

# Pharma 4.0 Plug&Produce solutions by ABB Ability MOM

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In the course of the digitalization of plants, the pharmaceutical industry has the chance to hit two birds with one stone: Increase productivity and flexibility while achieving data integrity eliminating the human factor gathering quality data. Today system integration in pharma industry struggles with the lack of cross-vendor integration standards, resulting in high complexity and engineering effort for definition, implementation/deployment and validation.

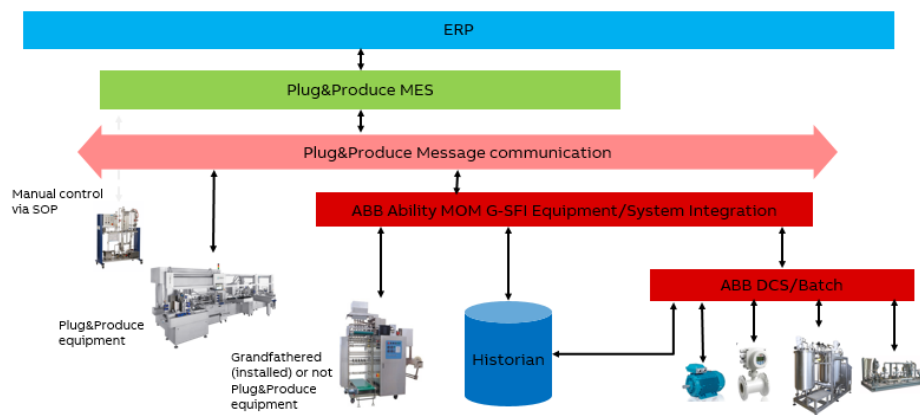
ISPE special interest group Pharma 4.0 is looking for standardization of XML-message based communication between equipment (shop floor), process control and EBR/ MES in its current Plug&Produce working group.

ABB Automation together with Werum IT Solutions, has taken the initiative to implement a message based communication based on OPC UA between its Process Control System ABB Ability System 800xA and Werum IT Solutions MES system PAS-X using ABB's Ability MOM Services.

This concept is extended into brownfield installations to include grandfathered equipment without message based communication capability. A simple object modelling allows to translate messages into tag based OPC communication.

## Message driven systems/equipment integration

ABB Ability MOM models installed equipment to connect to a digitized plant



Within this contribution, it will be shown how the promoted Message based communication architecture looks like and how it can be extended to already installed equipment. A working prototype will be presented that gives deeper insights into the modelling system concept, which is being implemented (Q4-2017/Q1-2018) in a pilot site.

**References:**

ISPE Special Interest Group (SIG) Pharma 4.0, Working Sub Group “Plug&Produce”