

# NUUO Banking Vertical Solution Guide

**B**anks remain very much at the top of the target list for today's criminal gangs. Robbers are resorting to ever more extreme measures, from carrying firearms to even taking the employees of the bank as hostages. Given this high threat level, it is essential that the surveillance system can deter attacks, manage incidents, gather and protect video evidence and enhance coordination with law enforcement officers.

Due to the nature of the bank industry itself, the data stored in banks system is also the target to be attacked, either via the Internet by hacker, or vandalism by robbers. Therefore, how to keep the data safe and stable is another crucial challenge in today's era.



## Figuring Out the Challenges

Outlines below are some of the major challenges faced by banks that NUUO thinks should be adopted to tackle these issues head-on.

### *Fund Security*

The large amount of cash transactions held at the bank counter and ATMs are an irresistible draw to the criminal. NUUO believes that incidents need to be detected early on and managed to keep customers, staff and funds safe and secure. Even where security staffs are in place, the right video surveillance measures must be configured to cover vulnerable 'blind spots' that potential robbers might seek to exploit.

High megapixel recording, which can capture very detailed image for accident investigation, is also an useful tool to tackle criminals. High megapixel however creates the need of a network structure with high throughput, including the Internet bandwidth and recorder throughput.

### *Video Protection*

Due to its profitable and confidential nature, the data stored in bank system remains the target to be attacked by hacker. To overcome this challenge, the Linux based recording solution in can be the way to skip away from the hacker's intrusion, and also to maintain the recording solution away from the system crash caused by virus.

Another source of attacking the video is those robbers, who not only rob cash but also destroy the recorded video. Consequently, being able to back up the video to another secure location becomes a crucial issue.

## *ATM Zone Management*

ATM zones sometimes are remote and isolated, therefore drawing the crimes. So, the ATM surveillance is a must for banks. To ensure the recording video can be safely kept, it's suggested to have a compact recorder, which can be put inside the ATM. Also, if the recording solution can combine the ATM data with the video, this approach can help identify criminal behavior, like "shoulder surfing," and it can solve the transaction queries as well.

## *Bandwidth Limitation*

For banks with multiple branches, there is typically a requirement for branches to be managed and monitored at the head office as well as locally. An obstacle here is that the available bandwidth between the head office and the branches may be limited due to the need to carry other priority traffic, such as financial transactions. Therefore, an Intelligent Video Surveillance Solution needs to optimize the bit rate of the video streams, so the video can be transmitted smoothly to the head office.

## **Favorable Results**

Let's turn to the benefits which NUUO Intelligent Video Surveillance Solutions can deliver in the security-critical banking environment:

### *Tackling the Criminals More Efficiently*

By using NUUO's solutions, incidents such as robberies can be tackled and managed in a proactive way. For example, NUUO Mainconsole can integrate access control, Video Analytics, and the I/O devices to detect the incident. Should this incident happen, the security guard will be notified immediately, and NUUO Mainconsole can automatically send an alarm to law enforcement officials at the same time.

If events unfortunately happen, the high megapixel recorded video is ready to be used for efficient event investigation. NUUO Titan NVR is configured with a massive 250Mbps of recording throughput capacity, ensuring that several high megapixel video streams can be recorded with high quality.

### *Secure Storage*

Focusing on how to ensure that video footage is secure, the innovative NUUO Mainconsole comes with valuable features such as "failover," so the associated failover recorder can take over the recording task when criminals take away the original recorder. In addition, we can use the "auto remote back-up" to duplicate the footage to a remote site. The schedule of the remote back-up can depend on a specific user's needs, for example, on a daily basis.

### *Enhancing Business Operational Efficiency*

Keeping the data away from the hacker and virus ensure a smooth business operation in the bank. Both NUUO NVRmini 2 & Titan NVR are Linux embedded recorders, and can enhance the security and stability of the bank data system. This consequently brings a safer banking system, and a higher operational working efficiency in the bank.

### *ATM Protection*

Considering video surveillance at the ATM, NUUO has brought to market the turnkey solution, NUUO NVRmini 2. This small unit can be fitted easily inside an ATM, and so can record locally to avoid the risk of a network failure. There is even an added value that NVRmini 2 can integrate ATM transaction data with the video.

### *Smooth Central Monitoring at Head Office*

For those bank security managers, who want to centrally monitor all the branches at head office, but with the limited bandwidth; the branches can activate the “transcoding” feature of NUUO Mainconsole, or the “2<sup>nd</sup> stream” of NUUO NVRmini 2. Then, the head office can use NUUO Remote Live Viewer or NUUO CMS (Central Management System) to select a most optimized video stream sent from branches to view.

Another option is to install NUUO Titan NVR at the bank's branches, applying the 2<sup>nd</sup> stream, and have NUUO NuClient at the head office. NuClient has central E-map to monitor events from multiple branches at once.

### *Raising Up the Return on Investment*

Counting the cost of security, it certainly makes sense to combine existing analog devices as new IP cameras come into play. NUUO is helping banks to minimize their upgrade expenditures by offering a hybrid solution, featuring NUUO Mainconsole with a DVR video capture card and IP license, so the same platform can work equally well with analog and IP cameras.

## **Solutions Which Add-Up**

NUUO's Intelligent Video Surveillance Solutions really add-up for today's banks. Where banks are looking to continue using analog infrastructure or combining analog and IP cameras, the high performance hybrid Mainconsole fits the bill. Should there a Linux-based approach be preferred, for added security and stability during recording, NUUO NVRmini 2 and NUUO Titan NVR come into the equation. For all ATM protection, the compact size of the NVRmini 2 is proven to be a winning option. Looking at the larger picture, for the central monitoring of multiple branches, NUUO CMS and NUUO Remote Live Viewer can be chosen based on the required level of central management; also the NuClient of Titan NVR is another solution in head office to easily manage views centrally.