

The future of data centres

Nexans' data centre solutions answer high-end technology demands

Data storage is becoming a huge issue for enterprises. The need for capacity is ever growing, driven in part by legislation requiring all financial transactions be stored electronically for a wide range of years, along with 24/7 reliability demands and power consumption concerns. That's why enterprises prefer data centre solutions that can satisfy their current and future needs, and Nexans Cabling Solutions is determined to aid them in their goals.

Data centres today account for about 10-20% of the cabling market, but by 2010 estimates show that this percentage will rise to about 30%. This big expansion will challenge both enterprises and their suppliers, because the demands will vary from traditional needs like reliability, growth and security. New challenges like power reduction, space maximisation and cooling will enter the picture and drive new demands for innovative technology.

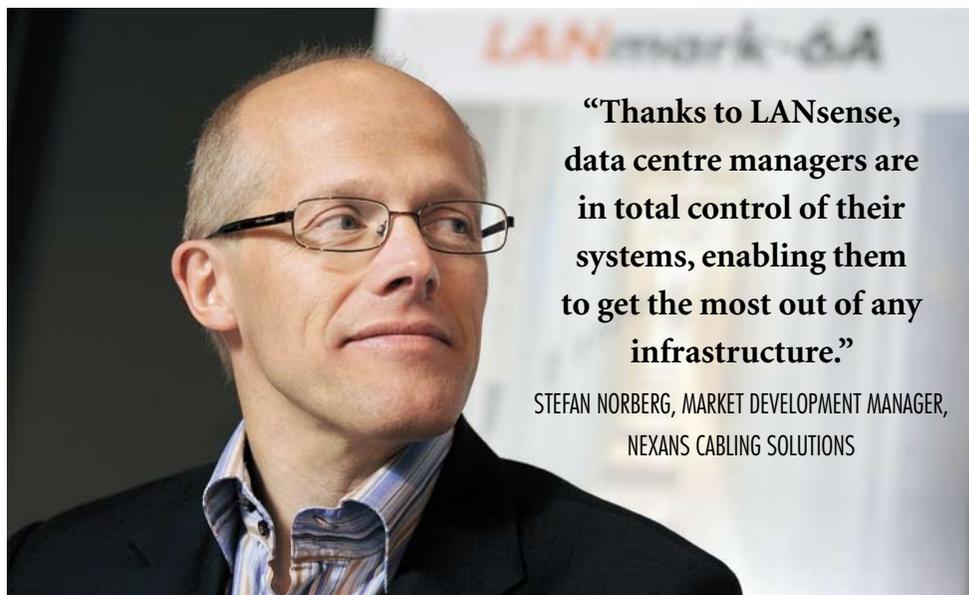
Nexans is recognised as a market leader in data centres technology today, dealing with Fortune 500-companies, especially from the financial sector. However, in order to fully address their customers' needs, Nexans had to present itself as a single source for proven solutions

involving cabling, networking, intelligent management as well as its powerful R&D and helpful expertise.

"Data centre managers don't want to deal with a large number of companies that offer them products; they need a partner that can help them build nearly everything a data centre needs," Harry Forbes, Chief Technology Officer of Nexans Cabling Solutions says. "And this is exactly what we offer them. We partner with a number of key technology players to provide complete solutions that not only include the cabling, but also the comprehensive management tools to make sure the data centre is operating perfectly."

PREVENTING SYSTEM FAILURES

Because data centres must be available 24/7, possible issues have to be avoided at all cost. That's why Nexans' data centre management solutions encompass the possibility to prevent system failures. "Nexans' Environmental Monitoring and Access Control technology monitors critical variables such as server temperature and humidity," Stefan Norberg, Market Development Manager at Nexans Cabling Solution says. "By having all this exact information in real-time, the data centre manager can intervene whenever critical changes occur, before the system gets into a serious state. By preventing emergencies rather than responding to them, system uptime is raised dramatically."



"Thanks to LANsense, data centre managers are in total control of their systems, enabling them to get the most out of any infrastructure."

STEFAN NORBERG, MARKET DEVELOPMENT MANAGER,
NEXANS CABLING SOLUTIONS



Another critical issue experienced by data centres today is the lack of traceability. Numerous centres feature legacy servers that are not used anymore, but nobody dares unplug them because the effects are unpredictable. LANsense Intelligent Infrastructure Management solves

The complete Nexans Management Solution for data centres incorporates Systems Management, Physical Layer Management, Security, and Power & Cooling. “Thanks to the Nexans Management Solution, data centre managers are in total control of their systems, enabling them to get the

and its data somewhere else, which is very expensive. That’s why data centre managers need cabling technology that guarantees them sufficient bandwidth to last many years. “The new 40Gb line speed over copper from Nexans is the most advanced cabling available today,” Harry Forbes says. “It gives us a major competitive edge to offer customers multiple solutions that are powerful enough to satisfy the needs of the next 15 years.”



“Data centre managers don’t want to deal with a large number of companies that offer them products; they need a partner that can help them build the data centre they need.”

HARRY FORBES, CHIEF TECHNOLOGY OFFICER,
NEXANS CABLING SOLUTIONS

this by offering tools that provide necessary information regarding critical elements such as bandwidth and the assignment of ports. This way, data centre managers have a complete overview of what’s on their system, where it is, and what it does. In this way, they are able to maximise the ongoing efficiency of their installation, and confidently shut down unnecessary components without worry.

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TECHNOLOGY THAT LASTS FOR YEARS

Because businesses and their customers demand 24/7 data availability, any interruptions of data centre servers are unacceptable. Upgrading a server with new cabling to meet growing demands means temporarily replicating the server

DEALING WITH POWER CONSUMPTION

Energy usage of data centres is big on the agenda of companies. The power consumption of a typical data centre is huge, not only in terms of server power but also cooling. “Cooling accounts for about 60% of a data centre’s power use,” Harry Forbes says. “Data centre energy costs are therefore enormous; a 30 megawatt centre will cost approximately 25 million dollars annually to operate.” Not only are energy costs important; also, adherence to a variety of environmental laws designed to limit power consumption to keep carbon emissions under control. Energy usage needs to be suppressed as much as possible, not only for server operation and cooling, but also in the cabling infrastructure. “Nexans shielded cabling technology is less affected by external interference, or noise,” says Harry Forbes. “As a result, our cables need less noise cancellation properties, which means less energy is required for each cable. As a result, power consumption per cable may significantly drop from 15W to 1W! For a typical, fully functional data centre, the energy savings that result are huge.” •