

Data Reliability: A Secure Solution with ControlEdge HC900 and Experion HS

Solution Note

Experion HS and ControlEdge™ HC900 together provide an integrated and affordable solution with world-class reliability and optimal performance, scalability and security.

Challenge

Process data is a crucial element in manufacturing. Industries increasingly require documented data on the manufacturing process before being permitted to sell their products or simply to improve the process. Process data is also critical in documenting new processes, from pilot to full scale production, and in the research and development of new product

Without this critical process data, or if even a portion of data is lost, products cannot be sold or months or years of research on a new product may be invalidated. Accurate, reliable data and record keeping has become as important as an accurate, reliable control system for the process.

Pilot plants, research facilities, data centers, clean rooms, aerospace parts manufacturing facilities, finished product warehousing requiring accurate records of the storage environment – all require accurate and reliable data and record keeping.

Solution

For years, Honeywell has successfully deployed validated systems to leading pharmaceutical manufacturing companies and research facilities.



Experion HS is a powerful software platform built on the proven technologies of the Experion PKS platform and provides an integrated, reliable and secure environment with ControlEdge HC900.

SOLUTION BENEFITS

- **Proven and Reliable** – Experion HS incorporates high-performance, stable and secure software. ControlEdge HC900 helps Maintaining a safe and continuous operating environment
- **Flexible** – From small to mid-size systems to large multi-site systems, integrated with Experion platform, Experion HS successfully addresses a wide variety of application requirements
- **Efficient** – Experion HS offers improved operator effectiveness and provides increased profitability and productivity with ControlEdge HC900
- **Scalable** – Expand Experion HS as your operations expands, and integrate easily with other Honeywell or third party controllers and systems
- **Easy to use** – The ease of configuration and ease of use of Experion HS ensures projects can be implemented quickly and efficiently.
- **Total Solution for Process / Safety Control** - The lowest cost of ownership, with reduced training, maintenance and inventory costs.

The Honeywell Solution includes Enterprise Building Integrator (EBI) for the building management system, Experion HS SCADA system for process monitoring and ControlEdge HC900 controller for critical control of temperature, pressure and humidity of manufacturing process environments, research areas and warehousing of finished product.

The solution offers a data archiving technology within the ControlEdge HC900 and Experion HS for automatic backup of process data in the ControlEdge HC900 in case communication is interrupted in any manner at the server or networking level.

ControlEdge HC900 is a flexible, modular and scalable system for process control, offering a faster start-up time, common engineering tools, reduced training, simplified maintenance and the lowest cost of ownership'

Experion HS, the powerful software platform incorporating human machine interface applications and supervisory control and data acquisition (SCADA), can use this same technology in applications with the ControlEdge HC900 process controller. This feature is called "History Backfill".

The History Backfill option enables plant history data from ControlEdge HC900 to be uploaded into Experion HS, providing critical data protection in the case of network outages, Experion HS server failures or other breakdowns.

In all cases, the Experion HS Historian remains the master. Where data is missing in the history file, the Experion HS server can retrieve the data from the ControlEdge HC900 once communication is restored and backfills the Experion HS historian to maintain a complete record so there is no loss or gaps in the process data.

Easy to Use Data Reliability for Peace of Mind

With out-of-the-box functionality, the critical points to be archived can easily be set up in both Experion HS and ControlEdge HC900.

Redundancy for added protection

The backfill function is available in all models of the ControlEdge HC900 CPUs, including redundant processors. Redundancy can also optionally be deployed with Experion HS for redundant servers and redundant communications to the ControlEdge HC900. These layers of redundancy allow multiple layers of protection for critical processes and data.

In addition, Experion HS supports conversion of a non-redundant server to redundant server. Users must simply ensure a redundant server license is available, the hardware and software configuration is the same for the redundant pair, and the non-redundant server's name is used as the base name for the redundant pair.

Data synchronization with other historians

Honeywell's MatrikonOPC suite of OPC products enables easy integration of the Experion HS server with other historian products and synchronization of history databases to eliminate missing data in other historians used for plant or corporate history collection.

MatrikonOPC's History Link provides an integrated data architecture eliminating gaps in data that can occur when linking different vendors' historians together.



Reliable data from the source to the final report

Data reliability starts with a rock-solid source for collecting data and is maintained by secure mechanisms for communicating the data all the way to the final destination and users. Honeywell's History Backfill solution utilizing ControlEdge HC900, Experion HS and Matrikon's OPC History Link provides a secure, reliable method to be sure that accurate process data is always available.

For More Information

Learn more about Honeywell's solutions visit our website www.honeywellprocess.com or contact your Honeywell distributor.

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