Irish mobile service provider, Meteor, builds service innovation and business expansion around next-generation data center strategy.

Meteor’s huge and rapid growth over the last few years was starting to put pressure on existing operations and business systems. Subscribers have grown from 90,000 to one million over the last five years, placing greater demand on business systems and data management. In parallel, technological advances in mobile telephony, such as mobile broadband, presented Meteor with an opportunity to differentiate its offering with new and innovative services. The need to improve and rationalize operations and the opportunity to significantly increase market share have influenced Meteor’s strategy to re-build its data center and take a new approach to data and application management. Meteor’s long-time relationship with Cisco and trust in its technology led Meteor to choose Cisco as the foundation for its data center strategy.
Rob Kennedy, IP engineering manager at Meteor, says, “Cisco provided valuable advice, support and direction and we also found Cisco performance and equipment to be of the highest standard. Cisco’s next-generation data center product portfolio offers value for money combined with experience in the industry in which we operate, this was why we chose Cisco for our new data center infrastructure.”

**Network Solution**

Meteor’s strategy is based upon the Cisco Data Center 3.0 vision for building, implementing and operating a virtualized, next-generation data center. Cisco Data Center 3.0, which offers products, services and programs that support a holistic view of the data center, is helping Meteor to centralize and consolidate its data center resources and services and develop a high performance environment.

Meteor’s entire data center networking infrastructure uses Cisco technology. This includes a Cisco Wide Area Network (WAN) and Local Area Networks (LAN) in offices connected to Cisco data center switching in the company’s Dublin data center. Meteor uses a Cisco Storage Area Networking (SAN) which helps to improve data management and reduce the number of physical storage devices needed. Meteor’s data center handles up to 20 Terabytes of data. Meteor also uses the Cisco Application Control Engine (ACE) which improves application performance while distributing services across multiple virtual devices, reducing data center power consumption and provisioning cycles. The latest development is deployment of Cisco’s most advanced data center networking platform – Nexus.

Near to its existing data center, Meteor is building a next-generation data center network using the Cisco Nexus platform which supports 15 Terabits per second performance demanded by an innovative mobile service provider like Meteor. Kennedy says, “Cisco Nexus Data Center switches really are at the forefront of the next generation data center environment. It is because of the capability of Cisco Nexus to deliver benefits like device consolidation, virtualization and high availability that we can start to transform data center operations.”

Initially, Meteor will use its new data center to handle and manage its 3G mobile phone service and its new mobile broadband data service. During 2009 it will move most of its new business systems and applications over to the new data center and start to upgrade the old one.

The Cisco data center networking solution at Meteor has been implemented by LAN Communications Ltd, a Cisco Gold Certified Partner.

**Business Results**

The Cisco data center solution is pivotal to Meteor in supporting its business operations and helping the company provide new products and services to its customers.

Kennedy says, “With the Cisco data center networking solution we have developed an infrastructure that delivers high bandwidth capability, performance and reliability that new services – like 3G and mobile broadband – demand. Not only that, with Cisco we’re putting in a solution that can scale up hundreds of times what we’re offering now so we can constantly innovate and improve our service. This is all about gaining market share and growing the business.”

Meteor has already launched its 3G voice service and is now developing other complementary services like 3G video call, video conferencing and other 3G data services that start to turn mobile phones into mini PDAs (personal digital assistants).

Kennedy adds, “Cisco data center networking technology is not just about raw performance. We need to ensure that performance impacts not just things like surfing the web, but all the other services like fast billing or improving the top up service for customers. It means offering the best services possible to Meteor customers.”
Another key aspect of the Cisco technology is making the data center more efficient and cost effective. Kennedy says, "Being able to consolidate data center resources and virtualize services is going to save money, but still drive the performance that we need. Cisco’s next-generation data center products mean that instead of 20 switches we can build just two that deliver core performance and run every service securely and separately. Previously, we’d have had a few 100 physical servers, now we’re looking at 20 physical servers with 200 virtual servers running on them. We are planning wholesale virtualization across the board from the server down to the network and all the services. Already we are starting to see a 4:1 saving as a result of data center virtualization.” Meteor has around 400 physical servers, but up to 1600 that are virtualized. This of course allows Meteor to create a reduced carbon footprint for its new data center. By consolidating and reducing the number of physical devices needed in the data center Meteor can reduce the amount of power needed for running and cooling equipment.

Based upon the Cisco Data Center 3.0 framework, Meteor’s future strategy is to integrate its networking infrastructure so that all parts of the infrastructure become fully connected, from data center, SAN, WAN and LAN to, eventually, integrating the mobile radio network. “Our end goal is to have a completely virtualized data center that can be self provisioned. When one server reaches max capacity, another virtual server is rolled out automatically with the end result being a completely scalable, virtual network,” says Kennedy. “The Cisco data center solution will be at the core of every service that Meteor runs over the next five years.”

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