

**Eurotech**

Eurotech is a global company that designs, creates and delivers full Internet of Things solutions, including services, software and hardware to leading systems integrators and enterprises large and small. With Eurotech solutions in place, clients have access to the latest open source and standardized software stacks, flexible and rugged Multi-service gateways and sophisticated sensors to bring actionable data from the field into business operations. Learn more about Eurotech at [www.eurotech.com](http://www.eurotech.com).

**REMOTE AND PREDICTIVE MAINTENANCE OF MEDICAL EQUIPMENT IN THE ERA OF THE CONNECTED HEALTHCARE**

**Digitalization is deeply transforming the Medical and Healthcare system worldwide. Enabling the “Internet of Medical Things” means to connect medical devices and enhance the quality of service that healthcare companies and facilities can offer to customers and patients.**



The Healthcare industry is at a turning point. Digitalization and IoT technologies are revolutionizing the BtoB market of medical equipment manufacturers, that can leverage innovative tools to provide added value to their customers and enhance their processes.

The number of connected and interconnected devices is increasing, and there have been developed many health specific applications that could monitor different kind of data through smart devices and other wearable devices. On the IT side, Cloud IoT technologies allow the development of apps for the remote management and monitoring of those devices and data: this can benefit both the consumer market and the BtoB market.

### **Preventive and predictive Healthcare: monitoring of remote devices with IoT**

Preventive and predictive Healthcare is therefore enabled: data collected by field devices – mainly to remotely manage the medical equipment but also in order to monitor patients health data – can be used to improve processes, face emergencies and anticipate malfunctions of such devices. The result is an enhancement of customer satisfaction and an increase in the quality of service.

Healthcare companies are now able to perform advanced analytics – both in the Cloud or at the Edge – of data collected by their devices and machinery. This reduces maintenance costs and boost specific predictive maintenance applications.

Eurotech enables these scenarios by providing hardware and software building blocks to deliver end-to-end IoT applications that connect Edge devices and data to the Cloud. With its Multi-service IoT Edge Gateways, Eurotech brings IoT connectivity and computing capabilities in the field into rugged, fanless and low-power computers based on open architectures to collect data that can be processed at the Edge for real-time responsiveness and sent to the Cloud for further analytics.



*Eurotech's Multi-service IoT Edge Gateways enable the connectivity between field devices and the Cloud*

### **An Edge-to-Cloud IoT infrastructure for remote and predictive maintenance of medical equipment**

Medical and Healthcare companies and Eurotech can collaborate closely to integrate IoT technologies with both devices in the field and their software applications on the IT side, with the goal of zero changes on the products and the applications.

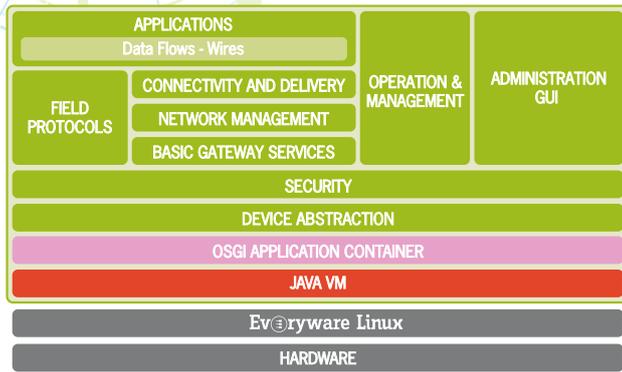
The successful result is a solution that enables, in a very secure and effective way, to carry out technical services of medical and healthcare companies' devices installed in clinics worldwide or worn by patients.

The challenges associated with the global deployment and servicing of intelligent medical devices are manifold and require the highest levels of flexibility when it comes to the software at the Edge. A well designed IoT architecture for distributed medical devices has to offer solid end-to-end security and has to provide local processing capabilities to enable functionality like access to technical data of medical devices and their configuration management. In addition, it is necessary to support a wide range of new and legacy protocols and interfaces to establish the communication between the IoT Edge Gateways and the medical devices.

This is achieved by leveraging Everyware IoT – Eurotech's Edge-to-Cloud architecture - featuring Everyware Software Framework (ESF) and Everyware Cloud (EC) in combination with Eurotech's Multi-service IoT Edge Gateways.

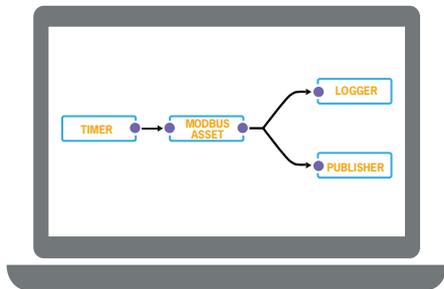
application story

The IoT Edge Framework ESF speeds up the development and deployment of the specific application or business logic on the IoT edge device.



*Everyware Software Framework's functional architecture*

ESF enables the collection, filtering, logging and managing of Edge data, with native support for field protocols. It provides a visual application development environment to avoid the coding of the single application building blocks from scratch. With ESF Wires developers have access to a marketplace of pre-configured elements to build Edge computing and IoT applications with ease.



*ESF Wires provides a visual environment to simplify IoT application development*

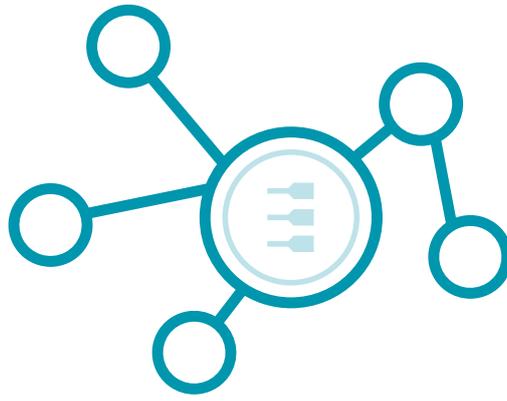
Everyware Cloud (EC) - Eurotech's IoT Integration Platform - interfaces easily with existing enterprise IT infrastructures, offering simple access through standard APIs to real-time and historical data from devices. In addition, it enables effective remote device management as well as the device life-cycle features that ensure a smooth deployment and management of these devices in the field. This IoT Integration Platform is also available for on-premises and private cloud deployments.

### The benefits of Eurotech IoT medical solutions

System integrators, OEMs and final customers can benefit from Everyware IoT building blocks for predictive maintenance and other IoT applications. For example, manufacturers of medical equipment could offer remote assistance to their customers via Cloud IoT services: with Eurotech's Multi-service IoT in place, they can build an Edge-to-Cloud infrastructure to analyze data collected in the field and sent to their technical service, that can monitor and manage those data in real-time and provide remote assistance.

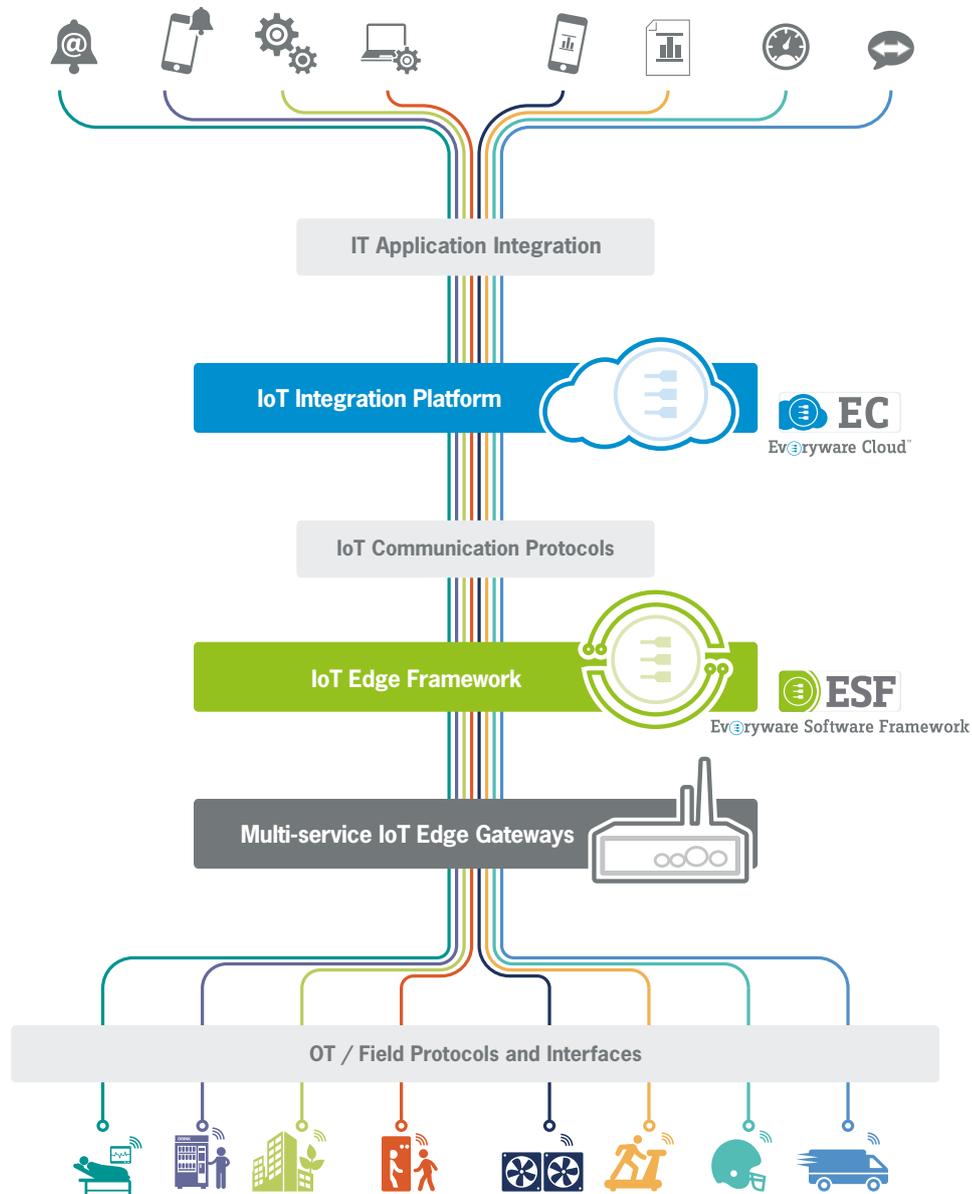
Moreover, providing devices with Edge computing capabilities allows advanced analytics and data management applications directly in the field: by collecting data over time, customers are able to benefit from predictive maintenance and other applications that can reduce costs and boost operational efficiency.

Having Eurotech as partner for Medical care solutions means implementing state-of-the-art IoT solutions supporting world-leading medical devices. The complexity of operational processes is encapsulated in a broad offering of easy-to-use services and products, ruggedized for embedded applications. Eurotech customers can rely on a leading IoT expertise and portfolio, allowing them to focus all their attention towards their strategic needs.



# Ev<sup>ery</sup>ware IoT

Open. Integrated. Managed.



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