Matrikon®
Powering Interoperability.

Datasheet

Matrikon® OPC UA Tunneller™ (UAT)

Version 7.0.0

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

SUPPORT TOMORROW'S INTERCONNECTIVITY NEEDS WITH WHAT YOU HAVE TODAY

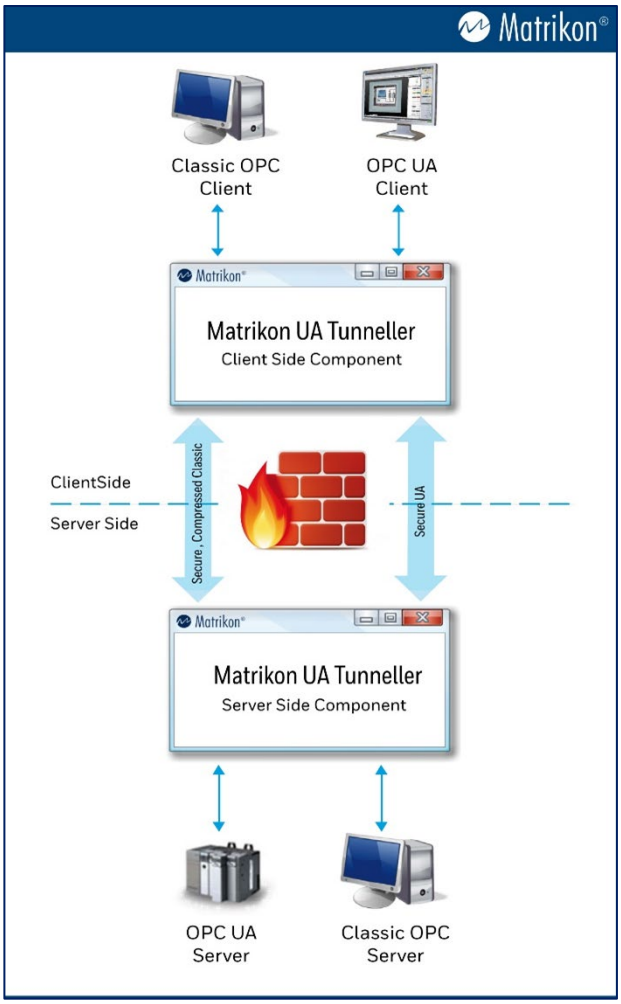
Increased connectivity requirements and the rise of the Industrial Internet of Things (IIoT) and Industrie 4.0 have created a challenge for the automation industry to standardize network protocols on more functional and interoperable platforms.

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 (i.e., devices and applications) into their existing OPC Classic-based architectures. Such 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 OPC UA Tunneller, Matrikon continues this legacy while adding powerful functionality to extend the useful life of your OPC Classic components.



Matrikon OPC UA Tunneller facilitating OPC Classic and OPC UA Interconnectivity

Extend the productive life of your OPC Classic infrastructure with UAT

SECURE AND ENHANCE OPC CLASSIC COMMUNICATIONS

Matrikon OPC UA Tunneller 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

- 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 OPC UA Tunneller software. Essentially, if you can ping the PC, you can get to it with Tunneller.

2. DCOM and OPC through firewalls

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. OPC UA Tunneller software permits firewall configuration for maximum security against viruses and worms, while taking advantage of all the benefits of OPC.

3. DCOM needs a lot of bandwidth

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 OPC UA Tunneller 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 OPC UA Tunneller software has configurable timeouts to work best with your network and reconnects to OPC Servers in a fraction of the time.

5. Data Privacy

OPC UA Tunneller software now features data stream encryption. "Man in the middle" attacks can now be thwarted because OPC data is not readable without the key. Encryption can be selected from 64, 96, or 128 bit AES. OPC UA Tunneller 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! OPC UA Tunneller software reduces your integration time to minutes!

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

GET SET UP QUICKLY AND EASILY

Matrikon OPC UA Tunneller 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 OPC UA Tunneller 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 OPC UA Tunneller 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 OPC UA Tunneller 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 OPC UA Tunneller 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.

Download the Matrikon OPC UA Tunneller today!

Product Specifications

Supported Standards

OPC Specifications

- OPC Classic to OPC Classic:
  - DA 1.0a, 2.0, 2.05a,3.0
  - OPC HDA 1.2
  - OPC A&E 1.1
- OPC Classic client to OPC UA server:
  - OPC Classic DA to OPC UA DA
  - OPC Classic HDA to OPC UA HA
  - OPC Classic A&E to OPC UA AC
- OPC UA client to OPC Classic server:
  - OPC UA DA to OPC Classic DA

System Requirements

Hardware Requirements (minimum)

- Intel CORE i5
- 4 GB RAM
- 80 GB 7200 RPM Hard Drive
- TCP/IP Connectivity

Supported Operating Systems

- Microsoft Windows 7 (32-bit and 64-bit)
- Microsoft Windows 10 (64-bit)
- Microsoft Windows 11 (64-bit)
- Microsoft Windows Server 2008 R2 SP1
- Microsoft Windows Server 2012 R2 (64-bit)
- Microsoft Windows Server 2016
- Microsoft Windows Server 2019
- Microsoft Windows Server 2022

Contact Matrikon

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