



## CANCER RESEARCH

# PROVIDING AFFORDABLE, RELIABLE BACKUP AND RECOVERY FOR CANCER RESEARCH UK

**Cancer Research UK's IT infrastructure is critical in safeguarding supporter data, scientific research, and mission-critical applications. Their data cannot be compromised.**

**Cancer Research UK (CRUK) outsourced its back-up and recovery infrastructure but found this was cost prohibitive and not as flexible as it needed. CAE worked with CRUK to deliver a cost-effective back-up and recovery solution, which gave the charity the adaptability it needed**

### The Challenge

CRUK had high backup costs from its incumbent managed service provider and needed a private cloud strategy, requiring a VMware-compatible backup solution so they could back up virtual machines as well as physical servers and provide deduplication.

CAE recommended EMC VNX® unified storage, the EMC FAST™ Suite, Flash drives, and related software to replace CRUK's legacy storage. CAE also recommended using Data Domain for backup as a more cost-effective option versus using third-party backup processes.

CAE deployed Data Domain at CRUK's two data centres (50 miles apart). The first data centre stores vital operating data, runs mission-critical applications, and supports 1200 thin client terminals. The second provides disaster recovery capabilities. A third external centre supports CRUK's customer-facing, website-related data.

**"EMC and CAE play a part by providing excellent foresight, knowledge, and technical capabilities. EMC Data Domain, EMC NetWorker, and our EMC infrastructure also contribute to the fight against cancer."**

**- Michael Briggs, Head of Infrastructure at Cancer Research UK**

If data and applications are corrupted or unavailable, and if backups are not accurate, CRUK's IT capabilities could be compromised. Therefore, each Data Domain system backs up data stored in EMC VNX unified storage and replicates the data between data centres to provide disaster recovery.

### The Outcome

CRUK now has substantially lower backup costs (with a break even point within 18 months). The charity has accurate backups of block and file data, virtual machines, and mission critical applications and has the capability to back up all mission-critical applications and data, as well as testing and development data, with a very small footprint.

CRUK needs high rates of data de-duplication to cost effectively replicate data between data centres for disaster recovery. They've achieved an average compression ratio of 9.6 times — so can transfer data between the data centres located 50 miles apart over an existing one GB IP pipe, that's not bandwidth intensive.

Data Domain de-duplication also minimises backup windows at CRUK. CRUK can confidently back up within its overnight window without the concern of backups running into the next business day.

CRUK now has the confidence that its virtual machine, as well as block and file data, are fully protected.