CASE STUDY

SAP Work Order Process Automation

Find out how a leading US manufacturer of building materials reduced operator intervention time by 3,000% per asset by eliminating the need for PLC and SCADA programming for maintenance Work Order management.

CHALLENGE

The customer had an existing automated work order management solution that involved counting maintenance driving metrics on PLC's, alongside defined trigger points. AVEVA System Platform was then capable of calling SAP (BAPI's) to trigger the specific work orders associated with predefined work plans. However, this approach involved making manual changes to PLC's and AVEVA System Platform with each new device that was encountered, or when new parameters were required. Similarly, when the SAP work order was completed and counters needed to be reset to zero, connections to the PLC would be required to make the change.

This approach carried operational risk with each of these changes, and significant manual effort with each new device or reset process.

SOLUTION

Using all of the customer's existing software and technologies, Reekoh implemented a data-driven solution that combined an observation-based approach to data collection with streamlined end-to-end operations.

Plant operators login to the Reekoh platform with specific role-based access allowing them to identify the assets that are of particular interest for monitoring, and simply manage asset meta-data that then determined the relevant behaviour on certain triggered conditions: SAP Work Plans, frequency of Work Order creation, and whether the asset is reset capable.

Process data integrated from AVEVA Insight was also correlated against the configured assets and data compared against the configured trigger conditions. For those assets identified as meeting the trigger condition, Work Orders were created in SAP (provided none were currently outstanding or recently closed, as per an asset-configurable time period).

On a regular basis, Work Order status was validated in SAP. When a Work Order was closed on a reset capable asset, data was then published to an MQTT Broker enabling the data to be passed down to AVEVA System Platform, which in turn would reset appropriate counters on the required PLC's.

OUTCOMES

- Reduced operational risk by removing the need for manual PLC and SCADA programming for maintenance Work Order management.

- Reduced time spent on operator intervention by 3000% per asset.

- Future-proofed for seamless addition of new assets.

- Leveraged all existing technologies (both on-prem and cloud-based) already in use by the customer.

Let's talk

We're here to help

+44 (0) 1527 529774

sales@mac-solutions.co.uk

M.A.C.
SOLUTIONS

Unit 6-7, Kingfisher Business Park
Arthur Street, Lakeside, Redditch
Worcestershire, B98 8LG
United Kingdom