



SCADAwall

Industrial Airgap Bridge



SCADAwall is an industrial airgap bridge. It offers all the benefits of a data diode, but with significant improvements in flexibility and performance. It enables truly isolated, non-routable, bi-lateral data transfer, and implements a full protocol break between two separate network entities. It uses a non-network-based control channel to confirm data receipt, and eliminates the need for repetitive re-transmissions and all the attendant overhead and inefficiency that comes with that technique.

- *Unidirectional data diode functionality provides an airgap bridge*
- *Transfers data without exposing machines to an untrusted network*
- *Controls, limits and enables communications from sensitive, restricted portions of the OT network*
- *Isolated, non-routable, unidirectional data transfer protects from unauthorized communications*
- *No network information is exposed as SCADAwall creates a full protocol break between two network entities*
- *SCADAwall is a physical device that sits in front of sensitive portions of the network- Alleviates cost and complexity of physical-only access or data diodes with an alternative connectivity option*

SCADAwall vs. Data Diodes

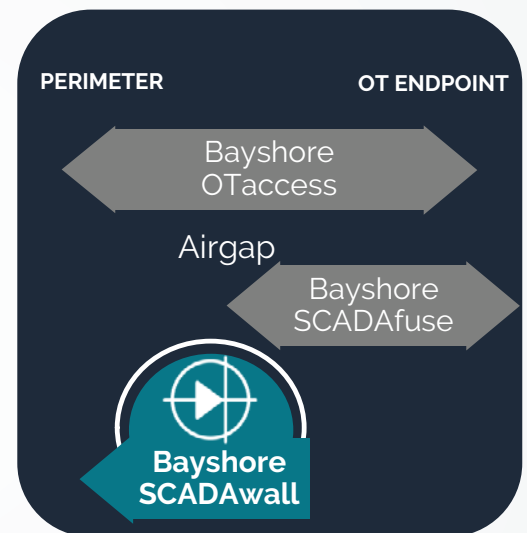
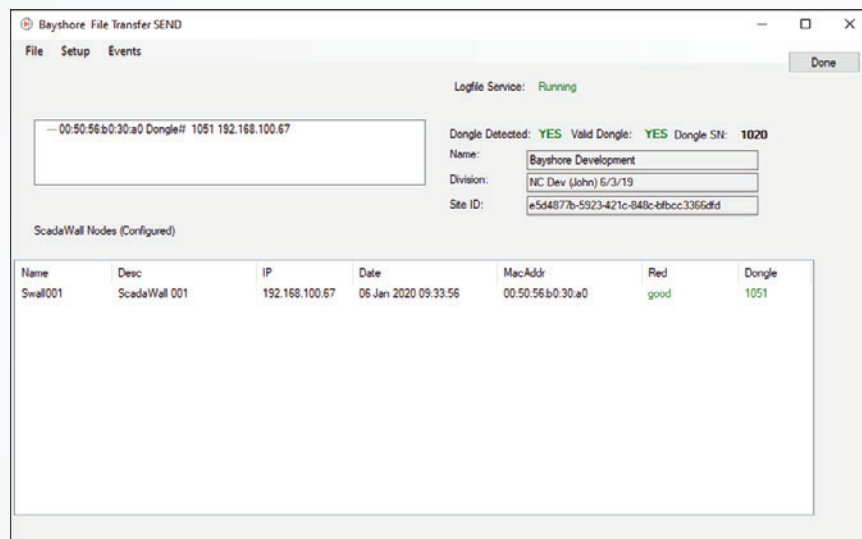
Feature	SCADAwall	Data Diodes
Unidirectional gateway	✓	✓
Complete protocol break	✓	✓
Transport any protocol without proprietary vendor HW and SW	✓	✗
Guaranteed delivery of data	✓	✗
Efficient synchronization and replication of data between systems	✓	✗
Improved data throughput (reduced repeat transmissions)	✓	✗
Hardware key security for admin access	✓	✗
Fast and easy to deploy	✓	✗
Budget friendly	✓	✗

- SCADAwall provides unidirectional cross domain (inner to outer) data transfer, using Windows File Sharing. The domains are referred to as BLUE and RED. The inner domain (BLUE) corresponds to the network in the customer site that requires protection. The outer domain (RED) is the more public-facing network of the site. You will configure the domains to run on separate networks.
- For example, if the site is a water treatment plant, the BLUE domain collects data on how all the individual components of the plant are running, so the engineers can see any problems. The RED domain provides a filtered subset of the data used by the plant board of directors.

SCADAwall provides the following features:

- No network connection between Inner Domain and Outer Domain
- 1Gbit/sec transfer rate using USB
- Full protocol break: data payload only across USB
- 256-bit encryption over USB
- Guaranteed integrity of delivered data
- Optional redundant USB connection

SCADAwall Windows Management Console



SCADAwall consists of the following components:

- Windows Console software: Used to configure the data transfer parameters. Runs on a Windows host computer.
- SCADAwall appliance: Used to collect and transfer customer data. The appliance consists of a 'box' that contains two separate 1U computers. The computers are servers for the BLUE and RED domains, and are joined by a USB cable, which controls the traffic flow.
- SCADAwall File Transfer application: Used to transfer the files from the BLUE domain server to the RED domain server

