VCE

CLIENT
Eclipse Aerospace, maker of technologically advanced, twin-engine jets

CHALLENGE
Replace outdated systems with a virtualized data center that supports the business more efficiently and cost-effectively

SOLUTION
Vblock Systems running SAP business applications and Siemens Teamcenter and NX CAD Server software

RESULTS
Reduce the IT infrastructure from three computer rooms to three racks and cut costs for power, cooling, space, and management

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VBLOCK HELPS ECLIPSE RESURRECT INTELLECTUAL PROPERTY FROM AGING INFRASTRUCTURE AND TAKE FLIGHT

BUILDING AN AGILE, COST-EFFICIENT BUSINESS USING A VIRTUALIZED DATA CENTER.

In 2009, Eclipse Aerospace acquired the assets of the former maker of the EA500 twin-engine jet. In doing so, it inherited the opportunity to enhance the design and capabilities for owners of the 260 EA500 jets in service—as well as to grow the fleet by introducing new models with significant innovations in many of the jet's aircraft systems.

But the challenges that Eclipse Aerospace faced were daunting. Years of advanced design and manufacturing know-how were sitting in a rapidly deteriorating IT infrastructure spread across the former company's 3 computer rooms.

To "lifeboat" everything from the jet's design and enterprise-class engineering applications to critical CRM tools—and provide reliable backup and scalability going forward—Eclipse Aerospace created an agile, easy-to-maintain virtualized environment running on Vblock™ Systems from VCE.

The Challenge

When the previous maker of the EA500—the world's first very light jet (VLJ)—ceased operations, it left behind an award-winning aircraft design and engineering diagrams cataloging 30,000 parts in 75 configurations. The data was stored in volumes of six to ten terabytes, which—along with the company's business and operational applications and information—were running in three computer rooms using more than 200 servers.

Designed for a much larger company supported by an IT staff of 60, the IT infrastructure had been neglected for several years during the previous firm's shutdown. Hardware and software were generations out-of-date and air conditioning failures had damaged pieces of the infrastructure. "We were holding our breath," said Jeremy Lawrence, Director–Information Technology, Eclipse Aerospace. "If we lost any of this data, the cost to redesign it would have been prohibitive."

Solution

Turning to Vblock Systems from VCE, Eclipse Aerospace found the cost-efficient, highly available, and exceptionally scalable, virtualized environment it needed. With Cisco Unified Computing System (UCS) blades, Eclipse Aerospace achieved the performance density required to consolidate the sprawling server farm.

VCE partner Presidio led the rollout of the Vblock System infrastructure, with a highly experienced project manager on-site throughout the one-month go-live and the follow-on fine-tuning period. Upgrades of key SAP, Siemens Teamcenter and NX CAD Server software, and other virtualized applications—plus the decommissioning of outmoded systems—continued for approximately a year.

"We owe Presidio a lot of credit—this wouldn't have been possible on our own," Lawrence remarked. "We virtualized 100% of the company while keeping the business running—and most never experienced a service interruption."

Eclipse Aerospace also invested in an EMC Avamar disk backup system to provide the desired redundancy. In addition, the company relies on both VMware vCenter Operations Management Suite and Cisco UCS Manager to streamline the management of its virtualized environment.

Results

With VCE and Presidio, Eclipse Aerospace was better positioned for the complex production start-up for the next-generation Eclipse 550 jets. The new jets have begun moving down the line and the company's order book is filling up fast with first deliveries planned in 2013.

Eclipse Aerospace has benefited from its virtualized Vblock Systems environment in a number of ways:

- The company's IT infrastructure has shrunk from three computer rooms to three racks with excess capacity to support expected business growth.

- Eclipse Aerospace is reaping a significant savings on power, air conditioning, and space costs.

- The physical-to-virtual migration was effectively accomplished in just three months.

- An IT staff of only ten now efficiently manages the entire environment.

- The IT team can "dial up or down" the resources needed to address business requests without worrying about performance or capacity.

"One additional benefit is that we've been able to confine most of our upgrades to business hours," noted Lawrence. "With a small IT staff, it's nice to avoid the disruption to people's lives that occurs in handling everything in the evenings or on weekends."

"**The only way we could run our infrastructure was through virtualization**—there was no other alternative. If we had tried to work with, clone, and move around our large data sets and volumes with the original hardware, I think we'd still be doing it!"
— *Jeremy Lawrence Director, Information Technology Eclipse Aerospace*

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