

Johnson Controls Data Center Solutions

Large Enterprise Cloud Provider



Cloud Provider Improves Operating Costs and Drives Down Construction Time

Construction of a new data center or the major retrofit of a data center offers the opportunity to optimize efficiency and resiliency with the newest high-performance technologies. The ability to meet efficiency goals while also minimizing construction time is critical.

A large enterprise cloud provider understood the importance of finding a partner that could improve efficiencies to generate the most cost savings while also prioritizing standardization and speed. Driving ROI meant finding a partner who can meet both goals.



The Challenge:

As with any construction project, many disciplines play a role in delivering an optimized and high performing building. For this particular provider, consistency and standardization were the keys to a successful, rapid implementation.

Developing standards to meet complex 24/7 efficiency requirements can be a tedious and time intensive process. During the early stage of getting this provider's new data center up and running, the team would individually test every single unit and rewrite or tweak sequences in the data center throughout the ramp-up process. While this stage is important to the overall success of this data center, it came at a cost. This time intensive process slowed down their speed to market to nearly two years before generating revenue.

When dealing with such large, capital intensive projects, this provider quickly understood the criticality of improving these monotonous, time-consuming processes to get to market faster, and sought an OEM solution partner that could help them speed up this installation and implementation process.



The Solution:

The speed at which this large enterprise cloud provider is building data centers is impressive. With multiple sites in construction at one time, the drive to maximize return on investment is intense – with a sense of urgency to “go live” as quickly and efficiently as possible. With many players in the market to choose from, this provider knew they wanted a reliable solution that could minimize construction time through a standardized approach and robust solution set. This client needed operational excellence to deliver a reduction in errors and construction delays. They needed to ramp-up people resources based on the demands of the project. Johnson Controls was able to provide the people resources and the technology solution, including the Metasys® building automation system.

The Metasys® building automation system provides a foundation of modern building energy management efficiency for data centers. This system works to connect commercial HVAC, lighting, fire detection, and security systems – enabling them to communicate on a single platform to deliver the information needed to make smarter decisions while enhancing the productivity of data centers.



The Outcome:

The Metasys® solution made an immediate impact. Johnson Controls provided controllers directly into the manufacturing process across a high volume of air handling units (AHUs) spread over multiple data centers. This solution allowed the customer to develop a standardized approach to air handling and control. Testing was done by both Johnson Controls and a third party to ensure validity and standardization.

This testing process resulted in a significant increase in time and schedule savings. With Metasys®, the provider could decrease the test schedule timeline from three months to four weeks, saving a minimum of eight to twelve weeks and millions of dollars in operating costs.

The Metasys® solution also enabled testing units in a factory setting before being shipped onsite to a data center. By testing in the factory, Johnson Controls could customize, test and ship the AHU to the data center for the construction team to simply “plug and play,” saving the provider up to six weeks of commissioning time.

Using smart planning and standardization, Johnson Controls was able to shorten commissioning time by 8-12 weeks. Pre-packaged Metasys® controllers allowed us to pre-test air handling units in the factory, helping the cloud provider shorten the deployment time by another 4-6 weeks. With many vendors to choose from, this provider knew they needed a reliable solution that minimized construction time while delivering a world-class building automation system to drive efficiency. Johnson Controls proved to be the partner that delivered.

REDUCTION OF
8 - 12
WEEKS



REDUCTION OF
4 - 6
WEEKS



REDUCTION OF UP
TO 18 WEEKS OF
CONSTRUCTION TIME

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