



## Autopista Vespucio Norte deploys leading edge IT with VMware infrastructure

Autopista Vespucio Norte (AVN) has employed virtualization solutions since 2008 and has since updated its entire IT infrastructure. The migration of its platform with VSAN technology became a major challenge for the IT area. The company is currently supported by a fully virtualized and dynamic operation, which allows for significant and tangible savings in operating costs.

Autopista Vespucio Norte (AVN) is one of the highway infrastructure concessionaires that manages the urban highway network in Santiago de Chile. Its mission is to reduce travel times, increase user safety levels, contribute to the city's urban development and improve the quality of life of inhabitants. At the same time it has accepted to be fully committed with the development of its staff members, efficiency of its processes, profitability of investments and the liabilities undertaken with the conceding authority, the Ministry of Public Works.

AVN highways span over 18 miles, connecting the capital city's east and west sides. The company is 100% controlled by Brookfield Asset Management, a Canadian consortium.

### The Challenge

Public-private service companies like this have high technological demands and social awareness. With this in mind, AVN understands the importance of investing in state-of-the-art IT products that are both powerful and highly reliable.

The Autopista Vespucio Norte technological platforms are basic pillars for day-to-day operations. Since the beginning of its operations, the company chose to leverage virtualization solutions that have resulted in a number of advantages and benefits.

Later on, AVN decided to pursue a technological renewal process to maintain uptime and performance levels reflected in the VMware 4.0 platform.

"Preserving operations by Autopista Vespucio Norte during the migration to the new VSAN technology platform was a major challenge for the IT department," said Agustín Solís, Head of Technology of Autopista Vespucio Norte. "This renewal was backed by the permanent support of the consultants at S&A Chile."

The company's IT team was aware of the challenge, as it was one of the first VMware VSAN implementations consisting of a group of over 50 servers.

"Its complexity lay in the fact that as this was an unprecedented technology in the market, we could not rely on previous experience or proven success cases to validate the VMware VSAN solution," explained Solís.

### INDUSTRY

Public Sector

### LOCATION

Santiago de Chile

### KEY CHALLENGE

Preserving Autopista Vespucio Norte operations during the migration to VSAN technology platforms

### SOLUTION

Implementation of a virtualized platform with servers connected to VSAN storage

### BENEFITS

- The company's operations were successfully preserved during migration to the new VSAN platform
- Continued partnership with VMware as the company's virtualization platform
- 50% reduction in capital expenditures per application
- 60% reduction in operating expenses per application
- Increased control of IT service provision

***"Following a number of assessments, the platform of choice became increasingly clear, and VMware was chosen as the virtualization platform for our business."***

Agustin Solis  
Head of Technology  
Autopista Vespucio Norte

### VMWARE FOOTPRINT

- VMware Virtual SAN

### VIRTUALIZED APPLICATIONS

- 3 IBM System X3630 M4 with 2 Intel Xeon 10C processors and 256 GB RAM Memory servers
- 1 42U IBM Rack
- 2 Arista 7150 Series 1/1 SFP Ultra Low Latency Switch
- 2 Express IBM System Storage SAN24B-4 with 8 active ports
- 6 VMware Enterprise for 1 processor, Lic & 5 Yr Subs
- 1 VMware vCenter 5 St vS5 pIL 5Y
- 6 VMware VSAN 5 for 1 processor, Lic & 5 Yr Subs
- 65 TB VSAN Storage

### PLATFORM

- VMware VSAN

### PARTNER

- S&A Chile

### The Solution

When the time came to choose a partner for the company's technological renewal, AVN decided to continue their partnership with VMware.

The company chose VMware vSphere 5.5 as the virtualization platform and VMware Virtual SAN (VSAN) as the basis for the main storage of the technological renewal.

"Following a number of assessments, the platform of choice became increasingly clear, and VMware was confirmed as the virtualization platform for our business," said Solis.

### Business Benefits

VMware products and technology delivered several benefits to the company, including a drastic 50% reduction in capital expenditures per application and more than a 60% reduction in operating expenses per application.

Control over IT service provision also increased, while automating and incorporating safety, scalability and availability. In addition, internal resources were used to preserve the flexibility to select other types of operating system, application and hardware.

A converging storage solution was chosen to abstract storage resources from the servers (ESXi) that form part of a virtual infrastructure, using HDD and SDD disks from the mentioned servers to create a resistant high-performance storage layer in the hypervisor layer.

### Looking Ahead

The company has plans to acquire a Private Cloud. "We would like to continue the optimization process," concluded Agustín Solis, Head of Technology of Autopista Vespucio Norte. "This will be possible by analyzing and evaluating the current environment, pushing ahead business continuity goals and planning our development towards the Private Cloud."

