

OPC UA

Application Connector

AT-A-GLANCE

- Secure one-way data transfers of OPC UA data
- Quick and easy setup and configuration
- Eliminates the need for flanking servers
- Protects OT and remote IIoT assets

KEY FEATURES

- Log and Configurations Manager (LCM) with a Windows-based GUI
- Configurable data scan rates – starting as low as 20 msec
- Import/export tag and subscription information via .csv file
- Dynamic point modifications
- Subscription data and notification display
- Automated OPC server discovery

Secure Transfer of OPC UA Data

OPC Unified Architecture (UA), developed by the Open Platform Communications (OPC) Foundation, is a machine-to-machine communication protocol for industrial automation. The OPC UA Application Connector allows information to be easily and securely shared between platforms and vendors. With seamless integration into those platforms, users can customize how data is organized and how information about that data is reported. By integrating OPC UA with Owl data diodes, industrial organizations can securely transfer OPC UA data out, with no way for threats to get back into Operational Technology (OT) or Industrial Internet of Things (IIoT) networks.

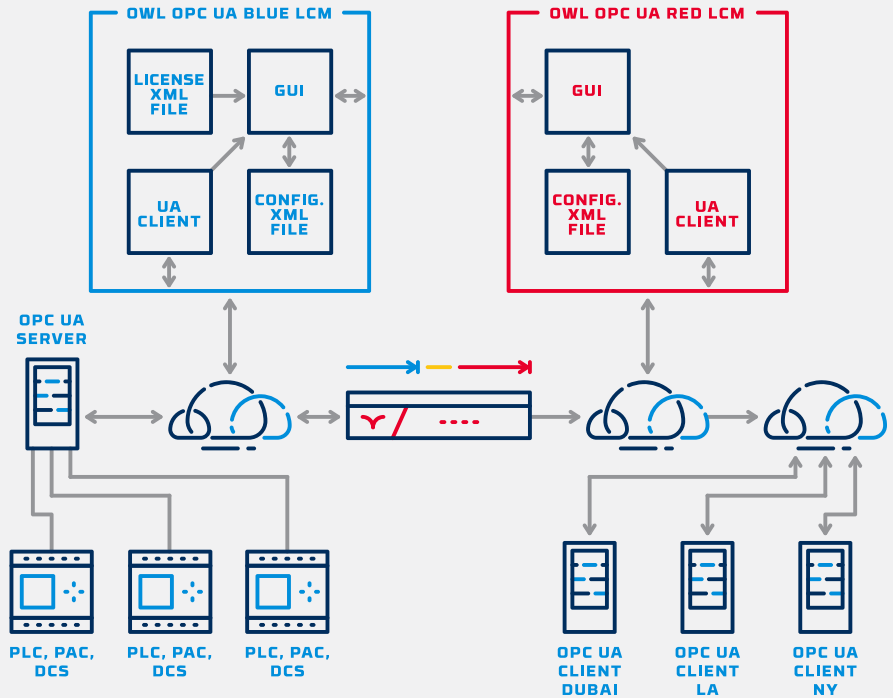
Hardware-Enforced Data Transfers

Through hardware-enforced data diodes, OPC UA data can be securely transferred one-way, outside of the network boundary, to multiple destinations. While maintaining all standard and custom OPC properties, OPC UA eliminates the need for flanking servers, as well as the complexities inherent in Distributed Component Object Model (DCOM) communication from an OPC server to a data diode. With an easy to navigate Log and Configurations Manager (LCM) with a Windows-based graphical user interface (GUI), industrial organizations can select tags for transfer, create intervals for instrument reading, set up connections for transfer, and view resulting logs, both current and archived.

Scalable and Simple Configuration

The OPC UA Session Manager provides industrial organizations with the ability to browse tags, view node attributes, read current tag values, display and change historic values, and add, remove, change, and debug tags. Supporting subscription-based scan rates, OPC UA supports scan rates as low as 20 msec. OPC UA handles point collection modifications dynamically to eliminate the need to stop or restart the collection process. With automated OPC server discovery, OPC UA is easy to setup and requires little to no maintenance or upkeep. This scalable solution supports a variety of throughput levels and provides secure data transfers of OPC UA data to platforms and vendors outside of the OT network.

OPC UA is configured and managed through the Log and Configurations Manager (LCM) application. There are separate LCMs for the source (blue) and destination (red) sides of the data diode. The OPC UA blue LCM pushes the configuration to the Owl OPC UA client software installed on the source (blue) side of the data diode. The OPC UA blue side then communicates with the network source OPC UA server and sends the OPC UA data stream across the data diode. The OPC UA red LCM pushes the configuration to the destination side of the data diode, acts as an Owl OPC UA server, and receives the OPC UA data stream from the data diode. The OPC UA client then communicates with the OPC UA red server using a third-party OPC UA client.



Technical Specifications

PERFORMANCE GUIDELINES

- 10,000 OPC UA points at a 1 second refresh rate
- 15,000 OPC UA points at a 2 second refresh rate
- 20,000 OPC UA points at a 5 second refresh rate

SUPPORTED ON

- OPDS-100
- OPDS-1000
- EPDS

LCM SUPPORTED OPERATING SYSTEMS

- Microsoft Windows 7
- Microsoft Windows 2012 R2
- Microsoft Windows 10 2016
- Any Microsoft Windows version that supports .NET 6.1

DATA SCAN RATE

- Starting rates as low as 20 msec

LICENSING MODEL

- Tiered licensing model based on the number of points/tags required:
 - 1 - 2,000 points
 - 2,001 - 10,000 points
 - 15,000+ points



Owl Cyber Defense Solutions, LLC leads the world in data diode and cross domain network cybersecurity. With a constant focus on customers in the military, government, critical infrastructure, and commercial communities, Owl develops market-first, one-way data transfer products to meet a variety of operational needs, from entry level to enterprise.

For more information on Owl, or to schedule a demo, visit www.owlcyberdefense.com