

# Moving from ‘Dumb’ Colo to ‘Smart’ Colo

Ulrich Schälling, Head of Business Line Networks, FNT, talks to InterComms about mastering the business of colocation data centers



*Ulrich Schälling, Head of Business Line Networks, has been working in the telecommunication market in various roles for Alcatel-Lucent for the last 20 years, most of the time in the OSS and system integration business. He is now responsible for the Business Line Networks within FNT.*

**O**ver recent years the digital economy has generated an irresistible demand for more and more IT capability. Whether it's for customer data analytics, media storage and manipulation or simply faster and faster processing of company data, every enterprise recognizes the over-arching importance of securing cost-effective and rapidly scalable IT capability. Most companies recognize that the most sensible corporate IT solution to this exponentially growing demand involves operating some sort of hybrid public cloud / private IT strategy. The public cloud portion certainly offers an alternative to in-house data centers, but security concerns and shareholder paranoia tends to restrict the use of public cloud to a limited subset of functions, leaving 'private' in-house IT responsible for the remainder of the demand. The 'realpolitik' of IT is that most enterprises find it easier, or just more reassuring, to have full control over what they consider to be mission-critical applications, data and network administration. But, private infrastructure does not necessarily require private facilities, and over recent years, 'colocation' has emerged as the solution of choice.

Colocation (colo) is a data center facility in which an enterprise can rent space for servers and other computing hardware. Typically, a colo provides the building, cooling, power, bandwidth and physical security while the customer provides servers and storage. It needs the ability to maximize resource utilization, yet still have the application and network isolation, high availability, resiliency, operational control and visibility typical of a mission critical enterprise data center. Additionally, since colo customers generally don't have convenient physical access to servers, switches and cables, they must also have the ability to remotely manage, monitor and audit systems without being able to physically touch the hardware.

Ulrich Schälling of FNT has huge experience in the challenges of infrastructure management of data centers and an enviable customer list that stretches across multiple industry verticals. "Our customers include all of the German car manufacturers, as well as many companies from finance, media, government and telecommunications", he says. "Data Centers are the great leveler, and the data center infrastructure management challenges of widely different vertical industries are all pretty similar."

## A Single Data Model approach

Ulrich believes that the key to FNT's success lies in their Integrated FNT data Model. They have built a seven-layer data model that seems to be able to operate seamlessly across multiple different industries. Starting at the **Facility** layer that describes the different geographic facilities; then the **Physical** layer which includes the servers, racks and cabling. The **Logical** and **Virtualization** layers model things such as MPLS & SDH as well as the increasingly important virtualized network elements & machines. The FNT data model then adds an **Applications** layer to model things like ERP & CRM, a fundamental **Services** layer modelling services such as video & voice and ultimately a **Business Services** layer into a single coherent data model – covering everything from the physical facility right up to the business services that are being operated.

▶ Another important benefit of the single data model approach comes to the fore when considering the emergence of NFV. NFV is the classic collision point between the telecommunications world and the data center. Managing this hybrid world in a coherent and consistent fashion is one of the areas that Ulrich highlights as a key focus of FNT. NFV will gradually transform network functions (firewall, router, IDS, ...) in a step by step fashion, migrating more and more into the data center. This will be a gradual evolution over the next number of years and for a long time Telcos can expect to be operating in a hybrid environment with a mix of traditional physical network 'boxes' and virtualized network functions. "We have one data model that can stretch across IT, Telecoms and Data Center worlds." This enables FNT to take a more consistent approach across the management of physical and virtualized environments.

**Connectivity and Configuration**

Another key aspect of the colo value proposition surrounds the connectivity that is enabled by the colo provider. Ulrich reinforced this point when he talked about the core focus of the FNT offering. "A colo is ultimately a marketplace that connects customers with partners. People often go to a specific colo provider based on which other solutions are already there. For example, in the financial sector low latency connections between partners is a key decision factor in colocation selection. We focus strongly on enabling this connectivity." From the point of view of the colo provider, this sort of connectivity enables them to enhance their basic space & power value proposition by positively enabling enterprise business models through connecting key partners.

Telx is one of FNT's telco service provider customers and Ulrich explained that the single data model approach is allowing the Telx solution to now be used more widely. "Telx use connectivity functionalities, which we have developed initially for Telco Service providers, but are now reused for Colo Operators on their way being 'Colo full Service' Providers".

FNT also focus on configuration for customers with little or no customization. "We have had large customization project in the past, but we learnt that this approach hampers the progress with customers over the years, because it is difficult for them to benefit from new standard functionality provided within new releases. This has forced us to design a solution that from the outset is sufficiently configurable that it rarely requires customization." In the past this sort 'anti-customization' approach would have limited FNT's attractiveness to large Telcos, who used to routinely demand COTS customization whether they needed it or not. But times have changes and this sort of approach has evolved into becoming a strong differentiator.

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As of today, the whole colo market is driven by efficient management of the infrastructure – essentially space, power and cooling. Colo's make their margin by pricing power on a flat rate per rack while implementing management approaches that drive down the cost. But space, power and cooling will ultimately become the base offering from colo providers with the real competition between colo providers focusing on the smarter advanced value add service offerings. "We are already beginning to see a shift towards power usage based billing which will drive requirements for a real-time dashboard on consumption – power, temperature etc.", mentions Ulrich. "Additionally, we are beginning to see a growth of connectivity and other value add cloud services and disaster recovery etc... from the colo providers. The portfolio of the colo providers is becoming more and more sophisticated beginning to include capabilities such as enhanced product and portfolio (catalog) management covering IT as well as Telco products and services, and Ulrich is looking forward to competing in this new 'smarter' world.

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