OPEN storage solutions™

Success Story

Princess Margaret Hospital

Princess Margaret Hospital has achieved an international reputation as a leader in the fight against cancer and is considered one of the top comprehensive cancer centres in the world, treating over 6,000 cancer patients with radiation therapy each year on 17 radiation machines.

Princess Margaret Hospital's international reputation for excellence stems in part from its history of pioneering discovery. The Hemitron, a machine used to deliver full and half-body radiation, was designed and developed at PMH. The first research to determine that Hodgkin's Disease can be cured by radiation therapy was undertaken at Princess Margaret Hospital, boosting the disease's cure rate from 25% to 75%, and the world's first ultrasound device capable of producing images of the human eye at microscopic resolution was developed at PMH.

Princess Margaret Hospital's record of pioneering achievement continues today. In October, 1998, researchers at PMH discovered the PTEN gene, a tumour suppresser gene whose mutations are linked to many different types of cancer, paving the way for future research into how to reverse a cell's progression towards becoming a tumour.

The Environment

Princess Margaret Hospital had a system of distributed data storage across the organization. They were looking for a method of consolidating their client information onto a single system to have a much more effective and efficient data management capability.

The Requirements

Princess Margaret Hospital did not want to sacrifice performance for the benefits of consolidation. They insisted on high performance access to the desktop. In addition they had concerns of redundancy and connectivity. Having all the data in one location raised the concern of power failure or system failure due to a natural cataclysm to a new level. Uninterruptible power supplies and clustering did not fully allay their concerns.

The Solution

It was determined that multiple copies of the data needed to be created and that the data had to be available to all servers. The data would reside on two campuses and would be mirrored. The Open Storage Solutions® data storage systems, which were 2.5 kilometres apart, would be connected by dark fibre. Additional redundancy was built into the system using redundant host-bus adapters, and switches; the effect being that any unforseen failure would result in a user being rerouted through another data path for continuous data access.

The system includes Sun servers, Ancor fibre channel switches, Emulex host bus adapters, Veritas software and 4 terabytes of disk storage.

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