



# Getting Started with OPC UA

## Part 2: Development Kits

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# Getting Started with OPC UA

#1 Free Test Applications

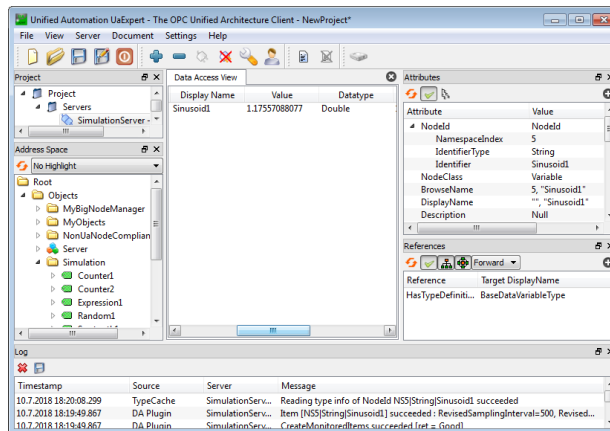
#2 Development Kits

- Stacks
- SDKs

# #1 Free Test Applications

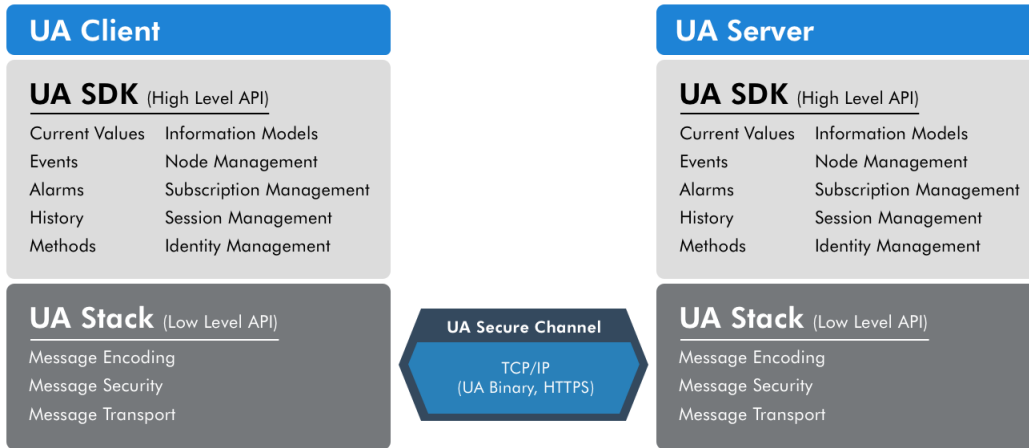
- ▶ OPC Foundation
  - Samples included in the '.NET Legacy' project
  - [Github.com/opcfoundation](https://github.com/opcfoundation)
- ▶ Unified Automation
  - UaExpert
  - Demo Servers
  - [unified-automation.com](https://unified-automation.com)
- ▶ Prosys OPC
  - UA Client
  - UA Simulation Server
  - [prosysopc.com](https://prosysopc.com)

Free



# #2 Development Kits

- ▶ OPC UA Programming Model
  - Stacks provide interoperable OPC UA communication
  - Software Development Kits (SDKs) provide standard implementation of OPC UA functionality
  - Your application code comes on top



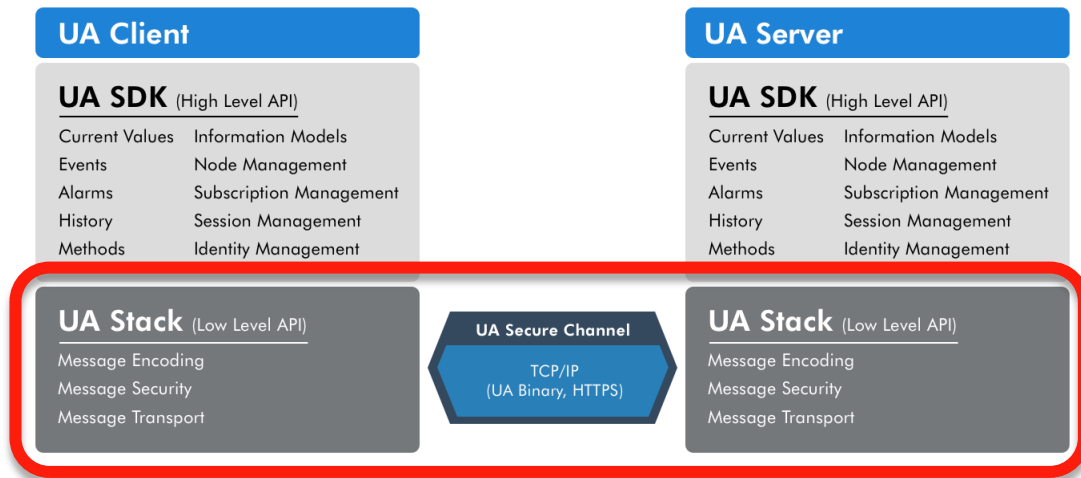
# OPC Foundation Stacks

▶ [github.com/opcfoundation](https://github.com/opcfoundation)

- .NET Legacy
- .NET Standard
- Java
- AnsiC

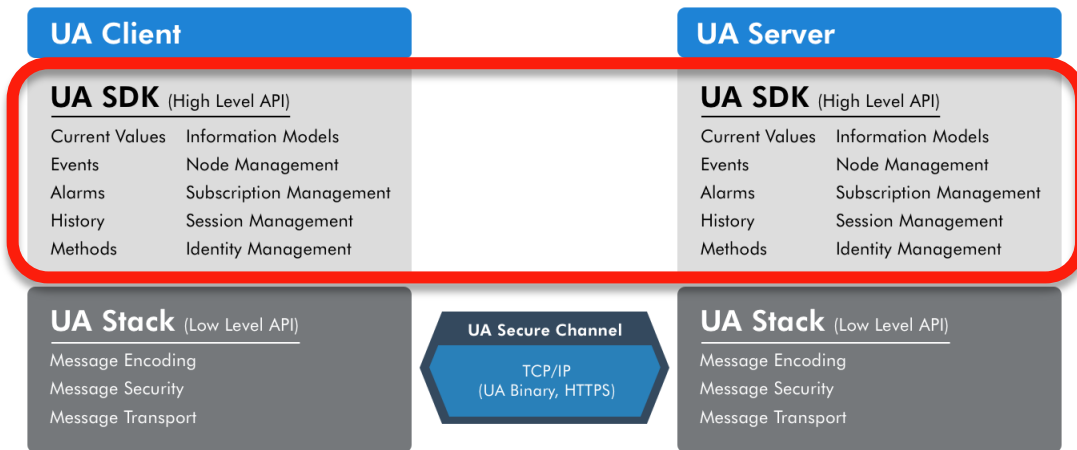
▶ Dual License:

- GPL (GNU Public License) v2: **non-commercial use**
- RCL (Reciprocal Community License): **commercial use**
  - OPC Foundation members
  - SDK customers



# Commercial OPC UA SDKs

- ▶ Java
  - Prosys OPC
- ▶ .NET
  - Unified Automation
  - Softing
  - OPC Labs (Client)
- ▶ C/C++
  - Unified Automation
  - Softing
  - Matrikon OPC (Server)



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usability.

This product catalog features OPC Se Certified Products from OPC Foundation members.

All Products

Certified Products

Q sdk|

Name	Member	Description
<a href="#">.NET Client Development Toolkits</a>	Advosol Inc.	.NET based client development toolkits for all OPC specifications. Ad...
<a href="#">Embedded OPC UA Stack</a>	EUROS Embedded Systems GmbH	Communication standards, implemented in the form of high level interfa...
<a href="#">MatrikonOPC UA Embedded Server SDK</a>	MatrikonOPC	The OPC UA Embedded Server SDK from MatrikonOPC is a software developm...
<a href="#">MatrikonOPC UA Device Server HDK</a>	MatrikonOPC	The OPC UA Device Server Hardware Development Kit is the easiest way t...
<a href="#">Modigm OPC UA Client Toolkit</a>	Modigm Inc.	Modigm OPC UA Client ToolKit is the easy and stable SDK for OPC U...
<a href="#">.NET And COM Client Toolkit: QuickOPC</a>	OPC Labs	QuickOPC is a set of COM and .NET OPC components that simplify the tas...
<a href="#">StreamInsight Option for QuickOPC</a>	OPC Labs	The StreamInsight Option for QuickOPC allows you to bring in streaming...
<a href="#">Apis OPC UA Software Development Kit</a>	Prediktor AS	The APIS Embedded OPC UA Software Development Kit is an easy and fast ...
<a href="#">Prosys OPC UA Java SDK / Toolkit</a>	Prosys OPC Ltd	Develop once, deploy anywhere Build OPC UA clients, servers and com...
<a href="#">Prosys OPC UA Client</a>	Prosys OPC Ltd	Prosys OPC UA Client is a generic OPC UA client developed with Prosys ...

VdW Verein deutscher  
Werkzeugmaschinenfabriken  
e.V.  
iData Inc.  
CoreTigo  
Beijing Blueprint Technology Co.,  
Ltd.

#### Certified Products

[Cyberlogic OPC Server](#)  
[Omron NX1 Machine Automation Controller](#)  
[Puerto UaMonitor for Excel TSI Facility Monitoring System \(FMS\)](#)

#### Twitter Feed

Thanks @samsung for great hospitality hosting the @OPCFoundation Seminar Day Seoul today and your continues commitm...  
<https://t.co/yJfIqIz>  
@samsung Opc Day Seoul: Dr. Park giving a great commitment to @opcfoundation and #opcua  
<https://t.co/Sw2JvOIAv9>  
@samsung Seoul hosting the OPC seminar day today. 107 registered attendees listing to impact of #opcua for... <https://t.co/b4yYB9et9J>

# Commercial SDK Benefits

- ▶ Professional quality for industrial use
- ▶ Documentation
- ▶ Support for the full OPC UA feature set
- ▶ Constantly improved and updated
- ▶ Product maintenance and support
- ▶ Product warranty and liability
- ▶ Certified solutions
- ▶ Faster time to market
- ▶ Long-term solution



- Overview & Benefits
- How to Certify
- Specifications
- Test Tools
- Purchase Test Tool

Certification » Overview & Benefits

# Overview & Benefits

The OPC Foundation recommends the use of products certified by an OPC Foundation accredited Certification Test Lab!

## What is Certification?

The OPC Foundation's Certification and Compliance program exists to help members develop and deliver high quality products that meet minimum operability requirements. OPC Certified products are:

- **Compliant** with the OPC specifications
- **Interoperable** with other OPC products from other vendors
- **Robust**, reliable and able to recover from lost communications, etc.
- **Usable**, by following universally accepted best-practices
- **Efficient** in managing resources (CPU, memory, disk space etc.)

The Certification program is under the jurisdiction of the [Compliance Working Group](#), a working group of volunteers responsible for:

- The rules of the certification program
- Definition of test cases and test-procedures for compliance to OPC UA Profiles ([Profiles available here](#))
- Guidelines for the OPC Foundation Certification Labs
- Continued development and refinement of the certification program

## What is Certifiable?

Any OPC UA Client or OPC UA Server or OPC Classic (DCOM/COM) product can be certified by an OPC Foundation accredited Certification Test Lab. These products may be software based (running on Windows, Linux, etc.) or hardware based (in PLCs, or embedded controllers, etc.). They may implement the current release of the OPC Foundation specification or one of the prior releases. The following releases are supported for certification:

BECOME A MEMBER

### Newest Members

- Cisco Systems, Inc.
- VDW Verein deutscher Werkzeugmaschinenfabriken e.V.
- iData Inc.
- CoreTigo
- Beijing Blueprint Technology Co., Ltd.

### Certified Products

- Cyberlogic OPC Server
- Omron NX1 Machine Automation Controller
- Puerto UaMonitor for Excel
- TSI Facility Monitoring System (FMS)

### Twitter Feed

Veronika Schmid-Lutz @SAP Elected Chair of @OPCFoundation Board of Directors. Congrats!  
<https://t.co/LsXHc6uZl2> ...  
<https://t.co/cG9s1CJ8oa>  
 Industrial #interoperability based on #opcua explained by Peter Seeberg, @softing at @vdi congress in Baden-Baden, ... <https://t.co/4ew5mrVEIcx>  
 OPC Seminar Day Singapore on July



# Thanks!



**PROSYS**  **OPC**

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