

Doxford Data Center Video Case Study



Peter Hands: (*Super:* Vice President, EMEA Service Delivery) EDS' data centers have more than three million square feet of managed floor space. In these centers we manage our customers' mission-critical data, systems and applications, through a range of services including hosting, storage management, security, networking and workplace services. Today we host more than 184,000 mainframe MIPS, in excess of 300,000 servers, and store more than 20 petabytes of data in our 15 service management centers and more than 100 data centers. This is EDS' Doxford data center, located in the northeast of England.

Dave Middleton: (*Super:* Manager, Doxford Park) The site was designed to be scalable so that we could build it out in a phased approach. The first phase opened in 2002, the second phase in July 2006. And these were built with a totally separate infrastructure supporting them, so that a problem in one area could not impact the entire site.

Peter Hands: EDS has installed two dedicated high-capacity fiber connections into Doxford, which allows for our active-active replication, and allows us to make sure that we have continuity of service if either of the two disparately-routed connections fails.

Dave Middleton: We must have two feeds coming into the site from a utility company; two complete sets of transformers. Internally within the building we also have a dual grid, and either grid can supply the full load of the building, and each of the data halls can be supplied independently. They also contain an item known as the static switch; this enables them to seamlessly switch between supplies without the IT equipment seeing the change in supply.

Peter Hands: Clearly security is paramount in running any data center such as this, and Doxford operates both physical and logical security that is world-class.

Dave Middleton: Each of the data halls is protected by its own pair of uninterruptible power systems. These systems comprise of power metering and correction systems, and also comprehensive battery backup. All of the batteries are continuously monitored for condition and they are physically inspected twice per day. This is the center of the fire suppression system, which is built around a 40,000-gallon tank of water and a dual pumping system. Each of the data halls also has its own fuel supply to its own generators. That fuel supply is designed so that, running at maximum load with all three generators running, we can supply fuel to them for a minimum of three days.

Peter Hands: EDS uses the same toolset, processes and methodology to deliver the same class of services regardless of where you are in the world.

Dave Middleton: ISO 9001, combined with the ITIL framework that we operate within and its supporting toolset, ensures that we can set a consistently high standard in repeatable services to our clients. The building itself is around 60,000 square feet in total. The data hall contains a raised floor, as you would expect; in fact our floors are sitting at 750 millimeters. The computer room air conditioning units are top quality, designed to dissipate the heat that the equipment generates.

Peter Hands: Our data center specification that we use globally is under constant review by EDS specialists to ensure that we remain at the leading edge of resilience and security requirements.

Dave Middleton: One of the keys to the Doxford design philosophy is not reacting to a problem; it's preventing that problem actually occurring.

Peter Hands: Regardless of whether you're here in Doxford, in Sydney, in Kuala Lumpur or in Plano, Texas, customers can expect the same level of service from any of our EDS data centers globally.