

For enterprises that run critical infrastructure or other protected networks, securing the flow of operational data across secure network boundaries is an ever-present challenge.

Data diodes have been one of the most effective solutions for this requirement. They offer a hardware-enforced unidirectional connection for the one-way transfer of data from on-site instrumentation and control systems to external users. However, traditional data diode solutions are notoriously expensive, and they often require a great deal of time and expertise to install and maintain.

That's why Exele developed DataGate, a robust and affordable data diode solution. The DataGate Data Diode allows organizations to transfer data from one domain to another while maintaining perimeter security. Best of all, it has been designed and optimized for OS/soft PI and OPC systems, making it easy to install, configure, and maintain.



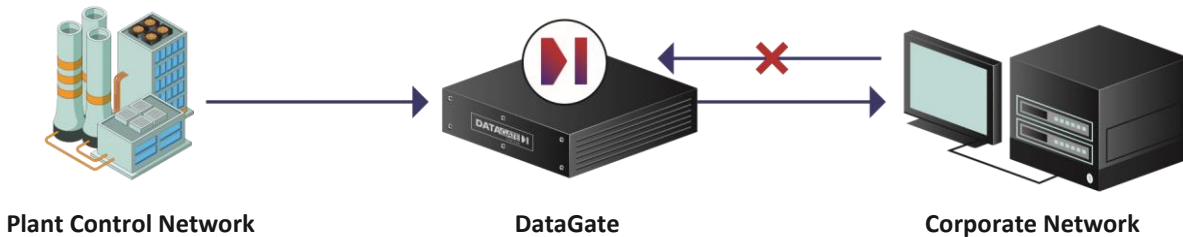
Communication Features

The DataGate Data Diode provides non-routable data transfer capabilities, including:

- **Time Series Data Transfer** – Transfer time series data from an OS/soft PI or OPC Server within the electronic perimeter to an OPC or PI Server outside of the perimeter. When transferring data between two PI Servers, manual history recovery can be used to fill in data gaps at any point in time.
- **Email Routing** – Monitor for new email messages generated within the electronic perimeter and deliver to an SMTP server outside the perimeter.
- **File Transfer** – Move files from within the electronic perimeter to a drop folder on the outside of the perimeter.
- **UDP Forwarding** – Forward datagrams, such as syslog, sent over UDP from within the electronic perimeter to endpoints outside the perimeter.

Design Concept

To ensure network security, the DataGate Data Diode transmits data over a hardware-enforced unidirectional barrier. The data is managed, sent, and processed via software running on the servers on each side of the connection. This design eliminates a middleman operating system that would require additional maintenance.



The DataGate Data Diode is simple to install and features a graphical user interface for selecting and configuring data transfer tags. Status information is published as performance indicators, allowing the health of the DataGate Data Diode to be easily monitored.