

# Matrikon® FLEX™ OPC UA server for CODESYS

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## Scope

OPC UA has established itself as a key technology in the digitalization of processes. OPC UA is not just a communication protocol or an interface, it is a technology, a framework, describing and transporting information in a secure, reliable and flexible manner. Matrikon, a Honeywell company, has been a major player in the OPC technology for years and is one of the first companies to certify an OPC UA server, now used by hundreds of manufacturers. This server can now be combined easily with CODESYS for Industrial Control Systems.

## Key features

- Portability
- Scalability
- Performance
- Security
- Ease of use

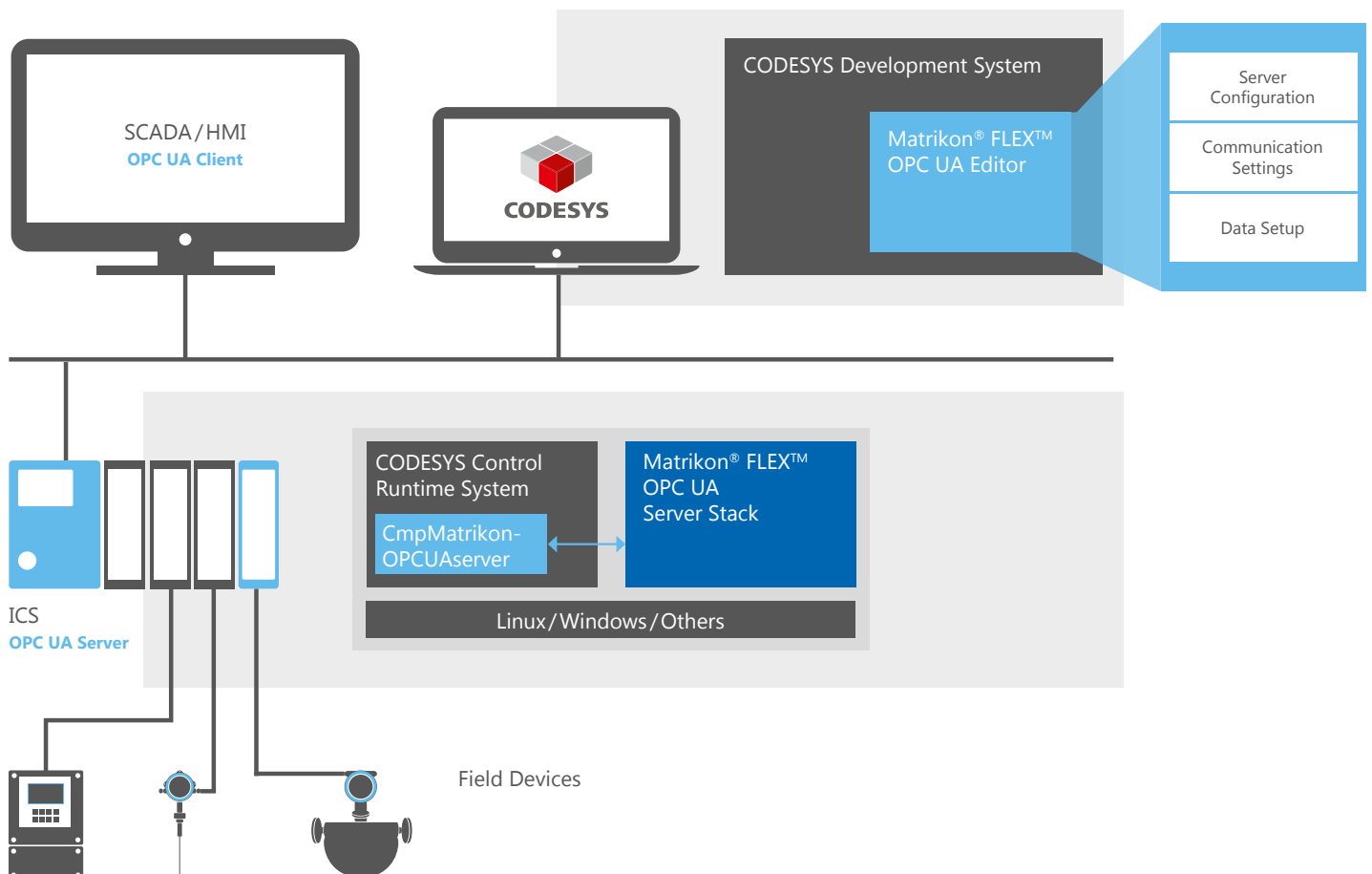
## Functionality

The Matrikon FLEX OPC UA server stack is delivered as SDK.

The stack is linked to the CODESYS Control Runtime System with an additional component (CmpMatrikonOPCUAserver).

The configuration of the server and data to be exposed over OPC UA is done with the Matrikon FLEX plug-in editor for CODESYS.

Integration of the OPC UA server.



## Features and benefits

### Controller manufacturers

**Rapid implementation:** clear documentation, evaluation kits, consulting and integration support through BE.services

**Highly reliable, long-term solution:** robust and proven stack from an OPC UA specialist assuring an always up-to-date solution

**Portability and scalability:** same stack for all platforms, support of all profiles, platforms with or without OS, with or without CODESYS

### Machine Builders

**Performance:** stack architecture allows performance through all profiles and facets used

**Security:** Better control over public and private data / support for the different security facets for data integrity

**Flexibility:** Support of various information models (companion specs)

### Application engineers

**Ease of use:** Reverse connect feature allows client to server communication and eliminates complicated firewall settings

**Ease of use:** Configuration of the server, communication settings and data setup (engineering units, operation range, sample rate per variable) directly in CODESYS

## Engagement model

One stop shopping for products, support and integration services.

How to get?

Product	Manufacturer	Part Number	Sales Contact
Matrikon FLEX OPC UA SDK	Matrikon   <a href="http://www.matrikonflex.com">www.matrikonflex.com</a>	0230201	info@be-services.net
Matrikon FLEX OPC UA CODESYS RTS Component	Matrikon   <a href="http://www.matrikonflex.com">www.matrikonflex.com</a>	0230221	info@be-services.net
Matrikon FLEX OPC UA Editor	Matrikon   <a href="http://www.matrikonflex.com">www.matrikonflex.com</a>	0230231	info@be-services.net

## Technical data

General system requirements		
OPC UA server stack size	minimum recommended	512kB Flash/180kB RAM 1MB Flash/512 kB RAM
Supported CPUs		X86, ARM, ARM Cortex, PowerPC (32 Bit processors and higher)
Supported OS		Bare metal or RTOS

Supported data types
All IEC data types including complex ones (arrays, structures)

Performance data			
Test	Conditions	Hardware	CPU Load (including security)
100 continuously changing tags	Sampling/reporting 100ms	ARM Cortex M4 168MHz	12.50 %
1.000 continuously changing tags	Sampling/reporting 1s	ARM Cortex A8 200 MHz	19%
1.000 continuously changing tags	Sampling/reporting 1s	ARM Cortex A15 1,5 GHz	8 %

## Featured Manufacturers



## Support

Please contact [info@be-services.net](mailto:info@be-services.net)