

## Challenge

- Protecting data and increasing capacity on a per server basis was time consuming and expensive, and resulted in unwanted downtime while servers were being backed up or upgraded.

## Solution

- A SANRAD V-Switch 2000 Cluster

## Benefits

- Servers can remain online while adding capacity or during backup. V-Switch clustering and data mirroring provide no single point of failure to ensure continuous access to application data.

*We selected the V-Switch for its clustering capability to deliver high availability, and liked SANRAD SNAPshots combined with Microsoft VSS, Veritas BE 10 and an Overland REO VTL to greatly decrease the backup time"*

Mr. Alex Kaiser, Director, ProASP, Austria



## SANRAD helps ProASP keep Austrian Hotels running Smoothly

Johann Strauss, the king of waltz, made Vienna - the city alongside the Danube – famous all around the world. His compositions such as "The Blue Danube", "The Fledermaus" and "Viennese Blood" are considered worldwide synonyms for Viennese tradition and flair. As Johann Strauss kept Austrians waltzing, ProASP keeps hotel and restaurants thru-out Austria operating with world famous Austrian efficiency.

ProASP is a leading application developer and solution integrator specializing in automating hotel and restaurant operations to decrease costs and improve customer satisfaction.

ProASP was growing quickly, but their data was still being stored on the disk drives within their servers. Managing data, ensuring data availability and increasing capacity on a per server basis was both difficult, and expensive and it also resulted in unwanted downtime and long backup windows. ProASP realized they needed a centralized storage solution to improve data availability, increase storage utilization and decrease their data backup window. They evaluated products from NetApp and FalconStor but found them to be beyond the range of their budget. With the help of storage experts, ASTCO in Vienna, Austria, ProASP selected a SANRAD V-Switch cluster combined with two Infortrend, EonStor Arrays to address all their storage needs.

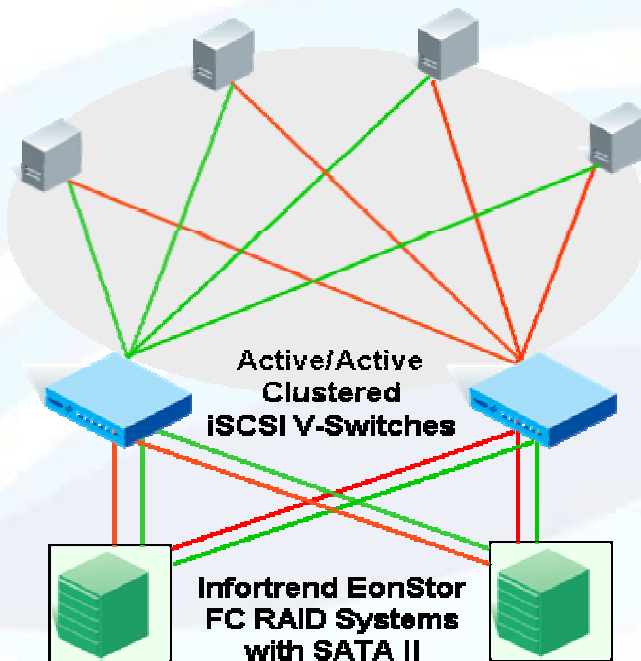
The company began looking for a solution that would allow for failover to secondary devices or volumes while maintaining configuration of access and user rights and permissions. It also wanted an open system that would allow it to continue using existing storage assets for cost-savings benefits.

Besides being more cost effective than NetApp and Falconstor, SANRAD was selected because it allowed ProASP to build an IP SAN and provided the high availability and data protections features required by ProASP.

ProASP configured the V-Switch's to mirror all their mission critical data to two independent Infortrend storage systems. If one of the mirrored storage systems fails for any reason, the remaining storage system will continue to service the needs of the application servers and ProASP staff.

### ProASP IP SAN Topology

**HP servers with Microsoft Virtual Server each with approx 12 VMs..**



V-Switch clustering was also an important feature for ProASP. If a V-Switch is temporarily off-line, the second V-Switch attached to the same storage and the same host network can take over the IP addresses and data communication for the off-line V-Switch.

ProASP also uses Microsoft Volume Shadow Copy Service (VSS) to eliminate the backup window. VSS can produce consistent SNAPshots for online backup by coordinating applications servers with the V-Switch SNAPshots. The combined solution of VSS and SANRAD V-Switch SNAPshots allowed ProASP applications to remain online for user access while data was being backed up to tape.

“We can scale capacity and increase individual server volumes on the fly within minutes,” said Mr. Alex Kaiser, Director of ProASP, Austria, “It’s been easy to manage and performance and reliability have never been an issue. And that is very important to a business that is expanding as quickly as ProASP.”

### Future Expansion

ProASP currently uses two V-Switch 2000's in a cluster providing storage services to four HP DL145 servers. ProASP continues to expand their customer base and will be adding more servers and storage capacity to the IP SAN by the end of 2006.