

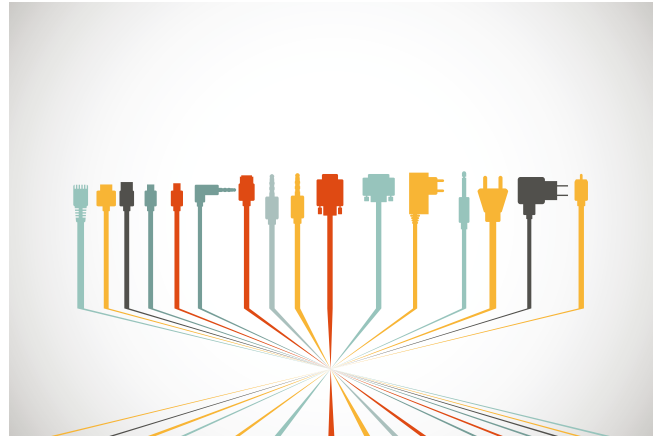
OPC UA – PLUG & WORK

A common interface
for all machines in the
global **woodworking**
industry



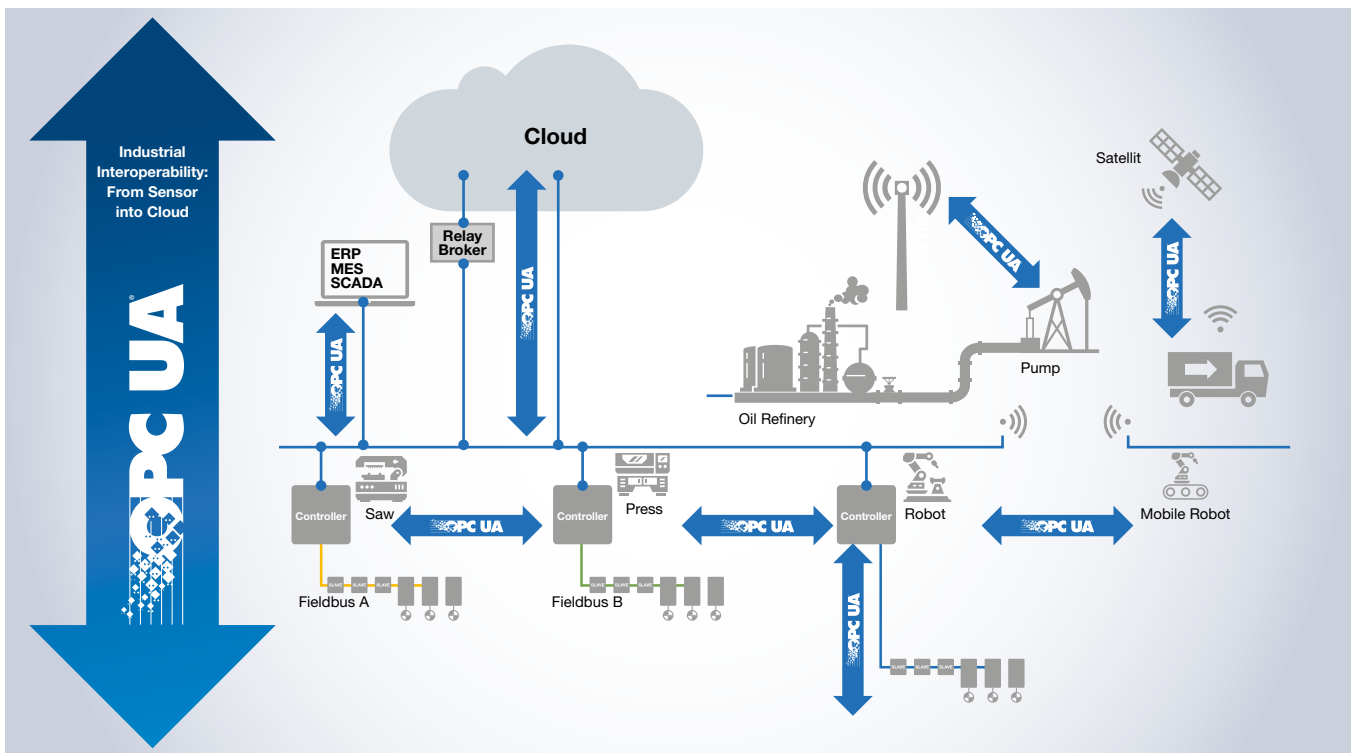
Motivation for a standardized interface

In a modern production environment, our customers typically connect machines from different manufacturers into a production network. This allows the view on the actual state of the machine from everywhere. This data can be stored and analyzed to improve the machine availability. Currently, there is no standard for communication defined, and it is always necessary to define a new software communication interface. It would be helpful, save money and reduce efforts for customers, if a standard interface would be available for connecting all their machines to an ERP/MES system or a cloud. It should be as easy as connecting a printer to a PC.



The solution: OPC UA

OPC UA means Open Platform Communication Unified Architecture and describes an international standard for industrial interoperability. It is the preferred standard by the German Platform Industry 4.0 and the Industrial Internet Consortium (IIC) in the United States. OPC UA is a common language to enable secured data and information exchange between different partners, i.e. different machines. It is defined, standardized and promoted by the OPC Foundation, an international non-profit organization.



Using OPC UA by all components is one mandatory element to have a plug and work solution. Furthermore it is necessary to define standardized words and semantic terms. For example, the current state of a machine is defined in a common way and every machine communicates its state with its environment in the same way, the same words. It is necessary to define this for the various industries, e.g. the woodworking machines. For this reason, organizations as VDMA, EUMABOIS and some woodworking machine manufacturers create therefore so-called Companion Specifications. These are standardized and published worldwide by the OPC Foundation.

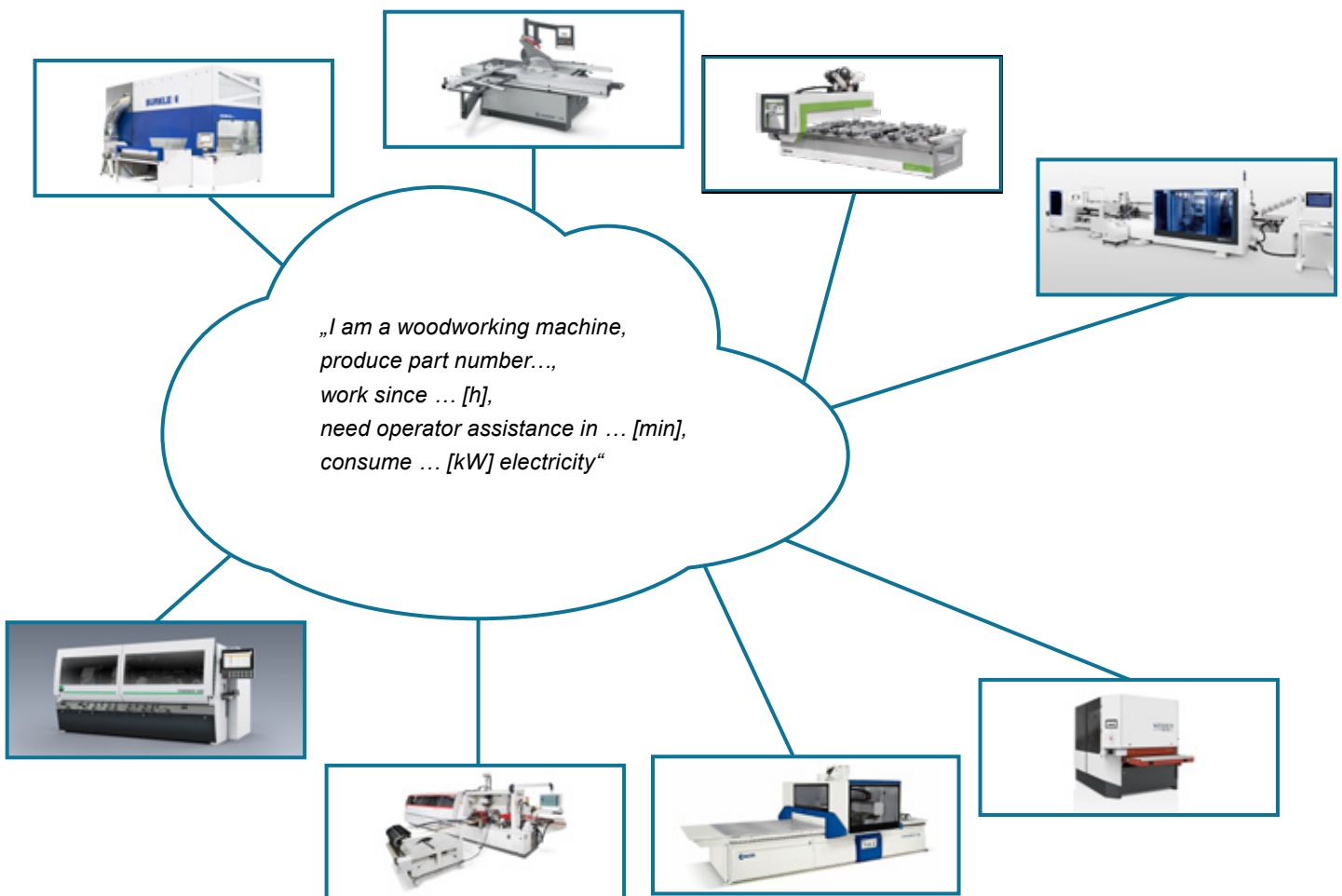
OPC UA in the Woodworking Industry

A working group of eight leading European machine manufacturers develop a unified worldwide communication standard to all software systems like MES, ERP and in the cloud, for all types of woodworking machines. The data will be presented in a uniform way independent of manufacturer and IoT platform. The aim of this is to consolidate an industry standard in the woodworking industry. This way, the integration of machines for woodworkers and processors into their IT landscape will become as simple as possible.

To achieve the highest possible worldwide penetration of the OPC UA standard in the woodworking industry and to maximize the customer benefits, the members of the working group have decided to cooperate with the working group for machine tools. The Plug & Work language will relate to the language developed there, which is called „umati“ (universal machine tool interface). This way, all components and controls used in machine tools and woodworking machines only have to be adapted once.

The Result: Plug and Work

The customers in the whole industry will be able to easily connect the machines in their machine park into one connected system!



Working Group:
8 leading european manufacturers
(in alphabetical order)



IMA SCHELLING
GROUP



WEINIG



HOLZHER

Supported by:

