



MMM Group Case Study

About MMM Group

Established in 1952 as a surveying company and incorporated in 1957 as Marshall Macklin Monaghan Limited, MMM Group Limited changed its name in 2007. The company is headquartered in Thornhill, Ontario, Canada. It provides consulting engineering, planning, project management, surveying and commissioning services to private sector owners, architects, contractors, investors and government clients across Canada and internationally. MMM Group focuses on large-scale, complex projects, such as international airports and hotels, urban and residential developments, transportation infrastructure, geomatics, and healthcare and environmental initiatives. MMM Group's staff of 90 partners and 257 associate partners and associates manages a practice that encompasses 1,650 personnel, one-third of whom are licensed professional engineers or scientists.

PANDUIT™

building a smarter,
unified business foundation

Connect. Manage. Automate.

Company

MMM Group

Country

Canada

Industry

Consulting/Engineering Services

Business Challenges

To consolidate six Toronto-area locations in a single facility, supported by a new data centre featuring a converged IP-based network. In addition, this new facility needed to reduce the overall environmental footprint.

Panduit Solution

Net-Access™ Server Cabinets, Racks and Cable Management System for improved thermal management, energy efficiency, accessibility and efficient space utilisation; Category 6A copper and 10Gig™ Fibre Cabling Systems deliver proven performance, ensuring availability, reliability and scalability. StructuredGround™ Grounding and Bonding Systems maintain performance, improve network reliability and protect both personnel and equipment.

Business Benefits

A reliable, scalable and integrated Unified Physical Infrastructure™, that maximises space utilization, optimises energy efficiency, and supports LEED Gold for Commercial Interiors (LEED-CI) Certification. A data centre that supports sustainability goals, reduces operational costs and provides a technology showcase for customers and prospects.

Unified Physical Infrastructure™



Building a Smarter Data Centre Starts with a Unified Physical InfrastructureSM

Panduit enables MMM Group to consolidate six locations and build an enterprise data centre based on a Unified Physical InfrastructureSM that minimizes risk and maximizes performance.

Business Challenges

After a five-year period of expansion during which MMM Group acquired eight companies and grew organically, the organisation recognised the need to consolidate most of its Greater Toronto Area (GTA) operations. Having its staff spread among six local offices in the GTA created a number of logistic, operational and collaboration challenges. First, each location had its own legacy IT system – in some cases, just a server in a closet – making it difficult to share, secure and back up data. Duplicate IT infrastructures and facilities also meant higher costs and staffing requirements. Perhaps most important, however, was the physical distance between offices that inhibited teamwork. MMM wanted to have everyone in the local area physically under one roof to encourage collaboration and spark creativity through day-to-day interactions. Beyond that, the company saw the need to connect other staff members, who are based in satellite offices across Canada, through a new, consolidated IT system.

“We wanted to move into a new headquarters facility and centralise and standardise our IT infrastructure so that everyone in the company could easily access and share all our knowledge resources,” said Dan Butler, partner at MMM Group. “During the previous period of rapid growth, we had simply made do with whatever system existed in each acquired location. But the time had come for a carefully planned and designed facility that could optimise business processes and enhance communications.”

Due to the nature of its business, the company had specific requirements for the data centre that would be the centerpiece of the new location. Because MMM engineers and scientists work with bandwidth-intensive files and complex CAD and CAE software, often containing confidential information, the data centre solution needed to provide powerful computing capabilities and stringent data security. Typically, projects must be completed within tight deadlines, demanding an IT system with high availability to avoid interruptions and delays. “Reliability is absolutely critical,” Butler said. “If our staff can’t access the network, they can’t work and we could potentially lose hundreds of thousands of dollars in productivity.”

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Dan Butler, Partner MMM Group

Strategic Objectives

In addition to the primary objectives of high performance and reliability, the company wanted to ensure the new facility would be operationally efficient and have a reduced environmental impact. Like the office spaces, which were designed with the goal of achieving LEED Gold certification, the data centre was also envisioned as environmentally responsible. In particular, MMM Group wanted to optimise power and cooling systems to cut energy use.

A related objective was to simplify administration and lower operational costs via centralised monitoring and management of key systems, including voice and data communications and the facility’s physical security and lighting systems.

In addition to these practical considerations, MMM Group wanted the new data centre to make an impact with its customers. “MMM is an engineering firm that handles very large and sophisticated projects,” continued Butler. “Before they sign on, our customers often want to see firsthand how we operate our own business. So we envisioned the new facility as a marketing tool as well as an IT system. The right infrastructure, using state-of-the-art design, systems and solutions, would enable us to show clients what the ultimate data centre should look like.”

Finally, MMM Group required the data centre to be scalable to support future growth and global operations. For this reason, the company sought an infrastructure solution that would enable rapid expansion and seamless system upgrades in support of emerging technology.





Panduit's Unified Physical InfrastructureSM

Panduit's Unified Physical InfrastructureSM (UPI) approach aligned with MMM Group's overall vision of a single, converged network based on internet Protocol (IP). Panduit's UPI approach gives organisations the ability to connect, manage and automate communications, computing, power, control and security systems for a smarter, unified business foundation. The plan for the MMM Group infrastructure called for integration of all IP-based networks, including Voice over IP, video and data, wireless connectivity, security systems and building access control.

Panduit was enlisted to provide a data centre solution comprising fibre optic and unshielded Category 6A copper cabling systems that offer ease of deployment and proven performance to ensure availability, reliability and scalability of mission-critical systems; NetAccess[™] Server Cabinets, Racks and Cable Management that provide effective thermal management as well as accessibility, flexibility and effective space utilisation; and the StructuredGrounds[™] System for data centre grounding and bonding to maintain system performance, improve network reliability, and protect both personnel and equipment.

Panduit Solutions

MMM Group selected a multi-tenant office building in Thornhill as the site of its new headquarters. The company planned to occupy six floors of office space and the data centre – a total of 13,285 square metres (143,000 square feet). MMM engineers designed the passive and active components for the new data centre and then the team began looking for a vendor that could provide the infrastructure.

The company had to move quickly, as MMM's landlord required the company to vacate by September 30, 2008. Panduit's global distribution network, which streamlines procurement and delivery to any destination, helped ensure the project was completed ahead of schedule.

Butler said, "We wanted a company that could deliver a single, unified solution. Although we considered three vendors, only Panduit was able to provide an end-to-end, Unified Physical InfrastructureSM, including copper and fibre cabling systems, cabinets and racks with effective thermal and cable management, and a dedicated grounding path, all based on an open, flexible architecture."

He continued, "We were particularly impressed with the engineering details in Panduit's cabinets with regard to cable management and thermal efficiency, which are essential for our Dell servers and Cisco network switches. Since the data centre was going to be a showplace, we wanted our server racks and cabinets to look great." Other benefits offered by Panduit were its customer focus, single point of contact for fast response, and proactive approach. Panduit's long-term strategic alliances with global industry leaders such as Cisco Systems – which had already been engaged to provide its Connected Real Estate redundant network infrastructure – as well as Liebert, Dell, and others, were also important.

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Dan Butler, Partner MMM Group

Unified Physical InfrastructureSM





Business Benefits

In Panduit, MMM found a partner that shared its vision of a scalable, flexible infrastructure that is ready for future technology changes. For example, the use of the Category 6A copper cabling system built in extra bandwidth capacity to support future expansion without the need for re-cabling. 10 Gigabit cabling was deployed to each desktop to prepare for the increasing demands of the next decade of computing.

“We have ambitious growth plans spanning the globe and our new data centre had to be designed with the scalability and flexibility needed to expand and enhance existing capabilities without major rework.” Butler said.

Another benefit of the Panduit solution is interoperability of all facility and network systems. Integrating key elements associated with systems consolidation and network convergence simplifies management while reducing risk and optimising performance. MMM Group can maintain these integrated systems using a lean staff of just four people.

While providing reliability and performance on the back end, the new data centre is helping to evangelise MMM Group’s services on the front end. This showpiece is a powerful marketing tool. “We recommend converged networks based on IP to our customers, and this new data centre demonstrates that we’re practicing what we preach.” said Butler. “It also shows customers that MMM knows how to design and implement the latest technologies and enterprise-class equipment. Thanks to Unified Physical InfrastructureSM-based solutions, the environment is exceptionally well designed and organised – that gives customers confidence in our capabilities.”

The new facility is so successful that MMM plans to use it as a model for another data centre in the western part of Canada to provide full redundancy for disaster recovery.

Butler concluded, “Panduit provided a comprehensive, end-to-end data centre solution that allowed us to converge voice, data, and security and building controls into a single network. The Panduit grounding system and passive thermal management cabinets ensure the reliability and performance of our network and Cisco equipment. MMM Group views an optimised, Unified Physical InfrastructureSM as a strategic advantage for managing our business more effectively and better serving our customers now and into the future.”

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Dan Butler, Partner MMM Group

Real-World Solutions to Ensure the Success of Our Customers

With a proven reputation for excellence and technology innovation, a robust ecosystem of global partners and long-term alliances with top industry leaders, Panduit is a valuable, trusted partner offering strategic vision and real-world solutions to ensure the success of our customers.



Innovative Technology Leadership

Panduit is an industry leader in developing innovative technology solutions that meet the rapidly evolving needs of our customers around the world. Our commitment to continued leadership is supported by significant ongoing investment, dedicated manufacturing facilities, strategic technology alliances and collaborative R&D with other industry leaders.



Global Business & Commitment

Panduit's ongoing commitment to excellence and our technology alliances with key industry leaders such as Cisco Systems, EMC, Emerson, IBM, etc., enables our highly skilled and knowledgeable global sales, systems engineering and technical support teams to engage with critical customer challenges that range from initial problem determination all the way to resolution. Local specialists, trained to global standards and competencies, provide consistent regional support that brings value to local business. Our global value chain, which combines manufacturing, distribution and service, provides prompt responses to customer-related issues, and streamlines procurement and delivery to any global destination.



Best-in-Class Partner Ecosystem

Panduit employs a consultative approach to identify customer needs and engage appropriate partners in a collaborative fashion to serve our customers. Panduit's robust ecosystem of architects, consultants, engineers, designers, systems integrators, contractors and distributors offer a full portfolio of lifecycle services. Our partners are trained on relevant services to Plan & Design, Build & Deploy and Maintain & Operate to deliver predictable and measurable results.



Worldwide Alliances

Panduit has established long-term strategic alliances with top global industry leaders such as Cisco Systems, EMC, HP, IBM, Liebert and Rockwell Automation to develop and integrate innovative, holistic solutions for our customers. We continually invest in relationships and resources for solving our customers' greatest business challenges.



Eco-Sustainability & Global Citizenship

With a long-standing commitment to environmental excellence, Panduit continually develops and implements solutions designed to protect, replenish and restore the world in which we live and operate. This commitment is demonstrated by Panduit's LEED-certified new world headquarters and future green building plans using its own revolutionary Unified Physical InfrastructureSM vision to enable convergence of critical systems for driving sustainability.

*Transform Your
Physical Infrastructure.
Call or visit us online,
we can show you how.*

Panduit Corp.

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