HOW COMPANIES CAN USE IoT TO MONITOR PRODUCTION WITH THE OFFLINE APPS OF ○ Neptune Software

Connect production with end-to-end process execution across the supply chain – Unlock the full value of your Industry with **Dyna-IoT4.0**, the 24/7 production monitoring on the edge.

Industry 4.0

Dyna-IoT4.0 with ○ Neptune Software

Outlook

Manufacturing companies are facing a huge challenge in their markets against competitors, throught investment in innovation and digitalization for the implementation of Industry 4.0 solutions.

Failure to adapt the changes brought by the digital transformation will cause them to lag behind and lose their competitive edge.

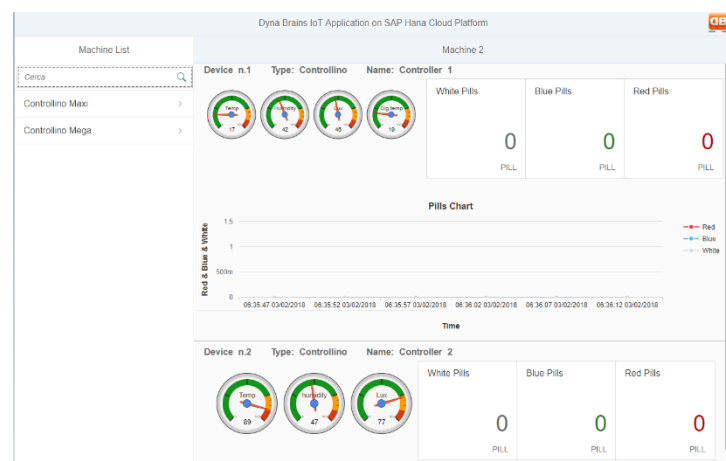So how to follow up the fourth industrial revolution?

Dyna Brains, in collaboration with **Neptune Software**, developed Dyna-IoT4.0 a solutions based on DXP with special Planet 9 Edge edition for PLC.

DEPARTMENT	Manufacturing
INDUSTRY / SECTOR	All Industries
SAP VERSION	SAP ECC & SAP S/4 Hana
DEVICES	Edge Workstations / Tablets / PLC
IMPLEMENTATION TIME	2 Months

ABOUT DYNA BRAINS

Power your Business Digitally. Dyna Brains is a boutique SAP consultancy that has been established by a team of consultants with proven international experience with the aim to transform their knowledge into value for their customers. Thanks to an in-depth knowledge of the business processes in industries such as Fashion, Retail, Ceramics, Real Estate, Mechanical, Textile and Shipping & Transportation, Dyna Brains is committed to help its clients to find the leanest and most optimized solutions by working hand in hand with them and identify a suitable road map to improve their SAP landscape according to their needs and the best practices.

Learn how Dyna-IoT4.0 on Neptune DXP is the most powerful and innovative solution for the Industry 4.0 projects of your company.

Dyna-IoT4.0 is a comprehensive, customized system and dedicated solution based on Neptune Software. It is composed by integrated production equipment that can be connected with your manufacturing machines and devices on the edge (PLC and sensors) through RS232, RS485, GPIO, analogical & digital interfaces, with communication PLC (Neptune DXP Planet 9 Edge Edition), connected to a cloud database (Neptune DXP Planet 9 Platform) or directly to SAP using embedded APIs of Neptune DXP Planet 8, creating the perfect landscape for developing Innovative Industry 4.0 solutions.

CHALLENGE

Top 5 Challenges of Industry 4.0

Connectivity – Keeping devices, infrastructure, cloud and applications, connected to the network is a top IoT challenge, because wireless connectivity is highly complex, and IoT devices are expected to work reliably without fail even in the toughest environments.

Continuity – Enabling a seamless flow of information to and from devices and infrastructure to SAP systems can be really critical in case of systems are not live.

Compliance – IoT Devices and systems are subject to Quality Certifications for Industrial Use.

Coexistence – An industrial device that loses the control signal, can have dire consequences. Coexistence testing is therefore crucial, to measure the reliablility of the operating environment.

Cybersecurity – Most traditional cybersecurity protection tools have focused on network and cloud. IoT vulnerabilities and potential point of entries into endpoint devices should be identified, and SW & HW infrastructure should be tested using a regularly updated database of known threats/attacks to monitor device response and detect anomalies.

APPROACH

Continuity and Security are the main goals of Dyna-IoT4.0 approach

Dyna Brains, developed Dyna-IoT4.0 to provide the best reliable architecture for industry 4.0, ensuring integration of production machineries with SAP using Neptune DXP Edge edition on Raspberry based Industrial PLCs.

Dyna-IoT4.0 architecture bring the possibility to control and monitor production phases and activties even if SAP is not live, to face up the challenges of having a fully digitalized offline application for your MES.
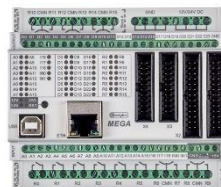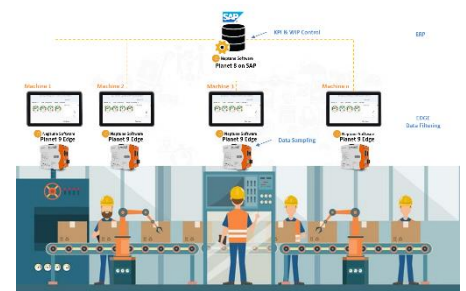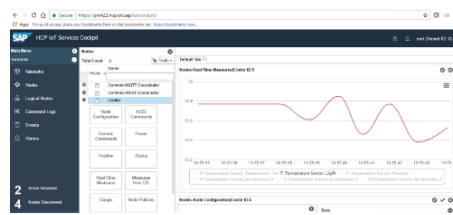
Dyna-IoT4.0 ensure the adequate level of cybersecurity through the API connection with the possibility to be enhanced with transaction certificaiton using Ethereum blockchain.

RESULTS

From the binary data to SAP using Neptune Software technology

One of the key success of Dyna-IoT4.0 is the scalable and big flexible solution of using a great combination of application features of SAP, Neptune Planet 8 and Neptune Planet 9 on Edge to develop a solid and innovative digital infrastructure for IoT of any industry sector.

The goal of having fully integrated Industry 4.0 web applications that can be driven completely by SAP, it brings the chance to centrally drive and control all the manufacturing processes with the right flexibility and reducing TCO.

MORE INFO ▶

sales@dynabrains.com

ABOUT NEPTUNE SOFTWARE