# Surveon Failover Solution Keeps Taipei City Hospital Surveillance Intact

To protect hospital staff, patients, visitors as well as assets in many areas, the security in and around hospitals is always a major concern in terms of surveillance operation. Through Surveon's end-to-end solutions, including high-resolution cameras and enterprise hardware RAID megapixel recorders, hospital can easily track every corner at any time to ensure the safety of this medical environment.

## Customer

Combined with 10 municipal hospitals in Taipei, Taipei City Hospital is the largest medical organization in Northern Taiwan, aiming to rebuild public health system and provide full services for people in needs for healthcare. Due to the open nature of these institutions and the sensitivity of hospital operations, Taipei City Hospital needs to upgrade their surveillance system to monitor every corner with improved images while being cost- saving.

# Challenges

As people visiting the hospital are often with either illness or gloomy mood, the conflicts between patients and hospital staff are inevitable. However, incidents like patient fights or disputes among the staff, patients and their families could be much worse in the emergency room. To solve the issues, it needs to have the police involved and the evidences like videos to assist the investigation. Taipei City Hospital used to deploy traditional CCTV that fails to provide images in high resolution, not to mention long-time recording due to the lack of storage capacity. In order to protect the reputation and staff of the hospital, the hospital needs to seek a better surveillance system to provide clear videos as the evidence when conflicts happen.

## Solutions

#### **Unique Failover Solution**

In general Failover functions, 1 or more Failover NVRs can be backup for many protected NVRs, but Failover NVR can be used for Failover purpose only. Different from others, Surveon's Failover solutions support mutual failover (1-on-1 or multiple to multiple) among NVRs.

Surveon provides 2 operation modes.

Operation Mode	Peer Mode	Dedicated Mode
Structure	NVR1  NVR2    NVR3  NVR2    NVR4	WHO Service J (Alacen fort) (Alacen fort) (SIGI Fort ]
Storage in Use	Internal Storage	External Storage
Recording	Protected NVR's videos will be recorded and saved to a separate location in Failover NVR.	Protected NVR's videos will be recorded and saved to the same location in the shared external storage.
Recommended Applications	Healthcare, Intelligent Buildings, Education, Retail, SMBs, Transportation, Restaurant	Banking, Critical Infrastructures, Airport, Casino



### Summary

Customer: Taipei City Hospital, Taiwan

#### Project Needs:

- Upgrading the surveillance system
- Keep half a year recording data without video loss
- Images of high resolution and stability
- Stable performance

#### Surveon Solutions:

Complete solutions with the following:

- Surveon failover solution
- NVR3308 hardware RAID megapixel NVR
- CAM1320S2 2MP compact dome network camera
- CAM4311S2 2MP indoor dome network camera

#### Surveon Solution Benefits:

- High image quality and reliability
- Stable performance under high I/O operations
- 180-day non-stop and zero frame loss recording
- Get everything at one stop with hassle-free integration



Figure 1: Failover Modes Comparison

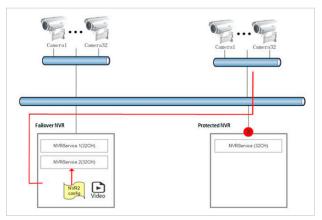


Figure 2: Peer Mode Structure

In this case, Surveon provides Failover solution with unique peer mode that supports mutual failover between two NVR3308. Under normal condition, the NVRs will record to their own internal storage. When one of NVRs fails, the other NVR will take over recording and save the failed NVR's videos to its internal storage. For project with limited budget, this failover working model provides the best alternative allowing the system to record continuously for long time without missing a moment.

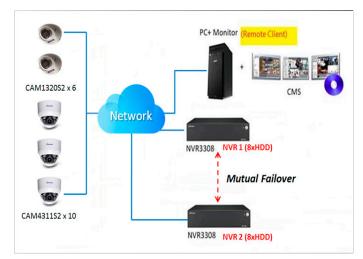


Figure 3: Distributed Architecture

**Enterprise Hardware RAID Megapixel Recorders** 

Supporting up to 64-channel 5 megapixel recording, Surveon NVR3308 with hardware RAID was chosen for its overall system reliability and stability. The large capacity with storage expansion to iSCSI is an ideal option to meet hospital's demand on 24/7 non-stop megapixel recording and longer video retention period.

#### Surveon High-resolution Cameras

Intellize, Surveon's main partner in Taiwan, adopted two models of cameras with full HD 1920 x 1080 resolutions to monitor the emergency room area. The compact dome camera CAM1320S2 comes with 2-axis support, providing a wider coverage while not being too obtrusive for the patients thanks for its compact size. The indoor dome CAM4311S2 with audio in/out with phone jacks supports hospital to record and effectively manage the conflicts or



disputes occurred in the emergency room. Both models provide 2D/3D noise reduction to ensure clear images under different lighting circumstances.

## **Benefits**

#### High Image Quality and Reliability

Surveon cameras provide excellent megapixel image quality with lowest RMA rate allowing hospitals to recognize crucial details and provide the powerful evidence to the police units when necessary. Moreover, Surveon CAM4311S2 comes with the Power over Ethernet and 3-axis adjustment, offering a flexible option to hardware installation.

Stable Performance under High I/O Operations

The embedded hardware RAID accelerator in Surveon NVR3308 ensures that the cameras have access to the required bandwidth when recording images, reducing the instability often seen when systems are conducting high I/O operations for extended periods of time.

#### 180-day Non-stopping Recording

NVR3308 provides large capacities for 180-day non-stopping recording and RAID function for zero video loss. Paired with Surveon's scalable enterprise VMS, the solution not only improves safety and security, but provides robust prevention, preparedness, and quick response measures for the hospital. With its real-time video analytics engine of the NVR3308, the hospital has also been able to upgrade from a traditional analog surveillance management model to an active model featuring intelligent detection such as forbidden area detection for patient rooms, supply rooms and so on.

#### **Cost-effective Data Protection**

Without having to set aside spare NVR or failover licenses, Surveon Failover solutions allow the license of camera to be shared with the Failover ones, making it the best C/P solution for large applications.

#### About Intellize

Established by professional project managers in the surveillance industry, Intellize carrying well-known brands offers IP surveillance and IoT applications integration services, providing best quality, C/P value and complete solutions to customers in Taiwan.

#### **About Surveon**

Surveon Technology offers end-to-end network video surveillance solutions that showcase our expertise in professional camera design, RAID NVR, high-availability video storage, embedded firmware and video management software. All Surveon products are designed in-house and manufactured on our ISO 9001 and ISO 14001 certified production site to ensure the highest quality for our partners.