OEM, FOOD PACKING EQUIPMENT

RED LION®

EXCELLENCE. REDEFINED.

Red Lion's FlexEdge enables secure data brokering by leveraging both MQTT and OPC-UA in the same application, reducing system complexity and increasing data visibility.

CUSTOMER

A Food Processing Equipment OEM

CHALLENGES

- ◢ Needed access to real-time data globally
- ◢ Local access to operational data without access to private machine data
- ◢ Needed to avoid higher OEM maintenance costs
- ◢ Needed to reduce server management and licensing costs

RESULTS

- ◢ FlexEdge gateway is installed at machine layer
- ◢ Different datasets can be distributed based on credentials used
- ◢ Crimson easily configures credential-based datasets
- ◢ Elimination of $1 million in annual licensing fees
- ◢ Increased efficiency and access to real-time data

DEFINITION OF PROBLEM

A food packaging equipment OEM needed help designing an architecture that would allow a user with a global footprint to access their data in real-time while significantly reducing the OEM's maintenance costs. They needed to enable their user to access operational data locally without providing access to their private machine data, which was routed to the cloud for preventive maintenance monitoring.

The original architecture included industrial PCs and a centralized protocol server, which captured and transmitted all available data to the cloud. The operational dataset that the user required was sent back to them. This architecture resulted in exorbitant server management and licensing costs, totaling almost $1 million annually. In addition to the on-going costs, there was also no way to share real-time data with the user, which inhibited their ability to drive efficiency.

THE SOLUTION

Red Lion provided an elegant solution through the use of their FlexEdge™ DA50A device, powered by Crimson®. The advanced automation FlexEdge gateway was installed at the machine layer, connecting and communicating with multiple different PLCs through Crimson's robust protocol conversion functionality. Leveraging FlexEdge's OPC-UA Server enabled different datasets to be distributed based on the credentials used. Crimson configured the credential-based datasets and routed the local data to the user and the larger, private, OEM dataset to the OEM's Gateway Panel layer, which was another FlexEdge gateway with a built-in OPC-UA Client. The OPC-UA Client device captured the OEM's private machine data and sent it to the cloud via MQTT.
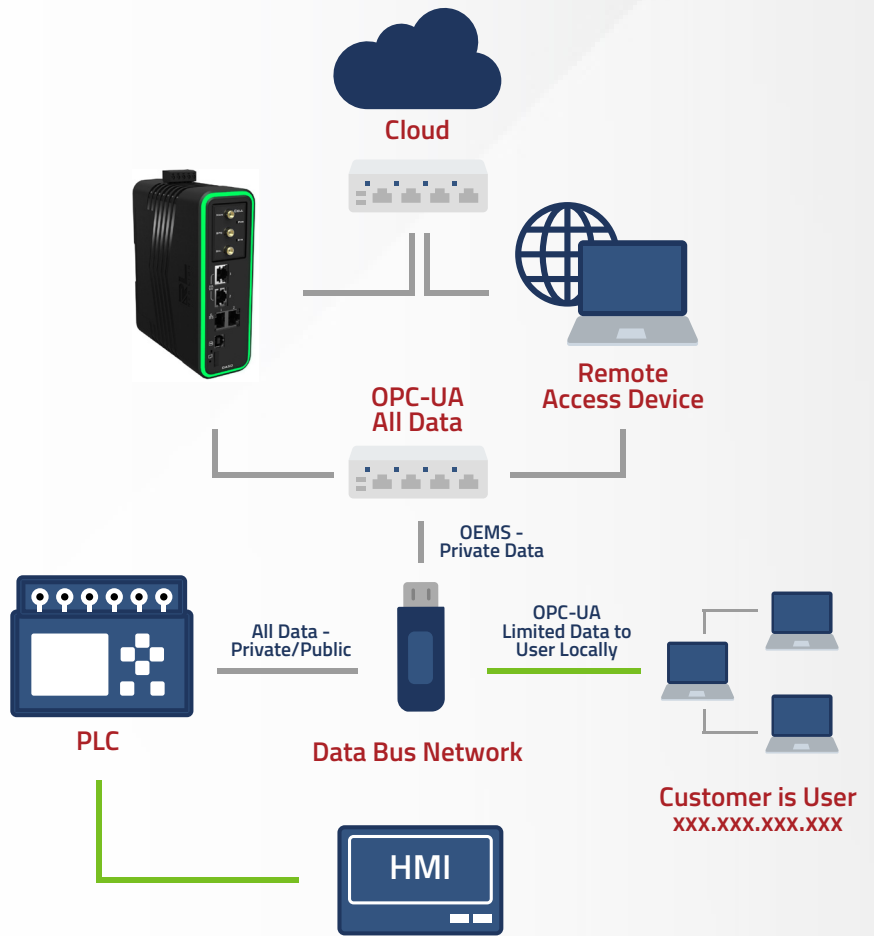
PRODUCTS

FLEXEDGE™

CRIMSON®

Description: The modular design of the FlexEdge DA50A makes designing for compatibility with rapidly evolving communications standards as easy as replacing a field-installable sled. Regardless of the brand of PLC or other equipment specified, the FlexEdge platform, powered by Crimson®, enables connectivity to virtually anything in your system.

THE RESULT

Ultimately, the OEM eliminated their $1 million in annual licensing fees and provided their user the real-time data they needed to monitor their operational output and increase their efficiency.

Cloud

OPC-UA
All Data

Remote
Access Device

OEMS –
Private Data

PLC

All Data –
Private/Public

Data Bus Network

OPC-UA
Limited Data to
User Locally

Customer is User
xxx.xxx.xxx.xxx

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