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Streamlining Data Center Access Control with Octopus Middleware:

Integrating Huawei Readers with Avigilon at Oman Data Park

Background

Oman Data Park, a leading data center, provides secure and scalable server rental services to businesses. Clients frequently need physical access to their rented servers for maintenance, data uploads, and retrievals. To ensure both security and efficiency, the data center required an integrated access control solution that could unify building entry and cabinet access management.

Challenges

The data center housed large Huawei network cabinets (42U in size), each equipped with Huawei card readers for access control. While Huawei provided an application for cabinet access, the building itself used Avigilon Access Control for entry management. This resulted in a major challenge:

- Fragmented User Credentials: Staff and clients needed separate credentials for building entry (Avigilon) and cabinet access (Huawei), leading to administrative inefficiencies.
- High Operational Complexity: Managing separate databases increased the risk of errors, delayed maintenance operations, and created frustration for users and IT administrators.



Slow Response Times: Maintenance teams had to manage multiple credentials,
 slowing down service response times and increasing operational bottlenecks.

The Solution

To address these challenges, Octopus Middleware was deployed to seamlessly integrate Avigilon Access Control with Huawei cabinet readers, creating a unified and automated access control system.

- Single Platform User Management:
 - Octopus synchronized user credentials between Avigilon and Huawei cabinet readers,
 eliminating the need for manual data entry in two separate systems.
 - When a new user was added to Avigilon, their access permissions were automatically extended to Huawei cabinets, ensuring a single-source-of-truth for access control.
- Seamless Access Across Systems:
 - Users could now use a single access card to enter the building and unlock their designated network cabinets, streamlining their workflow and reducing confusion.
 - Octopus ensured real-time credential updates, allowing security teams to instantly modify access permissions as needed.



- Simplified Administration & Improved Security:
 - IT administrators no longer had to manage separate systems, significantly reducing operational overhead and the risk of credential mismatches.
 - Octopus enhanced security monitoring by ensuring only authorized personnel could access both the data center and the cabinets, improving overall facility security.

Outcome

The Octopus-powered integration at Oman Data Park resulted in:

- Faster Operations: A single access card simplified workflows, reducing response times
 for maintenance teams.
- Reduced Administrative Workload: Automated credential synchronization eliminated manual data entry and errors.
- Enhanced Security: Centralized access management ensured strict control over who could enter the data center and access critical equipment.
- Scalability: Octopus allowed seamless expansion, making it easy to onboard new users and cabinets without infrastructure overhauls.

Why Octopus?

- Seamless Multi-System Integration: Octopus connects disparate access control systems,
 ensuring smooth interoperability between Huawei and Avigilon.
- Automation & Efficiency: By automating credential management, Octopus removes manual bottlenecks and enhances system reliability.
- Future-Proof Scalability: The integration can be expanded to accommodate new users,
 devices, and security policies without additional complexity.

Conclusion:

With Octopus as the central integration platform, Oman Data Park achieved a unified, secure, and efficient access control system. By bridging the gap between Avigilon and Huawei, Octopus eliminated credential fragmentation, improved security, and streamlined operations—providing a model solution for large-scale data centers seeking seamless security integration.

About Systeminence

Systeminence is a software development company that specializes in designing, developing, and executing Computer Vision and software integration solutions for the security industry. We employ an agile and flexible software development approach to assist you in saving time when dealing with mission-critical situations and simplifying your day-to-day tasks, thereby making your business processes more intuitive, connected, and integrated.







