

CASE STUDY

Ploeger Logistics

Ploeger Logistics Secures its Professional Infrastructure by Implementing
Aerohive's Cloud Wi-Fi Solution



Ploeger Logistics

With the new and modern distribution centre, Ploeger offers maximum flexibility and aims to be the best business partner for their customers. The implementation of Aerohive's network with the AP122X access points is one of the key elements to pursue this goal. All of the access points are ready for the 802.11ax network.

About Ploeger Logistics

Ploeger Logistics is a family business and provides logistics and transport for its clients on a contract basis, both nationally and internationally. This includes storage and inventory management, handling and shipment preparation, groupage, forwarding, cross-docking and dedicated transport. There is a total of 325 employees at Ploeger and 195 transport units operate daily on Dutch and European roads. With the construction of its new warehouse, Ploeger Logistics is ready for the future.

About DWE ICT

DWE ICT has extensive knowledge of standard products and services from market leaders, including Aerohive. They provide market-oriented added value with specialised professionals and innovative products. DWE ICT was also named Aerohive Partner of the Year 2017/18.

The Challenge

Completely new building: network must be rolled out in one go

The new warehouse of Ploeger Logistics meets all the strict environmental requirements that apply today and has also been designated a 'BREEAM Outstanding Warehouse'. Use of solar panels, completely gas-free production and insulation values within 25 degrees without heating and cooling are examples of the requirements that the new Ploeger warehouse meets. At the moment, Ploeger is the first company with a BREEAM Outstanding warehouse and thus a forerunner in the transport sector. As it is a new concept, high demands were set of the ICT network. DWE ICT was commissioned to design a network and to roll it out as quickly as possible. There was no time for a test of the network: the network had to work in one go, because they wanted to make use of the new warehouse as soon as possible.

Surface area of 10,000 m2 with mobile WiFi users

Fitting a new warehouse of this size with Wi-Fi is a big challenge. It was necessary to give predictive advice about the placement of the network, with only a sketch of the warehouse as a starting point.

The height and size of the warehouse requires the correct placement of access points (APs). It is crucial to estimate as accurately as possible where the APs should be placed for the best range. The employees of the warehouse move through all paths and between racks while using the network. The connection also has to work in the highest point of the warehouse, because employees also have to scan products here. This makes it a requirement that the APs seamlessly take over the connection from one another. The WiFi network is used for order picking, among other things. For example, products have to be scanned when they enter the lorries, and these scanners are linked to inventory management via the internet.

Density of the space: pallets stacked densely up to the ceiling

A warehouse is a dynamic environment, as the racking layout is constantly changing. The racks of the warehouse are filled with packages with a variety of structures, which could block the signal. This had to be taken into account in the design of the network, because the range of the APs is impeded by - for example - pallets full of products. It is crucial that the employees are always connected, because without the internet they do not receive any orders and therefore cannot do any work. The network has to switch quickly because Ploeger tracks everything, and both customers and consumers expect real-time access to their orders.

"If the warehouse employees do not have a fast network connection, they cannot work. For us, it is just as bad as a power failure: no orders can be sent and received, and communication cannot take place. A stable and reliable network has become a primary requirement for our warehouse."

*– Jonathan Kuiper,
Planning and Control Coordinator*

The Solution

Easy implementation

As speed was of the essence in the installation of the network, it was crucial that DWE ICT made good preparations for the installation. Each rack, each corner and every possible obstacle had to be overseen in advance. Ploeger's employees had to be able to work just a few days after the installation. Together with the installer, DWE ICT succeeded in making the network work in one go. With directional antennas to support the APs, DWE ICT has ensured that the Wi-Fi works perfectly everywhere.

Flexible network

Wi-Fi coverage is optimised with directional antennas. A total of 22 access points have been installed. The AP122X was used in the distribution centre. Thanks to the many possibilities the network offers, Ploeger can offer maximum flexibility to the business. The employees of the distribution centre can switch quickly and move flexibly without experiencing any hindrance. If a connection is needed in other locations, for example on the outside of the building, this can easily be realised by scaling up. APs can always be added and connected, with a unique licence.

The Results

Ploeger's new warehouse will not only be used for storage in the future. A floor has been built above the large entrance hall that will be transformed into one large office. The Aerohive network is equipped with three SSIDs, for the warehouses, the office and the guest network. This keeps the connections closed to external people. This is crucial for Ploeger, because they work with the products of their customers and have to deal with this securely. The new network and the separation between the warehouses, the office, and the guest network, provide Ploeger with guaranteed security and speed.

Reliable and stable network

The implementation of the Aerohive network has provided Ploeger with a total cloud solution with which they manage everything remotely. The cloud management tool, also called HiveManager, is managed by DWE ICT. The system can easily be updated with the latest techniques and releases through HiveManager. The monitoring possibilities of the system are always available and easy to monitor from any location, through the internet. HiveManager is a clear, intuitive and reliable solution, which also offers analytics and insights based off artificial intelligence (AI) and machine learning (ML) capabilities.

Now that Aerohive's scalable solution is installed, Ploeger is ready for the future. Inconveniences can be avoided at cloud-speed through HiveManager. Now with an always-on, self-sufficient Wi-Fi network, Ploeger can run logistics efficiently and take their business to the next level.

"Without having time to test the connection, it was possible to roll it out without problems in one go. It works flawlessly."

*– Colin Hoogerwaard,
Office ICT Advisor at DWE ICT*

