Evolved Data Centers for Transforming Companies

Calligaris, one of the most well-known "Made in Italy" furniture brands, chooses the Cisco Unified Data Center approach to equip itself with a flexible infrastructure capable of ensuring performance and uptime.

EXECUTIVE SUMMARY

Customer Name: Calligaris Spa

Industry: Interior Furnishings

Location: Italy

Number of Employees: 380 (Italy) – 600 (Worldwide)

Challenge
- Innovating the Data Center network infrastructure
- Ensuring higher performance by reducing management complexity
- Adopting ready solutions for future technologies

Solution
- Cisco's Unified Fabric

Results
- Maximum reliability and continuity of service
- Easier to manage
- Reduced consumption
- Flexible infrastructure that can grow with the company

Challenge

Calligaris is a historical Friulian company that has been engaged in the production of home furnishings since 1923, and it's one of the most well-known Italian brands worldwide in the field of home design. Created as a workshop for woodworking and building chairs, over time Calligaris has successfully adopted an innovative approach with its business model by expanding its range of products and enhancing its brand image - a long process of internationalization in various markets and the development of modern retail channels. Today the Calligaris group boasts turnover of more than €130 million, 60% of which is due to continuously increasing exports and product offerings capable of completely meeting any furnishing needs. The group's headquarters is located in Manzano (UD), one of the most famous districts in the furnishings industry, and includes a main office alongside several production facilities. Additionally, there are also other operational offices abroad, a distribution network that includes branches in the United States, France, and Japan, constituting an organization of sales based on retailers located in over 90 countries.

Like many other companies trying to keep up with the times by adapting their network infrastructure and Data Center to imminent business needs and the constant and relentless evolution of networking technology witnessed over the last decade, Calligaris has felt the strong need to start a project to innovate the entire architecture, with the aim of acquiring a platform capable of supporting the growth of the company.

"*Ten years since the first network infrastructure, a pressing need for technological advancement has clearly manifested*", explains **Paolo Michielin**, CIO of the Calligaris Group. "*Over the years the company has grown considerably and has required a very different kind of performance. In fact, it was necessary to ensure proper sizing in terms of the capacity and reliability of the entire system so as to guarantee adequate performance and support of our business operations*". The Calligaris network, designed in 2004, began to identify problems of obsolescence in some technologies that had been developed but could not be adequately supported. "*It's the case of services such as video streaming or other modes of data transfer which have become quite standard today and require the best-performing infrastructure*".

> "There was a very real change. We achieved our goal to acquire a network that has never experienced problems with connectivity and performance, ensuring reliability and continuity of service."

Paolo Michielin
CIO
Calligaris Group
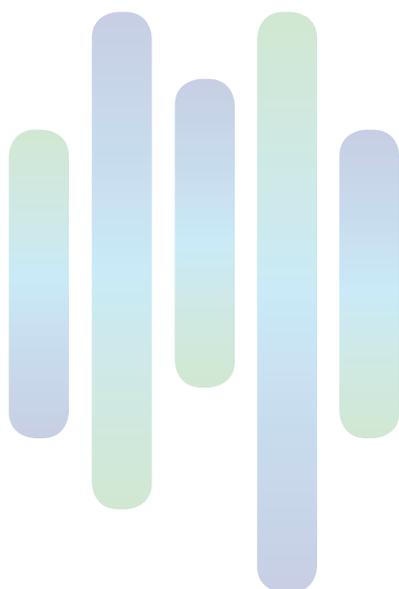
All of this was in addition to the need for greater speed, necessitated by the exponential growth of digital design of business spaces. The installation of a new network and a high-performing Data Center also required us to take into account these factors in order to allow for the development of a suitable architecture capable of growing with the company and responding to not only immediate needs, but future ones as well.

Solution

Thanks to the advisement of VEM Systems, the Calligaris Group chose a complete solution of Cisco equipment for a Unified Fabric infrastructure which allows for a convergence of the components of the Local Area Network (LAN) and the Storage Area Network (SAN) through Fiber Channel over Ethernet (FCoE) technology. The new Data Center is composed of Cisco Nexus 5000 switches, devices which allow for an innovative architecture capable of simplifying management by consolidating the separate LAN and SAN areas into a single infrastructure.

The implementation of the new Data Center network saves on operating costs and the consumption of electricity; additionally, clients have access to an ideal platform for system virtualization thanks to the agility and speed of the devices, attributes which are necessary for implementing new services or optimizing existing ones. Thanks to the Fiber Channel over Ethernet process, which allows for the deployment of a single converged network, Calligaris has been able to benefit from an advanced Data Center approach, with a drastic reduction in both the amount of equipment and wiring used, as well as the problems that arise from the operational management of two separate areas.

For the campus network interconnecting the headquarters with various facilities and establishments, VEM Systems has designed a type of ring architecture to ensure, through the closure of a circuit, primary connectivity of each cabinet box positioned along the network on two redundant devices, thus ensuring availability even in the event of malfunction.

At the core of this infrastructure, a system has been implemented consisting of Cisco Catalyst 4500x switches forming a Virtual Switching System (VSS), or with the switch devices in clusters operating virtually as a single switch, thus increasing operational efficiency and providing transmission capacity without interruptions. The design also included connections between the two components of the Data Center and of the campus infrastructure with a speed of 10 Gigabits, and it has been extended to each device in the peripheral network as well.

Results

According to Michielin, Calligaris has undergone a true transformation, thanks to which, with a new highly flexible and scalable environment, it is ready to accommodate future technological trends and giving the company all of the tools it needs to address future challenges. "*We have moved away from an architecture that, despite never having caused problems with productivity, had reached limits that were no longer supportable from a functional point of view and have embraced a completely new design,*" says Michielin, "*with redundant devices to ensure greater robustness of the network, which is now also more transparent with respect to the need to cope with the spontaneous loads that sometimes occur.*" Thanks to the Cisco solutions provided by VEM Systems, the objectives of reliability and absolute continuity of service have become key points.

The high performance of the new infrastructure also makes it possible to ensure uninterrupted operations and performance in the use of the services provided through the virtualized Data Center and the data transmission infrastructure. The renewal of the networking components and the choice of a Cisco Unified Data Center solution has enhanced use of the network, which is essential at Calligaris for communication between the headquarters and its offices distributed across the globe. All of this is in addition to savings in operating costs and greater ease of management. "*The Cisco Unified Data Center approach provides the company with a new IT vision*", explains **Gabriella Attanasio**, VEM Technical Director. "*It centralizes all computing, storage, networking, virtualization, and marketing resources into a single platform that offers our clients simplified operations and a more agile structure on which to develop their business.*" The contribution of technological consultants during decision-making meetings of the companies involved has never been so crucial.

"*With the Fiber Channel over Ethernet, provided by the Cisco Nexus devices, the project also generated a significant rationalization of space and more orderly wiring configurations than had been developed previously in response to progressive additions of requests and implementations made at non-modular data centers,*" adds Michielin. "*There were bundles of cables that blocked front access to the switches, with subsequent difficulties working in the area, such as introducing new patches. From this point of view, even laypeople can see this is a huge step forward.*"

There have also been positive opinions of the work of VEM Systems, which Michielin doesn't hesitate to describe as a well-established company with a strong presence in the critical areas of design and maintenance. "*There were no surprises*", says Michielin, "*the operations were completed on schedule and met all of the expectations established for the project*".

For More Information

For more information about the Cisco architecture and solutions mentioned in this case study, please feel free to visit: http://www.cisco.com/web/IT/solutions/datacenter/index

Product List

Unified Data Center Fabric

· Cisco Nexus 5000 Series Switches for Network Data Centers using FCOE

Routing and Switching

· Cisco Catalyst 4500X Series Switch