CAE
TECHNOLOGY ON POINT

CANCER RESEARCH UK

CASE STUDY | CHARITY

Providing affordable, reliable backup and recovery for **Cancer Research UK**.

What was the challenge?

- CRUK had high backup costs from managed service provider

- CRUK data growth required a solution that could provide de-duplication

- CRUK needed a private cloud strategy, requiring VMware-compatible backup solution so they can back up virtual machines as well as physical servers

'While the service provider offered a very good backup system, this simply wasn't cost effective. If someone within CRUK asked us for a new IT service, the first thing I worried about was the price of backup. I knew we needed a more cost effective solution,'

Michael Briggs, Head of Infrastructure at Cancer Research UK

THE POINT

Cancer Research UK's IT infrastructure is critical in safeguarding supporter data, scientific research, and mission-critical applications.

Their data cannot be compromised.

CRUK outsourced their back up and recovery infrastructure, but found this was cost prohibitive and not as **flexible** as they needed. CAE worked with CRUK to deliver a **cost effective back up** and recovery solution, which gave them the **adaptability** they needed.

THE OUTCOMES

- **Substantially lower backup costs (break even in 18 months)**
- **9.6 times de-duplication ratio, minimising backup times**
- **Data replication between data centres for disaster recovery**
- **Accurate backups of block and file data, virtual machines, and mission critical applications**
- **They can back up all mission-critical applications and data, as well as testing and development data, with a very small footprint.**

SOLUTIONS

- CAE Solutions offered
- EMC Data Domain
- EMC NetWorker
- EMC VNX unified storage
- EMC FAST Suite
- VMware

SERVICES

- Design and scope,
- Implementation,
- Project and relationship management,
- Network management

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The CAE approach

PROTECTING VITAL DATA

· CAE recommended CRUK EMC VNX® unified storage, the EMC FAST™ Suite, Flash drives, and related software to replace CRUK's legacy storage.

· CAE deployed Data Domain at CRUK's 2 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.

· Each Data Domain system backs up data stored in EMC VNX unified storage and replicates the data between data centres to provide disaster recovery.

· CAE recommended using Data Domain for backup as it's much more cost effective than using third-party backup processes. CRUK now have the confidence that their virtual machine, as well as block and file data, will be fully protected.

SCALABILITY AND EASE OF USE

· CRUK now have capacity and scalability,as backup storage is no longer an issue.

· They can back up all mission-critical applications and data, as well as testing and development data, with a very small footprint.

WHY CAE?

Our agility allows us to take a strategic approach to understanding, recommending and implementing our clients' needs, delivering a truly customised approach and empowering our customers.

We work to deliver an outcome that exceeds our customers' expectations. We drive cost efficiency down, ensuring we benchmark costs to ensure predictability, transparency, consistency and inclusivity. Our agility is demonstrated through time gains and strategic efficiency, which we measure so we can refine and improve.

For more information, contact **hello@thisiscae.com**

RELIABILITY SAVES LIVES

· If data and applications are corrupted or unavailable, and if backups are not accurate, CRUK's IT capabilities could be compromised.

· They're not the scientists doing the research, however everything CRUK does is to ensure funding gets to those scientists - their research saves lives.

· The system has to be as reliable as possible to support this.

ENABLING REDUNDANCY, REDUCING BACKUP TIMES

· CRUK needs high rates of data de-duplication in order to cost effectively replicate data between data centres for disaster recovery. They've achieved an average compression ratio of 9.6 times — so are able to 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.

"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

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