Engel & Völkers is transforming the real estate market. The global business has established a smart, flexible workplace at its new head office, ensuring seamless access for all employees to cloud-based productivity apps. It has created an open network architecture capable of integrating new PropTech. By unifying network operations, assurance and security platforms across WLAN, LAN and WAN, the onboarding of digital company assets and bringing end-to-end visibility have been hugely simplified.
Engel & Völkers is an international service company specialising in premium residential properties and commercial real estate. Quite literally, it is a bricks and mortar business. And it is racing ahead with digital transformation.

“Real estate remains a highly personal business. Over a lifetime we do not buy many houses and we always view properties in person,” says Oliver Ganswig, Team Lead Workplace/Product Owner Global Productivity, Engel & Völkers. “But the buying process often starts online. As a business we want to connect these two worlds.”

**ESTABLISHING A SOLID GLOBAL NETWORK**

Any digital ambitions must start with a solid network infrastructure. Engel & Völkers wanted to upgrade its global network architecture, ensuring a performant experience for employees using cloud-based applications and simplifying network management.

“We do not want an IT expert in every location and I do not want to be travelling to set up new agencies,” explains Ganswig. “We want to be centralised and automated.”

A move to a new head office in Hamburg provided impetus for the upgrade. The building, designed by Richard Meier & Partners, features 6,800 sqm of office space over six floors, including an atrium event space.

“We planned for certain departments, say legal or finance, to have ‘fixed’ desks, but otherwise, working should be flexible. Staff should be able to work anywhere in the building,” says Ganswig.

**REQUIREMENTS**

- Reduce pressure on IT resource by centralising management of global network
- Enable flexible working throughout new 6,800sqm head office
- Facilitate the development and use of cloud-based services and technologies
- Establish platform to accelerate digital transformation of the business

**SOLUTION**

- Aruba SD-Branch Architecture
- 100G redundant Backbone
- High availability Access with PoE+
- Unified Wireless Access Points
- Headend VPN Concentrator
- Remote Access Points (RAP)
- ClearPass virtual appliance
- Aruba Central network management
- ClearPass NAC & BYOD
- ClearPass OnBoard
- User Experience Insight (UXI) sensors

**OUTCOMES**

- Establishes a smart, flexible workplace at the new head office
- Provides secure corporate network environment for select remote users and locations
- Ensures seamless access for all employees to cloud-based productivity apps
- Automates network deployment and management, reducing the need for onsite intervention
- Creates an open network architecture capable of integrating new PropTech
- Unifies infrastructure, operations and security across wired, wireless and branch environments
- Secures the onboarding and management of digital company assets
- Delivers end-to-end visibility of users and devices connected to the network

**Simplified management and close support**

The Aruba architecture for Engel & Völkers has been optimised for a cloud-based, service-oriented operational model. All the components are hosted, except those which require local presence, mainly the access switches and wireless APs. The head office and agencies are equipped with Aruba 2930F Access Switches and high-density AP-315 and AP-365 Unified Access Points. Network Access Control and device onboarding for BYOD...
The Aruba difference was the ease of management. It is far simpler to activate, monitor and maintain the network with Aruba.

OLIVER GANSWIG
Team Lead Workplace/Product Owner Global Productivity, Engel & Völkers

are managed through ClearPass Policy Manager, employing ClearPass OnBoard and NAC services for over 2,000 users and endpoints. The configuration, deployment and supervision of the entire network is carried out via the cloud-based Aruba Central platform.

Certain employees who work remotely or from home, such as those in HR and finance or board members, require higher security access due to the nature of the data that they deal with. In order to extend the role-based and policy-driven company network environment to their remote locations, the IT team has deployed Aruba Remote Access Points (RAP) for these employees. The RAP automatically tunnels to the corporate network via a secure VPN connection, managed via a central and cloud-hosted Aruba VPN Concentrator.

As user experience and proactive troubleshooting of connectivity are important to the organisation, Aruba User Experience Insight (UXI) Sensors are progressively deployed in all locations. UXI sensors allow the IT team to monitor connectivity quality from the device and endpoint perspective. Issues are clearly detected and diagnosed and fixes can be automatically implemented.

In addition, Engel & Völkers is an early and enthusiastic user of Google cloud technology (especially Google Workspace). Google Cloud hosts all the infrastructure, including Aruba ClearPass and VPN Concentrator for Remote Access Points.

“From a standard connectivity perspective, there is perhaps little to choose between vendors,” says Ganswig. “The Aruba difference was the integration and ease of management. It is far simpler to activate, monitor and maintain the network.”

In addition, Ganswig highlights Aruba’s in-country support. “We had an Aruba expert on site throughout the design and implementation. We were able to create test set-ups, explore the platform and get comfortable. This level of close support simply wasn’t available with other vendors. With Aruba, it feels like a real partnership.”

DELIVERING A FLEXIBLE WORKPLACE ENVIRONMENT
The new Hamburg head office opened in 2018. In the year before Covid-19 locked down office work, Ganswig says the network delivered the desired user experience. It creates a flexible, always-connected environment, where staff have seamless access to all the files, data and required applications. Moreover, Oliver Ganswig and his team have the data to understand how the building is being used.

“Pre-Covid, around one third of staff were blending office and working from home, while post-lockdown, this has increased to approximately 80 per cent. We have set up 130 workplaces out of 350 to maintain social distancing and we are seeing, on average, 60-80 staff in the office.”

Centralised control of global branches
The plan is to roll-out elements of the Aruba architecture across 630 agencies and remote offices, touching more than 13,000 network users.

Aruba’s cloud-native solution encompasses all elements within a branch, delivering flexible services for LAN, WLAN and security with cloud-based monitoring and management. It means Ganswig and his team can now monitor and understand the user experience at every location, monitor for traffic continuity and performance and roll out new services. The Aruba solution unifies network infrastructure, operations, service assurance and security across wireless, wired and WAN environments. It secures the onboarding and management of digital company assets.

Somewhat delayed by the 2020 pandemic, the team also plans to roll out SD-Branch and WAN connectivity for select locations by deploying Branch Gateways and a central Headend Controller, also hosted by its cloud provider. This will allow them to also monitor and orchestrate WAN links and proactively solve end-to-end networking issues - all from Hamburg.

Engel & Völkers provides private and institutional clients with a professionally tailored range of services, including consulting, sales and leasing. This interaction need not be from a ‘fixed’ office, argues Ganswig.
The ultimate aim is to be able to create and spin up a new secure network anywhere, simply by plugging in locally and activating centrally. The business wants the agility to create pop-up offices, to have its skilled consultants go to where the customer is. It is therefore expanding the use of Aruba Remote Access Points (RAP).

**Leading the disruption of the real estate industry**

For Engel & Völkers, the opportunities around digital transformation are huge. Rather than wait for a digital start-up to come and disrupt the market, Ganswig says the company’s scale and global reach mean it is well placed to lead the disruption. To this end, the company is also an innovator in cloud-based applications and real estate application development. It is filling a gap which it sees in this market.

The business wants to be more granular in its use of data and more proactive in the way it engages customers at various stages of the sales value chain.

“We want to provide real-time valuations based on the street, not the neighbourhood. We can send alerts to registered buyers if they pass a property, with a virtual tour, or invite buyers in for a coffee if we see they are close to an office. There is a lot more we can do to connect different steps in the process to create meaningful workflows.

“The initial exploration may be distant, but closing the deal is always personal.”

**DISRUPT OR BE DISRUPTED!**

The challenge, Oliver Ganswig continues, is to stay abreast of the emerging ‘PropTech’ sector. Engel & Völkers is making strategic investments in the field and has links to several start-ups. Aruba’s open architecture simplifies the integration with new applications. That, together with Aruba’s unified infrastructure, highest levels of security and AI-based operations automation, scaling the business and expanding footprint will become far easier than in the past.

Agility is key to a business such as Engel & Völkers. “We are a large organisation, we do not always move quickly. Sometimes it is better to let a smaller start-up do the exploring or you have to behave like one,” Ganswig concludes. “Perhaps Amazon could be the biggest threat to us in the real estate business. It is up to us to lead the disruption.”