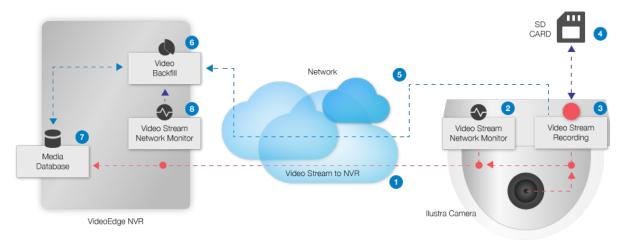




VideoEdge® TrickleStor Ensures Failover Redundancy with Confidence

Connectivity loss is always a concern in IP video surveillance infrastructures. It can result from network failure, power outages, offline Network Video Recorders (NVRs) or basic system maintenance. The VideoEdge TrickleStor feature with Illustra IP cameras provides a highly-integrated camera to NVR connectivity solution that protects against video loss by recording video locally on Illustra cameras. By recording directly onto the camera's internal storage when a connectivity failure to the VideoEdge NVR takes place, video is protected. When connectivity is reestablished, recorded video trickles back to the NVR and is placed seamlessly into video storage at the correct date and time. TrickleStor automates the process of media database repair and provides seamless playback with no need to search in multiple locations, reducing the number of areas that a customer needs to be concerned about when a network communication failure event occurs. Guarantee the safety of your recorded video by having a TrickleStor solution within your video surveillance system.



Features of TrickleStor

- The VideoEdge NVR records a video stream as normal from an Illustra camera 1.
- The Illustra camera monitors the video stream for failure 2. This
 monitoring is independent of either the cause of the connectivity
 loss or network topology.
 - The Illustra camera monitors the same video stream as the VideoEdge NVR is recording.
- When a video failure is detected, the camera starts recording the video from the monitored video stream 3 onto the camera SD card 4. The video is stored at the same frame rate, resolution and encoding as the monitored stream.
 - The video recording takes into account any latency in the detection of the network failure, and can ensure that no video is lost as a result of a delay in detecting the network failure.
- The VideoEdge NVR also monitors the video stream received

- from the Illustra camera **5**. No action is taken by the VideoEdge NVR when video is lost to the camera.
- When connectivity is restored to the Illustra camera, the VideoEdge NVR commences a video backfill operation 6.
- The video backfill operation consists of establishing the gaps in the recorded video that exist in the VideoEdge NVR media database 7 and retrieving the video files that contain this video from the Illustra camera.
 - The missing video is pulled from the Illustra camera by the VideoEdge NVR at an ultra-low bitrate 8. This minimizes the network load (on a potentially already fragile network) caused by the retrieval operation.
 - When video is retrieved from the camera, the video missing from the media database is extracted and automatically inserted into the media database at the correct position, thus creating a seamless stream of video in the database without any user intervention.