

Leading technology for a leading company

When Virtu, the predecessor of Equinix Managed Services, was established over ten years ago in Enschede, Holland, their choice for the former building of the Dutch National Bank was not a coincidence. With bulletproof windows, a bunker and a vault ten meters underground, the company immediately disposed of a high-secure building. With the implementation of AEOS, Nedap's security management system, Equinix Managed Services now has one of the best secured server rooms of Holland.



These days, the most important possession of companies is their information. For that reason, it's very important for them to protect these business critical data as well as they can. Datacenters understand this more than anybody else; they feel strongly about security and reliability. They have to comply with the strictest quality and safety requirements in the field of protection, availability of energy and infrastructure.

For that reason, when Equinix Managed Services in Enschede needed a security management system for its premises, they started looking for the most advanced system in the market that would comply with all the strict safety demands for datacenters. The underlying thought was -and is- that only leading technology would be good enough for a leading company like theirs. Also the company's vision for the future played an important role. The new system had to be capable of handling excellent access control, intrusion and failure detection, be expandable in view of the expected growth of the activities and, on top of that, be manageable with one platform.

Through Dutch automation company Winkels from Enschede, Equinix Managed Services quickly came across AEOS from Nedap. Being a specialist in the field of industrial hard and software engineering, risk management and building automation, among others, Winkels has been using AEOS satisfactorily for years. The strength of this security management system lies in the separation of hardware and software, which makes that every desired functionality can be built. This way, the security policy of a company can be organized and managed in a very flexible manner. For Equinix Managed Services this meant that the system could be installed completely to their own wishes.

Allard Olde Bolhaar, project manager at Winkels says: *"The former building of the Dutch National Bank is one of the most suitable locations for a datacenter like this one, partly due to the already available security measures, such as thick walls and bulletproof windows. In terms of architecture,*

however, it was a big challenge for us to install the security management system, precisely because of these security measures.

24/7 Security

The means of information that are present in datacenters must be protected at all times. That's why there is 24-hour security, 7 days a week, all year long. This includes security at the gates, the use of cameras, access control and biometric identification, laid down in strict protocols and safe access procedures. This 24/7 security makes the unauthorized access to the premises of Equinix Managed Services extremely difficult.

Access control for visitors and employees

Employees

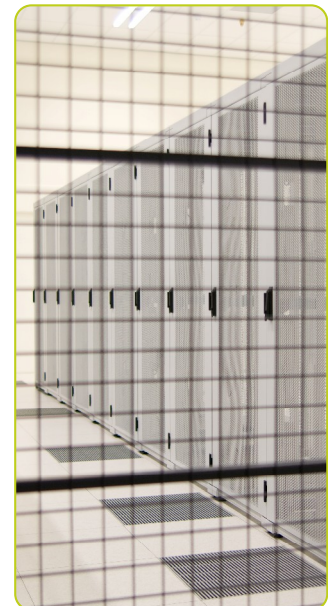
The safety measures of the high-security environment of Equinix Managed Services start with careful access control; without an authorized access badge no one can enter the building. What's so special about AEOS is that the access rights are not assigned to means of identification, but to the people carrying them. Because of this, it is possible to determine per person who has access or not to which room. As such, all employees have an access badge with a personal authorization profile with which they can only get access to the rooms where they need to be for their work.

Visitors

Visitors also get an access badge with a corresponding authorization profile. In order to keep an eye on the visitors present in the building, they need to be announced in advance and show a valid ID to enter the building.

The authorizations in AEOS are freely programmable and are determined by a combination of data; the carrier, the identifier and the entrances with a day/time schedule. This way, one can decide that some visitors are only allowed to enter a room when they are accompanied by an employee. Or that visitors can only go to a room via a predefined route and within a certain amount of time.

One of the safety measures in the field of security and access control that datacenters have to comply with is the possibility to review *who* has been *where* and *when*. With AEOS, this can be done in several ways. For example, all badge movements are traced and registered in the system. Besides, the badge movements and other events can be monitored real-time in the AEOS event monitor. Another example of this real-time monitoring is that it is possible to predefine actions for certain events.



Intrusion detection

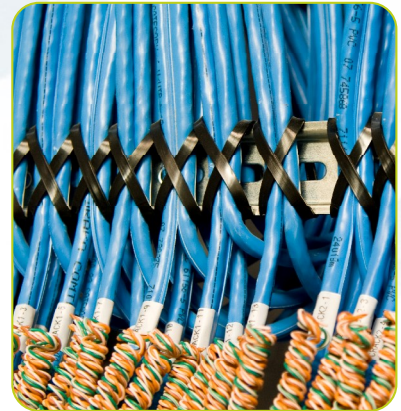
The security management system in Enschede is also used for intrusion detection. By integrating this in the security management system, all events related to intrusion can be monitored and managed from the same management platform. In case of an intrusion alarm, this is shown in the event monitor so that it can be handled adequately.

Biometrics

In order to protect the sensitive information that is stored in the datacenters even more, there are also biometric readers that have been connected to AEOS for verification. Access to certain server rooms is only possible after fingerprint verification. The biometric data are stored in the AEOS database and are linked to the ID of the corresponding person. With this extra security, it is impossible for someone who finds a badge to get access to the server rooms. The fingerprint readers are connected to AEOS.

Guaranteeing business processes

In order to guarantee the continuity of business processes as well as possible, it is important that the circumstances under which the systems operate are optimal. This means, among others, that the flow of air must always be uninterrupted, that the server rooms are cooled and that the humidity is regulated. Equinix Managed Services in Enschede has innovative facilities to arrange all this. The power supply has been secured by a redundant UPS installation with a generator that guarantees maximum availability. Also the cooling system is redundant and designed for the maximum capacity. Possible failures in these facilities are reported through AEOS. As soon as there is a leak or a failure with one of the aggregates or cooling systems, an alarm is generated in the system and the responsible people receive a text message with this notice. With the graphical user interface called AEOS faces it is possible to immediately close the stopcock, for example. In the same way, the lighting can be controlled or doors can be opened. As the system is fully web-based, this functionality can even be operated from home.



Decentralized intelligence



The AEOS security management system is based on the principle of decentralized intelligence; all access rights and programmed actions are registered and processed in native IP controllers. As this happens at the lowest level of the system, the functioning of the system and the security level are absolutely independent of the availability of the network or the server. As the controllers function stand-alone, the system continues to work in the unlikely case that the network or the server is not available. Contrary to other systems, all events are buffered in the system when the network or server is unavailable. As such, the security risks are minimized to the lowest levels thanks to the independent controllers.

ISO certification

Equinix Managed Services in Enschede is ISO 27001 and ISO 9001 certified. The ISO 27001 certification concerns the whole business process of a company. Some of the issues that are assessed are the company's assets, the physical safety, access control and continuity. ISO 9001 is a standard that describes the demands for a company's quality management system. Thanks to the extensive possibilities and flexibility of AEOS, the company can fully comply with these international standards for quality, security and service.

Project Facts

Project:	Equinix Managed Services, Enschede
Installer:	Automatiseringstechniek Winkels B.V.
Solution:	NEDAP AEOS

AEOS monitored entrances:	132
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