

OPC Tunneller - Eliminate OPC Related DCOM Setup Headaches



MatrikonOPC's OPC Tunneller allows you to make instant, reliable OPC connections when your OPC Clients and OPC Servers are on different computers, on different domains, separated by firewalls, or on low bandwidth/ low reliability dialup, satellite or radio networks. Use OPC Tunneller with the OPC Servers for Honeywell's TrendView, Experion® HS, Experion LS and all MatrikonOPC and 3rd Party OPC Servers and Clients.

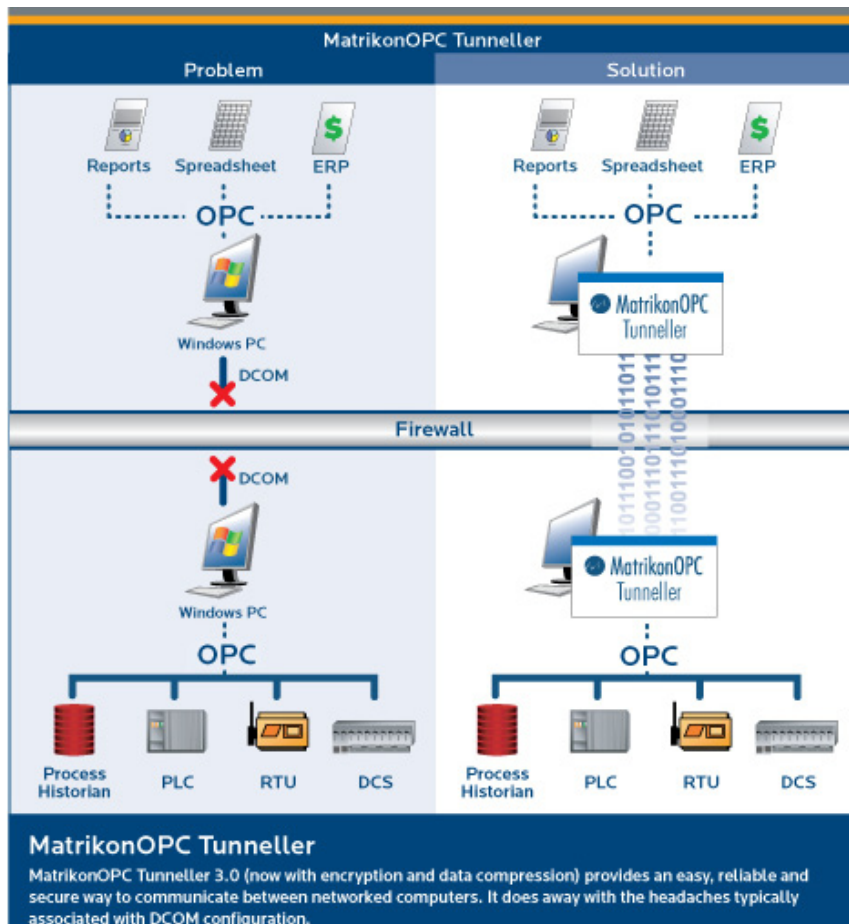
Overview: OPC Tunneller vs. DCOM

Regular connections between OPC clients and OPC Servers residing on different networked computers rely on Microsoft DCOM communications. This requires the precise configuration of multiple DCOM and Windows security settings for each OPC client and OPC server. In addition, DCOM requires many system ports to be opened so - using DCOM based communications

across firewall protected networks is not feasible because the primary job of the firewalls is to locking ports down. In contrast, OPC Tunneller replaces the need for Windows to use DCOM communications by establishing connections using a secure, encrypted TCP/IP data stream that uses less bandwidth and requires only one port for communication (i.e. is firewall friendly).

While DCOM security configuration and troubleshooting can take days, OPC Tunneller configuration takes minutes. Simply:

- Install OPC Tunneller on both the OPC Server and OPC Client computers.
- On the OPC Client computer: point your Tunneller Client to all the computers with OPC Servers you want to access (using either the computer names or their IP addresses)
- Enjoy headache-free OPC communications



Compatible Honeywell and 3rd Party Products

OPC Tunneller works with the OPC Server for TrendView, Experion HS, Experion LS and all Matrikon and all 3rd Party OPC Servers and Clients.

Connect OPC clients like Experion HS, Experion LS, Excel Reporter, SAP, 3rd Party HMIs and other tools and packages to the OPC Server for TrendView, or OPC Server for Modbus without worrying about DCOM.

Cross Domains and Workgroups

DCOM security rules make user authentication between computers on different domains and/or workgroups difficult or even impossible. Bypass this limitation with OPC Tunneller which, essentially allows you to connect with any PC you can ping.

Firewall-Safe

DCOM uses a wide variety of ports which are often prime targets for viruses and worms. While firewalls reduce such security risks by shutting ports down – they inadvertently shut OPC communications down as well. On the other hand, OPC Tunneller uses a single (non DCOM) port – allowing you to use firewalls to maximize your system security while taking advantage of all the benefits OPC has to offer.

Reduce Network Load by Over 50%

MatrikonOPC Tunneller features loss-less data compression to reduce the load on networks and save money when paying per MB of data. Also, standard DCOM only works reliably in environments with low latency and high bandwidth, like an office LAN. This makes using OPC difficult if not impossible with satellite, modem, radio, and other bandwidth-limited environments. OPC Tunneller has no such limitations and helps better utilize available bandwidth with just a few clicks.

Bandwidth Usage - OPC Tunneller vs. DCOM

Test	Number of Items	Update Rate (sec)	Tunneller Plain vs. DCOM	Tunneller Compressed vs. DCOM	Tunneller Compressed vs. Tunneller Plain
Test1	1000	1	54.84%	12.54%	22.87%
Test2	4000	1	54.93%	12.54%	22.29%

Improved Disconnection Handling to any Client

Most OPC Clients are not programmed to handle unplanned disconnections gracefully. They post errors, and in the event you lose the connection, you need to reconnect the client. OPC Tunneller supports automatic reconnections and graceful disconnection handling through configurable timeouts and retries regardless of the network or OPC Server in question. This provides control and stability not possible via standard DCOM-based connections.

Improve Security and Data Privacy

OPC Tunneller features data stream encryption to stop "man in the middle" security attacks. Encryption is available in 64, 96, or 128 bit AES. You can also lock down OPC Tunneller to only accept client connections from white- listed IP addresses.

Communicate with Multiple OPC Servers and Clients Simultaneously

A single Matrikon OPC Tunneller is able to communicate with multiple OPC servers or clients from multiple vendors simultaneously.

Features and Benefits

- Fast, easy and reliable
- Optimized for low-bandwidth infrastructures
- Efficient - uses only a single port
- Easy configuration
- Seamless OPC data transfer through multiple mediums across geographical locations.
- Reliably connect real-time, historical, and alarm field data to a centralized historian.
- Data encryption for security.
- Compression to utilize less bandwidth
- Simple, tracking, and conditional events are supported
- Subscribe and receive conditional alarms and events

Increase Value with These MatrikonOPC Products

- Add redundancy to tunnelled connections with MatrikonOPC's OPC Redundancy Broker
- Add tag-level, user and group security to MatrikonOPC Tunneller connections with MatrikonOPC Security Gateway to harden any real-time or historical OPC architecture.

Supported OPC Specifications

- OPC DA (OPC Data Access) 1.0a
- OPC DA (OPC Data Access) 2.0
- OPC DA (OPC Data Access) 2.05a
- OPC HDA (OPC Historical Data Access) 1.2*
- OPC A&E (Alarms and Events) 1.01*

**Optional*

More Information

For more information on using MatrikonOPC's OPC Tunneller, with Honeywell products, visit www.honeywellprocess.com, or contact your Honeywell account manager.

For more information on MatrikonOPC's OPC Tunneller, visit www.matrikonopc.com

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