

Matrikon[®] OPC UA Tunneller™

Version 7.4.0

Secure OPC UA-to-OPC Classic and OPC Classic-to-OPC Classic connectivity made easy!

Overview

SUPPORT TOMORROW'S INTERCONNECTIVITY NEEDS WITH WHAT YOU HAVE TODAY

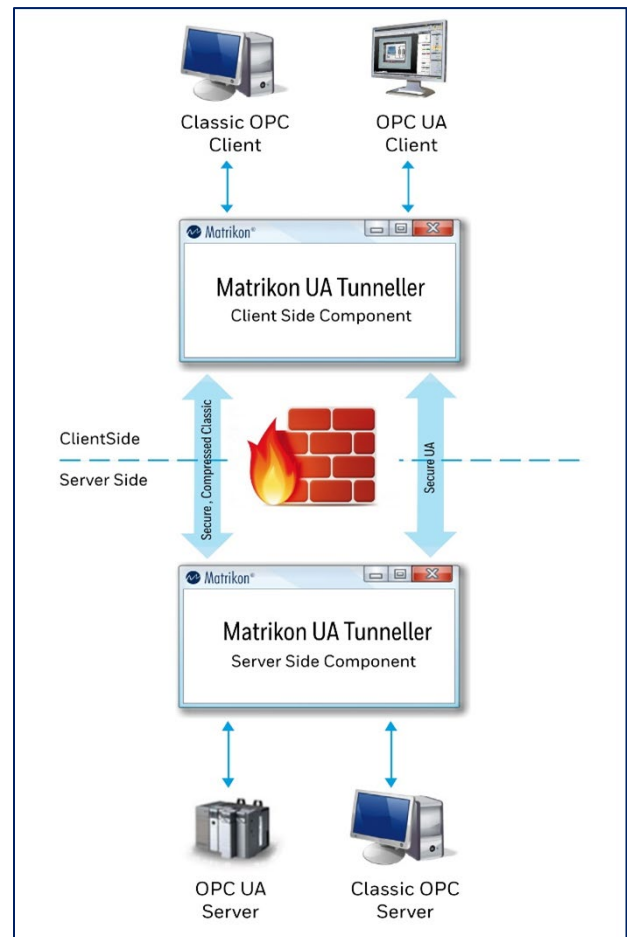
Increased connectivity requirements and the rise of the Industrial Internet of Things (IIoT) and Industrie 4.0 have created a challenge for the automation industry to standardize network protocols on more functional and interoperable platforms.

Growing demand for the OPC Foundation's next-generation communication standard, OPC Unified Architecture (OPC UA), is pushing the technology into mainstream adoption. OPC UA breaks down communication barriers stemming from modern data security concerns and a lack of third-party data interoperability.

EASY OPC CLASSIC-TO-OPC UA INTEGRATION

Automation vendor adoption of OPC UA continues to accelerate in response to industry demand for open, secure, and reliable data connectivity. With this shift, engineers, IT, and System Integrators alike need to properly integrate new OPC UA-based data sources such as devices and applications into their existing OPC Classic-based architectures. This integration of OPC Classic assets with OPC UA components is critical because a rip-and-replace strategy of existing OPC Classic infrastructure in favor of OPC UA-based technology is not economically feasible.

For the past 10 years, Matrikon OPC Tunneller has delivered a best-in-class solution to eliminate the majority of OPC Classic connectivity problems via a single, easy-to-use package. With Matrikon UAT, Matrikon continues this legacy while adding powerful functionality to extend the useful life of your OPC Classic components. Extend the productive life of your OPC Classic infrastructure with UAT.



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SECURE AND ENHANCE OPC CLASSIC COMMUNICATIONS

Matrikon UAT maintains the tried-and-true features of the original OPC Classic-focused Tunneller while offering expanded capabilities using a familiar, user-friendly interface to enable you to get your OPC connectivity up and running quickly.

Features and Benefits

Key Features

- NEW! Classic Client to UA Server component now supports selection of the Namespace URI or Namespace Index as the tag name prefix.
- Seamless OPC data transfer through multiple mediums across geographical locations.
- Easy configuration.
- Operates in the familiar Microsoft Windows environment.
- Smart defaults require minimal OPC UA know-how.
- Client-side and server-side 64-bit support.
- Built using the Flex OPC UA SDK from Matrikon
- Filtering functionality for optimized browsing of long tag names (paths).
- Ample Status tags for OPC real-time data health monitoring.

Customer Benefits

- Allows easy access to OPC Classic sources.
- Aligns OPC Classic connectivity with IT best-practices.
- Eliminates rip-and-replace of OPC Classic assets.
- Encryption feature secures data from unauthorized access (eavesdropping).
- The Data Compression feature reduces network loading. Data sent over satellite and other per-Megabyte connections can be reduced for significant cost savings. Historical data can be compressed to a size much smaller than the original data, all without any data loss.

Matrikon OPC UA Tunneller Resolves 6 Major OPC Classic Over DCOM Issues:

1. **Cross Domains and Workgroups:** Authentication difficulties make DCOM connections across different domains or workgroups extremely difficult or impossible. Leap past this limitation with UAT software. Essentially, if you can ping the PC, you can get to it with Tunneller.
2. **Unsecure DCOM Firewall Traversal:** DCOM uses a wide variety of ports, making it almost impossible to configure a firewall for. Not to mention, DCOM is a prime target for viruses and worms such as Blaster. UAT software permits firewall configuration for maximum security against viruses and worms, while taking advantage of all the benefits of OPC.
3. **High DCOM Bandwidth Consumption:** DCOM works best in low latency and high bandwidth environments, typical of an office LAN. This causes considerable difficulty when communicating over satellite, modems, radio, and other bandwidth-limited communication types. Matrikon UAT software features lossless data compression, reducing network load and saving cost when paying per MB of data.
4. **Timeouts and Disconnections:** Are you plagued with timeouts? Need recovery faster than the unconfigurable 6-minute timeout that comes with DCOM? Matrikon UAT software has configurable timeouts to work best with your network and reconnects to OPC Servers in a fraction of the time.
5. **Data Privacy:** UAT software features data stream encryption. *Man-in-the-middle* attacks are thwarted because OPC data is not readable without the key. Encryption can be selected from 128-bit or 256-bit AES. 96-bit AES encryption is provided for backwards compatibility. UAT software can also limit client connections from only the IP addresses you define.
6. **Easy Configuration:** Depending on your system, configuring DCOM just to the point of getting communication can take days! UAT software reduces your integration time to minutes!
 - Install Matrikon UAT software on both the OPC Client and OPC Server nodes.
 - On the client node, define an IP address or computer name to connect to.
 - Start communicating!

Matrikon UAT makes OPC data connectivity painless regardless of whether you need to connect between different enterprise levels or across the globe.

QUICK AND EASY SETUP

Matrikon UAT provides an intuitive, user-friendly interface to help you get your Classic-to-Classic OPC connectivity and Classic-to-OPC UA bridging quickly and efficiently.

ROBUST SOLUTION, RELIABLE COMMUNICATION

The UAT UA-to-Classic bridge for COM OPC Servers provides OPC UA Clients with access to legacy COM OPC DA and HDA Servers using the OPC UA specifications. The UA-to-Classic bridge exposes COM OPC Servers as folders in the OPC UA Server's address space and can be configured to host multiple OPC Servers.

Matrikon UAT helps future-proof your control infrastructure in anticipation of increased utilization of OPC UA. It takes the stress and uncertainty out of deploying new technology and ensuring reliable OPC Classic/OPC UA interoperability and cross-network communications. Greater efficiencies in terms of design, engineering and testing can also be realized.

PUT THE LATEST TECHNOLOGY TO WORK WITH WHAT YOU HAVE

Use Matrikon UAT to continue using existing OPC Classic-based assets and adopt next-generation OPC UA-based components in a seamless, phased-migration fashion.

For example, use UAT to facilitate connectivity between an OPC Classic-based human-machine interface (HMI) and new OPC UA devices or vice-versa. An easy and secure way to modernize your operations while minimizing costs and disruptions.

Product Specifications

System Requirements

Hardware Requirements

- Intel® i5 Processor MS .NET 3.5 framework
- 4 GB RAM
- 40 GB HDD (*minimum recommended free space*)

Software Requirements

- Microsoft Visual C++2008 Runtime
- Microsoft Visual C++2013 Runtime
- OPC Foundation Core Components
- Microsoft .NET Framework 4.5.1 and 4.6

Required components are determined by Operating System. Some of these components are installed automatically. Refer to the Product User Manual.

Supported Operating Systems

- Windows 7 (32- and 64-bit)
- Windows 10
- Windows 11
- Windows Server 2012 R2
- Windows Server 2016
- Windows Server 2019
- Windows Server 2022

OPC Specifications

Classic Client to Classic Server (*Tunneller*)

- OPC Data Access Specification 2.05a
- OPC Data Access Specification 3.00
- OPC Historical Data Access Specification 1.2
- OPC Alarms and Events Specification 1.10

Classic Client to UA Server (*Proxy*)

- OPC Data Access Specification 2.05a
- OPC Data Access Specification 3.00
- OPC UA (Version 1.02) Specifications
- OPC UA (Version 1.03) Specifications

UA Client to Classic Server (*Wrapper*)

- OPC Data Access Specification 2.05a
- OPC Data Access Specification 3.00
- OPC Historical Data Access Specification 1.2
- OPC Alarms and Events Specification 1.10
- OPC UA (Version 1.02) Specifications
- OPC UA (Version 1.03) Specifications

Next Steps

Start Your Digital Transformation Today!

- Download a free 30-day trial of [OPC UA Tunneller](#)
- Contact our sales team for a personalized demo at sales@matrikonopc.com
- Learn more at matrikonopc.com/opc-ua-tunneller