Integrated Solutions

VA Hospital Simplifies Its Security System

When VA Loma Linda Health Care of Loma Linda, CA, decided to simplify their facility's access control and intrusion alarm system, Rob Briggs of Dunamis Systems recommended a single system that would do the whole job. "The goal was to expand and integrate the security systems and access control into one system." The technology he recommended to best do the job was the DMP XR500N alarm panel.

One of the fastest growing segments in society is that of health care. When the need to expand physical security in the VA Loma Linda Health Care complex, Loma Linda, CA, presented itself, Dunamis Systems of Fallbrook, CA, had the right answers.

"We had been working at VA Loma Linda for more than five years when their management approached us about doing the design and installation of a new integrated security system," said Rob Briggs, operations manager of Dunamis Systems.

Briggs' company was already on site installing fire, cameras and other low-voltage systems in the facility when the decision was made to combine the various elements of the facility's complicated, hodgepodge of security precautions into a single, more simple system.

"Originally they had an old LED annunciator that they used to manually disarm various cobbled-together security systems," says Briggs. "These systems ran through the internal telephone wiring. The original security company did not have any idea as to the wiring routes taken through the building."

A second security firm later changed all of this, installing a computer-based security system that was located in the VA Loma Linda police dispatch office. According to Briggs, this changeover was never completed because the original firm did not know the wiring issues within the various buildings well enough to bring it to a successful conclusion.

Briggs adds that since that time, the second security company had gone out of business. When VA Loma Linda management decided to turn the entire project into a "design build" effort, Dunamis Security got the call to try and make sense of the existing systems.

> "We decided on the XR500N because it offers more users, more zones, and has a built-in network connection."
>
> **Dunamis Systems Owner Rob Briggs**

Single System Solution

The primary VA Loma Linda facility occupies 750,000 square feet of space, with seven additional buildings as part of the protected complex. When Dunamis began the project, he was confronted by a cobbled-together collection of dissimilar alarm panels scattered throughout the eight-building campus. Access control duties were performed by another, separate system, adding further complexity. Briggs had the job of bringing all of these systems together under one umbrella.

"The goal was to expand and integrate the security systems and access control into one system with administration in the VA police dispatch center," says Briggs. The VA wanted a single command-and-control solution, with the various systems working together in an organized, integrated manner.

In addition to simplifying control and management, they also wanted to simplify user access, enabling employees to come and go with a single action rather than multiple authentications. And of course, along with a simpler integrated system, they had to assure consistent and reliable protection throughout the complex.

The Decision to Use DMP

When he began to specify the components needed to build the new integrated system, Briggs made the decision to use DMP security products. "I've worked with DMP technology since 1988. I've used their products when I worked at other companies. When I formed my own company I decided that DMP was the product line to stay with," says Briggs.

A key part of the VA equipment list was the DMP XR500N alarm panel.

Bringing Multiple Security Systems Together

"We decided on the XR500N because it offers more users, more zones, and it has a built-in network connection," says Briggs.

A number of DMP 505-12 power supplies were installed in parallel with the alarm panels, using two batteries each with a dual-battery harness. The power supply internal to each XR500N is only tasked with taking care of the needs of each panel, while the 505-12 remote power supplies take care of all external power requirements such as card readers, door modules, alarm speakers, and motion detectors.

Within the dispatch center itself Briggs utilized the DMP Command Center System Link module to handle all command and control issues. All programming is performed from the dispatch center. The same operations management software is installed on a second computer in a secure location.

Networking Considerations

While the VA center management wanted a single security system, they needed to keep it separate from the complex's main computer network that housed critical patient healthcare data. To isolate the systems from one another, Briggs established a separate V-LAN for the DMP XR500N panels.

Only VA employees with proper authorization can access the V-LAN network. When they do, each user has access that's restricted to only those areas of the security system they are authorized to use.

Since the original eight XR500N panels were installed, Briggs has installed another six panels for a total of 14, and he plans to add more.

"Although it's true that we could have extended the original eight panels to assume some of the responsibilities of the additional six, it's just as cost effective to install individual XR500N panels and network them together," says Briggs. "We can use this approach because of how easy it is to incorporate these panels into the network, then integrate them using software."

Briggs networked all 14 panels with a centralized computer using Command 1000 software, Advance Reporting 100, and System Link. The central computer is positioned in the VA Loma Linda security office where it is immune to physical attack.

Mission accomplished

"VA Loma Linda had a goal to expand their security system, and to integrate their security and access control into a single integrated system." Briggs is pleased that his firm was able to deliver a solution that met all of those needs.

And for the future, the development capability and networkability of each XR500N combined with the ability to integrate them through a central command and control system on the network, means that they won't hit a brick wall if they want to expand or modify the system in the future. VA Loma Linda has a solution that works today and will keep working in the future.

The XR500N Has Features and Benefits That few Others Have

System Link ™ Enables remote XR500N programming and control.

XR500N Advanced, integrated control panel for access control, fire, and intrusion detection.

714 Loop expander adds four Supervised burglary zones for use with fire and burglar alarm devices.

714-8 Loop expander adds eight Supervised burglary zones for use with fire and burglar alarm devices.

714-16 Loop expander adds 16 Supervised burglary zones for use with fire and burglar alarm devices.

716 Output expander module provides four programmable Form C relays and four zone-following annunciator outputs for a variety of output applications.

734 Wiegand interface module integrates the use of Wiegand-type access control readers and door strikes.

5455 Prox ProII card reader for proximity credentials.

Order of Protection at VA Loma Linda Complex

The original security design for the VA Loma Linda facility, which is located in Loma Linda, CA, called for eight XR500N security panels. The following is a list of responsibilities associated with each:

Panel 1: serves three out buildings with six areas of protection.

Panel 2: serves one area of security, five areas of access control, and 32 panic buttons

Panel 3: serves five areas of security and three areas of access control, requiring the two-man rule consisting of a passcode and a proximity card with intrusion protection on several doors.

Panel 4: serves one area of access control.

Panel 5: serves one area of access control with intrusion protection on several doors.

Panel 6: serves five areas of security and four areas of access control with intrusion protection on several doors.

Panel 7: serves one area of access control.

Panel 8: serves one area of security and access control using the two-man rule.

Since the original design of the security system at VA Loma Linda, Dunamis Systems of Fallbrook, CA, has added another six XR500Ns to the mix. According to Rob Briggs, owner of Dunamis, the XR500N is a perfect fit because each panel can be networked using a single computer-based control system, located at VA Loma Linda's security office.