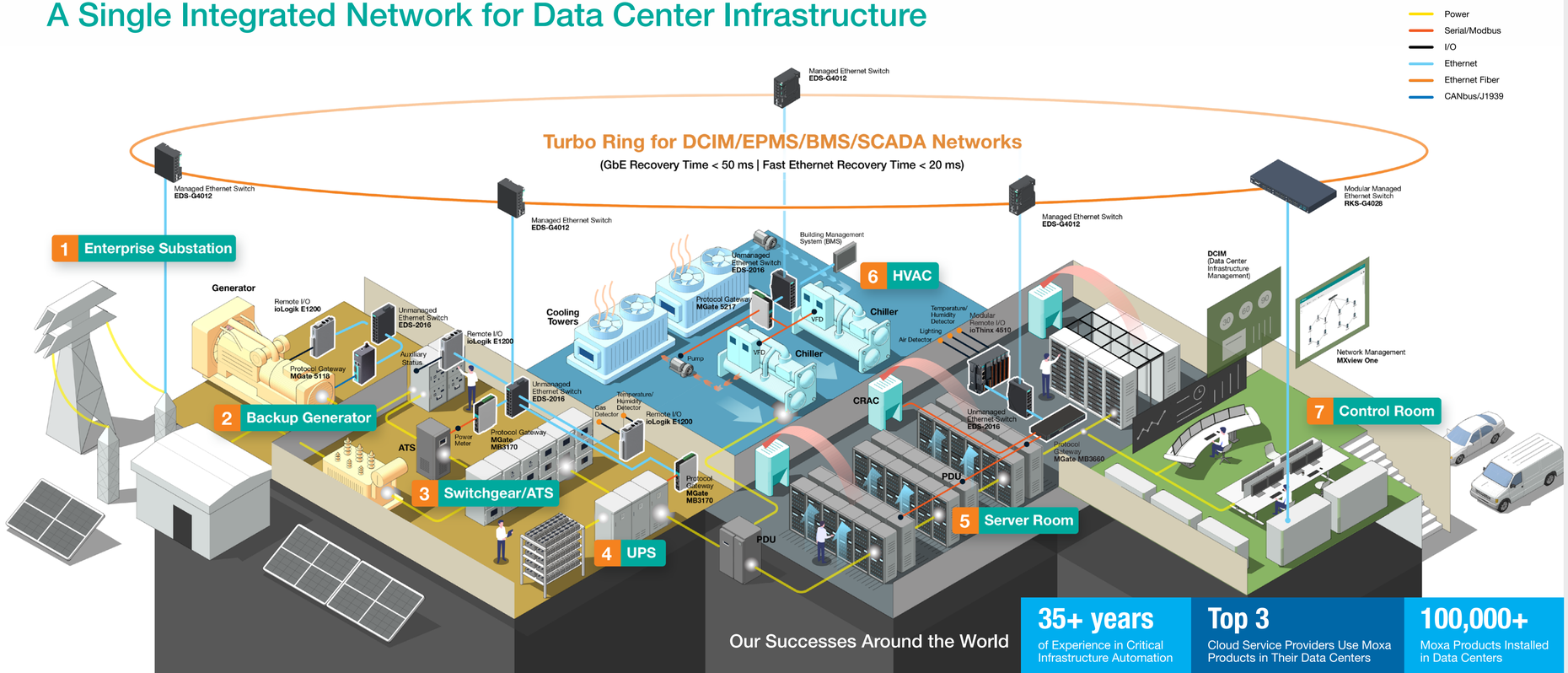
A Single Integrated Network for Data Center Infrastructure



Our Successes Around the World

35+ years
of Experience in Critical Infrastructure Automation

Top 3
Cloud Service Providers Use Moxa Products in Their Data Centers

100,000+
Moxa Products Installed in Data Centers

Comprehensive Portfolio for Reliable DCI Connectivity

1 IEC 61850-3 Enterprise Substation

SCADA Computer
DA Computer
PRP/HSR

Ethernet Switch
PT-G500/G7000
IEC 61850 MMS
PRP/HSR

Protocol Gateway
MGate 5119
Modbus
DNP3/101/104
IEC 61850 MMS

2 Backup Generator

Ethernet Switch
EDS-4000/G4000

Protocol Gateway
MGate 5118
Modbus
J1939

Remote I/O
ioLogik E1200
Modbus

3 Switchgear/ATS (Automatic Transfer Switch)

Ethernet Switch
EDS-2000

Ethernet Switch
EDS-4000/G4000

Ethernet Switch
PT-G500
IEC 61850 MMS
PRP/HSR

Protocol Gateway
MGate MB3000/3000I
Modbus

Remote I/O
ioLogik E1200
Modbus
SNMPv2c

Panel Computer
MPC-2070

4 UPS

Serial Device Server
NPort 5000
RS-232/422/485

Protocol Gateway
MGate MB3000
Modbus

5 Server Room

Protocol Gateway
MGate MB3660
Modbus

Serial Device Server
NPort 5000
RS-232/422/485

Modular Remote I/O
ioThinx 4510
Modbus
SNMPv3

6 HVAC

Ethernet Switch
EDS-2000

Ethernet Switch
EDS-4000/G4000

Protocol Gateway
MGate 5217
Modbus
BACnet/IP

7 Control Room

Network Management Software
MXview One

Ethernet Switch
RKS-G4028

Secure Router
EDR-G9010

IEC 62443-4-2 Security Level 2 certified

MOXA®

Simple Integration

Enter the new era of connectivity in data center infrastructure (DCI)

www.moxa.com

The Need for Efficiency

Boost Resilience

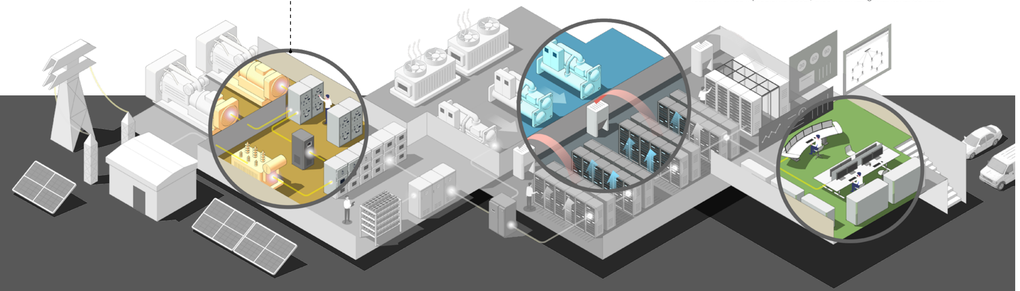
Modern consumers' demand for large data center reliability has increased from 99.982% to 99.995%. This phenomenon has made 2N+1 power supply systems mainstream. As these systems are driven by net-zero emissions power sources, data centers have integrated renewable energy with their existing power sources. However, this complicated power system design makes it difficult to ensure operations are uninterrupted.

Gain Full Control

To further optimize energy efficiency, the cooling requirements of the servers must be calculated and controlled precisely. However, because computing needs may vary and the surrounding temperatures and humidity may fluctuate drastically, a better understanding of these variables is necessary to accurately predict the energy required.

Get the Full Picture

To optimize energy consumption and allow a DCI system, for example, to make automatic adjustments based on AI calculations, OT data from various systems—such as an Electrical Power Management System (EPMS), Building Management System (BMS), or Power SCADA—must be integrated into Data Center Infrastructure Management (DCIM). This allows IT staff to get a more precise view of all the subsystems in the data center while avoiding PUE distortion. Having the ability to see the system in its entirety helps shorten reaction times if problems occur, thus minimizing maintenance risks.



Evolve Your DCI Connectivity Solution For Better Efficiency

From Segregated to Integrated

To realize cross-system data analysis and collaboration, data center infrastructures (DCIs) must transition from siloed OT networks to fully integrated architectures. Achieving seamless connectivity and eliminating complexity in OT network integration are key to improving operational efficiency.

From Tunnel Vision to the Big Picture

To optimize power usage effectiveness (PUE) in rapidly evolving data centers, monitoring points must increase tenfold to enable precise system visualization and optimization through efficient data collection. Massive data volumes necessitate efficient data collection for complete system visualization and optimization. To handle increasing data needs, more efficient, larger networks are required to provide stable, lag-free data transmissions.

From Reactive to Proactive

To maintain a consistent power supply for increasingly complex systems, equipment must react to electrical power monitoring systems (EPMSs) commands without delay. A highly efficient and stable network infrastructure enables real-time responses, shifting management from reactive to proactive, thus mitigating operational risks. Success in this transformation hinges on a reliable and scalable facility network.

From Option to Obligation

To meet the demands of becoming critical infrastructure, data centers must now view cybersecurity not merely as a best practice, but as a legal and operational imperative. Governments worldwide—through laws like NIS2, CRA, and CIRCIA—are enforcing stricter standards. Operators must now embed security across systems, supply chains, and operations. In today's environment, trust is built on resilience, and resilience begins with cybersecurity.

MOXA®

Your Trusted Partner in Automation

Moxa is a leading provider of edge connectivity, industrial computing, and network infrastructure solutions for enabling connectivity for the Industrial Internet of Things (IIoT). With over 35 years of industry experience, Moxa has connected more than 111 million devices worldwide and has a distribution and service network that reaches customers in more than 91 countries. Moxa delivers lasting business value by empowering industries with reliable networks and sincere service. Information about Moxa's solutions is available at www.moxa.com .

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