

RAL Space ensures the continuity of its ongoing research projects by deploying a stretched cluster with StarWind Virtual SAN (VSAN)



About the Company

RAL Space carries out world-class science research and technology development. As an integral part of the Science and Technology Facilities Council (STFC), RAL Space is the space hub for UK Research and Innovation.

Industry

Aerospace

Location

EMEA (Great Britain)

Solution

StarWind Virtual SAN (VSAN)

"StarWind VSAN was the only solution that met our requirements in terms of functionality and price. It allowed us to deploy a 3-node stretched cluster which allows us to easily move VMs between sites and allow for automatic HA."

Laurence Brazil,
Infrastructure Manager

Challenge

Before implementing StarWind Virtual SAN (VSAN), RAL Space relied on a traditional SAN-based vSphere cluster infrastructure with the ESXi hypervisor. The existing setup faced significant challenges, primarily due to single points of failure and the need for manual failover during issues. It was also prone to downtime and required constant monitoring and manual intervention, hindering the institution's efficiency and posing risks to the continuity of ongoing projects.

The traditional SANs couldn't guarantee high availability (HA) and fault tolerance, crucial for RAL Space's critical research.

Solution

RAL Space chose StarWind VSAN as it allowed the institution to deploy a 3-node stretched cluster and successfully eliminate single points of failure. The new infrastructure provided seamless VM mobility between sites, enhancing operational flexibility and fault tolerance. The automatic HA feature ensured continuous operations even during hardware issues. This streamlined the IT infrastructure, providing a robust and scalable foundation for future growth.

Looking ahead, RAL Space plans to expand its storage capacity by adding 264TB to the existing cluster. The resulting infrastructure has exceeded expectations, saving at least \$10,000 over the past year.