COMMSCOPE®

The new Nestlé site includes CommScope's state-of-the-art IT infrastructure at more than 3,600 network outlets

Customer

Nestlé Brazil

Country

Brazil

Challenges

Nestlé Brazil's relocation to a new building in the city of São Paulo included not only the design and installation of the Wi-Fi and cabling infrastructure for 2,500 employees but also moving the data center. The main challenge was to complete this project on a tight deadline with minimal disruptions to the company and its employees.

The connectivity in the new building would have to perform better than the previous network, as well as support applications such as IP phones, Wi-Fi, audio and video, and access control, all monitored by an automated infrastructure management (AIM) system.

With more than 3,600 Category 6 and 6A information outlets, the project paves the way for a high-performing LAN and data center.

Located in a modern building on the Avenida das Nações Unidas, in the South Zone of São Paulo, the new Nestlé site sets the stage for technology being increasingly prominent in the company's business processes.

With a floor space of 2.2 million square feet (210,000 square meters), the complex includes a shopping center and two towers. The company occupies 10 floors of the Sigma Tower. Two kitchens are on the ground floor and the Nestlé Store, which is open to the public, is in the Alpha Tower The project received investments of more than $10 million (R$50 million).

The move breaks boundaries with the creation of a central collaborative environment for Nestlé's 2,500 employees.

Part of the building is linked to a standardized network infrastructure that meets international company standards. To create a comprehensive and high-performing network, Nestlé chose connectivity solutions from CommScope.

Comtec, a CommScope PartnerPRO® Network provider in São Paulo, helped Nestlé to implement this network. The work took four months to complete and involved 80 professionals. Comtec installed 3,677 Category 6 network points for the workstations and 204 Category 6A dedicated Wi-Fi access points.

The infrastructure supports connection speeds of up to 10 Gbps.

The distribution network uses 155 miles (250,000 meters) of UTP LSZH-3 (low smoke, halogen-free) cables for access to the LAN and resources such as Wi-Fi, printers, audio and video, telepresence and IP phones, among other systems. This infrastructure provides network reliability and optimal availability for Nestlé employees. The optical backbone, also composed of LSZH-3 cables, is 2.7 miles long (4,500 meters), with redundancy routes and a capacity of 10 Gbps.
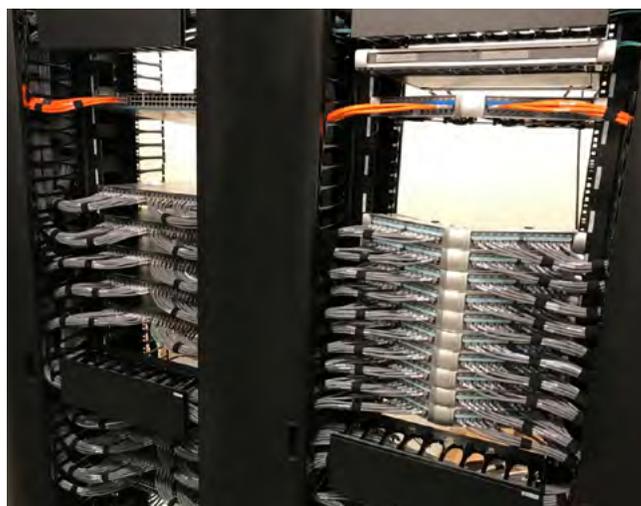
The secondary cabling is distributed from the IDFs – intermediate rooms existing on each level – by means of metal conduits installed beneath the raised floor. All of the work was certified and is backed by CommScope's 25-year extended product warranty and applications assurance. Comtec and CommScope ensure standardization, support for future applications and the correct functioning of the facility. Nestlé's IT team received training in operating the system.

CommScope's solutions are based on the cornerstones of network reliability, physical layer security and public safety to ensure high-performing connectivity.

CommScope is the only global manufacturer of every technology required for tomorrow's ultra-efficient converged networks. Nestlé's new infrastructure includes copper and fiber-optic structured cabling, modular components and intelligent management capabilities to monitor and manage every physical layer connection in real time. These features help to minimize the chances of an unexpected failure and increase productivity throughout the company. The energy-efficient data center occupies 861 square feet (80 square meters). Since the project involved relocating equipment and employees from the previous Nestlé site, Comtec created a detailed and phased plan that included risk analysis, (diagnostic) assessment of the environment, electrical load and technical documentation.

Automated Infrastructure Management (AIM)

One of the project's distinguishing features is imVision®, CommScope's automated infrastructure management system. With an interface in Portuguese, the solution provides visibility and monitoring of all network connections in real time. Infrared sensors monitor more than 3,600 network ports in the patch panels and internal optical distributors (IODs). Nestlé acquired an unlimited licence for imVision so that the company can add other business units to the system, as needed.

"The infrastructure used in the data center, combining a 6A structured cabling system and OM4 multimode optical fiber, was designed for high performance. Moving the data center was included in the project. We have considerable experience in this type of work in large industries and carried out careful planning to ensure the move was seamless and on time."

Vicente Salzano, Director of Comtec

imVision is an open system that can be used with non-proprietary industry-standard patch cords. The solution helps to locate any network issues rapidly and precisely, thus minimizing downtime. It's even possible to geolocate IP devices in real time, improve asset management and reinforce network security from the physical layer. imVision also optimizes network administration by generating electronic work orders and includes many other features.

High performance and availability in an energy-efficient data center

The data center also formed part of the contract and involved moving the old building environment, also in São Paulo. The structure was designed to guarantee high performance, availability and energy efficiency. The network combines a system of Category 6A structured cabling (with 730 points) and OM4 12-strand multimode optical fiber for the racks of servers.

CommScope's dependable, high-performance cabling infrastructure will last long into the future. This reliability was one of the factors that impressed Nestlé. The OM4 fiber cables are highly reliable and flexible. The technology has lower attenuation and is equipped to support applications of 10 GbE to 100 GbE at distances from 492 feet (150 meters) to 1,804 feet (550 meters).

The infrastructure included 672 optical fusion splices and 768 OM4 optical pathways in trunk cables. The optical fiber routes for the racks are redundant and the cables are located in the ceiling to avoid any type of physical interference with other infrastructure solutions and to prevent airflow interruptions to air conditioning.

The project also included manageable optical distributors and 24-port angular patch panels. The patch panels are ideal for high-density applications and optimize rack space.

In addition, technicians configured switch port mirroring, enabling cable operations to be performed in the patch panel and IODs. This facilitates the management and maintenance of the active equipment in the racks.

Another project differentiator is the use of MPO connectors, a pre-terminated optical cabling system with up to 12 fibers that doesn't require field termination and performance testing after installation.

The solution is easy to install and test, providing network stability and reducing the risk of downtime – crucial features in a mission-critical environment.

The building's energy-efficient features include a hot and cold corridor approach, precision air conditioning and access control, uninterruptable power supply, and smart fire detection and firefighting systems.

With the new data center, Nestlé has succeeded in consolidating and virtualizing its servers based on new digital transformation processes. Thirty-seven pieces of equipment have been decommissioned, for example, reducing energy consumption and saving space.

"The 2,500 employees at the new office have a much more collaborative, open environment, which promotes personal interaction and sustainability in the use of resources. Everything was designed to ensure integration between the different areas, from administration to the industrial plant, to increase productivity and improve their automation systems."
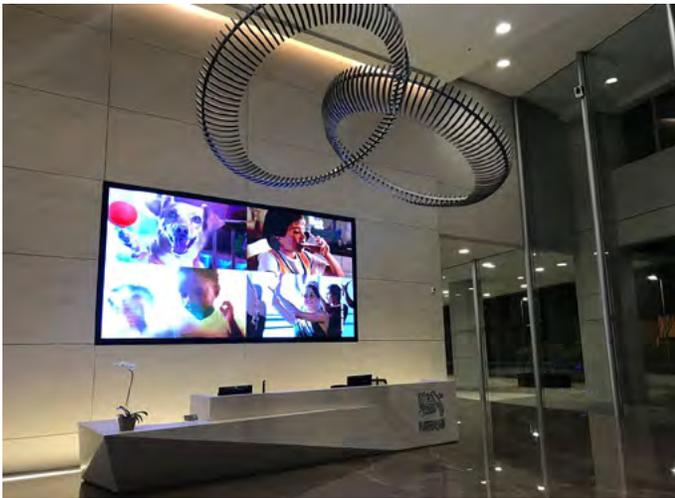
Fernando Molina, IT Manager at Nestlé

About Nestlé

Nestlé is the largest food and drink company in the world. Operating in 194 countries, the company has 328,000 employees. It has more than 2,000 brands ranging from global icons, such as Nescafé or Nespresso, to local favourites such as Ninho. It's headquartered in Vevey, Switzerland, where it was founded more than 150 years ago. The Brazilian subsidiary has 31 industrial units in the States of São Paulo, Minas Gerais, Bahia, Pernambuco, Goiás, Rio de Janeiro, Rio Grande do Sul and Espírito Santo. It employs more than 20,000 workers directly and manages another 200,000 supply chain workers. The company makes, markets and distributes more than 1,000 items.

Find out more about Nestlé at www.nestle.com.br

About Comtec

Founded in 1988, Comtec provides solutions for all essential components of the business infrastructure, with products and services for the most diverse environments in the areas of information technology and electronic security. Its operation includes on-demand contracts, infrastructure outsourcing, customer loyalty and retention, specification and standardization of infrastructure. Its partnership with CommScope spans more than 20 years. Since 2012, the company has had 211 projects certified throughout Brazil.

Find out more about Comtec at www.comtec.com.br

CommScope pushes the boundaries of communications technology with game-changing ideas and ground-breaking discoveries that spark profound human achievement. We collaborate with our customers and partners to design, create and build the world's most advanced networks. It is our passion and commitment to identify the next opportunity and realize a better tomorrow. Discover more at commscope.com

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