

Electrical Firm Reduces Data Center Costs by 75 Percent

Customer Case Study



EDIF improves business responsiveness and resilience with Cisco and EMC data center architecture.

EXECUTIVE SUMMARY

Customer Name: EDIF Holding SPA

Industry: Wholesale and distribution

Location: Corridonia, Italy

Number of Employees: 400

Challenge

- Improve customer service
- Reduce operating costs
- Strengthen operational resilience

Solution

- Unified data center architecture deployed across two sites for flexible and cost-effective business continuity

Results

- Customer experience improved through optimization of online and logistics systems
- Total IT operating costs reduced by about 75 percent
- Business continuity strengthened by split site implementation

Technology Partners

- EMC
- VMware

Challenge

EDIF is an electrical wholesaler and distributor that operates along the eastern side of Italy, generating revenues of €136 million in 2010. The company supplies more than 10,000 business-to-business customers with residential and industrial products for lighting; solar energy; building automation, monitoring, and control; and security.

EDIF has two headquarter buildings less than 300 meters apart in the city of Corridonia, and 25 regional sales offices. Technology underpins the business, and all the company's applications, from warehousing logistics and order processing to email and unified communications, are housed in a data center that also supports a Multiprotocol Label Switching (MPLS) network connecting 250 internal users.

That data center, located in one of the buildings, had no more space for new servers to cope with future business growth. The company planned to open a second data center in the other building, both to create more space and to improve business continuity.

"Most of our sales orders and vital business processes depend on applications hosted in our data center," says CIO Samuele Cerquetti. "Any interruptions to those processes could result in loss of sales or customer goodwill, so we wanted to reduce that risk as much as possible."

Another important goal was to improve business efficiency by making IT services more responsive to requirements from internal users, including the company's sales offices, and from customers purchasing online. Setting up a new physical server used to take two full days, for example, and EDIF was keen to shorten this timeframe to one hour. "There is huge demand for IT services, both internally and externally," says Cerquetti. "If we can't respond to that demand quickly enough, we are going to lose business, and that could prove very costly."

Improving data center efficiency was another priority, because operating costs were too high. With too many physical servers in a small space, cooling costs alone were about €30,000 each year. The architecture was complex, requiring two engineers to oversee the multiplicity of cables, components, and management points. EDIF wanted to minimize the time required to replace a failed server blade and to reduce the downtime necessary for maintenance, which often had to be completed outside office hours.



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Samuele Cerquetti
CIO
EDIF

Solution

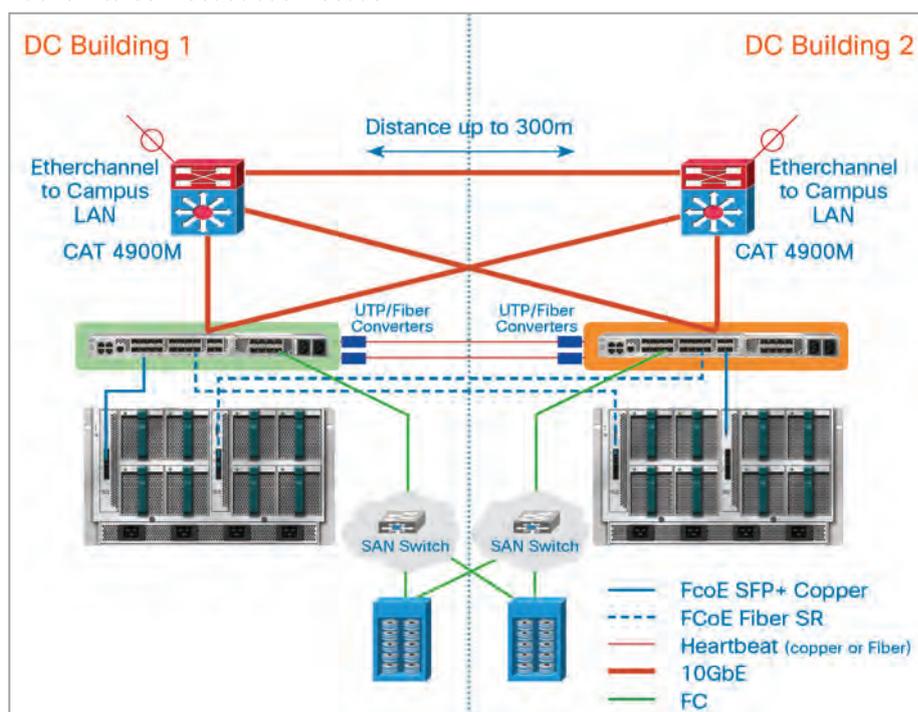
EDIF first evaluated several traditional blade server architectures before seeing a live demonstration of the [Cisco Unified Computing System™ \(UCS™\)](#), which had recently been launched. Although Cisco® UCS was completely new, EDIF was impressed by the system’s unified design, which encompasses computing, networking, storage, and virtualization. EDIF also liked the ability to manage all the data center elements as a single cohesive system with UCS, a capability that no other solution could provide.

Cisco UCS gave EDIF a unified environment on which to run its applications, instead of having to manage different technologies for server blades, networking, storage, and virtualization. “We calculated that UCS had the best price/performance ratio of all the systems we considered,” says Cerquetti. “The integrated design of UCS simplifies the IT architecture to such an extent that you can make very interesting savings in capital and operating expenditure: for example, we have cut our IT operating costs by about 75 percent.”

Another feature of Cisco UCS that appealed to EDIF was the system’s programmable infrastructure, which automates the process of provisioning data center resources through the creation of “service profiles” that are configured once and used to allocate resources very quickly. EDIF recognized that this capability would help achieve the important goal of improving the responsiveness of IT services to changing business requirements.

EDIF deployed one Cisco UCS environment with two chassis populated with half-width B200 M2 blades, and two Fabric Interconnects that contain the intelligence of the system. The company split the UCS between its two sites in Corridonia, installing one chassis and one Fabric Interconnect at each location (see Figure 1). Because the UCS continues to operate as one system, which is only possible due to the short distance between the data centers, this configuration improves EDIF’s business continuity provision without increasing costs.

Figure 1. EDIF split the UCS between two sites, installing one chassis and one Fabric Interconnect at each location.



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EDIF also changed its storage vendor to EMC, selecting two EMC CLARiiON AX4 networked storage solutions, which are integrated with Cisco UCS and VMware. By deploying one storage solution in each data center, EDIF was able to replicate the storage between the two sites and strengthen the protection of its business-critical information.

In addition to the CLARiiON system’s scalability and ease of management, another significant factor in EDIF’s decision was the strong technical and strategic collaboration between Cisco and EMC.

“This is the first time I’ve seen such a close partnership between two vendors,” says Cerquetti. “Because Cisco and EMC have a common strategy, and their solutions have been pre-designed and pre-tested to work together, there was a very fast time-to-market on integration, issues resolution, and deployment. This was important, because it reduced our risk, helped to drive up the combined performance of the two systems, and resulted in an excellent price/performance ratio.”

Two Cisco MDS 9124 Multilayer Fabric Switches, one in each data center, connect the Cisco UCS to EDIF’s legacy storage systems. Cisco was the only vendor that could provide this capability, which enables EDIF to continue using its legacy equipment and avoids the need to invest in replacement systems.

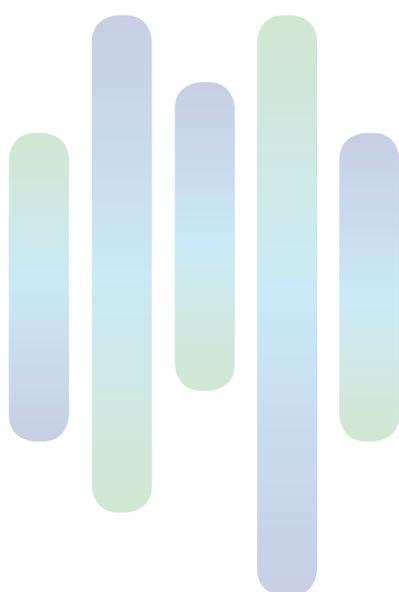
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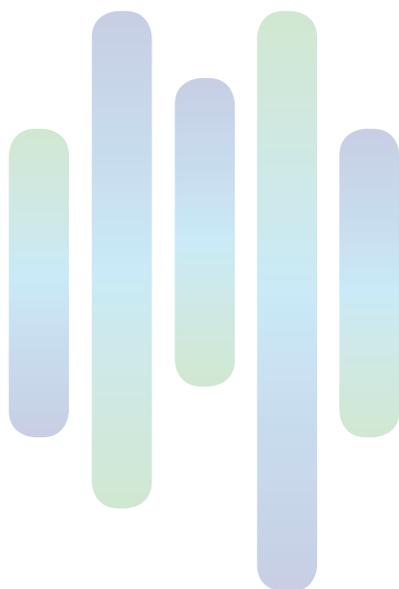
Better performance in the data center has made online services and logistics systems operate more efficiently, improving customers’ interactions with EDIF. Installing one split-site Cisco UCS system in two different locations has strengthened business continuity and resilience by creating two “active” data centers, instead of one active and one “standby” facility.

The decision to buy Cisco UCS and EMC CLARiiON has made it easier and cheaper to manage storage, because the unified fabric in UCS brings together networking, storage, and management on the same physical infrastructure. For example, the EMC solution has eliminated the need for software systems to synchronize data between two data processing sites, because the system itself constantly and reliably verifies the consistency of the data. Fibre Channel over Ethernet (FCoE) technology built into the UCS reduces by at least half the number of network adapters and switches needed in a storage area network. This unified fabric has already reduced EDIF’s cabling requirements by 66 percent, and the company can expect incremental savings in the future.

The new data center architecture has greatly simplified the work of the IT team, speeding up many tasks such as managing servers or installing new software. Engineers can now move workloads from one data center to the other very easily, using service profiles that contain all the necessary configuration settings. This capability has helped EDIF to reduce the time spent on administration and maintenance, while further enhancing business continuity. It is now possible, for example, to replace a failed server blade in just 15 minutes, by moving the service profile of the failed hardware to another blade.

Further efficiencies are coming from significantly lower operating costs. Since reducing the number of physical servers by 80 percent, the company’s cooling costs have dropped to virtually zero, and other energy costs have fallen by about €1200 a year. The amount of time spent on maintenance work has been reduced by 86 percent, and EDIF has achieved its goal of provisioning a new server in one hour instead of two days.





It is now easier to allocate IT resources according to business needs, while skilled engineers are able to work less on maintenance and more on revenue-generating projects; the IT team as a whole has become more proactive.

“The new architecture has had a positive impact on our business,” says Cerquetti. “We have reduced our operating costs by 75 percent while renewing the technology in our IT infrastructure, and we can now offer better continuity of service and a faster response to our customers.”

Next Steps

The scalability of Cisco UCS will easily and cost-effectively accommodate future business growth. Spare capacity in the UCS environment will enable expansion without increasing the physical size or complexity of the data center infrastructure. EDIF can also implement a virtual desktop infrastructure (VDI) for the first time, and has already run a successful proof of concept for VDI. The company is planning to offer this service to 50 employees within a year and to 300 employees within four years. “With our legacy architecture, it was impossible to even think about VDI, but now we are close to delivering it on the new UCS architecture,” says Cerquetti. “We expect to make further savings of around 25 percent in desktop costs.”

For More Information

Details of the Cisco Data Center Business Advantage architecture and solutions are available at: <http://www.cisco.com/go/datacenter>

For more information on Cisco UCS, please visit: www.cisco.com/go/unifiedcomputing

Details of EMC Unified Storage are available at: www.emc.com/storage/vnx/

For More Information

Data Center

- Cisco Unified Computing System featuring B200 M2 Blade Servers
- Cisco MDS 9124 Multilayer Fabric Switches

Storage

- EMC CLARiON AX4 networked storage solutions



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