

# NUUO Government Vertical Solution Guide

Terrorism attacks, organized crime, and other acts of violence are eventualities that every city worldwide must prepare for. NUUO's Intelligent Surveillance Solutions are being deployed to assist governments provide public safety along with improving the image of their cities, thereby facilitating the economic and cultural development of their countries as a whole. This presents numerous challenges in the government vertical market.



## One Country, Several Challenges

To maintain public safety and their own credibility, municipal governments must satisfy a range of requirements to uphold a positive city image. The main challenge concerns how to efficiently protect people and infrastructure by decreasing costs when installing complete and large-scale surveillance solutions.

### *Prevention and Action to Protect People and Infrastructure*

Providing security on behalf of people (i.e. residents, tourists, etc.) and infrastructure is one of the foremost duties of government. However in recent years, urban violence and outright criminal activities such as carjacking, terrorism, or commercial burglaries, plus hazards like traffic snarls and accidents, have led numerous governments to take preventative measures. One of these is to install surveillance systems to forestall undesired events and provide proactive alarms and report tools when such events take place.

### *City Image Enhancement and Costs Reduction*

In addition to its security function, the key surveillance system selected must also integrate several advanced features like 3<sup>rd</sup> Party Integration and other solutions which enable operators to react instantly. In so doing, city image is improved which in turn positively impacts the national economy because it attracts tourists and business folk by creating a visitor-friendly environment and stimulating consumption. Moreover, cost reduction is an extra-benefit and the resulting efficiency can be seen, for instance, in the improvement of urban or human resource management.

### *Action, Reaction: Facilitating the Justice System*

Given that incident detection and intervention must be carried out promptly, time is another crucial factor. By using proactive event management tools, responders can know right away where to go and what to expect when a critical situation occurs. Moreover, legal proofs are always requested when a criminal prosecution beings. As such every solution should provide and integrate evidence certification.

## *Information Sharing and Decision-making in LAN/WAN Environment*

Information sharing between emergency responders is another critical factor when it comes to intervening during an incident. To consolidate information and optimize efficiency of operations via rapid decision-making, a Control Room solution within LAN and WAN environments is vital. What's more, proactive centralized alarm management with efficient localization of all events from multiple sites (e.g. traffic intersections, municipal buildings etc.) and user management are also required.

## *Long term Investment: System Reliability and Future Expansion*

The challenges at each site depend on the particulars of each government installation. In fact for certain types of sites, such as courts of justice, higher-level data protection like system backup or redundant power considerations are necessary. Moreover, there may be a variety of camera types and brands present during expansion of the system. As such, surveillance solutions have to be open-platform and easy for users to deploy and develop.

## **Compelling Solutions for Advancing Public Safety and City Image**

Turning to the key benefits that NUUO Mainconsole Family (NUUO Mainconsole, NVRmini 2 and NUUO CMS) and Crystal Family (NUUO Titan NVR) offer for government installations:

### *Advanced Solutions to Enhance Public Safety and Credibility and Create a Better City Image*

To ensure a higher level of public safety and credibility, NUUO's solutions integrate I/O devices, 3<sup>rd</sup> Party Integration features and provide full SDK support. All 3<sup>rd</sup> Party Integration features guarantee high fluidity of emergency operations. Indeed, the LPR or the access control features can assist police officers deliver robust protection of the citizenry and government officials by immediately detecting suspicious people or stolen vehicles. Moreover, the Video Analytics feature allows the prevention or detection of traffic violations and even tracks gang activities through the Stopping and Direction features. Via the SDK support, customized tools can be provided such as an adapted E-maps system.

### *Proactive Intervention with Solid Investigation Tools for Prosecuting Malefactors*

NUUO offers efficient detection, notification and localization of incidents with high quality images. While viewing NUUO NVRmini 2 and NUUO Titan NVR, events can be detected, for example, via the Edge motion of the camera and alerts can be issued via e-mail, output or on-screen display. These functions are also integrated into NUUO CMS and Mainconsole, and combined with others such as the two-way audio or the PTZ preset point. The E-map function is crucial since it allows emergency responders during traffic accidents to instantly localize the scene and act accordingly. Plus, high-level actions can be undertaken since the live view can be directly accessed by clicking on the appropriate icon overlaid on the E-maps generated by NUUO's solutions. Another highlight feature is the mobile client access over NUUO iViewer application that allows accurate and real-time monitoring. Indeed via mobile phone, emergency responders can maintain constant informational awareness of the remote scene prior to arriving. These solutions also include an instant playback function which is vital for facilitating prosecutorial proceedings. It enables immediate resolution of disputed incidents and provides legal proof via the export of snapshots or recorded videos. Furthermore, the smart search function allows operators to rapidly find objects of interest rather than laboriously searching through entire video tapes manually.

## *Centralized Management: Strong Information Consolidation and Decision-making*

Information consolidation featuring decision-making between each actor is crucial when there is a need to manage multiple sites such as citywide fire and rescue stations. To respond to this, NUUO CMS delivers central management of all NUUO Mainconsole Family recording servers. Thus the centralized real-time alarm management and the unlimited E-map layers include the overlaid icons of devices, enhancing the efficiency of operations. For instance, if a bombing was to occur, the first emergency responders can cooperate and react instantly. At the same time, they can be informed as to each action to take via the alarm management guide and the reporting tool. As to viewing, NUUO CMS provides a Matrix Wall with a display enabling an unlimited number of views and several modes including a dedicated alarm monitor. Centralized views and event management are also provided by NUUO Titan NVR via NUUO Command Chain Technology. Moreover, NUUO's solutions integrate user management which means various privileges can be assigned to different users and the Window Active Directory is also supported on NUUO CMS and Mainconsole.

## *High System Stability: Linux Embedded, Data Safety and Storage Optimization*

Having multiple site surveillance citywide within a LAN or WAN environment calls, on the one hand, for data safety and, on the other hand, for storage optimization. As to data safety, NUUO NVRmini 2 and Titan NVR are both Linux Embedded, which means they are free from the threat of viruses and support several types of RAID as well as data backup through FTP. Moreover, the redundant power requirements for the NT-8040RP model are also supported by Titan NVR. As to NUUO Mainconsole, the Failover feature provides a failsafe thanks to a backup server which can take over the server in use if it goes down. As for storage, optimization is possible in all NUUO's solutions via the wide range of stream profiles and recording mode selections (e.g. 'boosting' record mode of Mainconsole).

## *Large Capacity for Adjustment and Further Expansion*

Most government installations call for easy expansion without proprietary restrictions. One of NUUO's principles is dedication to open-platform solutions by offering Hybrid and Tri-Brid recording solutions and supporting a high number of channels per server over an easy licensing mechanism. Other core principles include designing products that are simple to install, maintain, and do not require special training. In brief, NUUO aims to provide user-friendly and intuitive solutions underpinned by high system stability. On reviewing these added benefits, the most significant is surely the improvement of monitoring performance and organizational efficiency. By using NUUO's solutions, human resources really can be efficiently allocated. To cite just one example, automatic reporting tool creation eliminates the requirement of personnel for drawing up reports.

## **Facilitating Better Cities and Better Lives**

Protecting people and infrastructure and enhancing city image are the challenges that NUUO's solutions fully cover by facilitating highly effective crime prevention and solid intervention and investigation processes. Enabling this are the SDK and 3<sup>rd</sup> Party Integration support, real-time monitoring via the mobile client which provide access to even the strongest investigation tools, including the Control Room solution which provides centralized alarms and views management. Moreover, the easy licensing mechanism, maintenance, and high system reliability are what make NUUO's surveillance systems synonymous with stability and great flexibility.