



Harmonic

Profile

- High availability of TV control systems.

Users

- Video operators in charge of broadcasting TV channels cannot be interrupted by IT failures.

Challenges

- Find a simple and robust solution for 24x7 availability of MediaFlex^{SUITE}, the Harmonic management system.

Benefits

- Deploy the solution on two standard Windows servers without shared disk.
- Replicate data in real-time
- Restart automatically the critical application in case of failure.

Harmonic has deployed more than 80 SafeKit clusters with its critical TV broadcasting application

TV broadcasting is a critical activity

Harmonic is a global leader in advanced video compression solutions. Harmonic supports media companies, video service providers and TV broadcasters to deliver premium video quality within the narrowest possible bandwidth for terrestrial, satellite, cable IPTV and OTT applications.

To manage its video compression platforms, Harmonic develops its management solution named MediaFlex^{SUITE}. This application is critical because:

- Video operators who broadcast TV channels must be able to supervise their video system at any time.
- The automatic replacement of any failed video equipment by an equivalent back-up one is achieved by MediaFlex^{SUITE} management system which must therefore stay continuously available.
- The alarm system with filtering and priorities implemented by MediaFlex^{SUITE} must be available all the time to allow the immediate reaction of video operators.

Hardware or software failures cannot stop the Harmonic application

Harmonic has chosen Eviden SafeKit to offer a high availability solution to MediaFlex^{SUITE} and to provide 24x7 availability of its critical application between 2 Windows servers.

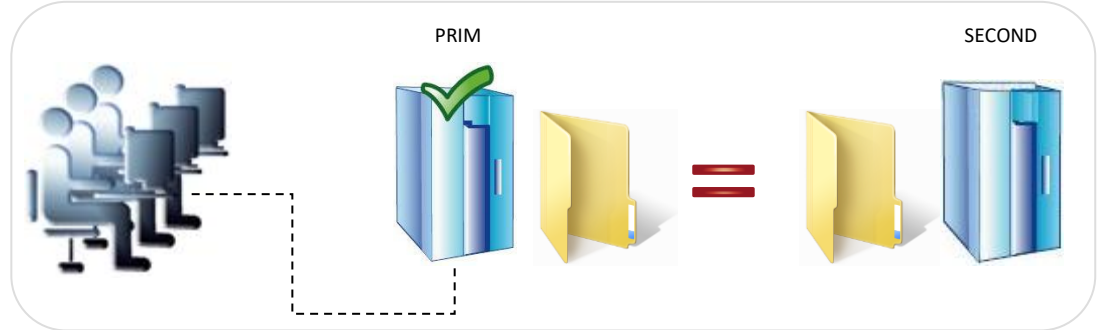
Harmonic chose the Eviden SafeKit high availability solution because it is a product very easy to deploy. Solutions like Microsoft cluster are too complex.

Harmonic deploys SafeKit on two standard Windows servers without shared disk. Without changing the MediaFlex^{SUITE} application, Harmonic customizes SafeKit with a mirror module. The module implements real-time replication of data over the network, automatic restart of the application in case of failure and failover of the virtual IP address.

More than 80 clusters are deployed today worldwide.

Deployment of a SafeKit cluster for high availability of MediaFlex^{SUITE}, the Harmonic critical application

“SafeKit is the ideal application clustering solution for a software publisher looking for a simple and economical high availability software. We are deploying SafeKit worldwide and we currently have more than 80 SafeKit clusters on Windows with our critical TV broadcasting application through terrestrial, satellite, cable and IP-TV. SafeKit implements the continuous and real-time replication of our database as well as the automatic failover of our application for software and hardware failures. Without modifying our application, it was possible for us to customize the installation of SafeKit. Since then, the time of preparation and implementation has been significantly reduced.”



Phase 1. Normal status.

Server 1 runs the MediaFlex^{SUITE} application. SafeKit replicates on server 2, in real time over the network, the files opened by the application. Only the modifications made by the application are replicated, thereby limiting the traffic.

Phase 2. Switchover in case of failure.

If server 1 fails, SafeKit makes a switchover to server 2. SafeKit switches the cluster's virtual IP address and starts the MediaFlex^{SUITE} application on server 2. The application retrieves the replicated files: no write operation on disk is lost between server 1 and server 2.

Phase 3. Failure recovery.

When server 1 is restarted, SafeKit re-synchronizes the files automatically. Only the files modified on server 2 when server 1 was inactive are resynchronized. Server 1 is resynchronized without stopping the MediaFlex^{SUITE} applications on server 2.

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For more information: [SafeKit web site](#)