

State-of-the-art solutions from AMAG Technology have enabled Digital Realty to significantly enhance its security operations

igital Realty is a data centre ecosystem business and colocation services provider that delivers a complete range of interconnected global scale solutions that best fit their customers' needs. At the same time, they connect their customers to the cloud on an open platform that includes 250+ buildings in 32 global markets.

In 2006, Digital Realty started its journey with AMAG Technology when it searched for an integrated solution to install throughout the global business. The components needed to include best-in-breed solutions from each area: access control, alarm monitoring, digital

video, building management system, a monitoring system and computerised maintenance and monitoring.

Digital Realty selected AMAG's Symmetry Access Control software to provide the backbone of their system and recently migrated to Symmetry CompleteView video management. Symmetry provides the integration platform for all Digital Realty systems to work in a converged environment.

Symmetry is currently installed in 160+ sites. Each site operates independently, controls its own Symmetry server and can easily authorise, assign and change who has access to their facility. Some

sites have several buildings that are linked and report back into the main site.

According to Digital Realty, Senior Technical Director-Portfolio Security, Jack Jones, five critical elements make up a data centre: space, electricity, cooling, connectivity and security. Digital Realty's distributed security model ensures all systems are monitored 100% of the time.

"We have a distributed security model in how we use Symmetry," said Jones. "The system needed to work on the local area network because there is redundancy to the building management system (BMS)."



Data centres use a tremendous amount of power and it is critical to keep servers cool. If a cooling system fails, a customer's whole network could go down, resulting in lost business. A cooling system failure would prompt an alarm in the BMS and then the BMS alarms are transferred to Symmetry.

Digital Realty deploys the concentric ring security model using four to five layers, which includes physical barriers, systems, processes and people. Symmetry controls access to each ring and monitors all systems. A customer or visitor must swipe a card to enter the main building. They then need to show their badge to the security team, where it is determined whether the person needs to be escorted to their server room. All employees have access and all visitors and contractors require an escort. They must request to enter via ServiceNow, a cloudbased digital workflow platform and be approved before being allowed into the building. If escorted, they wait at the security station for a Digital Realty employee who must stay with them the entire time. Some customers do not need an escort and can proceed directly to their server room.

They currently use Suprema fingerprint readers at all server room doors which integrate with Symmetry Access Control.

Keeping an auditable record of activity within each concentric ring is critical to maintain compliance for a number of government issued standards.

"Symmetry helps us meet the Payment Card Industry Data Security Standard (PCI DSS) for credit card processing," said Jones. "We rely on Symmetry CompleteView Video Management to record the required number of days needed to meet PCI's compliance demands and we are audited to ensure that happens. We also must show who is entering a suite with proper access credentials and correlate that information with the video."

Digital Realty understands the importance of having clear, intelligent audio as part of their integrated security solution.

The Zenitel AlphaCom Intelligent Communication solution is integrated to Symmetry and uses Zenitel IP intercoms for audio communication to all entrances. Customers, employees or visitors can drive up to the guard shack, press a button and speak to the security department. Each lobby uses audio at the front door so employees and visitors can

call if they need assistance. The shipping and receiving departments also use audio to communicate with delivery drivers and manage shipments.

## Video challenge

Digital Realty experienced rapid growth through acquisitions. As they acquired more companies, they were operating six different video management systems, which were difficult to manage.

"We have such a great relationship with AMAG that it made perfect sense to migrate our video systems to Symmetry CompleteView Video Management," said Jones. "CompleteView was easy to install, maintain and manage and it integrated with Symmetry Access Control."

Cost was another consideration. The security team was already familiar with Symmetry and could use it to manage CompleteView.

It also offered advanced video capabilities that customers were requesting. Customers choose what they want to view, how they want to see it and the resolution or framerate. CompleteView provided the most flexibility to meet demands.

## Migrating to Symmetry CompleteView offered many benefits:

- One place to program cameras, making for a speedier deployment.
- Only one license required between the two systems provided a great cost savings.
- One phone number to call for support for both access control and video.
- Consolidation of Site Support Agreements - only needed one.
- Ensures cameras and readers are operating correctly.

 Enhanced partnership with AMAG.

## Symmetry helps improve processes and save money

In the past, Digital Realty was concerned about the high number of false alarms it received and because the industry doesn't have a standard on how to manage, they weren't sure if they were experiencing an acceptable amount of alarms or not. They decided to measure the percentage of alarm activity to total events (card access, door held open, etc.) Using Symmetry data to analyse where the problems occurred and the response to those problems, Digital Realty reduced their false alarms to 12%. They discovered repair work that needed to be made to doors and changed several design philosophies to eliminate some of the problems.

"Over the past several years, we've used Symmetry's transaction records to create a dashboard that tells us where the problems are," said Jones. "It's helped us improve our security program globally."

Through data mining and analysing trends using the visitor registration

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model database, Digital Realty studied visitor activity. Visitors start coming at 7am, peak at 11am and reduce from there. At 3am one site received 0.3 visitors an hour.

"Using this good data, we were able to reduce the number of guards at night and shave almost US\$5 million from our company-wide guarding budget," said Jones. "Our understanding of Symmetry and



its reporting capability helped us save money yet provide tight security at peak times."

## Compliance

Using ServiceNow, Jones and his team implemented a customer portal that allows customers to request a service, such as giving a new person access to their data centre area. Once approved, a profile is created and the person given a badge and granted access only to the areas where they are allowed. The dashboard allows Digital Realty's customers to grant or terminate access to their own areas and populate profiles. They can monitor the BMS to make sure temperatures are accurate and data secure.

"Automating the manual process improved efficiencies and saved time and money," said Jones.

To meet compliance requirements, Digital Realty must keep 93 days of video. Symmetry CompleteView Video Management helps Digital Realty remain in compliance when it automatically notifies security staff if there is something wrong with a camera's video signal or recording of video with an alarm event. CompleteView also generates an alarm to alert operators when a camera or NVR goes offline.

Symmetry Access Control keeps all history and alarm logs. Digital Realty must keep transaction logs for two years to meet compliance requirements. "We have a total of 24,109 cameras and readers. Symmetry easily handles all of them," said Jones.

Symmetry CONNECT identity management is currently being implemented to manage access rights and their customer portals. **CONNECT** operates with Symmetry's central card holder, AMAG's Physical-Logical Access Interoperability (PLAI) agent, allowing Digital Realty to bridge the Symmetry Access Control system with a secondary access control system they use at a few sites they acquired. CONNECT manages all cardholders, regardless of the system and saves Digital Realty the expense of tearing out the second system and replacing it.

Digital Realty recently acquired another European data centre company and will be migrating thousands of readers and cameras onto the Symmetry system.

Jones has come to rely on AMAG Technology and their reseller partners to support him and his team throughout their expansion of physical offices and use of Symmetry. Symmetry can keep up with their exponential growth, changing security demands and compliance requirements.

"AMAG is evolving its delivery and I think it's a good thing," said Jones. "If I have a problem, I make one call and I get the support I need. It's an important relationship that I highly value."