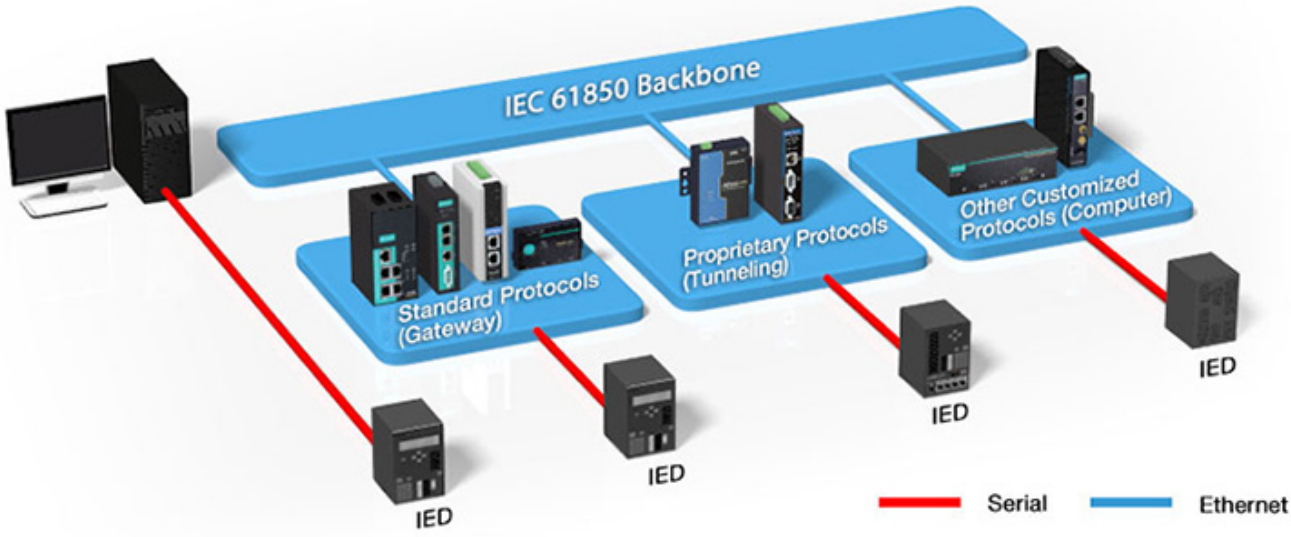
IEC 61850 Subtations Retrofits Device Variety

Existing systems may have been developed in a different time period and region, making it difficult to migrate legacy devices into a single system.



Common Challenges of Retrofit Substations

Challenge

Existing systems may have been developed in a different time period and region, making it difficult to migrate legacy devices into a single system.

Major Concerns

Challenge 1: My existing devices support a variety of protocols
Challenge 2: My system uses different Time Sync protocols

Solution

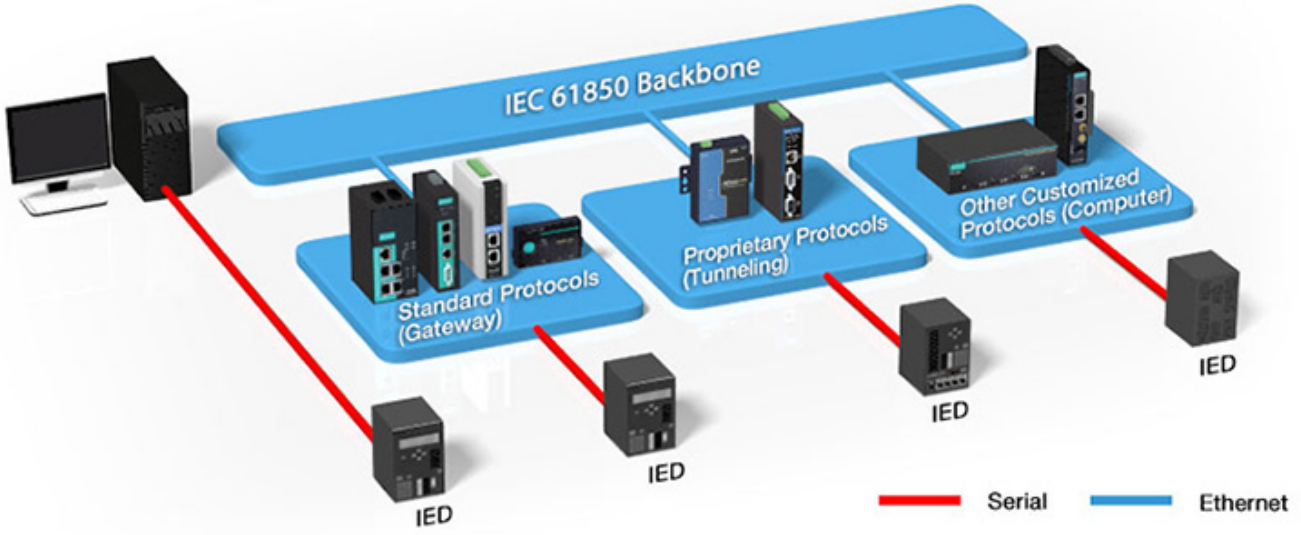
Rich Portfolio for Retrofitting Legacy Devices into a Single System

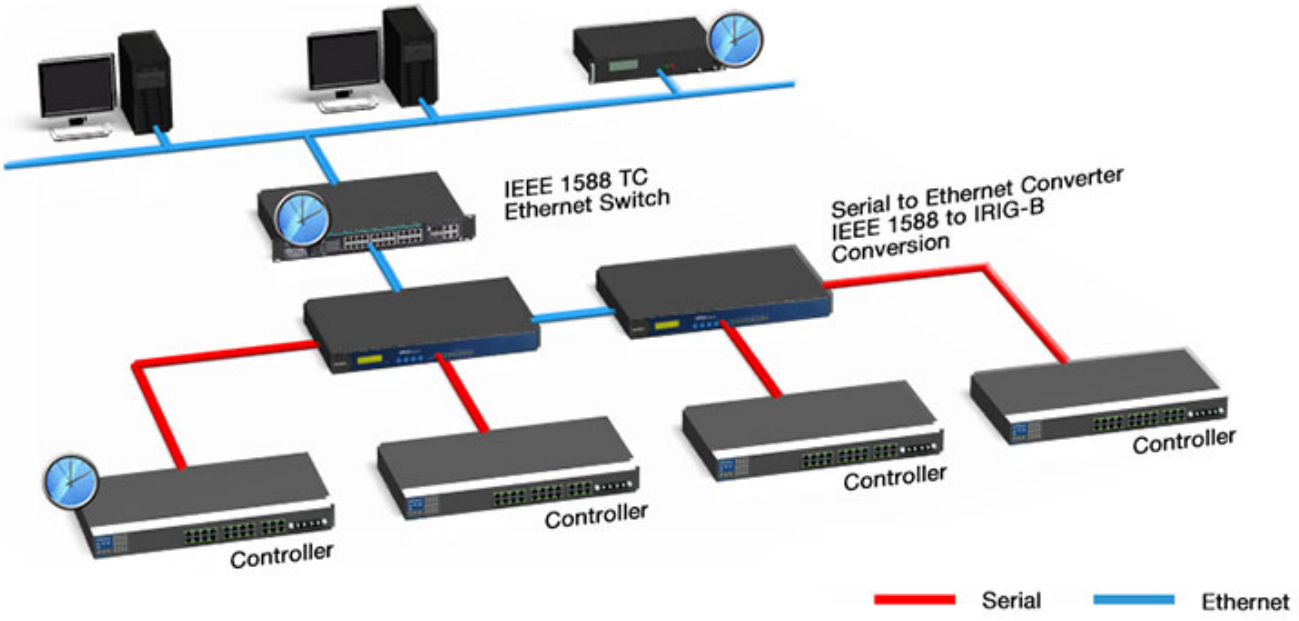
Since many existing substation systems were built in a different time period and region, migrating legacy devices into a single system can give rise to a lot of problems. How to effortlessly shift retrofit substations from conventional hardware to automated, intelligent IEC 61850 equipment is a challenge, particularly when dealing with the complexities of protocol conversion.

Moxa provides a wide range of products to help connect legacy devices, which could use any of a wide variety of protocols, to an IEC 61850 backbone:

- Protocol gateways for standard industrial protocols
- Transparent serial-to-Ethernet device servers for proprietary protocols
- Fanless embedded open computer platforms for other customized protocols

Our serial-to-Ethernet solutions can connect legacy Intelligent Electronic Devices (IEDs) and other serial communications devices to an Ethernet network. This approach extends the useful life of the devices, and can significantly reduce the cost of upgrading to a communications system that is smart grid ready.



Mixing Time Sync Protocols

Supports IRIG-B and IEEE 1588