COMMSCOPE®

SUCCESS STORY / NYU Shanghai

Becoming a world-class, multi-cultural research university, NYU Shanghai should be supported by a high-performance, highly efficient and reliable IT infrastructure. The robust network coupled with CommScope cabling solution and imVision intelligent management system helps NYU Shanghai in handling both the current needs and future growth.

— IT Manager, NYU Shanghai

A new approach to higher education demanded a higher degree of network performance—and CommScope delivered.

NYU Shanghai brings a global perspective on higher education into focus in China, blending two world-class universities into a powerful educational and research institution — the first of its kind in China. With students, professors, researchers and administrators all demanding robust network capabilities, CommScope delivered a state-of-the-art, campus-wide IT infrastructure and cabling management solution.

A powerful partnership, a bold new experiment in higher education

NYU Shanghai (New York University Shanghai) is the first international university established jointly by China and the United States. Approved by China's Ministry of Education, NYU Shanghai joins NYU Abu Dhabi and NYU New York City in the NYU Global Education System of degree-conferring campuses. NYU Shanghai is also the first university to receive legal person status in China.

Construction of the NYU Shanghai campus began in January, 2011 as a joint venture between NYU and East China Normal University of Shanghai (ECNU), a world-class university and key member of China's Project 985. On August 15, 2012 the university's inauguration ceremony was held and in August, 2013, the first undergraduate students arrived on campus. During August, 2014, the Pudong campus was officially opened.

High-performance IT infrastructure helps deliver world-class education

The goal of NYU Shanghai is to become a world-class, multi-cultural research university that will serve as a model of cultural exchange, educational cooperation and global influence.

NYU Shanghai provides students with a high-quality, high-performance online educational service platform. Academic management, administration and student management services are all supported by the IT network, as well, making the establishment of a high-performance, highly efficient, and highly reliable IT infrastructure of critical importance to the functioning of the university. This robust network, coupled with an intelligent management system, must be capable of handling both the current needs and future growth.

Since the number of on-campus IT administrators is limited, a wiring management system that is both intelligent and easy to visualize is required to boost management efficiency, lower operating costs, reduce network terminal risks, and improve failure response times.

CommScope was selected to implement the solution because its SYSTIMAX® 10-Gigabit copper and 10-Gigabit fiber cabling offered high performance and reliability, as proven around the world. In addition, CommScope's SYSTIMAX imVision® intelligent wiring management system is deployed extensively in the Greater China region and has an excellent reputation among users, with well-developed installation, delivery, training and customer service processes.

Three facilities, one comprehensive IT infrastructure solution

CommScope's NYU Shanghai project consisted of three facilities: the classroom building, the data center and student dormitories.

The NYU Shanghai classroom building is a 15-story structure with over 60,000 square meters of space. Its premises distribution system (PDS) not only had to satisfy the networking and telephony requirements of the classrooms, offices, meeting rooms and equipment rooms, but also support the university's IT systems and the sharing of resources, as well as functions like conference calls, video conferencing and distance learning.

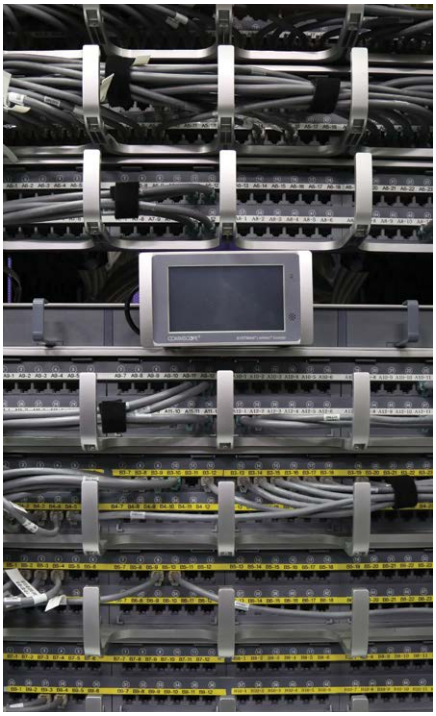
The building's horizontal information nodes include terminal applications for data, voice, wireless access point and IPTV, with a total of about 5,500 IT nodes installed. The 430,000 meters of horizontal cabling consist of SYSTIMAX X10D 10-Gigabit unshielded copper cables; indoors, a 24-strand zero water peak (ZWP) single-mode OS2 10-Gigabit fiber optic cable was used.

The NYU Shanghai data center was designed by Dell based on the Tier 2 international standard and occupies 450 square meters of floor space within the classroom building, providing 24/7 support to all IT operations at NYU Shanghai. The data center is divided into two sub-sections, with each section capable of supporting loads of up to 150 kW. The center can handle expected interference and limited hardware failure, and parallel maintainability ensures that human error will not interfere with operations.

CommScope has completed phase 1 data center installations in the UPS battery room, UPS distribution room, main server room, network room, control room, gaseous fire suppression room and storage room. All of the horizontal cabling uses SYSTIMAX X10D 10-Gigabit unshielded copper cable; indoors, 10-Gigabit, 12-strand multi-mode OM3 and 10-Gigabit, 12-strand ZWP single-mode OS2 fiber optic cables were used.

The data center supports networking; voice-over-IP calls; printers; remote VPN access for the classroom building, dormitories and ECNU campus; door access control; server backups; and other key systems. In the future, CommScope management software will be implemented to facilitate the management of these systems, and private faculty servers will be added to support their research and development programs.

NYU Shanghai's student dormitories consist of two buildings with 2,400 IT nodes installed. The 23,000 meters of horizontal cabling uses SYSTIMAX X10D 10-Gigabit unshielded copper cable; indoors, a 24-strand ZWP single-mode OS2 10-Gigabit fiber optic cable was used.



imVision provides intelligent IT infrastructure management

The NYU Shanghai project utilizes the SYSTIMAX imVision intelligent wiring management system across all three installations. Combined with patch panel monitoring hardware and system software, the imVision system provides a wide range of features and functionality to improve system management and lower maintenance costs.

System managers can access a total visualization of the patch panels, monitors, network equipment, and other IP devices, and easily locate them with the connectivity map overlaid with a CAD drawing of the building or campus. When new connections are established, the manager can remotely trace the complete path from an end device, such as a server, workstation, IP phone, or printer, to the service-providing port on a switch.

A wire's connection or disconnection status can be viewed from the electronic patch panel to help the wiring management technician quickly and accurately connect jumpers by using the jumper port and corresponding button to track connections. The electronic patch panel can immediately report inappropriate jumpers to reduce service interruptions, and can also verify and locate available ports, as well as track the connections from each workstation.

An IT infrastructure solution designed for the future

NYU Shanghai is positioned for growth, with an IT infrastructure and cabling management system designed by CommScope to handle rapid expansion and blend seamlessly with future technology advancements. And as China pursues similar joint ventures with other global institutions, CommScope will be ready to provide the high-performance infrastructure and management solutions needed to drive their success.

CommScope (NASDAQ: COMM) helps companies around the world design, build and manage their wired and wireless networks. Our network infrastructure solutions help customers increase bandwidth; maximize existing capacity; improve network performance and availability; increase energy efficiency; and simplify technology migration. You will find our solutions in the largest buildings, venues and outdoor spaces; in data centers and buildings of all shapes, sizes and complexity; at wireless cell sites and in cable headends; and in airports, trains, and tunnels. Vital networks around the world run on CommScope solutions.

COMMSCOPE®

www.commscope.com

Visit our website or contact your local CommScope representative for more information.

CU-109587-EN (06/16)