

# WESCO | Anixter Standardize Data Center Architecture for a Global Semiconductor Manufacturer



## CHALLENGES

A global semiconductor manufacturer was moving to a hybrid cloud architecture across their global fleet of data centers, deploying twin peered data centers in cities around the world, running active/active. During this process, they wanted to take the opportunity to standardize their data center architecture. They needed an architecture to support day-0 design in combination with day-1 and day-2 expansion to support a growth in demand. They also wanted to create a solution for 1/10Gbps with future readiness for growth up to 100Gbps.

## SOLUTIONS

The WESCO | Anixter Technology & Support Services (TSS) team worked with the customer to define standard points of distribution of infrastructure and compute racks, as well as standard cabling architecture to ensure that the functionality and design approach could easily be deployed consistently across different continents.

Standardizing manufacturers and including all details in the documentation enabled the customer to leverage their global spend and benefit from improved unit-rate pricing on all components. Building blocks were standardized for small, medium and large data center deployments. Furthermore, we worked with our supplier partner to develop a custom power strip that overcomes the power delivery limitations of a standard 32A 400V power strip, delivering 22kW actual. This reduces the need for two strips per electrical feed to one strip per electrical feed, so two strips per 20kW cabinet instead of four. We also used two-color power distribution to simplify high-availability inspection.

The TSS team designed each facility in AutoCAD and produced tender documentation for the customer to solicit installation works through WESCO | Anixter partners. All cabinets are preassembled and quality checked at WESCO | Anixter facilities. All cabling materials are also pre-labeled and copper and fiber trunks and panels are pre-terminated. The assembled cabinets are then delivered on site via white glove delivery service to ensure all cabinets arrive safely and on time.

## SUMMARY

### CUSTOMER

A global semiconductor manufacturer

### CHALLENGES

The customer needed standardized data center design and documentation for a hybrid cloud architecture across their global data center fleet.

### SOLUTIONS

- TSS engineers simplified design process by using standard “building blocks” for customer-specific customizations of true 20kW racks
- Standardized manufacturers
- Cabling pull schedules
- Prelabeling of all components off site

### RESULTS

- Reduced design time
- Ensured consistent design globally; scalable and repeatable solution
- Optimized power
- Rapid deployment and on-site labor savings
- Leveraged global spend and improved unit pricing with consolidated manufacturers

## CASE STUDY

### WESCO | Anixter Standardize Data Center Architecture for a Global Semiconductor Manufacturer

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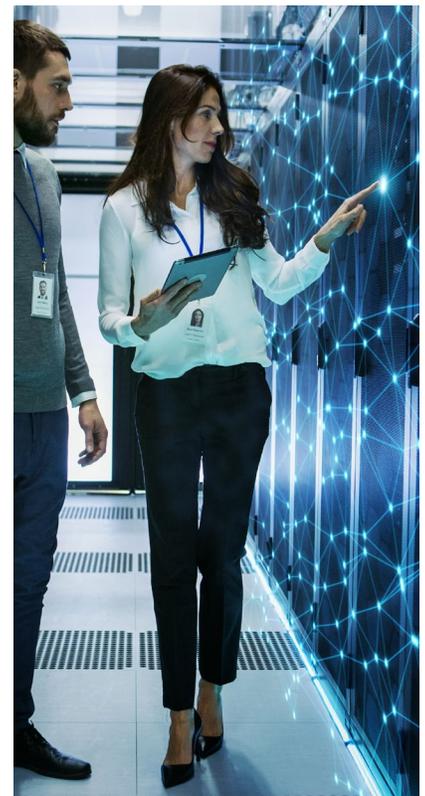
## RESULTS

As a result of working with the WESCO | Anixter TSS team, the customer now has a standardized data center architecture that can easily be deployed across the globe, whether on-premise or colocated. The standardization documentation provided by WESCO | Anixter makes it easy to deploy the same architecture at all the customer's other locations around the world. WESCO | Anixter's global presence means that it can offer the same service and level of expertise, no matter the location.

In addition to meeting the customer's needs and keeping the project on track, WESCO | Anixter also helped the customer save money. Delivering the cabinets preassembled simplifies installation and minimizes time on site for the installation partner, therefore reducing labor costs. Furthermore, by working with our supplier partner to create a custom power strip and cutting the number of power strips needed for each cabinet in half, TSS saved the customer approximately \$2,000 per cabinet.

Visit [anixter.com/technology](https://anixter.com/technology) to learn how the TSS team can improve your project.

*This project was completed under the name of Anixter*



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21S0116GL © 2021 WESCO | Anixter 05/21

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