“Thanks to the increase in bandwidth with the M4300 switches, we were finally able to truly demonstrate the ZeeVee 10 GbE SDVoE solutions that we distribute.”
Boas Hochstrasser - CTO of Genesis Technologies

Genesis Technologies: focused on bringing the best in AV-over-IP technology to its customers.

SUMMARY
Genesis Technologies is a company with a mission: to inform and to help its partners, the AV integrators, and their clientele, to get the best out of the latest high-speed AV-over-IP technology. It provides superior-quality AV systems to the high-end residential and luxury leisure marine markets, including some of the world’s biggest superyachts. These are mainly used for entertainment, but also for on-board PA systems.

Also, as a company that is passionate about great technology, Genesis only wants the best for its own internal network. These requirements led it to choose the NETGEAR M4300 Series of SDVoE-compliant AV-over-IP switches, which Genesis’ CTO Boas Hochstrasser has described as: “The way to go”, based on performance, cost and ease of deployment and use.

BACKGROUND
Established at the end of the 20th Century and headquartered in Lyss, Switzerland, Genesis has always been a ‘technology pioneer’ in the AV distribution market. It consistently looks ahead and optimizing what is already available to meet the specific requirements of its clients’ projects. Besides providing hardware and software, Genesis collaborates closely with its community of specialist installers and integrators, offering consultancy services, training and support for each phase of their projects. In its home country, Genesis works with residential AV installers. Plus, throughout Europe, it has gained a strong track record for delivering superior quality AV systems both to the residential and marine markets.
THE CHALLENGE
Genesis focuses on bringing the best possible technology to its customers and on making it easy for them to understand the benefits. One example is a video-wall in its Swiss HQ, that shows training course attendees and other visitors the difference between 1 GbE and 10 GbE AV-over-IP, based on the SDVoE protocol, using AV devices from the well-known hardware vendor ZeeVee.

The company has also built its own high-quality in-house backbone network, which is fundamental for supporting a variety of AV protocols and end-point equipment from different AV manufacturers, as well as for all usual office data traffic. Everything flows on one single physical network infrastructure.

Having reliable, fast and high-performance switches is therefore fundamental to Genesis Technologies, particularly to support the growing use of SDVoE-compliant AV-over-IP technology. Although yet a young market, AV-over-IP is expected to grow fast with customers of all kinds making the transition. Boas Hochstrasser, CTO of Genesis Technologies, says, “We switched to NETGEAR because it has introduced a SDVoE 10GbE switch for a reasonable price.”

SOLUTION
“Thanks to the increase in bandwidth with the M4300 switches, we were finally able to truly demonstrate the ZeeVee 10 GbE SDVoE solutions that we distribute. We have been able to show the difference between compressed 4K streaming over 1GbE and uncompressed 4K video streaming over 10GbE using the SDVoE protocol.”

Divided over two racks, the three M4300 series switches run in stacked mode and provide a 10GbE connection to SDVoE encoders and decoders from ZeeVee, as well as to other equipment, including computers, access points, phones and Dante devices. “You can combine up to eight units in a stack and for its price, the M4300 scales well,” says Boas.

Installation started in January 2019 and was completed in four days (it would have been less, but several days were lost due to inaccurate information from one of the AV hardware vendors). The Genesis Technologies team installed the three M4300 switches themselves and once NETGEAR’s approach to stacking was understood, the process of switching on the fly became straightforward, without any visible downtime.

“After configuring the VLAN using the NETGEAR switches, we plugged in the SDVoE equipment and it all just worked. The rest of the company was not aware of any noticeable breaks during the transition. Whenever we have had any queries, they have escalated to NETGEAR tier-three support, which has been very good.”

RESULTS
Boas Hochstrasser describes some of the business benefits of moving to the M4300 switches; “Being able to stack switches together, with one interface to configure the complete system, is a huge time saver and makes administration a lot easier.”

“The web interface also makes it simple to set up the switches: there is no need for years of expensive training. The system simply runs, which is the best. You plug in the switches, set them up and forget about them.”

Genesis Technologies has saved time and money since they switched to NETGEAR. “With other switches, firmware updates and troubleshooting took hours. With NETGEAR, after an update, everything works as before. The pricing is also very good for 10GbE switches and you get a lot of throughput for the money.”

FUTURE
Based on its own experience, Genesis Technologies is now emphasizing the advantages of the M4300 switches to their partnering AV integrator. “We can upgrade customers to 10 GbE for a reasonable cost and bring the full quality of SDVoE to them at an affordable price.” Boas concludes, “To have unlimited, uncompressed 4K transmission, you need 10 GbE and the M4300 series is the way to go.”