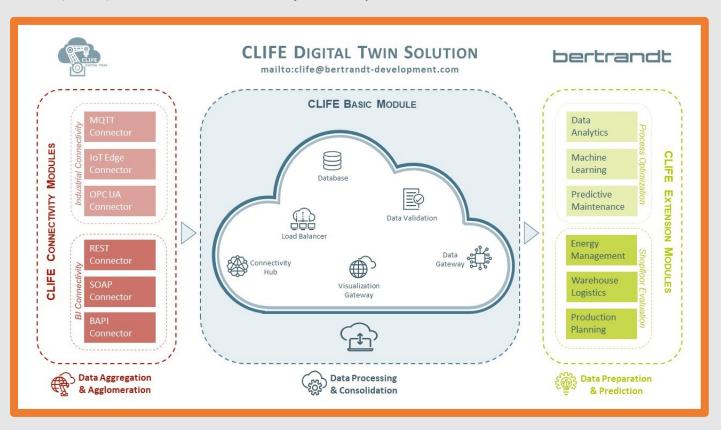
Due to its architecture, using a visualization gateway, CLIFE can be used on any operating system (Windows, Android, iOS) and any device (laptop, tablet, smartphone) without any problems.

## **LIVE 3D POSITION VISUALIZATION**

Integrated interactive 3D models show live status and positions of factory components in real time. The animated models exactly visualize the live factory processes.

## **CLIFE & Microsoft Azure**

Depending on the customer needs, the CLIFE Digital Twin Solution is composed of particular modules. The heart of the system is the CLIFE Basic Module (CBM). For data aggregation, CLIFE offers a wide range of connectivity modules (CCM), which gather data, e.g. from OPC UA, SOAP or even PTC ThingWorx. Finally, several extension modules (CEM) offer additional analytic and prediction functions.



### **DATA AGGREGATION & AGGLOMERATION**

CLIFE connectivity modules enable data aggregation from industrial connectors like MQTT or OPC, business intelligence connectors like REST or SOAP and from PTC ThingWorx.

## MICROSOFT AZURE CLOUD

CLIFE's connectivity hub, the load balancer and its database is located in the MS Azure cloud. The data is validated in the cloud and gateways for visualization and analytics are provided.

## **DATA PREPARATION & PREDICTION**

Use CLIFE extensions modules such as data analysis, machine learning or production planning to optimize processes and evaluate the shop floor.



# Ask for CLIFE Digital Twin

Call for more information: +49 (0)211 - 5206577-10

Ask a question via email: <a href="mailto:clife@bertrandt-development.com">clife@bertrandt-development.com</a>





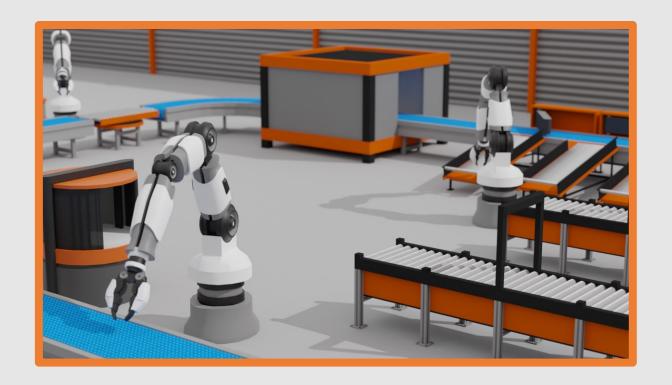




# CLIFE for Fischertechnik Smart Factory

There are numerous challenges in the areas of smartification and digitization that go hand in hand with the establishment of a smart factory. First there is the collection of data, then the display of this data and its further use. In addition, different employees require different information, which should be prepared and displayed as efficiently as possible.

Mapping the factory in a digital twin is one way to address all these challenges and thereby generate added value.



### **State-of-the-art Architecture**

The Digital Twin Solution CLIFE from Bertrandt Development GmbH combines a state-of-the-art software architecture with the possibilities of optimum data utilization. CLIFE aggregates data in an MS Azure cloud, displays it user-specifically and enables the connection of data sources and evaluation modules.

## **Available Everywhere**

CLIFE ensures that every employee has access to the information that is important to him or her at any time and in any place, as CLIFE is accessible from anywhere via the MS Azure cloud and runs on all standard devices like laptop, tablet or smartphone.

## **Reducing Costs**

CLIFE helps to reduce costs. Processes are streamlined, errors are eliminated faster, data is used consistently, and employees are deployed efficiently. Tools for evaluation and optimisation contribute to increased profits.