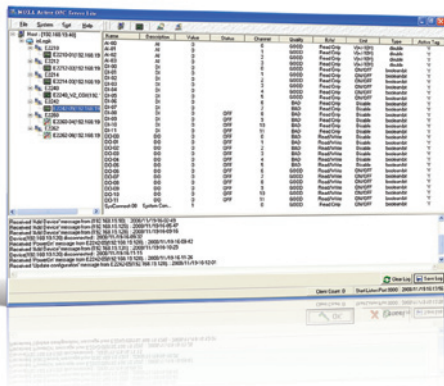


Active OPC Server Lite

Seamlessly connect ioLogik to your SCADA system



- > OPC DA 3.0 supported
- > Event-driven tag update
 - Save 80% on network bandwidth
 - I/O response that's 7 times faster
- > Patented automatic tag generation
- > Firewall-friendly connection from remote ioLogik devices
 - Allows remote I/O to use dynamic IP
 - Allows remote I/O to use private IP
- > Download free from Moxa's website

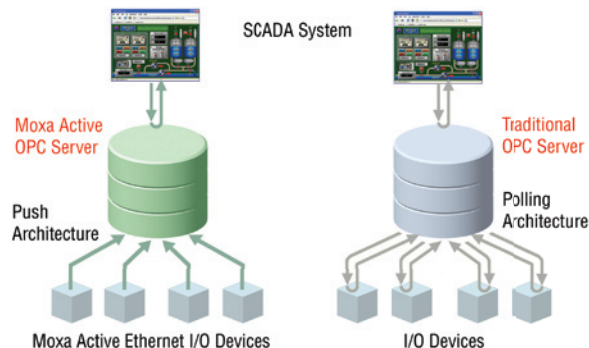
Introduction

Active OPC Server Lite is a software package provided by Moxa that operates as an OPC driver for an HMI or SCADA system. It offers seamless connection from Moxa's ioLogik series products to

SCADA systems, including Wonderware, Citect, and iFix. Active OPC Server Lite meets the latest standard of OPC DA 3.0, which allows connections to various kinds of devices and host OPC machines.

Smart I/O Connection—Migrating from “Pull” to “Push”

General OPC servers typically use the “poll/response,” or so-called “pull” architecture, to connect to Ethernet I/O devices, which involves an HMI/SCADA system continuously sending out commands to collect relevant data. Moxa's Active OPC Server, with its non-polling architecture, supports the standard OPC protocol, but also offers active (or “push”) communication with Moxa's ioLogik series of Active Ethernet I/O products to HMI/SCADA systems, providing instant I/O status reports.

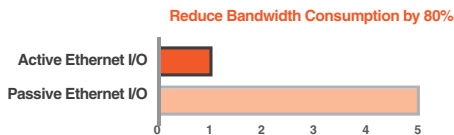


I/O Response that's 7 Times Faster and Provides 80% off Bandwidth Usage with Event-driven Tag Updates

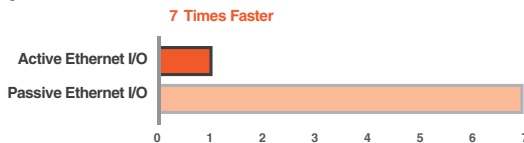
Adding additional I/O channels will tend to bog down an HMI/SCADA system's operation, resulting in a longer response time, and high network bandwidth occupation, all because of the traditional “pull” architecture. Active tags created by Active OPC Server Lite and ioLogik series products report the I/O status only when it changes. This type of event-driven tag status update results in an I/O response time that is 7 times faster than other OPC Server packages (using a testing environment with 2,560 I/O channels). In a different test of network bandwidth usage, Active OPC Server Lite and the ioLogik caused an apparent 80% reduction in network traffic. The end result is that I/O access is more precise, and the cost of communicating with remote I/O devices is substantially lower, especially when the remote site has limited bandwidth (e.g., satellite, microwave, and cellular communication). At the same time, the CPU usage of the SCADA/HMI system is also reduced by 35% with this innovative push-based architecture, so that less maintenance effort and lower level hardware devices can be implemented.

Critical Tests Say It Best

Test 1: Network Traffic Comparison
This test used 32 ioLogik E2210 units with 640 DI/O points. As shown in the figure, Active Ethernet I/O can save 80% on bandwidth consumption compared to passive Ethernet I/O.



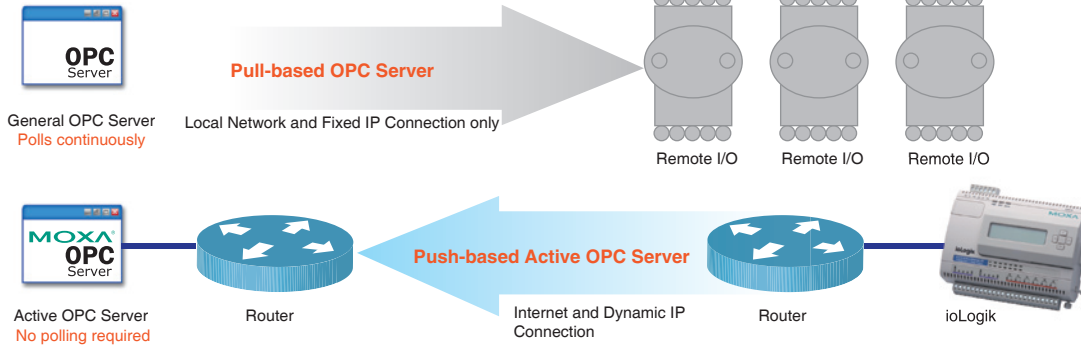
Test 2: I/O Status Response Time
This test used 128 ioLogik E2210 units with 2,560 I/O points. As shown in the figure, the active architecture is 7 times better than the passive architecture in response time when the I/O status changes.



Dynamic IP/WAN Connection

Unlike the fixed IP requirements of Ethernet I/O with a traditional OPC server, Active OPC Server Lite and ioLogik products provide the flexibility of configuring the ioLogik to use dynamic IP addresses. The ioLogik connects directly to the Active OPC Server Lite instead of

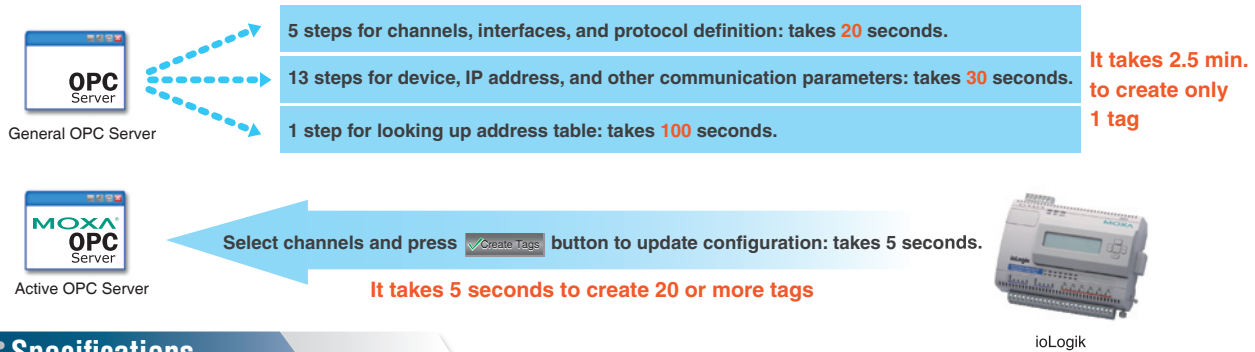
being polled, which makes dynamic IP addressing and WAN Access to the Ethernet I/O device possible, and adds even greater flexibility by allowing connections across firewalls. I/O devices for traditional data acquisition applications are not capable of using this approach.



Automatic Tag Generation

Active OPC Server Lite and ioLogik series products support "Auto Tag Generation," which eliminates the headache of specifying target IP addresses, I/O channels, and data formats one by one, or editing and importing configuration text files, since Active OPC Server Lite creates the tags for the target ioLogik automatically. Simply select the channels

that you need to update, and the tags are generated and configured automatically. Generally speaking, tag generation is 50 times faster with Active OPC Server Lite than with traditional OPC server packages. One of the biggest payoffs is that users will no longer need to be trained to install and configure your OPC.



Specifications

Hardware Requirements

CPU: Intel Pentium (Pentium 4 or above)
RAM: 512 MB (1024 MB recommended)
Network Interface: 10/100Mb Ethernet

Software Requirements

Operating System: Microsoft Windows 2000/XP/2003
Editor (optional): Microsoft Office 2003 (Access 2003) or above

OPC Server Specifications

OPC Data Access: 1.0a, 2.0, 2.05a, 3.0
Max. No. of Tags: 256

Ordering Information

Available Models

Active OPC Server Lite: Free software package for integrating with SCADA/HMI systems

Can be used with the following products

Active Ethernet I/O: ioLogik E2210/E2212/E2214/E2240/E2242/E2260/E2262 Series

Modular Active Ethernet I/O: ioLogik E4200

Cellular GPRS I/O: ioLogik W5340

Software Versions and Model Support Table

ioLogik Model Name	E2210	E2212	E2214	E2240	E2242	E2260	E2262	E4200*	W5340*
Active OPC Server Lite	V1.0↑	V1.0↑	V1.0↑	V1.1↑	V1.1↑	V1.1↑	V1.1↑	V1.3↑	V1.2↑
Configuration Utility	ioAdmin V3.0↑	ioAdmin V3.0↑	ioAdmin V3.0↑	ioAdmin V3.1↑	ioAdmin V3.1↑	ioAdmin V3.1↑	ioAdmin V3.1↑	Modular ioAdmin V1.1↑	ioAdmin V3.2↑
Firmware	V3.0↑	V3.0↑	V3.0↑	V3.0↑	V3.0↑	V3.0↑	V3.0↑	V1.1↑	V1.0↑

*Note: The version numbers for these models are preliminary. Please see Moxa's website for the most up-to-date information.