

panorama

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FIBRE OPTIC NETWORK AS COMPETITIVE ADVANTAGE

Interview with Thomas Dingel, Deutsche Telekom:

SD-WAN AS THE FOUNDATION OF DIGITALISATION

Data centre cabling:

THE NEW MD-DCS

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EDITORIAL

BECAUSE TALENT IS NOT HEAVEN-SENT

Dear Readers, Ladies and Gentlemen,

My name is Adrian Bolliger and since October I have been the new CEO of Datwyler IT Infra AG, previously having been Managing Director Europe there for four years. It is my pleasure to share the first editorial with you. But, before getting down to the business in hand, I need to thank our previous CEO, Johannes Müller, for 19 years at Datwyler. "Panorama" has also evolved alongside the transformation of our company, from a publication dealing predominantly with internal stories to a real customer magazine with lots of reports on practical projects by our users throughout the world. That and a lot more changed under Johannes Müller.

I am devoting my first editorial to the current labour market, more specifically to the shortage of talented people, and I would like to try and explore some of the reasons for this trend. Throughout the world the economic catch-up effect of Covid is over. What remains is called inflation – even if the connection with the pandemic is doubtless only partial, i.e. not only attributable to Covid. Many economies are in crisis, and rising interest rates are creating problems for countries and firms, as raw materials, salaries and interest among other things are becoming more expensive.

Actually, the labour market should gradually level off again. But there is no sign of this happening in many sectors. We often hear that there are too few skilled workers, in IT and engineering for example. For our company as well, it still is a challenge to find talented people in these fields.

Why is that? At Datwyler we have found an answer. One reason is the increasing complexity of our customers' IT environments. In addition, nowadays it is important to be familiar not only with the IT but also the OT environments, i.e. the operating technology for industrial plant: What technology do I use to connect the machines? Can I use 5G for this – and what are the advantages and disadvantages compared with WiFi? What about Industrial Ethernet? How do I process the data – using cloud technology or rather with a local solution? Should the data leave the machines at all? If so: Do I use cloud or edge computing for the purpose? Last but not least: What partners can I rely on to support me in terms of security? Because linking ma-



chines to the network is bound to result in new security vulnerabilities, as we already know from classical IT.

It is difficult to find people with such a wide range of skills. On the one hand, therefore, we are providing our existing workforce with further training, and on the other hand we are assessing candidates more on their potential and less on what they did in their previous job. In the process we are learning – and growing – with and through our self-imposed challenges and the challenges which our customers pose to us. We in turn pass on to our customers and partners the knowledge gained and the new solutions developed. In this way they benefit from lower project costs.

This already works in many sectors. We will continue to follow this route. With a little self-criticism we can surely become even better here – also in order to attract even more new talent.

Adrian Bolliger
CEO Dätwyler IT Infra AG



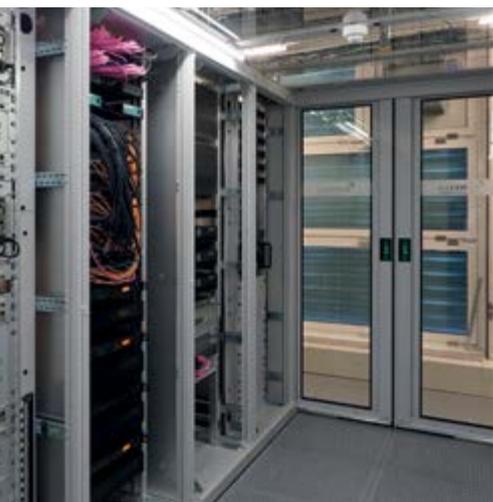
blue Entertainment AG, Volketswil:

FAST, SECURE, TROUBLE-FREE

Datwyler has installed a robust future-proof 100 gigabit fibre optic backbone in blue Entertainment's broadcasting and production centre.

blue Entertainment AG is a Swiss media company owned by Swisscom. From its broadcasting and production centre in Volketswil the Pay-TV provider broadcasts series and films, sport, music and news, which can be received via the Internet and digital television.

One of the seven plant rooms in the building



In the course of a modernisation project blue Entertainment recently upgraded the studio technology on its Volketswil site. This was accompanied by the purchase of new production servers and their connection via a 100 gigabit-capable fibre optic backbone.

On the recommendation of a partner, blue Entertainment entrusted the Datwyler specialists with the IT infrastructure. The contract included the entire implementation of the project: from consultancy and design through to acceptance and handover of the fibre optic backbone – including costing and cost control as well as the tendering procedure for the installations and the transceiver and switching technology.

The project commenced in spring 2021, i.e. in the middle of the Corona lockdown, with two half-day workshops. After eleven weeks of project planning and tendering as well as three months of installation by Datwyler partner Vision-Inside AG from Wetzikon, the new network went into trial operation in October and was handed over in November.

Conversion in live operation

The challenge was that live operation in the broadcasting and production centre had to be guaranteed during conversion. Because the new IT infrastructure was created parallel to the existing one, in some cases space was very tight in the racks, which are distributed over seven plant rooms. In this respect it was really helpful

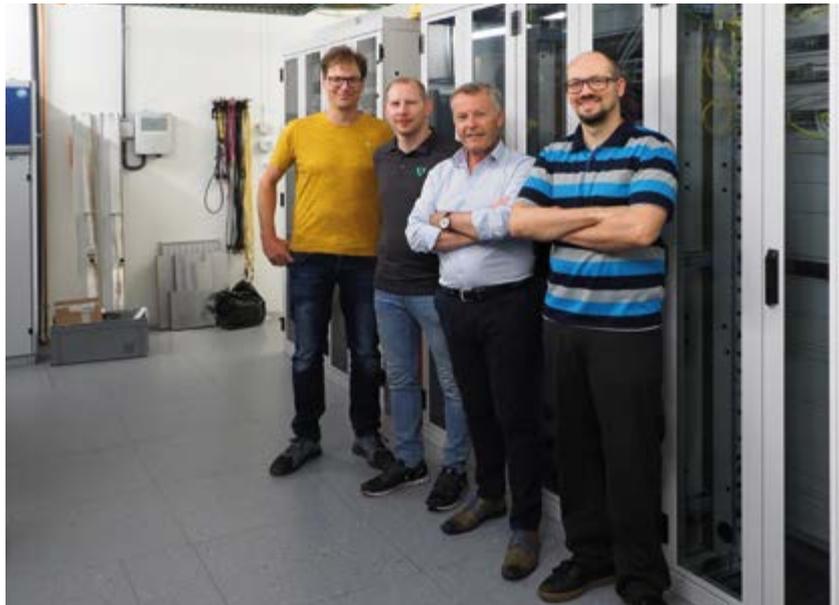


View into a television studio at blue Entertainment in Volketswil

that Datwyler's high density solution provided maximum packing density.

Nine modular HD-DCS panels were installed in the racks, which provide up to 96 ports per rack unit. These are equipped with a total of 24 MTP-on-LCD plug-in modules (cassettes); one third of the space in the distribution panels is available as a reserve for future expansion. Datwyler also supplied around 70 HD-DCS fibre optic patch cables in various lengths. Horizontal cable ducts were installed above the racks so that the patch cables could be routed neatly and safely in the plant rooms.

For fast fibre optic connections between the racks the installer was able to use thin 24- and 48-fibre indoor cables. Datwyler supplied these in the requisite lengths and



The project leaders responsible (from left to right): Daniel Meyer, Technical Head Broadcast/IT, blue Entertainment AG, Marc Gretler, Project Manager, Vision-Inside GmbH, Pius Albisser, Senior Engineer Data Centre Solutions, Datwyler IT Infra, and Lukas Minder, System Engineer Broadcast/IT, blue Entertainment AG

with preassembled MTP connectors. They lead in a star configuration from two plant rooms on the first and fourth floor into the five other technical rooms on the same floors via two riser zones.

All specifications met

This explains the origin of the path-redundant fibre optic backbone which today forms the backbone of the communications network in blue Entertainment's broadcasting and production centre. It is unrestrictedly 100G-capable, i.e. constitutes a high-performance data motorway for the company's video editing systems. As well as this it facilitates easy migration to 400G.

The challenging installation ran smoothly thanks to the good work of installation partner Vision-Inside. All the project specifications in respect of quality, cost and deadlines were met. After acceptance testing was completed the new backbone, including documentation, was handed over to the operator in flawless condition and on time.

During the project a large office area was also extended and converted into a newsroom. In order to integrate it with the communications network a 10-gigabit-capable copper solution from Datwyler was used, comprising type CU 7702 4P cables and KS-TC Plus modules and including 140 Category 6_A links.

Robust and scalable solution

Those responsible at blue Entertainment are very satisfied with the result. "We turned to Datwyler because the company has in-depth know-how in the field of network technology and because we promised ourselves high-quality professional implementation and support. This proved correct in every respect," said Daniel Meyer, Technical Head Broadcast/IT, taking stock.

The new fibre optic backbone is not only a high performance solution but also an extremely robust one. Since the startup all the links have been running faultlessly. This is very important in the broadcasting sector, because every bit error and every delayed data packet leads to unwanted video or audio distortion.

"The original use case changed over time. This solution, however, meant that we were able to cope with all new requirements in the best possible way," added System Engineer Lukas Minder. "We have ended up with a really robust and, above all, scalable network backbone which will save us from capacity bottlenecks in future. If we had not implemented the solution in this form, I am sure that today we would already have had to install additional cables." (pia/dir) ■

Seera Group Holding, Riyadh:

JOURNEY INTO THE FUTURE

With a Smart Modular Data Centre Datwyler is supporting the travel and tourism company Seera in modernising its IT infrastructure.

Intelligent data centres are playing an increasingly important role in the age of digital transformation. This is because organisations can use it to efficiently manage and process large amounts of information. Seera Group Holding, based in Riyadh, is one of the companies taking this development into account.

Seera is a leading travel and tourism company in Saudi Arabia. For its growing customer base, Seera, with its strong presence in the Middle East, has been one of the top addresses for innovative travel offers for years.

In order to meet the demands of the increasingly digital world, Seera has found the right partner in Datwyler. The collaboration led to the successful commissioning of a state-of-the-art data centre and a powerful structured cabling solution in May 2022.

Headquarters of the Seera Group in Riyadh



A strategic decision

Seera's growth and expansion over the past few years has been driven by the company's willingness to leverage technological advances and digital solutions to maintain a leadership position in the dynamic travel and tourism market. The aim was to further improve not only the offerings and customer experience but also operational efficiency. For this reason the group made the strategic decision to modernise its IT infrastructure.

Modular, scalable solution

Together with Datwyler, those responsible at Seera have defined a solution that meets all of the company's requirements. After planning and design, Datwyler supported the Seera team with advice and support right through to project execution.

For the data centre at the headquarters in Riyadh, the choice fell on a Smart Modular Data Centre (SMDC), an integrated solution that includes racks, power, cooling, fire suppression, physical security, monitoring (software) and pre-terminated cabling. The modular design of this solution allows the operator to easily scale the IT infrastructure as needed without increasing costs.

10 gigabit network

The new communications network offers capacities for transmission speeds of up to 10 gigabits per second. It consists of more

than 1000 data connection points throughout the building. This installation was also carefully planned in advance and carried out in compliance with strict quality standards. In conjunction with the new data centre, the company now has future-proof structured premises cabling, which means it is well prepared for further technological developments.

Game changer

"The implementation of Datwyler's Smart Modular Data Centre at the headquarters is a game-changer for our company," say Sultan Al Sultan and Mansour Abu Zaid, the heads of Seera's IT infrastructure team. "The seamless integration of this cutting-edge technology has not only increased the performance and security of our infrastructure, but also given us the flexibility to adapt it as needed in the future. We are very satisfied with the work of the Datwyler team and the tangible results."

"The successful collaboration has led to an innovative result that drives the digital transformation at Seera and shows how modern data centres are designed and deployed today," explains Asem Shadid, Managing Director of Datwyler Middle East. "The new IT infrastructure solution is flexible and scalable and will support Seera on its way into the future." (mua) ■

LVMH Group, Shanghai:

5 ½ WEEKS

The new LVMH sales and logistics centre
in Minhang District

Thanks to Datwyler, the LVMH Group was able to put two new data centres into operation in its Shanghai sales and logistics centre – in record time.



*The data centre solution
on the third floor of the new building*

The listed LVMH Moët Hennessy – Louis Vuitton SE, headquartered in Paris, is the global leader in the luxury goods industry. The group holds the rights to 75 different brands, which are sold in around 5,000 stores in about 80 countries. The company is also active as an art auctioneer and in publishing.

As a global market leader, since its founding in 1987 LVMH has pursued a business model that is based on the vision of “promoting creativity and excellence” and characterized by dynamic growth. This model drives the group’s success and ensures it a promising future.

New sales and logistics center

In Shanghai the French luxury giant is currently building the largest sales and storage

platform for cosmetics in the Asia-Pacific region. The new building is located in the Xinzhuang industrial zone in the Minhang district. It will serve as the LVMH Group’s central packaging, sorting and distribution base for the high-end cosmetics and perfumes it sells through its e-commerce platforms.

In recent months a high-performance IT infrastructure has been created in the building complex. It forms the basis for all business processes – from online sales to goods storage and sorting to packaging and delivery. The integration of these processes ensures a stable sales network and logistics system.

A central component is a highly available, fail-safe data centre. It was installed in two locations on the first and third floors of the new building, ensuring a reliable and stable network environment for the entire warehouse operation platform. The two data centre solutions come from Datwyler.

Plug-and-play solutions for the data centre

In April 2023 Datwyler received the order to supply the required IT infrastructure for the two data centre locations. Based on the drawings provided by main contractor, the Datwyler team in Taicang designed and pre-assembled two mini data centres for LVMH in order to be able to deliver tailor-made end-to-end solutions that enable plug-and-play operation on site.

This included the integration of various systems such as power distribution, air conditioning, UPS and batteries as well as monitoring and Cat.6_A cabling.

The project schedule was a real challenge. After the order was placed, the Datwyler team only had about a month to convert all of the customer’s requirements into finished solutions and make them available on time. They were installed within a week at the end of May 2023 and handed over to the end customer at the beginning of June.

Thanks to close coordination with the customer it was possible to adhere to the ambitious schedule. So it is not surprising that those responsible at LVMH are very satisfied with the result. *(mew)*

The mini data centre on the first floor



Autopark GmbH, Innsbruck:

PERFECT SOLUTION

in a very small space

Commissioning the Micro Data Centre (from left to right): Bernhard Wetsch, Sales Engineer at Datwyler, and Ing. Dieter Kaltenriner, Managing Director, STW Spleisstechnik West, with Martin Zangerl, IT Administrator, Autopark GmbH



A Datwyler Micro Data Centre meant that Autopark in Innsbruck acquired a second data centre location with which it could significantly increase failsafe performance and availability.

With five sites in Tyrol, Autopark is one of the largest car dealerships in Austria. In the autumn of 2020, the company invested in a new construction project on the Innsbruck site, the so-called "Volvo Cube". After a construction period of approximately one year the striking building opened in October 2021. It includes a showroom equipped to a high standard and with direct access to the workshop area on the ground floor, two ultra-modern classrooms on the first floor plus an underground tyre warehouse and underground car park. A distribution centre for used vehicles is also integrated in the new building.

With the expansion of the business the decision was taken to set up a new redundantly connected data centre site beside the exist-

ing data centre, which has 30 server racks. After extensive preliminary planning by STW Spleisstechnik West GmbH, in October 2022 Datwyler was awarded the contract to configure a Micro Data Centre (MDC) meeting the car dealer's individual requirements. The decision in favour of the MDC was based on a visit to the premises of the local solution partner by Martin Zangerl, the IT administrator at Autopark GmbH. One of Datwyler's Micro Data Centres (MDC) is in operation there, so Zangerl was able to convince himself of its advantages on the spot.

Compact, prefabricated solution

The compact data centre solution was to be housed in a plant room in the basement of the new building. This room is used to supply power to the car charging stations on the



Autopark's "Volvo Cube" on the Innsbruck site

above-ground car parks, and serves as the fire alarm control centre, but was not designed to meet the requirements of a computer centre. Among other things it lacked air conditioning for server ventilation, appropriate access control and many other components needed to operate a data centre.

View into the MDC 300



With the MDC 300 Datwyler delivered a stand-alone, fully enclosed solution which eliminated the need for extensive upgrades to the existing room. With the Micro Data Centre Autopark acquired a customised, pre-assembled end-to-end system which already integrated all the necessary elements such as cooling (3.6 kW), energy supply, monitoring and security – including UPS, fire extinguishing system and access control. Moreover, each MDC can virtually be installed as "plug-and-play". This one was also able to start operating on site within a very short time.

High availability and failsafe performance ...

Today the new MDC serves as a second server location which is redundantly connected to the firm's central data centre. This has enabled Autopark to significantly increase the availability of its data and applications as well as the failsafe performance.

At the same time, the Micro Data Centre is redundantly connected to the structured cabling in the new building. 24-fibre optic cables lead to the sub-distributors on the

individual floors, from where around 120 workstations are supplied via copper data cables. Today all the car dealership's relevant communication systems, including WLAN, telephony and surveillance, are integrated in the data network – and "neatly" housed in one secure place.

... without structural changes

The system, which has been in operation for months now, has proved extremely effective. "For me this MDC is the perfect answer to creating a complete server room environment in an extremely small space," summarised Martin Zangerl. "And it can be implemented retroactively without having to carry out any major structural changes."

The success of this project, moreover, means that STW Spleisstechnik and Datwyler have set a solid foundation for further collaboration with Autopark GmbH, as there are plans for upgrades also aiming to increase data security. A second Micro Data Centre is initially planned for Innsbruck, but there are still other branches scheduled to receive their own server locations. (bew/syb) ■



Link Real Estate Investment Trust, Singapore:

EVERY SQUARE METRE COUNTS

In many city business districts office space is a valuable commodity. Datwyler and GTL have therefore built a data centre for Link REIT in Singapore that could not be more space-saving.

Link Real Estate Investment Trust, based in Hong Kong, is a real estate trust managed by Link Asset Management Limited. The group's portfolio consists of retail centres, car parks, offices and logistics properties in Hong Kong, China, Australia, Singapore and the UK.

In Singapore Link REIT recently moved into new office space in the Singapore Land Tower in the Central Business District (CBD). For day-to-day business it quickly became necessary to have modern office cabling installed. The company also considered setting up an IT room and replacing the existing server rack with a new one.

Now rents in the Central Business District are very high. Like many other CBD-based companies, Link REIT faced the challenge that a separate, air-conditioned IT room that complied with current regulations would have significantly reduced the available office space.

Space-saving solution

However, Datwyler's Solution Partner in Singapore, GTL Group Pte Ltd, was able to suggest an ideal, space-saving solution to Link REIT: a Micro Data Centre (MDC) from Datwyler IT Infra.

This is an integrated system that includes power distribution, cooling, UPS, access control, monitoring, management and active network equipment – and is available from Datwyler IT Infra in a fully enclosed rack.

GTL Group has many years of experience with multinational companies as well as with IT and security solutions, engineering and ELV systems. Together with the Datwyler team, GTL made its customer a good offer for a Micro Data Centre and a high-performance office cabling system.

Link REIT was immediately convinced. With the MDC solution, which measures just under one square metre, the company, which only needed a single IT rack anyway, did not have to set up its own IT room and can use the office space to its full extent in the future.

High energy efficiency

The Micro Data Centre offers the company even further advantages: the integrated software for environmental management enables visual and central monitoring of the IT infrastructure and the active network components. The smoke, leakage and temperature sensors installed in the rack ensure the safe operation of the active devices.

In addition, the cooling unit integrated into the closed rack ensures high energy efficiency (Power Usage Effectiveness, PUE).

Ordered at the end of April 2023, Datwyler delivered the MDC at the end of May. As a completely prefabricated plug-and-play solution, it only had to be connected on site. It became fully operational in mid-June. Since then, the small data centre has been working smoothly.

After this positive experience, Link REIT is considering using Micro Data Centres in other office buildings and commercial properties in the future. *(j/c)* ■



United Overseas Bank Ltd,
Singapore:

HIGH-RISE MODERNISATION

UOB Plaza One is an office tower owned by United Overseas Bank. It was built in the early 1990s at Raffles Place, in Singapore's Central Business District, right on the banks of the historic Singapore River. At 280 meters high and 66 floors, it is one of the tallest buildings in the city state.



Right next to it is UOB Plaza Two, a 1970s building that measures 162 meters and has 38 floors. On Alexandra Road the bank owns another property, the 25-storey UOB Alexandra Building, which like UOB Plaza One was built back in the 1990s.

As part of the Bank's initiative to reduce energy and resource consumption, it has recently been actively working to achieve measurable savings by introducing new and efficient technologies to modernise its current systems. In 2021, the upgrade of the elevators in these three buildings was part of the program, making the high-rise buildings more environmentally friendly overall.

Datwyler also made a contribution to this – with modern high-rise travelling cables that were used in the buildings' 39 elevators. Unnoticed by users, the travelling cables have been in operation since spring 2023. They reliably transmit energy and data between the cabins and the controls and ensure trouble-free operation around the clock under high mechanical stress. *(i/vt)* ■



Mustaqbal University, Buraydah:

CUTTING EDGE TECHNOLOGY

for research and teaching

At a private university in Saudi Arabia a Datwyler data centre is helping to improve the quality of education – and at the same time reducing the ecological footprint.

Mustaqbal University is a prestigious private university in Buraydah, the capital of Saudi Arabia's Al-Qasim Province. It consists of three colleges: dentistry, administration and humanities and computer science. The university is committed to meeting the highest standards in higher education and providing its students with the best resources in the digital age. Therefore it attaches great importance to an excellent communication and IT infrastructure which is a key factor for the quality of training.

In order to further develop its digital infrastructure, Mustaqbal University commissioned a new data centre last year. This data centre is not only a significant step on the path to digital transformation,



The Mustaqbal University in Buraydah

both power supply and network connections ensures a seamless digital experience for teachers, students and administration.

Beyond the technical aspects, the university's data centre solution helps improve research and teaching by enabling comprehensive data analysis. In addition, it contributes to an environment that promotes innovation.

More digital possibilities

"The project and engineering teams from Datwyler, Green Way and the university demonstrated exceptional expertise and professionalism throughout the entire process," explains Abdullah Aboudi, head of the university's IT infrastructure department. "They ensured a smooth and rapid deployment with minimal disruption to our daily activities. In this respect we are very grateful for the contribution that the Datwyler team has made to improving the university's digital capabilities."

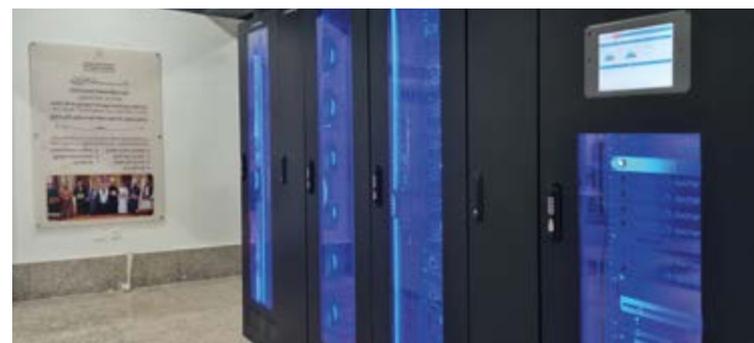
"This project is a good example of what can be achieved when you combine cutting-edge technology with a commitment to excellence and progress," emphasises Asem Shadid, Managing Director of Datwyler Middle East. "As Mustaqbal University takes a big step into the digital future, Datwyler's intelligent data centre solutions are driving progress and enabling educational institutions to have a lasting impact on society." (mua) ■

but also to greater sustainability and efficiency. The university chose a Smart Modular Data Centre from Datwyler – a state-of-the-art and energy-efficient solution that also offers a flexible and scalable design. This allows for easy expansion and updates when needed as the university continues to grow.

At the beginning of 2022 Datwyler Middle East designed, installed and successfully put the data centre into operation together with the company Green Way. Particular attention was paid to not disrupting ongoing university operations if possible.

Seamless digital experience

The Smart Modular Data Centre is a Tier III solution. In the current expansion stage it consists of four racks and an energy-efficient cooling system with in-row coolers. The completely closed solution optimises power consumption and reduces the university's ecological footprint. It also offers a high level of safety thanks to the integrated fire extinguishing system. The high service availability of



The Smart Modular Data Centre from Datwyler



Quart de Poblet, Valencia Province:

FIBRE OPTIC NETWORK

as competitive advantage

In order to remain attractive as a location, the Spanish municipality of Quart de Poblet has opted for a modern fibre optic network from Datwyler.

Quart de Poblet is a municipality with over 25,000 inhabitants. Only six kilometres from Valencia, Spain's third largest city, its strategic position provides businesses and international organisations with a locational advantage. Another advantage is the excellent transport infrastructure, which in-

cludes a good link to Valencia's public transport system as well as direct connections with the motorways to Madrid and Barcelona. Last but not least, the businesses established in Quart de Poblet benefit from the proximity of the provincial capital's airport.

*Space-saving high density solution
in the data centre*

The municipality is characterised by sustainable planning and development, the range of high-quality services on offer, and scenery like the Túria Nature Park. For many families all this makes Quart de Poblet a residential area with a high quality of life.

Fit for the digital future

In order to ensure that this remains an attractive location in future, two years ago the municipality decided to create an extensive high-performance municipal fibre optic network. Not only is the provision of a modern communications infrastructure considered advantageous for companies, but it also provides freelancers and home office workers with the opportunity of working more efficiently. It further ensures that the municipality's public services are easy to use.

Nowadays only towns and municipalities with a comprehensive technical infrastructure which allows the fast and interference-free transmission and processing of large amounts of data can score points in the "smart city" competition.

A high-performance infrastructure

When setting up its municipal fibre optic network Quart de Poblet opted for a high-performance solution from Datwyler. Its physical basis is two 1,100 metre long FO Outdoor loose tube cables – one with 144, the other with 12 OS2 fibres. Added to that there are the appropriate high-performance connecting components. This solution connects the town hall and several official buildings, including the city library, the civic centre and the fire service.

The installation was undertaken by Viriotec Sistemas SL, one of Datwyler's certified Solution Partners, based in Alicante.

In order to make optimum use of the performance of the network with its high data volume and to reduce latencies, a small data centre simultaneously serving as a central distributor was set up in one of the municipal buildings. Here use was made of the space-saving FO-DCS high density system, which provides numerous LCD connections on a few rack units.

To connect the individual buildings to the "data motorway", moreover, further fibre optic cables and multiple cables (trunks) preassembled with connectors were needed as well as various patch cables. These were also supplied by Datwyler.

Datwyler has already supported many cities throughout the world in rolling out fibre optic broadband. The special challenge with each of these projects is to find an economical and yet sustainable solution which takes account of the municipality's differing requirements and needs – from planning through to commissioning.

With this project as well Datwyler's experienced engineering team was there to advise the customer at every stage.

Networked all round

Quart de Poblet started operating the municipal fibre optic network in September 2022. Today, with the modern digital infrastructure linking the public buildings to the administrative centre, very short response times are achieved, the municipality's tasks are optimised and information is available in real time. (jom) ■



The town hall of Quart de Poblet



Orient Securities Co., Ltd., Shanghai:

TAILOR-MADE DATA CENTRE SOLUTIONS

In Datwyler the Orient Securities Group has found a long-term partner to modernise its central data centre.

Orient Securities Co., Ltd. is a leading Chinese investment bank and brokerage firm headquartered in Shanghai. It employs more than 8,000 people and has 179 branches in 89 cities across the country. The company provides one-stop compre-

hensive financial services, including investment banking, securities, futures and derivatives trading, securities analysis, asset management, investment advisory and equity investments. Orient Securities is listed on the Shanghai and Hong Kong

stock exchanges and manages total assets of more than 360 billion renminbi (47.6 billion euros).

The company's most important values include customer focus, professional services and innovation. In order to be able to fulfil this requirement in the digital age, a modern IT infrastructure is a must.

Need for modernisation

For many years Orient Securities has operated a central data centre at its headquarters for all of the group's data and voice communications. But the existing infrastructure no longer offered enough bandwidth, it could not be upgraded and further developed, and the installed equipment from various manufacturers

A perfectly adapted solution



Installation and commissioning of the equipment was completed within a week.

made interoperability highly complex. There was a lack of a uniform monitoring and management platform. In addition, it became increasingly difficult to find suitable personnel to maintain such a complex system.

That's why the group decided to modernise the data centre – with an IT infrastructure solution from Datwyler.

Good planning, quick implementation

During the design phase Datwyler worked closely with those responsible at Orient Securities, for example on the positioning of the racks, the welding work for the channels and the lines required for cooling and air conditioning.

This forward planning significantly sped up the entire project. The installation and commissioning of the equipment on site was completed within a week.

The new data centre consists of two rows of racks with cold aisle containment. Datwyler adapted it perfectly to the structural conditions (columns) in order to make optimal use of the available space. The software that Datwyler developed for Ori-

ent Securities is also customer-specific. It integrates all the equipment in the data centre. All information and data can be managed across platforms, including access control, IP cameras and existing third-party power distribution systems.

Presenting all of this data on a central platform enables real-time monitoring and ensures reliable system operation.

Long-term partnership

To address the maintenance issues, Orient Securities utilised Datwyler's after-sales services. The prerequisite for this was the trust that the Datwyler team was able to build through its professional technical services and software development and customisation.

This is how a long-term partnership was created. It is also a solid basis for future MAC (Moves, Adds and Changes) projects from Orient Securities. *(mew)* ■



AT&S, Kulim:

STABLE BASE FOR PRODUCTION

When building its new microelectronics factory in Malaysia, AT&S is relying on structured cabling and a campus network from Datwyler.

AT & S Austria Technologie & Systemtechnik AG is one of the world's leading manufacturers of high-quality printed circuit boards and IC substrates with headquarters in Austria. The company is a major supplier to the mobile communications industry, automotive, aerospace and industrial electronics and medical technology. It employs around 15,000 people

worldwide and has production sites in Austria, China, India and South Korea as well as numerous sales branches around the world.

In June 2021, AT&S announced the construction of a new manufacturing site in Kulim, Malaysia. With an investment of around 1.7 billion euros over the next few

years, the listed technology group has planned the largest investment in the company's history.

In the same year the first construction phase of the new campus began in the Kulim Hi-Tech Park, which is located in the northwest of the Southeast Asian peninsula in the state of Kedah. In addition to



Delivery of 1,500 boxes with network technology from Datwyler

the production of high-tech products, a focus of the new location will be research and development. The company is therefore working on collaborations and partnerships with leading universities in Malaysia. Around 6,000 jobs are expected to be created in the new plant.

In August 2022, EQCOMS Sdn Bhd, a Datwyler-certified solution partner, was commissioned to deliver an IT infrastructure solution for the entire premises cabling and campus network. The Singapore-based system integrator, which has been offering turnkey IT solutions for over 20 years, has extensive expertise in the areas of network technology, data centres and cybersecurity.

View of the construction site of the new AT&S factory in Kulim



Due to the quality of the Datwyler products and many successful joint projects, EQCOMS decided to work with Datwyler IT Infra again.

Fibre optic solution for the backbone network

Datwyler supplied a high-quality armoured single-mode fibre optic cable for the campus network, which extends across the production buildings, administration and warehouse. For safety reasons, FO cables with flame-retardant, low-smoke and zero-halogen sheaths (LSZH) were used throughout the backbone.

The structured premises cabling comprises 13,800 Category 6 copper data connection points, and the installation involved exclusively cables with LSZH sheaths. Not only is the entire communication technology integrated into the copper network, but also outdoor video surveillance (CCTV), access control and all IoT devices.

In the AT&S data centre different coloured copper and fibre optic patch cables from Datwyler IT Infra are also used to clearly distinguish between the various services.

Successful cooperation

The commissioning of the new plant is planned for autumn 2024. This will successfully complete the first phase of the project.

Datwyler is proud to have contributed to the construction of the state-of-the-art microelectronics factory with its reliable IT infrastructure solutions. Based on the positive experience, AT&S plans to continue working together to expand the plant. (tzip)



Patch panel assembly in a rack



Switzerland:

SERVICE-PARTNER

for edge data centres

cablex AG is a new service partner for the implementation, repair and maintenance of Datwyler's Micro and Mini Data Centres.

cablex has been a Certified Service Partner for Datwyler's Micro and Mini Data Centres since February. Due to its extensive know-how in the field of ICT infrastructure cablex AG not only acts as a partner, but is also used on site throughout Switzerland as an extended arm of Datwyler.

Good reasons for MDCs

Smart modular data centres like Datwyler's Micro and Mini Data Centres (MDCs) are used in the SME segment and configured on the basis of individual customer requirements. For example, every prefabricated solution is customised in respect of air conditioning, UPS, power output and the desired alarm systems. The single- or multi-cabinet solution can be placed in any room without the need for extra structural "preparation". This means that the

data remains on site or is mirrored in a hybrid partial solution.

MDCs ensure fast local data processing (edge computing) and protect sensitive data in a self-contained system. Such an IT infrastructure must be professionally installed and connected to meet the customer's specific requirements and must be regularly maintained. Above all, remote monitoring of the most important compo-

nents together with preventative work also allows swift intervention in the event of any acute problems arising.

Trusted partner

The first two MDCs, including one at Arthur Weber AG, were put into operation by cablex in conjunction with Datwyler. Two others were built in Solothurn and Zug. The cablex technicians involved are now independently carrying out the installa-

“ We are very pleased to have found a competent partner for our future projects.

Lukas Kurmann, Services & Solutions Team Leader, Dätwyler IT Infra AG

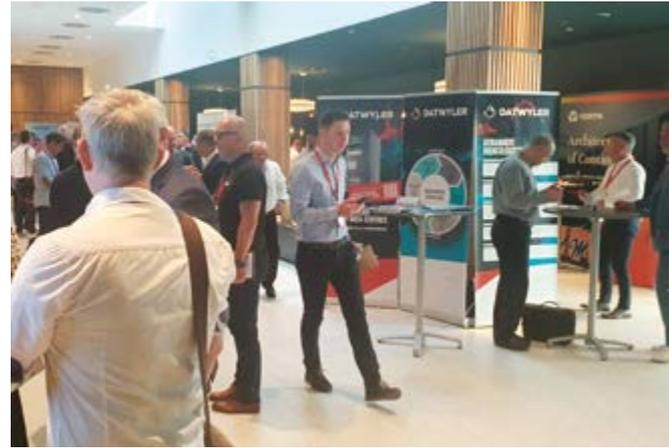


tions on the users' premises. They are also responsible for repair and maintenance, the cabling and other additional work. In order to stay up to date at all times, for example in the field of data centre cabling, the specialist staff at cablex receive ongoing training.

"We are very pleased to have found a competent partner for our future projects," explained Lukas Kurmann, Services & Solutions Team Leader at Dätwyler IT Infra AG. "Collaboration with a strong partner networked throughout Switzerland strengthens customer loyalty and enables us to optimally cover customer requirements in various sectors." *(gac)* ■



Christian Poletti, Solution Engineer (on the left), and Sascha Gruber, Senior General Manager (on the right), both cablex AG



Austria: **DATA CENTER AUSTRIA 2023**

In September around 200 participants took the opportunity of finding out about the latest IT trends during this year's ForumIT in Vienna. The focus was on the challenges posed by AI and digital transformation as well as the issues of cybersecurity, data centres, service desk and SAM.

Datwyler took part in one of the four parallel conferences, Data Center Austria, with a stand and a well-received presentation. Pius Albisser, Senior Engineer for Data Centre Solutions at Datwyler, gave a talk on "The appropriate environment for sustainable Edge solutions". Among other things, the audience members learned how to create business potential from data and were given information on customised IT and OT infrastructure solutions and services.

The two days were filled with knowledge transfer and networking. The Datwyler Team in Austria were pleased with the lively interest shown by the visitors. *(syb)* ■





Morocco:

POSITIVE FEEDBACK

at GITEX AFRICA

The first GITEX AFRICA took place in Marrakech in June 2023 – with around 900 exhibitors, start-ups and delegations from 95 countries. The aim of this trade fair is to bring together companies, experts and innovators to exchange ideas about future-



Datwyler's Remote Management based on Metaverse platform attracted great interest.

oriented technologies, to advance the digital economy in Morocco and to explore opportunities that the African market offers.

Datwyler Middle East also took the opportunity to showcase its latest, future-proof IT and OT infrastructure solutions that play an important role in the digital transformation of companies. Interested visitors were able to find out about innovative software solutions such as the Smart Service platform and the new Remote Management based on the Metaverse platform at the Datwyler trade fair stand. Another highlight was a "hands-on" Smart Modular Data Centre which offers an intelligent solution for edge applications.

Platform with great potential

Datwyler's Smart Service platform is designed to provide organisations with bet-

ter visibility and control over their critical IT and OT infrastructure. Advanced technologies such as IoT and data analytics are used to provide intelligent and connected services. With this software-as-a-service solution, administrators can easily manage IT systems and applications across different locations. It offers predictive maintenance, remote monitoring, advanced analytics and personalised customer experiences.

"The enormous interest from the trade audience in this platform has shown us that it is highly relevant for the African market," confirms Soubhi Al-Aliwi, Head of Sales MEA at Datwyler Middle East.

Welcome to the metaverse

Another highlight at the trade fair stand, which attracted many technology enthusiasts, was Datwyler's new Remote Manage-



Soubhi Al-Aliwi presents the Smart Service platform.

ment based on Metaverse platform. It uses Metaverse technology to create digital experiences with Datwyler's data centre solutions in a virtual 3D world and to interact with them in real time (see page 37).

The Smart Modular Data Centre at the stand was also a crowd puller. This state-of-the-art solution is a standalone, small data centre that integrates intelligent cooling, energy efficient technologies, monitoring and security in a single solution. It offers a high level of flexibility and scalability that can be quickly and easily adapted to changing requirements. All of this enables companies to advance their digitalisation and at the same time significantly reduce their carbon footprint.

Due to the positive response and the promising contacts that the Datwyler team was able to make during GITEX AFRICA, participation was a complete success. Datwyler Middle East sees the trade fair as an incentive to continue to support companies and organisations throughout Africa with innovative solutions in their digital transformation. *(neg)* ■



Germany: DIGITAL X IN COLOGNE

On 20th and 21st September Digital X 2023 in Cologne revolved around the topic of digitisation. In the centre of Cologne around 50,000 visitors, 250 speakers and 300 partners – including Datwyler – showed how digital transformation can succeed. New perspectives, innovation, future vision and hands-on technology – this event which bore the slogan “Be digital. Stay human.” was all about technological developments and megatrends as well as the issue of how to reconcile people and technology.

Many prominent guests like George Clooney, Björn Ulvaeus, Amy Webb and Dr. Wladimir Klitschko were there. At its stand in one of the partner tents on the Rudolfsplatz the Datwyler team also had a very special visitor in the person of Tim Hötting, CEO of Deutsche Telekom AG.

At the event Datwyler presented the Q-tainer, a specific project for the successful digitalisation of traditional processes which was developed together with a customer – from use case to IT project implementation. “We know the challenges our customers face and – together with our partners – we develop solutions that support and improve their business processes,” explained Ralf Klotzbücher, Vice President Sales Europe at Datwyler IT Infra. “Through proof-of-concept projects tailored to our customers’ individual requirements we give them the assurance that the ideas developed together will work and that the digitisation projects will help to make their processes more efficient.” *(syb)* ■

Switzerland:

TECHNOLOGY UPDATE

for end customers and partners

In mid June a full day “Technology Update” took place at Datwyler IT Infra in Switzerland, to which the local Datwyler team had invited end customers and selected partners to head office. Nearly thirty people made their way to Altdorf to find out about current trends and new developments in the fields of data centre cabling, edge computing, edge data centres and Industry 4.0. They included representatives from cantons, universities, the Swiss army, hospitals, manufacturing companies, ICT service providers, power supply and pharmaceutical companies.

After the welcome in the company showroom by Gregor Süssli, the Head of Sales Switzerland, Adrian Bolliger, now CEO of Datwyler IT Infra, gave those present a brief insight into where the “journey” is going, the transformation processes which lie ahead and the connectivity offerings and services for their business applications which are available from Datwyler.

In two info sessions Pius Albisser, Senior Engineer Data Centre Solutions, initially talked to those present about current develop-



ments in data centre cabling, then about “AI, edge computing and Industry 4.0”.

After lunch Gerardo Cetrulo, Project Manager IT Infrastructures, presented a Mini Data Centre solution, and explained its advantages for edge data centres. This was followed by a joint tour of the Datwyler factory, when the participants gained insights into the production of copper data and fibre optic cables.

The successful event ended with a closing session in the showroom – and very positive feedback from all those present. *(luk/dir)* ■





China:

DATWYLER AT WEE EXPO 2023

Since 1996 the World Elevator & Escalator Expo (WEE Expo) in China has continually developed and contributed to the success of the elevator industry. After three years of careful preparation the fifteenth edition of the trade fair took place at the National Exhibition and Convention Center in Shanghai from July 5 to 8, 2023, and over 1,000 exhib-



itors and more than 100,000 trade visitors made it a huge success. Once again, the WEE Expo has proven to be a high-quality event that connects the elevator industry around the world while demonstrating the industry's dynamism and vitality. It presents the latest technical innovations, offers a col-

laborative, interactive platform for exchange and cooperation within the industry and offers new opportunities and perspectives for the development of the elevator industry.

Heritage and innovation

As a Swiss brand with over a hundred years of history, the team from Datwyler China worked with the team from Singapore to be present at the trade fair together and to be able to present both flagship products and innovations to stand visitors.

These included travelling cables, suspension devices, fibre optic boxes and converters, shaft wire harnesses and other industrial products. In the field of travelling cables, Datwyler's product range extends from parallel to stranded structures, application heights from 150 to 600 metres and running speeds from 4 to 12 millimetres per second – with CCC, CE, UL and other related product certifications. This means they cover all high-rise, middle-rise and low-rise requirements of all elevator manufacturers and applications.

The Datwyler IT Infra teams were able to welcome representatives from the world's

most renowned elevator manufacturers to the exhibition stand, including Schindler, Otis, ThyssenKrupp, Mitsubishi and Hitachi. Datwyler's sales, technical and R&D teams took the opportunity to demonstrate to visitors competently, professionally and impressively what makes working with Datwyler special.

Product of the year

By the way, the "World Elevator Summit 2023" took place parallel to the WEE Expo 2023. Here, a flat high-rise elevator travelling cable from Datwyler received an award as "Elevator Product of the Year 2023" – which once again underlines the company's leading position in technical innovations for the elevator industry in China. (chc) ■





Switzerland:

The path to the

DIGITAL FACTORY

In August everything at Datwyler in Altdorf revolved around the topic “Smart and secure to the digital factory”.

On August 24th, after a lengthy break due to Corona, Datwyler IT Infra was again able to welcome nearly 130 customers and partners to Altdorf. The theme of the event was the imminent transformation to smart and secure digital factories.

Since Datwyler is not the only one dealing with this development, it was all the more gratifying that the company’s technology partners also contributed towards jointly demonstrating solutions and technologies for this transformation and discussing them

with the visitors, including DC Products, Fortinet, Microsoft, Nokia and Schneider Electric. Both the supporting programme with presentations and the on-site demonstrations made it clear how networking applications, infrastructure applications and overall applications can smooth the way.

Overall solutions are complex

Even if the technology silos are increasingly dissolving, essential transitions between the technologies still exist and must be planned, integrated and operated by competent partners in the form of an overall solution.

Starting with the networking of sensors and actuators via 5G and WLAN (also Single-Pair Ethernet) through to the various possibilities of data processing, interpretation and forwarding, for example in a public or private cloud. These keywords al-





ready describe the breadth of expertise that is required here. The presentations of the experts involved in this event were correspondingly demanding.

It was also emphasised as a central discipline that the IT infrastructure solutions in the “smart fabrics” must be comprehen-

” We are pleased that together with our technology partners we were able to host an exciting event for our customers and partners.

Gregor Süssli, Head of Sales Switzerland at Datwyler IT Infra

sively and proactively protected and monitored: both from physical and digital abuse and, if the worst comes to the worst, of course, from attack. The event provided a successful framework for demonstrating these complex issues realistically and in partnership. There were also plenty of opportunities for the participants to network and share their insights and ideas.

Frequency band for Private 5G

Another highlight was the contribution from René Tschannen, Head of Frequency Planning at the Swiss Federal Office of Communications, who examined the importance of intelligent frequency manage-

ment and its impact on Switzerland’s digital future. He announced that as from 1st January 2024 the harmonised 5G frequency band 3400–3500 MHz will be available for local private mobile networks, also known as campus networks, in Switzerland. This is a significant step towards future connectivity for companies and other organisations.

“We are pleased that together with our technology partners we were able to host an exciting event for our customers and partners,” said Gregor Süssli, Head of Sales Switzerland. “We are already looking forward to a repeat next year.” (jud) ■





Europe, China:

CLIMATE PROTECTION AT DATWYLER

At the end of September, the flag for sustainable development goals was raised worldwide. Datwyler IT Infra also supported the Sustainable Development Goals (SDG) by participating across Europe on this day. As a member of the UN Global Compact, Datwyler wants to draw attention to the 17 UN goals for sustainable development – and further intensify its own commitment to them.

A school class from Altdorf found out more about Datwyler's sustainability activities.



Datwyler showed the flag

With various local actions the European Datwyler teams demonstrated that the company sees itself as part of this international campaign. A fifth school class visited the Swiss site in Altdorf. The pupils learnt of the measures Datwyler is taking to reduce environmental pollution and how the self-imposed target of CO₂ neutrality can be achieved by 2030. One example is that the factory in Altdorf relies on renewable energies, recycles waste and uses sustainable district heating in winter. At the end the children were given a board game on the theme of sustainability.

Under the slogan "playful school", Datwyler employees and their families in Děčín, Czech Republic, also received a game containing information about the 17 Sustainable Development Goals. In Hattersheim the German team went home with flower meadow seeds so that they could make a small contribution to more biodiversity.

CO₂ neutral by 2030

Datwyler IT Infra has set itself the goal of becoming climate neutral by 2030. The focus here is on the reduction of Scope 1 and Scope 2 emissions. This means that the company wants to reduce direct emissions from fossil fuels which it uses itself (Scope 1). The release of indirect emissions which Datwyler buys in from the energy suppliers will also be reduced (Scope 2).

Datwyler in Hattersheim celebrated SDG Flag Day.

Clean energy from PV systems

Over the past four years Datwyler has reduced CO₂ emissions by more than 30 per cent with a long list of measures. And not only in Altdorf, Switzerland. The plant in Taicang, China – to take another example – is also making a major contribution to this climate protection target. At the end of 2020 a photovoltaic system covering 19,400 square metres started operating on the roof of the Chinese plant. The system has a maximum output of 1,200 kW and a service life of over 15 years.

The initial results are impressive: to date the power plant has already generated 3.6 million kilowatt hours of clean energy. This was supplied to the factory or to the national grid when power generation ex-



Green electricity from the roof of the factory in China.

ceeded internal demand. As a result, annual emissions could be reduced by around 900 tonnes of CO₂ in each case. 150 hectares of woodland would be needed to “store” this amount of CO₂ and hence remove it from the atmosphere.

Further significant investment is planned for the coming years. This will bring Datwyler a great deal closer to its goal of reducing greenhouse gas emissions to zero by 2030. (syb) ■



Strong partners (from left to right): Aissam Boushaba, Deputy General Director, ECV, Soubhi Al-Aliwi, Head of Sales MEA, Datwyler, and Eduardo Casellas Bonaterra, CEO of ECV

Morocco: NEW DISTRIBUTION PARTNER

In Morocco the increasing demand for advanced IT solutions led to the company ECV Vidéo Sécurité entering into a sales partnership with Datwyler in May 2023.

ECV is a leading distributor of security and technology solutions and has earned a strong reputation in the Moroccan market with its comprehensive portfolio. The company always provides its customers with innovative solutions and services that meet the ever-changing needs of users. To support Moroccan companies with high-quality technology solutions, ECV has established close partnerships with industry leaders around the world. Through its commitment to quality, reliability and continuous optimisation, ECV has gained the trust of customers from various industries and is now their preferred partner.

The strategic collaboration between ECV and Datwyler and the combined know-how of both partners open up new opportunities for companies and other organisations in Morocco to overcome their specific challenges and requirements. Through ECV they gain access to Datwyler’s extensive portfolio of innovative, state-of-the-art and efficient IT and OT infrastructure solutions, including data centre solutions, communication networks, software and services for a wide range of industries and applications. (soa) ■



Evolution of the IT infrastructure:

SD-WAN AS THE FOUNDATION FOR DIGITALISATION

Interview with Thomas Dingel, Managing Director,
Deutsche Telekom Global Business & Security Schweiz AG

Herr Dingel, in your opinion how have IT infrastructure requirements changed in recent years, and how is this reflected in the market?

As a result of increasing digitalisation, the storage of many IT applications in the cloud, the use of hybrid work models and the increase in cyber threats, the market for net-

work solutions in particular has changed dramatically. Businesses are having to rely more and more on flexible, scalable and secure network architectures like SD-WAN

SD-WAN

A software-defined Wide Area Network (SD-WAN) is a fully digitised network. Here all the settings are combined centrally in one software. Firstly, it bundles all the connection options such as the network, the Internet or data transport via mobile radio (5G). Secondly, network functions are configured, for example security measures such as firewalls and encryption. SD-WAN is a kind of traffic management system by which the “road” and the “type of traffic” is set. At the touch of a button video/audio links, applications or locations can be prioritised or established. Central monitoring and control make it easier to solve problems in protecting the network from threats.

and -LAN, which can be adapted quickly and easily to new operating requirements.

What are the advantages for companies modernising their IT infrastructure and using SD-WAN technologies?

SD-WAN is a highly flexible, software-based network. It offers full transparency from a central application. Companies gain insight into traffic on the network. They can identify bottlenecks and allocate bandwidth dynamically and according to demand. This results in optimal application performance for users. At the same time, security is increased by the central roll-out of the latest security solutions – the keyword being SASE (Secure Access Service Edge, editor’s note). Following the automation of functions, the operating team is relieved of routine activities.



An SD-WAN router protects user data and speeds up business applications

What advantages do SD-WAN solutions offer in comparison with traditional network infrastructures, and how does this affect company competitiveness?

Classical network architectures are geared to a central data centre – not to the cloud. The SD-WAN approach involves fundamental changes: device onboarding, bandwidth adjustments or optimisations are configured in a few minutes. New locations are connected within days – not weeks or months. This ability to react quickly increases the competitiveness of our customers, especially as the market now also demands tremendous speed in terms of customisation times. In this sense software-defined networks react more rapidly than the companies themselves.

Do you see SD-WAN as a driver for digital transformation and innovation in companies?

I see SD-WAN as an “enabler” rather than as a “driver” of digital transformation. The driver is always the market in which the company is dealing. SD-WAN permits the easy and seamless integration of new technologies and applications.

How do you rate the acceptance of SD-WAN on the market, and what challenges do you see in respect of the in-

roduction of this technology in companies?

MPLS (Multiprotocol Label Switching, editor’s note) is the past, SD-WAN the present, SASE the future. SD-WAN always also means that companies use cloud services flexibly – and globally. Step number one in the roll-out is to consider security as well as the WAN and its customisation. The range of solutions, risks and scenarios make a rating for customers impossible. With MPLS this was one-dimensional, i.e. simpler. We see customers going overboard with this task and exposing themselves to dangers such as fatal cyberattacks. The optimal approach is to implement together, train staff and transfer know-how. Or even more simply: have the solution managed completely by one service provider.

How do you assess the future development of the market for IT infrastructure and SD-WAN?

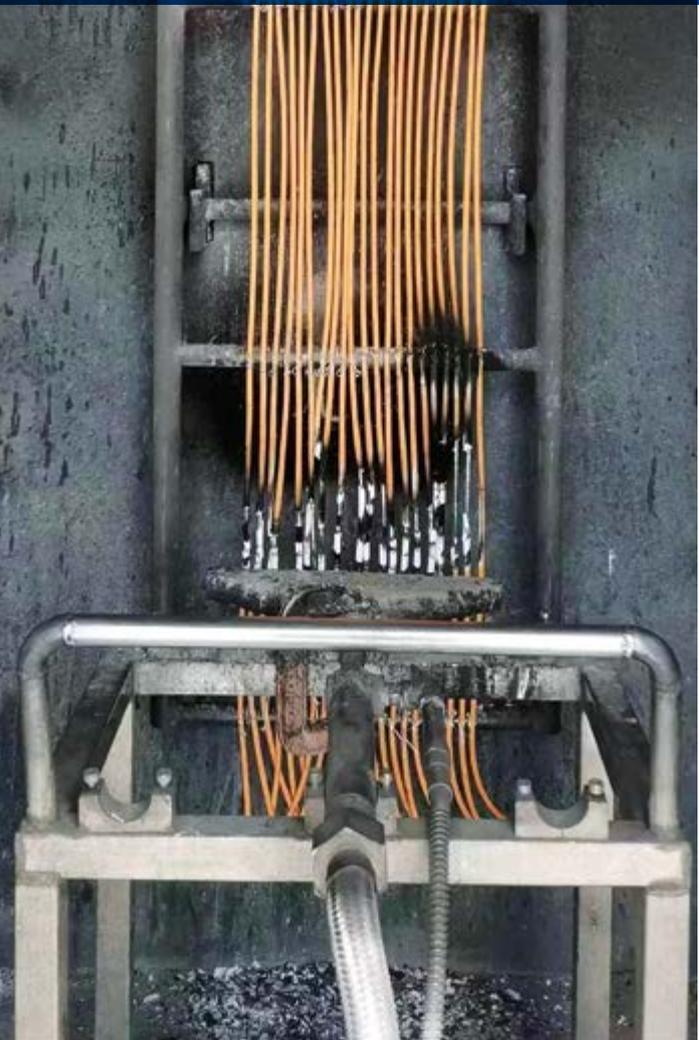
The trend towards the cloud, especially multi-cloud architectures, is unbroken. Cloud means global collaboration. This will also further fuel the demand for SD-WAN. In view of the increase in cyber threats, security aspects must always be borne in mind as an integral component. This is why we also see strong growth in security solutions – with keywords like ZTNA (Zero Trust Network Access, editor’s note) or SASE.

Many thanks for this interesting conversation. (raf/dir)



Preventive fire protection in airports:

BECAUSE SAFETY COUNTS



B1 cables conforming to Chinese standards are increasingly being used in the communication networks at Chinese airports. They offer the highest level of safety in the event of a fire.

The rapid development of international trade has led to airports being built or existing aviation hubs being expanded all over the world. As in all buildings that are frequented by many people, airports have high requirements for the fire behaviour of the materials used. In the event of a fire, it is important to maximise the protection of the lives and property of passengers and employees.

Also in China, where a particularly large number of airports have been built in recent years, great attention is paid to preventive fire protection. For example, the requirements for data cables, which are a central part of airport communication, have been constantly tightened with regard to their behaviour in the event of a fire.

Of course Datwyler keeps a close eye on market changes in order to be able to continuously supply high-quality cables that have the necessary fire protection properties. Previous flame-retardant cables still used polyvinyl chloride (PVC) or low-smoke, zero-halogen (LSZH) materials for the sheath. It was then discovered that PVC produces acids and large amounts of black smoke when burned. For cables installed in airports an LSZH jacket undoubtedly proved to be a better choice. In the event of fire these cables do not produce any acids and only emit a small amount of smoke.

Cornerstone of fire protection

For this reason Datwyler has always viewed LSZH jackets as the cornerstone of preventive fire protection in particularly vulnerable areas. The first generation of these flame-retardant cables has been available in China for many years. It also has another advantage

important for airport security: these cables are flame-retardant and are self-extinguishing if the source of the fire is removed. In this way the risk of fire spreading along a cable can at least be reduced. The low-smoke and halogen-free materials achieve reduced fire propagation by adding metal oxides to polyolefin.

However, with the continuous expansion of airports, the "density" of communication lines laid has also continued to increase. Today they are often installed in bundles. In this case the flame retardancy of an individual cable no longer has any significance. Instead the fire safety of the entire cable bundle must be taken into account.

New generation of cables

That's why Datwyler has brought a new generation of flame-retardant cables with LSZH jackets onto the market in China, which still meet the high fire protection requirements even when laid in bundles. In various test setups that were modelled on real installation situations, these cables extinguished themselves after a certain period of exposure to fire, even when laid in



bundles. The measured flame spread along the bundles was less than 2.5 meters throughout the entire process.

The standard GB 31247-2014

In 2014 China introduced the GB 31247-2014 standard for classifying the fire characteristics of copper data and fibre optic cables. This standard evaluates the fire behaviour of cables based on various criteria, including heat of combustion, heat release rate, smoke generation, smoke generation rate, flame propagation, flame propagation rate and flaming droplets (particles) of plastic – similar to European standard EN 50575.

The new generation of cables from Datwyler meets the requirements of the highest reaction to fire performance class in China, GB 31247-B1. For comparison: In Europe the highest reaction to fire performance class is B2ca – and of course Datwyler has also been offering the respective cables since 2017 in this highest class required at airports.

As a result, Datwyler's B1 cables are increasingly being used at Chinese airports. They have completely replaced the copper and

fibre optic cable bundles originally installed. They are currently helping to ensure the safety of passengers and staff at Guangzhou Baiyun, Urumqi Diwopu, Xi'an Xianyang and Chongqing Jiangbei airports. (nen) ■



Change of leadership at the top of Datwyler IT Infra:

OUR TRANSFORMATION

is both a challenge and
an opportunity

Interview with Johannes Müller and Adrian Bolliger,
the previous and the new CEO

On October 1st Adrian Bolliger (48) took over the position of CEO at Datwyler IT Infra. He thus succeeded Johannes Müller (65), who retired at the end of November after more than 19 years with the company. Shortly before that both of them – the previous CEO and the new one – made themselves available for an interview. In it they answer the most important questions arising within the context of the change in management.

CEO of Datwyler IT Infra for 19 years, Hannes. An amazing achievement! If today you look back at your time as CEO, of what are you particularly proud? And what do you look back on with a tinge of regret?

Johannes Müller: I am particularly proud of the fact that in the last 19 years we have been able to transform the firm from a traditional cable manufacturer into an innovative high-tech company in the forward-looking ICT sector. In addition to Europe our business during this time has grown profitably, especially in China, the Near/Middle East and in South East Asia, and our

brand is recognised and valued all over the world. Despite the transformation that has taken place it is also great that the cable business still continues to be an integral component of our offering.

And regrets? Yes, I have found it hard to say goodbye to my colleagues, customers and partners from all over the world. We were like one big family with a close and trusting working relationship which extended beyond national and cultural borders. I shall never forget many shared experiences from every part of the world.

Based on your experience and in view of the current multipolar world order, what in your opinion are the most important qualities and abilities which a successful CEO should possess?

Planning reliability has decreased dramatically over the past two decades. There have been huge changes in technology, the market environment and geopolitics. They require the utmost agility and attention from management. The CEO must be aware of this and act close to the market so that he – together with his management

team – can set the right course in good time.

As far as Datwyler IT Infra is concerned, there should also be a strong affinity with the ICT industry, as our company is constantly moving at the cutting edge of innovation and wants to act as a trendsetter. Artificial intelligence, IoT, edge computing and robotics are currently our daily bread and require a good technical understanding.

Finally, the CEO should be a person who radiates positivity, with positive feelings and empathy. He needs to understand that major change can only be achieved with the help of the workforce. Incidentally, I am convinced that my successor brings precisely these qualities to the job.

Adrian, of course you are not exactly a new face in the IT Infra universe, but all the same would you introduce yourself to our readers in a few words?

Adrian Bolliger: I have been working at Datwyler IT Infra as Managing Director Europe for four years. Prior to that I was employed in the telecom IT sector for over 20



years, and there I carried out various activities in the B2B environment and also fulfilled a management role. I started my career by training as an electronics technician. After that I completed various further training courses in business management, computer science, management and digital transformation. Finally, I took an advanced training course at Insead in the context of global leadership and communication. In private my favourite ways of spending time are with my family and in outdoor sporting activity.

One subject which is probably on the minds of both our customers and staff: what can we expect from you as the new CEO? Where will your strategic priorities lie – and especially with regard to the current economic situation?

Traditionally Datwyler IT is a cable manufacturer. Over the last 19 years Hannes has successfully transformed our firm into an IT infrastructure service provider – thus making us fit for the future. Today we are perceived mainly as an IT infrastructure provider, and that is a major achievement, due not least to Hannes' foresight. We want to continue this transformation and in the next 12 to 24

months make our ICT business a strategic priority, particularly the development of solutions and the implementation of IT projects to help our customers succeed in growing their business.

Can you give a couple of examples of this?

A good example are production companies which are beginning to network their machinery in order to advance digitisation in manufacture. This often gives rise to questions such as: Where are the data stored? Are there security vulnerabilities when recording and processing the data? Which networking technologies >>

should we use? And so on. With our expertise we can considerably ease the workload for these companies in the areas of designing and construction through to operation of the solution. In this context we speak of support from “connectivity” through “infrastructure” to “application” – and with us our customers, global and local alike, have one point of contact for everything.

As well as expanding the ICT business we will also grow further in geographical terms. The establishment of legal entities – initially in Saudi Arabia and Spain – will no doubt be followed by other countries. We always work with the appropriate partners in order to provide end-to-end solutions globally.

Back to you, Hannes. What in your opinion are the greatest challenges confronting CEOs – and hence also your successor – in today’s business world?

Johannes Müller: In today’s technology-driven world nothing any longer works without a sound, high-performance IT and OT infrastructure. Datwyler IT Infra is ideally positioned in this strategically important sector with annual double-digit growth. Our decentralised structure and excellent customer proximity allows us to expand our business model successfully, even under new as yet unknown technologies and developments. The key here is definitely in the service sector.

In the European business the constantly increasing strength of the Swiss franc is and remains a major challenge. The euro has declined steadily compared with the Swiss franc and will probably continue to do so. We also need to be mindful of further geopolitical changes which could possibly pose risks for parts of our international business.

How do you see this, Adrian? Have you already planned how you would like to tackle the challenges facing Datwyler IT Infra?

Adrian Bolliger: There are a lot of challenges, and fortunately we have a lot of ideas as to how we want to meet them. By way of example, I would like to refer specifically to two of them. The first is our transformation: if Datwyler IT Infra today

was to continue manufacturing only cables – like it did 20 years ago – we probably would not be around anymore, at least not in our present form. If we didn’t make any more cables at all, we probably wouldn’t. Over the last 20 years we have time and again succeeded in developing together with our customers to create value, whether with new products and services, in geographic terms or in the way we find new solutions jointly with customers – for things no longer work as they used to when developers liked to shut themselves up in the lab. Today’s approach of developing solutions with customers and partners is also due to the number – and type – of changes we all need to react to, our customers as well as ourselves.

So, we see the future along the three levels I mentioned earlier, connectivity, infrastructure and applications, where we design, build and operate the solutions for the customers. I see this transformation – or evolution – as an opportunity and a challenge at the same time.

And the second challenge?

That is complexity. Our customers are faced with ever greater requirements which lead to increasingly complex questions, for example which networking technology makes the most sense – cable, WiFi, 5G or something else? Where will the data generated be processed – in the cloud, edge cloud, in a data centre or even in a gateway close to the machine? And where do the applications run, and how can I appropriately protect my IT applications against cyberattack in this environment? These questions must be answered in order to be fit for the future. Here we provide comprehensive solutions and an outstanding advisory service. We can only do this if we employ staff who are very familiar with our customers and their complex challenges, and who have the necessary specialist knowledge to be able to advise them on connectivity, infrastructure and applications. Today we are capable of providing this service. In future we want to continue developing this expertise in the regions. Because in this way we can successfully use the opportunity of increasing complexity for ourselves.

What kind of relationship and interaction do you want to cultivate with our customers in order to ensure greater loyalty and satisfaction?

My career is based on many years of B2B and sales expertise, but I also had the opportunity of doing various jobs in product management and development. This means that my answer will surprise nobody: it is my conviction that tailor-made solutions demand that we understand our customers and their needs very well.

Even today we are developing most of our solutions jointly with them and our partners; in technical jargon we call this the “outside-in perspective”. Hannes visited customers and partners very often in order to ensure this perspective. I will continue to do this because I am convinced that this is the only way to meet the needs of our customers and develop tailor-made services.

As CEO I will do this in all regions, and as well as visiting trade fairs and making public appearances I look forward to many customer meetings, when I will be able to gain a very good insight into new trends and possible new partners.

Hannes, if you were to give only one piece of advice to your successor, what would it be?

Johannes Müller: I would advise him to continue to stay very close to the market and be indefatigable in opening up new, innovative business areas. At the same time, he should listen primarily to the people who are striving for success with him, and even to the constructive critics, but less to sceptics and naysayers wanting to explain why his ideas never can or will work.

Good advice! Thank you both very much for this interesting conversation.

(chs/dir) ■



Data centres:

Remote Management based on **METAVVERSE**

In the era of rapid technological advancement and digital transformation, Datwyler Middle East has developed a service that offers its data centre customers a new dimension of virtual reality and immersive experience: Remote Management based on Metaverse.

This platform enables corporate IT managers to access a virtual replica of their data centre and interact with the computer-generated environment in real time. This immersive environment allows them to monitor, control and optimise various aspects of the IT infrastructure such as temperature, power consumption, security systems and device performance. With the help of virtual data centre management, users can increase their operational efficiency. By providing real-time insights and predictive analytics, maintenance costs can be reduced.

Furthermore, the platform can be used for remote collaboration between data centre teams and stakeholders. Regardless of their physical location, they can gather virtually in the

metaverse, review plans, share ideas and troubleshoot problems in a visually immersive environment. In addition, the platform facilitates virtual training for data centre staff, improving knowledge transfer even without the need for face-to-face meetings.

Datwyler Middle East also uses the Remote Management based on Metaverse platform for sales demonstrations. This allows interested parties to virtually experience a data centre solution and explore its design, device placement and operational functions. The immersive experience enables potential customers to gain a better, more realistic understanding of the functionalities and benefits of a Smart Modular Data Centre solution from Datwyler.

“Integrating this concept into our Smart Modular Data Centre revolutionises the way data centres are managed and experienced by our customers,” says Asem Shadid, Managing Director of Datwyler Middle East. *(ihg)* ■



Factory automation: IE CABLES TO UL 444 CMG STANDARD

Datwyler has expanded the Industrial Ethernet portfolio, which comprises solutions for factory automation, by two types of cable which meet all the requirements of Standard UL 444 for communication cables. Both can be used as patch and connecting cables – for flexible wiring in machine control cabinets and for general industrial applications where UL certified products are required.

The new CU 7727 4P is a Category 7 data cable (AWG 27), suitable for transmission rates up to 10 gigabits per second and thus meeting the real-time requirements of Industry 4.0. Thanks to its compact design it is very flexible and easy to process. For example, it has already been tested successfully on the extrusion coating of industrial connectors. The cable is available from Datwyler with a grey sheath and can also be produced in other colours on request.

In addition to this Datwyler has applied for the same approval (UL 444) for the existing CU SPE 1P. This flexible Single-Pair Ethernet (SPE) data cable is equipped with a flame-retardant, non-corrosive (FRNC) and halogen-free external sheath.

Both Ethernet data cables meet the high fire safety requirements of FT4 (vertical flame propagation, UL 1685), as required by Standard CSA C22.2 No. 233:17 for patch cables in machine control cabinets. The cables are therefore marked as “CMG UL Listed”.

The two data sheets can be found on Datwyler’s website.
(ivc) ■

For a long time, users in Europe have been relying on pre-assembled cabling systems for cabling server rooms and data centres. For just the same length of time Datwyler has been meeting demand with its two data centre solutions (DCS).



The HD-DCS is a high density system. It represents the maximum packing density possible with LC connection technology, namely 96 duplex ports per rack unit. The greatest strengths of the FO-DCS – with its maximum 36 duplex ports per rack unit – lie in the use of the 4U sub-rack and 12 different combinable plug-in modules (cassettes). They provide unbeatable flexibility for mating faces and fibre classes.

Medium packing density, high flexibility

From now on a third system is available: the MD-DCS. It nicely fills the gap between the previous solutions: a medium packing density of up to 48 duplex ports per rack unit, plus maximum flexibility and simple scalability.



Data centre cabling:

THE NEW MD-DCS

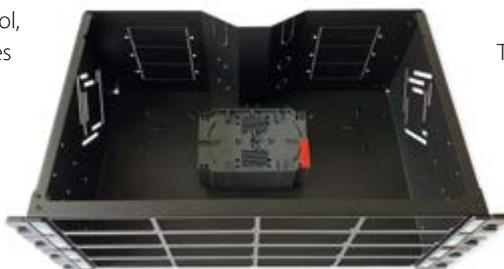
From now on European users will be able to choose between three Datwyler cabling systems for server rooms and data centres.

With MD-DCS the common modern SC, LC and MPO mating faces are served in two different packing densities. They are also interchangeable within one rack unit using snap-in cassettes – and even in combination with splice connections.

Global portfolio, consistent quality

The MD-DCS was successfully introduced on the Chinese market some time ago under the name of “Lingdong”. For the European market Datwyler has modified the system to the extent that the routing and securing options for the DCS breakout and DCS trunk cables match, allowing trouble-free, tool-free installation. The specification relating to quality control, quality limit values and performance of the fibres used is also globally harmonised.

This means that the MD-DCS solution dovetails seamlessly into Datwyler’s DCS component range. As normal, it can be freely combined by the user with any of the patch cables and trunk cables.



Extensive portfolio

The MD-DCS panels are supplied in a 19-inch standard format with one rack unit (1 U), optionally also available with 2 U and 4 U. The 1 U version alternatively comes as a pull-out drawer.

An extensive portfolio is available for equipping the panels: on the one hand fibre optic plug-in modules for patching trunk cables directly – i.e., breakout solutions for various mating faces –, on the other hand MTP fanout modules with multimode OM4 and single-mode BLO fibres. At the same time up to four snap-in cassettes can be used per rack unit.

The MD-DCS solution is rounded off by optional splice cassettes with heat shrink splice protection as well as blanking plates and cable managers. (kaw) ■

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