Building a Connected IoT Infrastructure to Achieve BESS Efficiency

Location: United States
Company: Leading energy storage system turn-key provider

Overview

To integrate IoT functions into BESS, our customer in the United States who is a leading energy storage system turn-key provider leveraged Advantech solutions to optimize the efficiency of BESS and achieve a balanced energy utilization.

Challenges / Requirements:

- Prevent battery unit damage and optimize BESS performance
- Deliver stable operating conditions for BESS by monitoring and controlling the HVAC

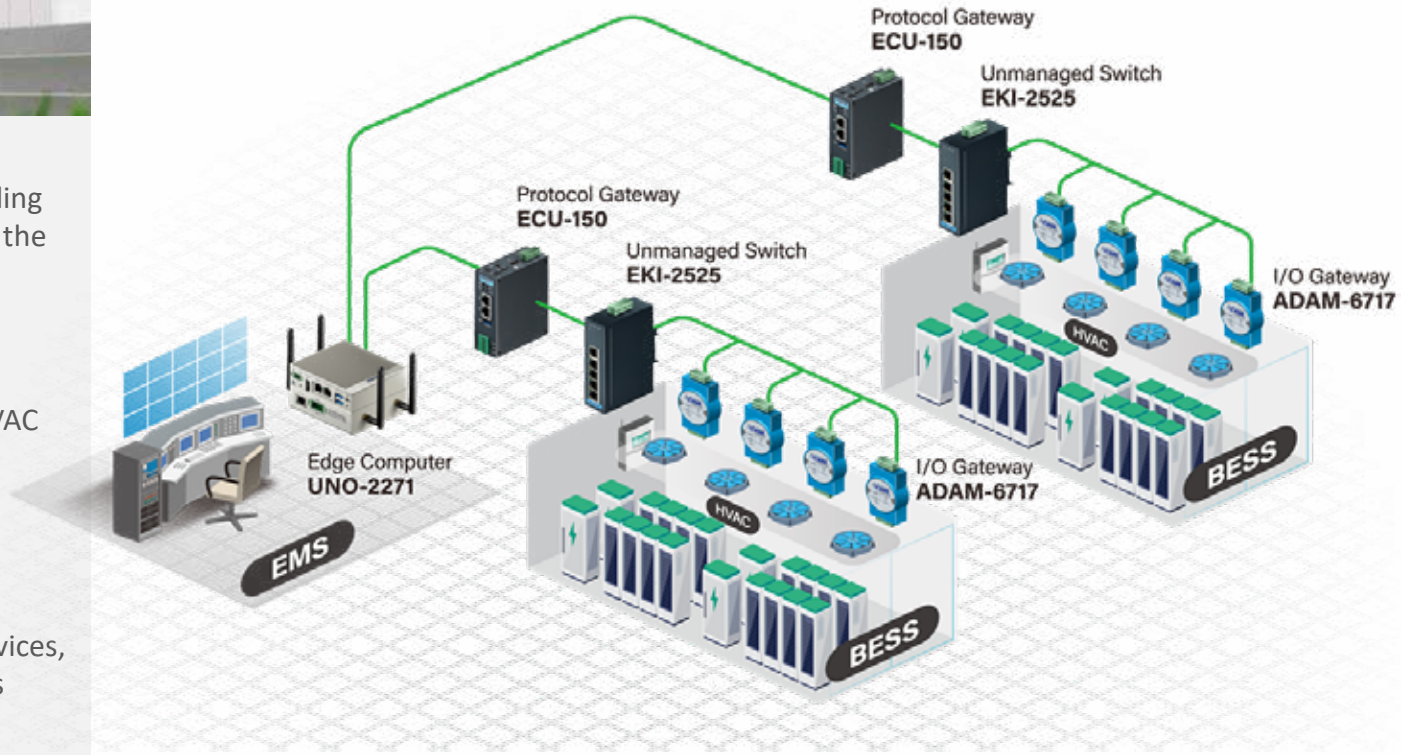
Solution:

- The ADAM-6717 I/O gateway serves as the HVAC controller. This gateway incorporates I/O modules and basic computing functions to handle I/O control processes and alarm/event handling
- The ECU-150 high performance edge gateway plays a crucial role in managing devices, including the ADAM-6717, and transmitting information to the UNO-2271 fanless edge computers that run EMS to manage the equipment status of each BESS

Benefits:

- By incorporating I/O gateways, edge protocol gateways, edge computers, and a robust network infrastructure, BESS can be optimized to its fullest potential
- IoT integration ensures seamless communication and real-time monitoring and control of the BESS

System Diagram



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