Matrikon®
Powering Interoperability.

Matrikon® FLEX Dispatch™

FireBridge

IT
DT
OT

Data Technology for Secure Network Traversal

www.MatrikonOPC.com/Dispatch

FireBridge: Secure OT data exchange across firewalls

Matrikon Dispatch FireBridge, is an enterprise ready data tool for enabling secure OT data sharing across firewalled networks.

Use FireBridge to easily:

- move OT data bi-directionally across firewalls
- follow the IT security best practice of keeping in-bound firewall ports closed

Perfect for use in facilities and in the field, FireBridge empowers you to control what external systems you want to share your data with regardless of where they reside.

Use Cases

USE CASE ONE

Secure Bi-Directional OPC UA Traffic Across Firewalls

OPC UA clients and servers use bi-directional traffic to establish connections and to communicate with each other.

When an OPC UA Client-Server pair sits on the same network without a firewall between them everything works well. When a firewall is inserted between them communication is not possible unless exceptions are introduced.

Use FireBridge to avoid the traditional workaround that required selected firewall inbound ports to be open for OPC UA clients and servers to communicate..

Fiigure: Maximize firewall effectiveness by locking in-bound ports. Only allow connections to be established from more trusted to less trusted areas.

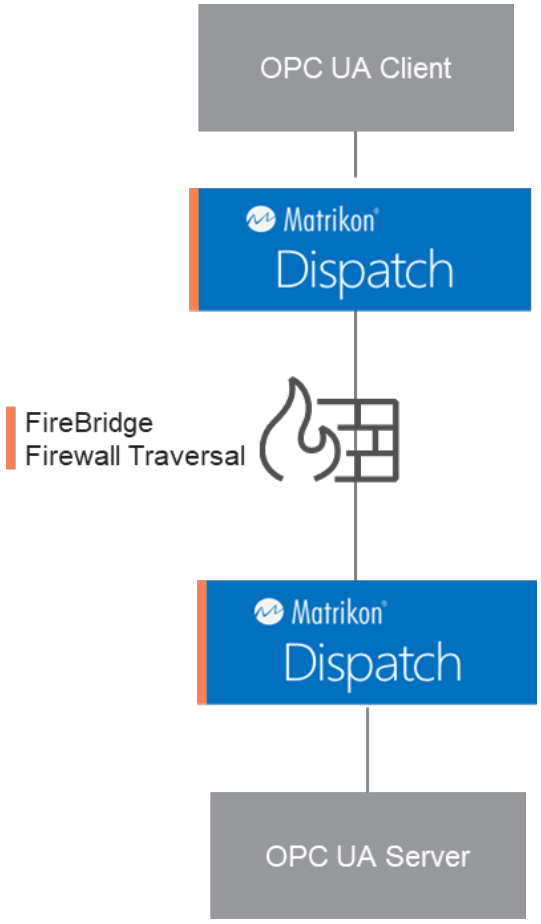
An Open Standard Based Solution

Based on the latest OPC UA specification, FireBridge uses the OPC UA Reverse Connect function to provide you with a solution that is 100% open standard based. This means you can use FireBridge:

- on both sides of a firewall in case both your 3rd party OPC UA clients and servers do not support ReverseConnect.
- on one side of the firewall in cases where your 3rd party client or server does support Reverse Connect.

FireBridge: A True Firewall Solution

FireBridge resolves IT/OT differences by simultaneously eliminating the need to open inbound firewall ports while making it easier than ever for any 3rd party OPC UA Server to communicate with any 3rd party OPC UA client.



Fiigure: Use FireBridge on one or both sides of a firewall to facilitate secure, bi-direcctional 3rd Party communiccations across it

Use Cases

USE CASE TWO

Phased OPC Classic to OPC UA Migration

Maximize ROI

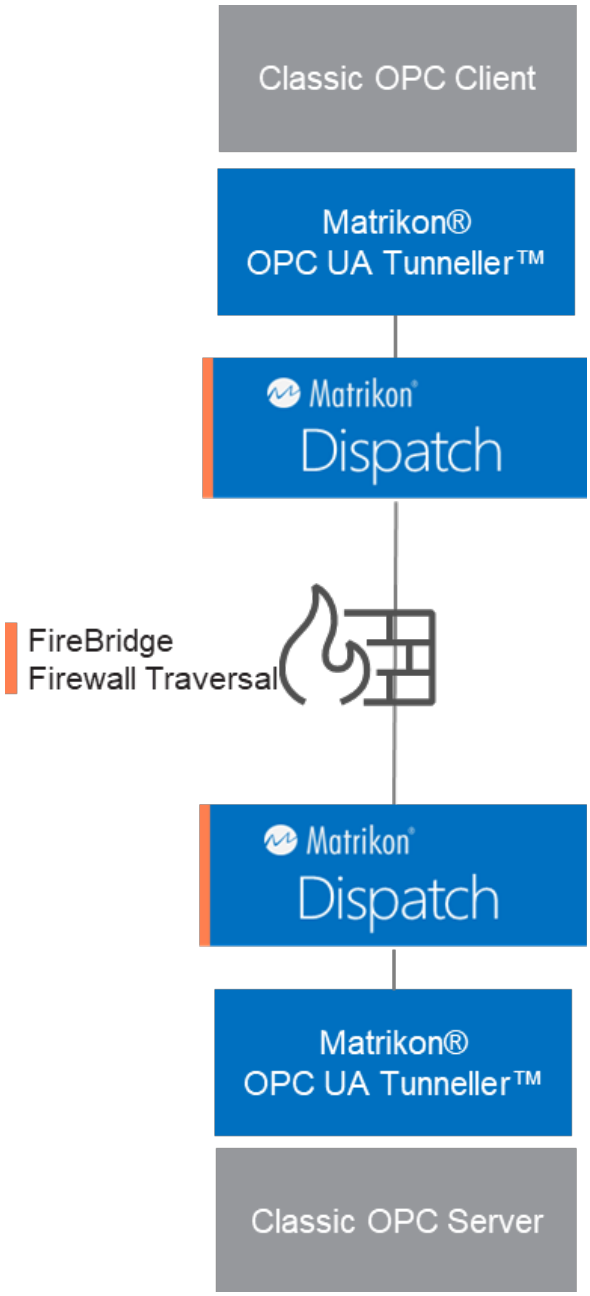
If your infrastructure needs to keep using OPC Classic clients and servers - Matrikon has you covered. You do not need to replace them to take advantage of Matrikon Dispatch FireBridge.

Connect Today

Simply pair Matrikon Dispatch FireBridge with Matrikon OPC UA Tunneller™ nodes and watch your OPC Classic Server data show up at your OPC Classic Client without having to change either of the OPC Classic components!

Be Future Ready

In the future, when you are ready to migrate some or all of your infrastructure to a fully OPC UA based solution, start using the new OPC UA components with FireBridge alongside the rest of your componentssystems.



Fiigure: Share data between OPC Classic components securely across firewalls by using Matrikon OPC UA Tunneller™ together with Matrikon Dispatch FireBridge..

Use Cases

USE CASE THREE

Secure DMZ Traversal Made Easy

Growing enterprise wide dependence on shop-floor data for business decision making and enhanced analytics calls for a secure yet convenient way to move OT data from the operations network level (L3) to higher layers such as the business network and the cloud. DMZ Agent meets this need.

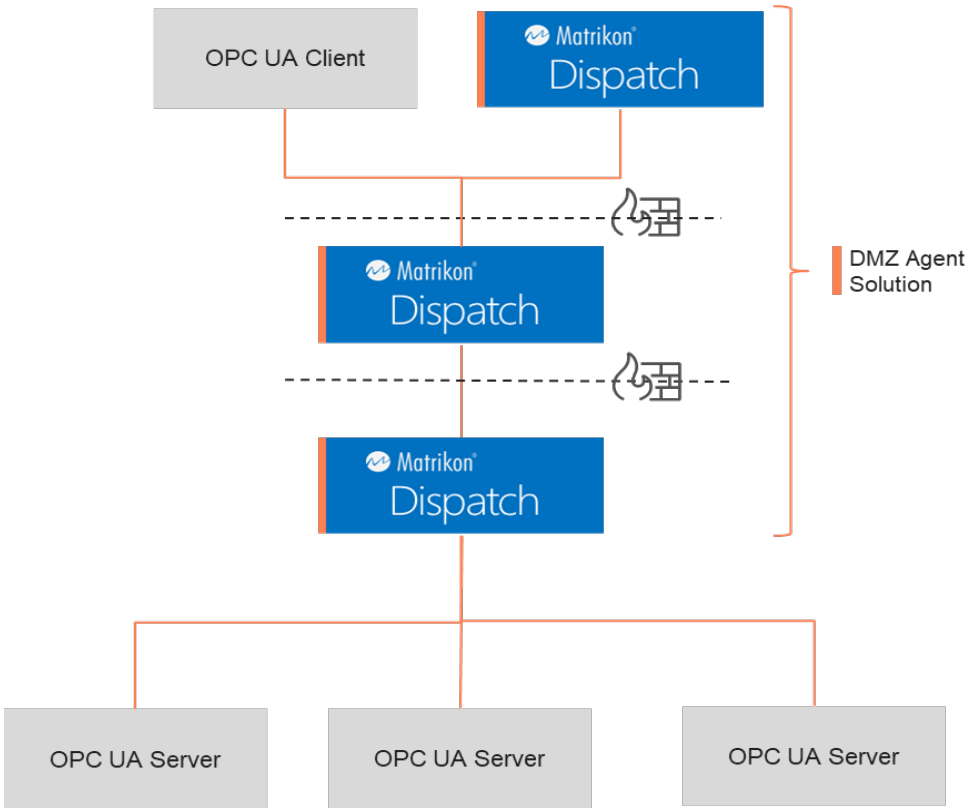
DMZ Agent benefits at a glance:

Easy Setup: Authorized users simply choose the Matrikon Dispatch cores to be used to facilitate data movement across a DMZ, and set the data access rights.

Secure Solution: DMZ Agent is IT/OT friendly. It enforces IT security best practices (keeps in-bound firewall ports closed) and enables OT to fully control L3 data access.

Open Standard Based: Based on the latest OPC UA specification, DMZ Agent works with all 3rd Party OPC UA compliant components. Federates OPC UA servers across unlimited levels (Multi Level Federation)

Phased Migration Friendly: Works with OPC Classic servers via Matrikon OPC UA Tunneller™



Fiigure: The DMZ Agent solution leverages Matrikon Dispatch FireBridge functionality to facilitate OT data movement across DMZs (L3.5) without the need for openning either of the two firewalls' in-bound ports.

Use Cases

USE CASE FOUR *(Future)*

Call Home On-Demend Capability

Beyond firewall traversal, Firebridge opens new field communication options by enabling your remote OPC UA servers to 'call-home' when needed instead of having to maintain a constant connection.

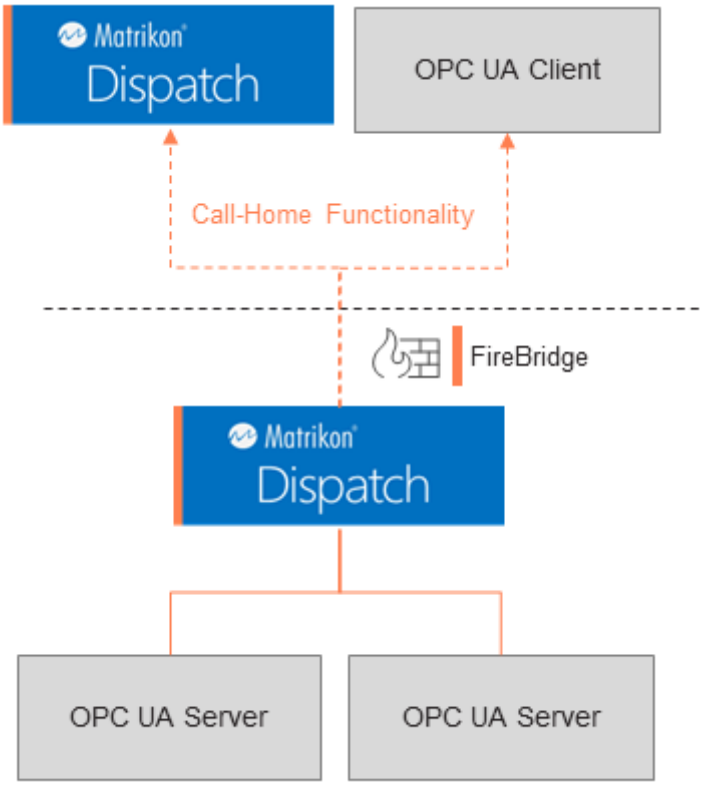
Benefits include:

- Reduced bandwidth costs
- Minimal energy use at remote sites
- Imprived brown and green field visibility
- Secure bi-directional communication with field (compared to one direction PubSub solutions)

Instead of having to keep communications active at all times in case an OPC UA client calls the OPC UA server, FirebBridge enables your remote location to initiate a reverse OPC UA connection with the OPC UA Client when the conditions are right such as:

-Sufficientsunlightisavailefortheselarpannels to power a modem to establish connections

- Intermittent data is available for transmission



Fiigure: Matrikon Dispatch FireBridge Call-Home functionality enables a remote Matrikon Dispatch core to initiate communications from when based on the value of a Call-Home flag.

Matrikon® FLEX Dispatch™ Specifications

SYSTEM REQUIREMENTS

PC Hardware

Matrikon Dispatch runs on a broad variety of systems ranging from microcomputers and laptops to server class PCs. PC hardware selection primarily depends on the scope of the application Matrikon Dispatch will be used for.

Typical PC Hardware

2 Core CPU

4 GB RAM

512 of available hard disk space

Operating Systems

Windows 7 (64 bit)

Windows 10

Windows 2012 & 2016

Windows 2019

Linux Ubuntu (Future)

OPC UA Facets:

Client/Server	(R100)
DA & Events	(R100)
HA	(Future)
AC	(Future)
Methods	(R100)
Complex Types	(R100)
Reverse Connect	(R100)
Aggregation	(R100)
PubSub	(Future)
Redundancy	(Future)

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