
Surveon Storage Replication Technology

Application Notes



Technical Support Team

Abstract

For middle to large-scaled video surveillance projects, the data high availability is a key requirement. Users usually deploy the RAID technology, one of the traditional data protection methods. But this kind of protect cannot handle hardware crashes. Therefore, we would like to introduce a storage solution called “remote replication” duplicating a full set of storage subsystem for advanced data availability.

Traditional replication

In order to provide a high available system, many professional specialists would recommend the RAID protection. It is a good solution but it cannot prevent the damages of the hardware storage such as the controller or power failure. Some vendors use the “Data Backup” solution, taking a PC as the backup control center and regularly copying the video data from the storage A to the storage B. So if storage A failed, users still have the storage B.

However, the backup control center, the PC would become the problem itself. If the PC encounters any system/hardware level failures or bandwidth issues, the backup process would fail as well.

Remote replication

Surveon, the security company of the world leading storage company Infortrend Corporation, offers an alternative solution called “remote replication” which can synchronize the video data between two storages using no PC as the back control center.

The storage replicates the video data in the local LAN or WAN. As the Diagram 1 shown, users can setup the replication between storage A and B. Once the storage A failed, user can quickly connect the NVR to the storage B to pick up old video data and start video recording.

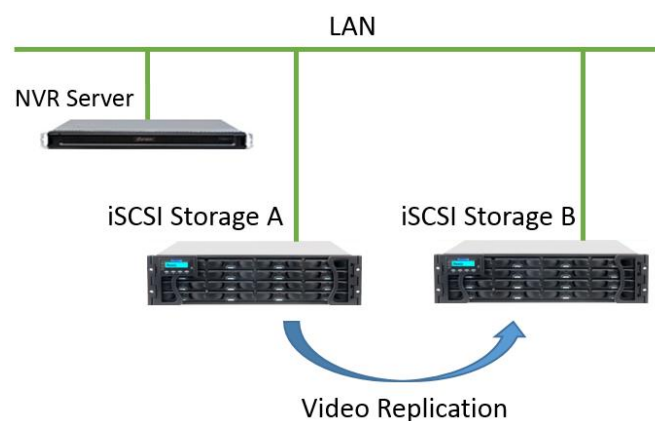


Diagram 1

In Diagram 2, user can setup two storages in different locations and replicates the video from storage A to storage B based on VPN over WAN. If site A encounter any disaster, user can enable site B NVR and storage to recording/playback video.

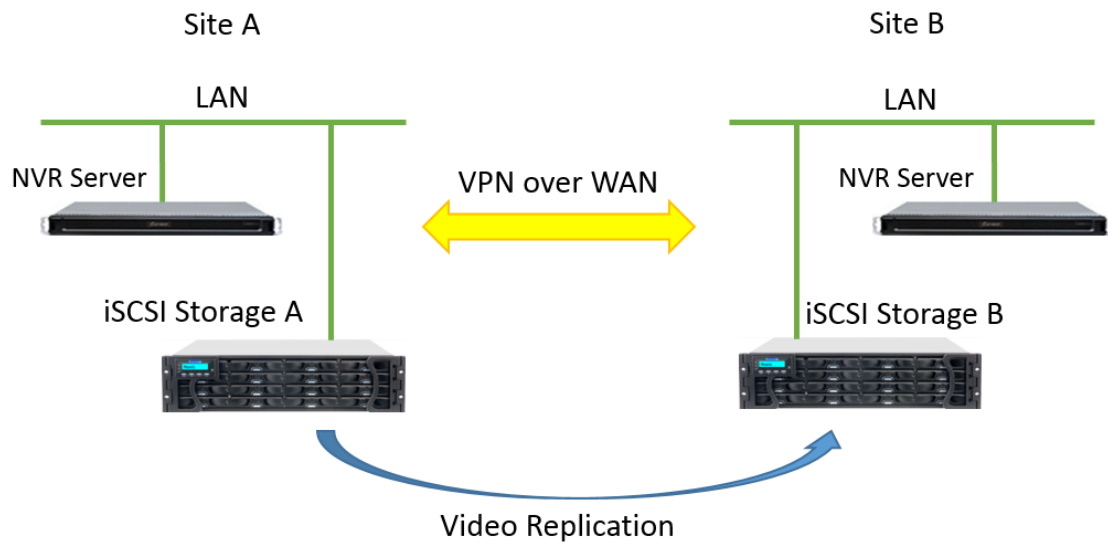


Diagram 2

Moreover, the replication includes Sync and Async options. The Sync replication ensures two storage video data are identical at all time, suitable for high speed network environment. And the Async replication allows user to schedule the backing up to other storage.

Summary

Surveon remote replication technology provides users with a more reliable video replication solution and cost effective architecture. And Surveon supports various options for different replication scenarios. This technology is used in mid to large-scaled projects to ensure a higher reliable system.