

CommScope connects 15,000 ports for NTT Communications' dedicated data center in Hong Kong

Customer

NTT Communications

Country

Hong Kong

Challenges

Hosting mission-critical customer applications demands the highest level of performance and reliability from the network within NTT Communications' dedicated data center in Hong Kong.

CommScope solution

NTT Communications chose SYSTIMAX® copper and fiber solutions from CommScope to create a green technology environment and address vital connectivity objectives like improved uptime and faster data-transmission speeds.



“SYSTIMAX performance has been proven in many data centers worldwide. With the global insight of CommScope and the local resources of its PartnerPRO supplier, we knew with complete certainty that our network would be installed quickly—and that performance levels would meet our stringent needs.”

—George Or, Senior Manager, Data Center Development, Cloud Business Division, NTT Com Asia

NTT Communications provides consultancy, architecture, security and cloud services to optimise the information and communications technology (ICT) environments of enterprises. These offerings are backed by the company's worldwide infrastructure, including leading global Tier-1 IP network, Arcstar Universal One™ VPN network reaching over 160 countries/regions and more than 140 secure data centers.

While Hong Kong is home to two data centers, the company is currently developing its third center. The Tier IV-ready Financial Data Center (FDC™) in Tseung Kwan O offers a highly secure, robust environment that houses customer information and various intelligent communications systems.

NTT Communications' premium data centers are designed with meticulous care to ensure high availability and business continuity. As one of its core components, the company's network infrastructure must be virtually flawless and absolutely reliable—especially in support of daily operational and financial transactions.

George Or, senior manager, data center development, Cloud Business Division, NTT Com Asia, explained, "To provide our customers with the most reliable data center service, it is our highest priority to deliver the highest-quality network solutions—in particular for our newly-opened Financial Data Center, which targets financial services institutions that have the most stringent demand on availability and latency. It's especially important to have integrated, end-to-end connectivity. Any mismatch of components can seriously degrade performance. As a result, we needed a trusted partner who could deliver turnkey, comprehensive, high-performance solutions."

To meet this requirement, Or and his team chose CommScope and its SYSTIMAX portfolio of solutions. CommScope enjoys a global reputation for performance and reliability backed by industry-leading warranties and application assurances. These guarantees are established through extensive testing, research and development conducted at its internationally-recognised laboratories.

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Seamless copper and fiber

For fiber requirements, the team selected LazrSPEED® 300. This multimode fiber exceeds OM3 standards and supports data transmission at 10 Gb/s over distances up to 300 metres without the need for expensive electronics. To meet its copper cabling requirements for equipment rooms and office areas, the team chose GigaSPEED X10D®, which provides 10G performance over 100 metres, exceeding the full specifications of Category 6A and Class E_a international standards. In offices, meeting rooms and other areas where 1G performance was sufficient, GigaSPEED XL was incorporated to provide end-to-end performance in excess of Category 6/Class E standards.

After selecting an integrated infrastructure solutions provider, NTT Communications appointed a CommScope PartnerPRO® Network supplier to provide smooth, seamless installation services.

PartnerPRO® NETWORK

"Even the best solutions must be installed correctly to attain their full potential," said Or. "We chose a CommScope PartnerPRO® Network supplier that specialized in the deployment of end-to-end, mission-critical solutions, so we were confident in the installation process. We knew that professional support was available from CommScope—both immediately and for the foreseeable future."

A team of 40 engineers was involved in the network design, planning and installation. To connect 15,000 communications ports throughout the data center, these professionals installed more than 300 kilometres of GigaSPEED copper and 20 kilometres of LazrSPEED fiber cable. The team worked against tight deadlines in evening and graveyard shifts to complete the installation—a speed that would not have been sustainable without CommScope's timely delivery of materials and readily available expertise.

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Saving time and space

CommScope's factory-preterminated InstaPATCH 360 solution was used to install fiber connections quickly and efficiently. This solution tremendously reduced connection losses and installation time. The availability of materials from local stock holdings also cut lead times and ensured easy future network expansion.

Compared with on-site termination, preterminated InstaPATCH is a high-performance solution that fulfilled the need for high bandwidth while also saved the time and space for setup. In fast-growing co-location data centers, higher connector density is also a major benefit, since it allows more systems to be installed in the same space.

The cabling between terminations in various communications rooms and those in cabinets runs through overhead trunking. This infrastructure serves customer facilities ranging from a single rack to custom-built cages and dedicated private-rack zones.

In administrative areas, InstaPATCH serves a wide variety of applications—from office systems and Internet access to video conferencing. For office and co-location areas, the network also supports closed-circuit television (CCTV), security and access control systems.

Construction was phased to meet demand for co-location facilities and proceeded floor-by-floor, connecting thousands of cabinets across multiple levels. In addition to dedicated servers, the data center offers hosted storage and enterprise IT systems that mirror customers' in-house applications. Systems running in the center support many of the activities that transpire within Hong Kong's global financial sector.

The proven success, instant accessibility and long-term reliability of SYSTIMAX solutions for mission-critical financial applications were important factors that NTT Communications considered in the design of a data center must appeal to successful financial professionals.

Sustainability

A minimal carbon footprint was a key design objective of the data center. This objective informed all aspects of the new facility. This directive applied to both active and passive elements of the infrastructure.

“We not only aimed to optimise operational efficiencies, but to minimise energy-consuming activities throughout the entire lifecycle of the data center—from deployment to the future disposal of obsolete systems.” Or explained. “The durability of high-performance CommScope cabling helps us and our co-location customers meet these sustainability targets.”

For its success in building and operating a sustainable co-location data center in Tai Po, the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) program awarded NTT Communications with a prestigious silver certification.

Laura Chen, Greater China sales director of enterprise solutions at CommScope, remarked, “As people pay more attention to long-term sustainability, the advantages of high-performance, long-life connectivity are now more widely accepted and appreciated. SYSTIMAX solutions offer durable, trouble-free product lifecycles that exceed international standards and are backed by superior product warranties. Customers experience greater reward from their investment by utilising fewer resources to install and maintain their networks.”

Everyone communicates. It’s the essence of the human experience. *How* we communicate is evolving. Technology is reshaping the way we live, learn and thrive. The epicenter of this transformation is the network—our passion. Our experts are rethinking the purpose, role and usage of networks to help our customers increase bandwidth, expand capacity, enhance efficiency, speed deployment and simplify migration. From remote cell sites to massive sports arenas, from busy airports to state-of-the-art data centers—we provide the essential expertise and vital infrastructure your business needs to succeed. The world’s most advanced networks rely on CommScope connectivity.

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