



Gazechim

Profile

- Gazechim is one of the leading distributors of liquefied gas, plastic and refrigerant in Europe.

Applications

- Bookkeeping application, also used to manage relations with its 8,000 customer base.
- Stock management application, with the delivery of 290,000 bottles a year.
- Accounts management application, with 250 million euros turnover.

Challenges

- Modernizing and making the server infrastructure fault tolerant without modifying the applications.

Benefits

- 24x7 high availability of applications.
- Use of standard Intel servers with virtualization.
- Applications with their unchanged, original OS.

Gazechim combines virtualization, full replication of virtual machines and high availability using SafeKit.

Modernizing and making the infrastructure highly available without modifying existing applications

Gazechim's IT department was faced with a complex request:

- Migrate old applications to new Intel servers without modifying the applications or their original operating system,
- Ensure 24x7 high availability,
- Minimize costs and make sure that no server is idle and dedicated to fault tolerance only; avoid the use of a SAN and a costly, shared-disk system between the servers.

To solve these complex constraints, Gazechim has deployed a simple solution, based on Evidian SafeKit and its virtual server clustering technique.

Easy deployment of a high-availability solution

Gazechim has deployed a virtual server cluster with the following characteristics:

- Two standard Windows physical servers without shared disk,
- An hypervisor, set up on the two physical servers,
- Virtual servers distributed over both physical servers,
- The critical bookkeeping, stock-management and accounting applications with their original operating systems installed on these virtual servers,
- The software clustering solution, SafeKit, installed on the 2 physical servers. SafeKit replicates the virtual servers in real time and restarts them in case of failure.

All Gazechim's constraints have been solved with a simple, cost-effective solution. Each application runs on a virtual server, together with its original operating system. The virtual servers are distributed over two physical servers. Both physical servers are active and highly available. There was no need to buy any expensive, external SAN because SafeKit performs software clustering and real-time virtual server replication through the standard network.

The virtual server clusters deployed at Gazechim

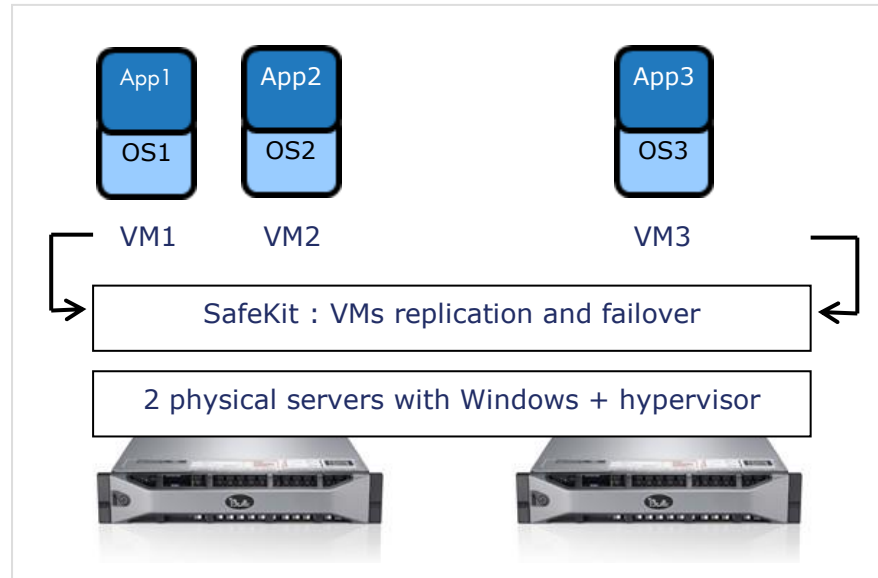
Three virtual servers are deployed at Gazechim. Each one contains:

- A Windows operating system with the bookkeeping and customer relations-management software,
- Another Windows operating system with the stock management software,
- Another Windows operating system with the accounts management software.

These three operating systems are three guest operating systems. SafeKit ensures full and real-time replication of each virtual server and automatic recovery of a virtual server in case of failure, as shown in the example below.

"We have found a simple solution for a complex objective. We have implemented a modern, fault tolerant and generic server infrastructure without changes to our application. This is the main advantage of the solution: today, we can very easily add new virtual servers with new applications to the cluster without any integration effort. Moreover, thanks to the SafeKit solution, we have saved the cost of investing in shared disks which are expensive and difficult to manage".

Pascal Gateau,
IT manager,
Gazechim.



Advantages of a virtual server cluster

- The guest operating system in each virtual server may be of any type: old version of Windows, specific versions of Linux...
- Operating-system-dependent applications, such as Microsoft Exchange or Microsoft Active Directory, do not pose any problem because the combination application + operating system is replicated and recovered by SafeKit.
- Integration of a new virtual server with a new application server is very simple. It is not necessary to provide a recovery script per application. SafeKit restarts the virtual server which in turn restarts the application.
- No shared disk needs to be deployed between the physical servers, thanks to SafeKit's real-time replication.

For more information: www.evidian.com