The University of Wisconsin Stevens Point Achieves High Data Availability and Optimizes Its Expenses with **StarWind Virtual SAN**

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Rob Kobiske, Network & Server Administrator at UWSP



About the Company

The University of Wisconsin Stevens Point (UWSP) is located in Stevens Point, Wisconsin and is one of the largest educational organizations in the district. The history of the institution goes back to the year of 1894 when it was established as Teachers College.

Today, UWSP is a university that has an enrollment of about 9,000 students and has roughly 1,200 facility and staff. The students are offered over 120 undergraduate program choices and numerous campus and athletic activities. The university is consistently named one of the top Public Midwestern Universities-Master's level in U.S. News and World Report's College Rankings.

www.uwsp.edu

Environment

Two front-end clustered servers connected to two StarWind HA servers.

Challenge

- To provide highly available storage that will ensure the continuous accessibility of data.
- To resolve the issue of hardware underutilization and server sprawl.

Solution

StarWind Virtual SAN

Results

- High availability of all critical data
- Effective use of hardware and network resources
- Reduction of storage-related expenses

CHALLENGE

The University's "need" was to create highly available shared storage to ensure the better protection of the intellectual assets of its users. UWSP has a centralized IT infrastructure that provides its large user community with an access to network storage (5 GB) for private and educational purposes. The network shares vary in size and are anywhere from a few gigabytes to a few terabytes. The more departments that started to utilize the network storage, the more of a burden was put on IT.

"We needed to make the storage highly available, as users expect their files to be accessible all the time. Network storage became a business necessity for us. We realized that if storage wouldn't be available, classes might not be able to meet," said Dave Dumke, Chief Information Officer.

The IT team first made an attempt to provide network storage by deploying file servers. However, as one would run out of space, another one would need to be purchased and brought online. This proved to be quite troublesome both for the users and IT. When the file servers filled up, shares needed to be shuffled between different servers, and then the user's links to those shares had to be manually updated to reference the new file server and share. *"This methodology provided no high availably and was a management nightmare because of the large server sprawl," complained Rob Kobiske, Network & Server Administrator at UWSP. "Finally, we couldn't accommodate storage requests, as so much storage was needed on the network."*

SOLUTION

After researching the possible solutions, the IT staff realized that using a clustered file server was the easiest option for them. Among the multiple SAN providers available on the market they selected StarWind Software, Inc. The most appealing to the university's IT team was the flexibility that StarWind provided.

"We were excited by the idea that we could buy off-the-shelf drives, connect them to a server (of our choice) running StarWind, and make the storage accessible via the network," shared Dave Dumke. "We could now buy fast drives for data that we know would be accessed frequently, and slower drives for bulk storage and files that are accessed on an infrequent basis. We can also grow at our own pace."



Now there is no longer a necessity to build and deploy new dedicated file servers when one fills up; shuffling shares to those new servers is also eliminated. It is possible to change the file location on the backend and just update the physical path that the share points to on the file servers. Files can be moved around to different drives, and the storage became user-transparent. The solution from StarWind was strongly supported by the easy to understand documentation. Therefore, the UWSP IT team was able to setup a clustered file server connected to redundant storage in a matter of minutes.

Before the implementation of the **StarWind Virtual SAN** solution, the IT departments suffered from a desperate underutilization of their server capacity. There was excess storage space on some servers, while others were running out of it. Buying the new disks was senseless as it constantly added to the operating expenditures and resulted in painful downtime. StarWind optimized the use of the storage capacity and saved money for IT.

"We were amazed at how easy the setup process was. In no time we had two StarWind servers clustered together providing highly available storage. Downtime is now a thing of the past," said Rob Kobiske, Network & Server Administrator.

The cost of StarWind plus the ability to deploy the software on any server using any disk drives made StarWind the clear choice for UWSP. Absence of hardware lock-in and the scalability for keeping pace with the growing storage demands are very important decision factors to stick with this solution.

The IT team at UWSP considers StarWind to be a wonderful option for the educational sector where budgets are one of the major drivers.

RESULTS

Deployment of highly available shared storage

The University IT team managed to deploy highly available storage making its users' data accessible at any time. The IT staff now feels confident that if one server were to fail, the connections will be automatically failed over to the other server. The created storage system is able to keep up with technology changes and the escalating data growth. It provides the reliable failover, protecting the data assets and maximizing the overall system performance and uptime.

Optimized disk space utilization

StarWind enables the university to fully use its storage space capacity, drastically increasing utilization rates, eliminating unnecessary downtime for provisioning, and improving the response time to the storage needs.

Starwind defeated server sprawl

The IT team was able to reduce the number of file servers by 60%. Currently, the institution's IT has two front-end clustered servers connected to two highly available StarWind servers. This redundancy of storage resources ensures business continuity and the availability of data. The Virtual SAN built with StarWind is easy-to-manage, which substantially reduces time-consuming maintenance for the UWSP administrators.