White Paper

Mining Security Simplified

Delivering smart, secure and healthy work sites with the cloud

A key challenge for mining operators is ensuring the safety and security for their employees and assets. Controlling access, guarding against theft and keeping a watchful eye over operations can be challenging when dealing with expansive areas and properties spread out over many locations. Learn how digital transformation and cloud technology is changing the way mining operators deliver smart, secure and healthy work sites.

The power behind **your mission**

Johnson Controls

The digital transformation of physical security

Security challenges

Due to challenging work, dangerous work sites and the presence of expensive assets, mining operations are often faced with accidents and theft. These incidents cause monetary losses, as well as a disruption to operations. Monitoring operations, keeping equipment secure and controlling access across vast spaces can be challenging. To do this in an age where people are asked to do more with less is even more challenging.

Financial challenges

Preferring to devote budget for operations rather than security and surveillance, most mining operators are looking for value in every purchase. In the past, technology constraints made government and enterprise-grade video surveillance, CCTV and access control solutions too expensive for most mining operations.

There was a huge quality gap between cost effective solutions and truly effective solutions. This gap has forced many mining businesses to make tough decisions around security measures. To make matters worse, having the wrong solutions in place can slow down response times and affect the ability to protect property, recover valuable assets, and keep workers safe.

Technological challenges

Yesterday's surveillance and access control solutions were cumbersome to manage for everyone involved. From an IT perspective, surveillance systems required expensive network video recorders, dedicated operating systems, and routine software updates or firmware upgrades. Installing cameras off-network was difficult and created security vulnerabilities.

From an operations perspective, access control has always been a hassle. It involved the management of physical keys for gates, trailers, storage units and lock boxes. Loss of physical keys required frequent lock changes followed by new key distribution.

From a security operations perspective, yesterday's solutions were not integrated, disconnected and couldn't scale. Access control and video surveillance were managed on different systems and video surveillance required people to log in and out of different accounts to view footage across multiple locations. Useful video analytics that could streamline security and mining operations often required heavy processing power – making it too expensive. Yesterday's video surveillance mainly served as a forensic tool and couldn't provide the actionable intelligence of today's surveillance solutions.

Along came the cloud

With rapid advancements in cloud computing, the video surveillance and access control technology marketplace is significantly different from what it was just a decade ago. Today's physical security solutions live in the cloud and they bring all the typical benefits associated with any digital transformation– centralized management, scalable solutions, access to tools that require powerful processing, and reduction in costs. This shift in technology is rapidly changing the way security solutions are used, installed and purchased.

Modern Construction Security

Imagine deploying portable surveillance solutions that use cellular modems to provide visibility across all your work sites. Imagine remotely controlling access to work site trailers and storage units. Imagine if you could receive automatic notifications when valuable equipment is moved in the middle of the night. All this possible and more with the power of the cloud.

Security simplified

The cloud gives organizations access to centralized management of video surveillance and access control. This means they can control cameras, locks, alerts and permissions across their work sites, buildings and warehouses from one browser, anywhere in the world. Since data can move easily through the cloud, sharing information has never been faster. This increase in speed and accessibility, transforms video surveillance footage from forensic data into actionable information that can be quickly distributed across entire organizations.

Smarter technology

The processing power of the cloud increases accessibility to an array of intelligent, industry-focused tools. These analytics, intelligence, and AI help organizations improve security operations and help drive operational efficiency beyond physical security.

Access to smarter technology allows security staff to focus on moments that matter the most. Tools like camera-specific people detection, linger detection, object detection and object removal can be used to automatically alert staff as events unfold. Where live monitoring is deployed, staff can do more with less people by filtering-off camera feeds without specific activity and leveraging custom views to only see certain locations or cameras.

The benefits of smarter technology extend beyond security. Frictionless access can increase operational efficiency. Remote management of access control, means workers can only access properties or equipment at scheduled times. This also means that access can be remotely granted or revoked. Surveillance is used to give full visibility over worksites, monitor safety and manage workers. Tools like skin temperature alerts can help provide healthier work environments.

Scalable operations

With everything centrally managed through the cloud, scaling security has never been easier. Plug and play cellular solutions are commonly used for watching over remote areas, building materials, expensive equipment, and areas without network access. An unlimited number of cameras and access control points can be added to a single instance. Custom floor plan views, map views, and powerful dashboards help keep data organized. As you scale there is a proven solution for every scenario. Data can be stored locally, in the cloud, or with a hybrid approach. Access control points can work on-network or off-network by leveraging mobile credentials. Cloud Cameras connect directly to the cloud, while Cloud Gateways are used to connect existing cameras to the cloud.

Streamlined costs

Cloud technology makes video surveillance and access control affordable. By moving costly infrastructure to the cloud, organizations can typically see a reduction in the total cost of security by 20% to 30%. Organizations save both on upfront costs and on maintenance. The digital transformation of physical security is also changing the way these solutions are bought a sold. Organizations can choose to purchase hardware upfront and pay a low, cloud subscription fee or they can get everything as a subscription and never worry about hardware or camera replacement.

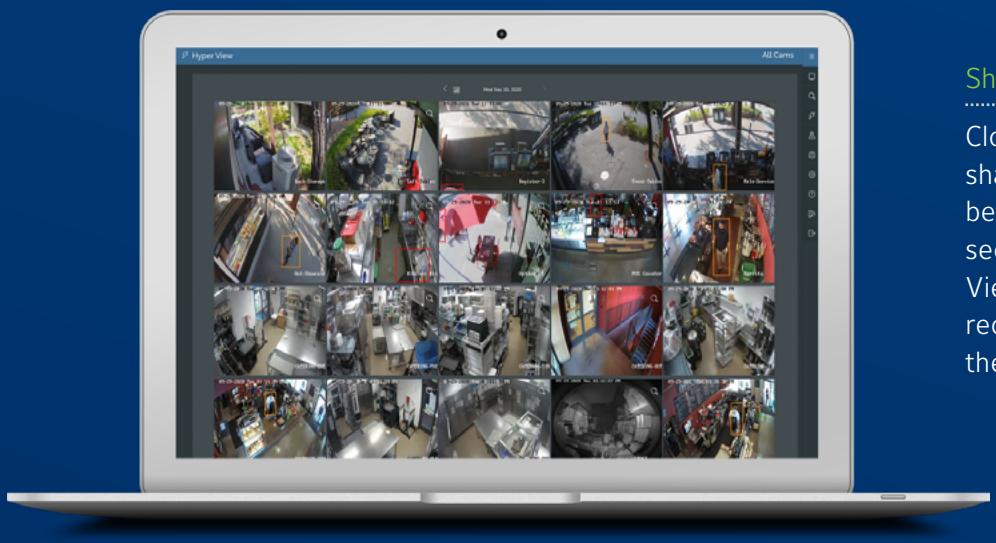
Managing Physical Operations Through the Cloud

Centralized Management

Control cameras, doors, alerts and permissions across an entire business all from one browser. Custom floor plan views, map views, and powerful dashboards help keep data organized and easy to manage.

Streamline Access Control

Doors, gates and anything that needs a lock is managed directly through the same software used for video surveillance. Access control points can work on-network or off-network by leveraging mobile credentials.



Share Information Faster

Cloud technology makes searching and sharing information faster than ever before. Sharing surveillance footage takes seconds. Powerful search tools like Hyper View can let you scan through 24 hours of recorded video on up to 100 cameras at the same time in seconds.

For more information visit www.cloudvue.io

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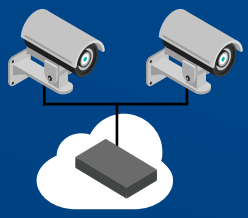
Deploy Cloud Cameras

An array of Cloud Cameras connect directly to the cloud. Data can be stored locally on the camera or in the cloud.



No Network, No Problem

Cellular solutions connect directly to the cloud with a built-in, cellular modem. They are commonly used for gates, fences, and remote areas without network access.

Object Removal Detection

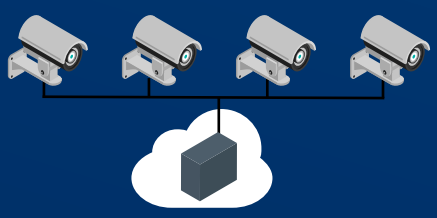
Remotely control access. Leverage smart phones to unlock doors or storage where there is no network.

Work Smarter

Tools like camera-specific people detection, crowd formation, linger detection, object detection and object removal can be used to automatically alert security staff as events

Reuse Existing Cameras

Connect your existing camera networks using Cloud Gateways.



Temperature Screening Stations

Thermal cameras placed at main entry points can send skin temperature alerts to help provide a healthier environment for employees, customers and clients.

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