

DC MAG

MAGAZINE OF THE DC-DATACENTER-GROUP



EDGE
SECURITY
5G
DIGITALIZATION

Create your **IT**.
Today for tomorrow!



MAIN DC – Data center on course
In time despite corona pandemic



EN 50600 – Tier – ISO 27001
Advantages and disadvantages of
Standards and certifications



DC-ITSafes protect diagnostic data of SBB
Schweizerische Bundesbahnen AG relies on
security „Made in Germany“

CONTENTS

02 Preface

04 Frank Ernst

New managing director strengthens the areas sales and finance

05 References

- Thai Parliament
- HUF HAUS
- Schweizerische Bundesbahnen AG
- prego services
- LEITWERK
- MAIN DC

16 F-Gas Regulation

Decreasing availability of coolants requires new cooling concepts

17 7 Questions For...

IT manager Michael Stöhr (Albrecht Bäumer)

18 RZproducts

- DC-ITSafe HDE
- DC-MonIToring

20 Interview

Tim Kohlhaas comments on increasing demand for IT containers

22 EN 50600, Tier and more...

Throwing a glance at current data center Standards

24 Company News

- Kick-Off
- Qualification to „Accredited Tier Designer“
- Basic and advanced training
- New employees
- Anniversaries
- Imprint

MASTERING CHALLENGES TOGETHER!

Dear readers,

this edition of our company magazine reaches you in a time confronting companies all over the world with extreme humanitarian and economic challenges. The DataCenterGroup also took precautionary measures during the last months to create safe structures and concepts to protect our customer's and employee's health. We have always been dealing with topics such as security and availability but now they get another, even different, important meaning to me as managing director.

Digitalization keeps gaining ground

According to Mario Ohoven (president of the German Association for Small and Medium-sized Businesses) eight from ten medium-sized companies rate digitalization positively. I agree with this statement but I also notice how much woman- and manpower as well as investment it takes by our customers daily. As increasing digitalization means more data and increasing dependencies from a working IT infrastructure.

Data symbolize the gold of the 21st century. This is why they need to be protected from physical risks as well as from cyber-crime attacks. By using our certified high-security solutions, for example the DC-ITSafe, IT containers or IT security rooms combined with turnkey general contractor solutions and the resulting services we support our customer's physical and technical overall protection of their growing data amount.

Schweizerische Bundesbahnen AG sets an impressive example (report on pages 8 to 9). Their diagnostic trains gather approximately 20 terabytes of data each week. This data amount is protected in 2 highly-secure DC-ITSafes.

Additionally, this edition reports on IT security products from our business unit RZproducts used by our customers HUF HAUS, LEITWERKE and prego services as well as on a DC-ITRoom (ECB•S) implemented in the new Parliament building in Bangkok. Last but not least we will provide you with interesting information regarding data center regulations and security solutions for IT infrastructures.

Increasing demand for data centers “Made in Germany”

At present more and more service data centers settle in the sphere of Frankfurt, Germany’s capital city of data centers, counting more and more large, foreign companies among their customers. How is that possible despite comparatively high energy costs in Germany? The most convincing advantage certainly offers the immediate proximity to the DE-CIX internet exchange point. Additionally, especially foreign customers appreciate the fact that their servers are located in a country with strict rules regarding data protection and data security. Thus, Offenbach is the location where the data center MAIN DC is built by DCG as general contractor and joint venture partner together with EVO AG and Vantage DC. On pages 14 to 15 we report on the current project status.

This DC MAG edition can only show an extract of projects and topics our more than 190 employees and partner companies all over the world have been coping with. We got off to a very good start this year, but at the same time we set the highest sales target in the company history. This is only possible because we already demonstrated in 2019 what we are able to achieve when we work together as the DCG team!



This year, despite the difficult situation, we look back in pride on 15 exciting and successful business years. Last but not least I am happy to introduce Frank Ernst, our new managing director for the areas sales and finance, who has shared the responsibility to manage the DataCenterGroup with me since the 1st of March. You can learn more about Mr. Ernst on the next page.

I hope you enjoy reading the DC MAG.
You and your families stay healthy!

Best regards

Ralf Siefen
(Shareholder and Managing Director)



” My goal is to unite man and technology – always. “

Frank Ernst

Frank Ernst

Age 47, married

Background Training as gas and water plumber
 Training as central heating and ventilation engineer
 Study of refrigeration engineering
 Study of business administration
 Managing director, Menerga GmbH
 Chairman Herstellerverband
 Raumlufttechnische Geräte e.V. (2016 – 2020)

Hobbies Sports, nature

“IMPOSSIBLE IS NOT AN OPTION. THERE IS ALWAYS A SOLUTION “

Frank Ernst strengthens management of the DataCenterGroup

Since March 2020 Frank Ernst has completed the management of the DataCenterGroup and he will shape the company’s strategic orientation together with Ralf Siefen. He will lead the areas sales and finance, contributing his expertise from more than 20 years of selling capital goods.

Born in the Lueneburg Heath he started his professional life with the craft training as gas and water plumber. But soon the today 47-year-old discovered his passion for technology and sales and collected first experiences in facility management and sales of technical products. “My goal is to unite man and technology – always. Especially complex tasks arouse my ambition. I always rethink and review ideas and solutions prior to contributing them in projects. My device: Thinking before acting”, says Frank Ernst.

From his former position as managing director of the Menerga GmbH, a supplier of ventilation and air-conditioning technology and part of the international Systemair group, Frank Ernst provides comprehensive know-how, for example in view of air-conditioning technology. This knowledge supports our customers to realize efficient IT infrastructures.

“Due to the corona pandemic my start at the DCG certainly faces a difficult situation. But together we will master this situation. We take this time as an opportunity to set up and adjust required processes and to align our solutions and services in the best possible way with our customers’ current and future needs.”

THAI PARLIAMENT REALIZES HIGHLY-AVAILABLE DC

DC-ITRoom protects IT at Bangkok 's seat of government



(f. l.) Khun Chupong Ninsakul, Khun Suchat Rojthongkam, Karl Hummitzsch.

Visitors of the new Parliament building enjoy an impressive view: even from a distance the seat of government, designed in the style of contemporary Thai architecture and according to the concept of the Triphum and the Tipitaka, is silhouetted against Bangkok 's skyline. The Thai Parliament is the legislative's seat but also a meeting point for the representatives and senators of the Asian metropolis – built in only seven years.

A new data center was planned to be part of the new seat of government. The demand to it was crystal clear: highest availability of the systems and the business-critical processes. Outsourcing was not an option for the responsible planners. In the past they already had their own data center and intended to operate their own IT infrastructures in the new government building as well. At the same time many national and international standards had to be taken into account.

"We designed the new data center as a prototype for future Thailand data centers. It is a role model regarding it's physical security and availability and guarantees the data security we need to achieve our business goals", says Khun Suchat Rojthongkam, Deputy Secretary General of the Secretariat of The House of Representatives. The attention was drawn to the high security room "DC-ITRoom GranITe" through the collaboration with SITEM (Site Preparation Management Co. Ltd.), one of the partners of RZproducts in Asia. It took less than 1 month to realize an ECB•S certified room-in-room concept on 77 sqm.

"We are sure that with the DC-ITRoom GranITe we found the best room-in-room solution for us, with a high degree of investment security" sums up Khun Suchat Rojthongkam.



Facts

SALES:

- Karl Hummitzsch Pacific Systems Ltd.
- SITEM Ltd.

DATA CENTER:

- Room-in-room system DC-ITRoom GranITe, 77 spm

DURATION OF CONSTRUCTION:

August - September 2019





Photo: HUF HAUS



“NEW PLAYER JOINS TEAM IT”

Green DC-ITSafe for HUF HAUS

The name HUF is connected with demand and engagement of a family that has already been leading and shaping the company in third generation placing just as much emphasis on economic solidity and stability as well as on continuity, assuming responsibility over management and employees.

The experts from the HUF company group thoroughly carry out every step of construction and are absolutely familiar with the specific demands of timber-framed architecture.

In the course of digitalization the requirements and priority of the IT infrastructure for the West-erwald-located family business increased and thus the importance of the data that needs to be protected. Besides topics such as backup, firewall and data availability, the role of air-conditioning technology, fire protection and physical access protection is getting more and more important. Hence the HUF HAUS management decided to implement a new and future-proof solution in order to meet the current regulations regarding IT security as well as data and fire protection.



The IT manager Thomas Ehmann and his colleague Denny Langos remember the first contact with the products of the DataCenterGroup took already place in 2014 during the CeBIT fair. This meeting paved the way for the final purchase decision.

It was not just the product that convinced, also both company mentalities matched perfectly. The responsible IT staff were convinced after the first meetings, too. The customer felt to be in the best hands thanks to an uncomplicated and transparent consulting service provided by the sales department.

With the help of virtualization, the number of server cabinets was reduced from 5 to 1. This cabinet had to be well-thought centralized. In collaboration with the DataCenterGroup the best possible solution for the systems was defined: the DC-ITSafe.

As the new location for the server was at ground level and highly-accessible there was no need to pay attention to any special features. It took about 8 weeks from handshake to implementation. "The implementation was carried out smoothly", summarizes Ehmann. The DataCenterGroup did not only deliver the safe, the company is also charged with maintenance.

Ehmann concludes positively: "On the one hand the IT core is now protected against most physical failures, on the other hand the whole equipment is centrally accommodated right beside the IT office without anyone being disturbed, for example by noise."

"We were not only convinced by the obvious characteristics such as air conditioning and fire and access protection but also by the solutions regarding monitoring and uninterruptable power supply (UPS). Additionally,

the safe was of course painted in typical HUF green and the accommodation of the UPS batteries was just brilliantly solved. Up to this day, no other supplier was able to provide this service", continues the IT manager.

„ We put great emphasis on receiving all services from one single source. “

Thomas Ehmann
IT manager



Facts

SALES:

Florian Hammer

DATA CENTER:

- DC-ITSafe 56 HE
- Redundant rack inverter cooling system 1.6 -4.5 kW
- 19" UPS system, 8 kVA/8 kW (integrated into the safe's interior)
- DC-MonIToring DCM Agent

DURATION OF

OF CONSTRUCTION:

March until April 2019



Photo: HUF-HAUS



(f. l.) D. Langos and T. Ehmann (HUF HAUS), F. Hammer (DCG).



Green and secure. The compact data center from HUF.

FREE FLOW FOR DATA TRAFFIC

Two DC-ITSafes protect diagnosis data of SBB

The Swiss Federal Railway Company Schweizerische Bundesbahnen AG (SBB) has existed for more than 150 years and counts approximately 33,000 employees. Every day SBB transports 1.25 million travelers and 205,000 tons of goods, while the division SBB infrastructure with its 4,500 employees is responsible for the security and the lifecycle of the rail network and the infrastructure.

On a daily basis a mobile diagnostic vehicle controls the whole road network of SBB and reports the status of the trails with high-definition cameras, x-ray and ultrasonic devices to ensure the security of the almost 11,000 trains using the rails with a range of more than 3,000 km day after day. Every week this procedure creates an enormous data amount of approximately 20 terabytes to be collected at one central spot. Therefore, a data exchange point was installed at Bern. It must guarantee highest demands to security and availability.

The demand

Due to the large data amount the planned data center should be designed as a single-point-of-failure data center. "Outsourcing was not an option due to the large data amount", says Joël Casutt, head of technology and development. Using the internet to find a data center provider connected SBB with the DataCenterGroup in May 2019.

The solution

In the course of initial talks, the DC-ITSafe crystallized out to be the best solution for the demands of the SBB as it guarantees the required security as well as flexibility, mobility and efficiency.

Two interlinked DC-ITSafes with 62 units each provide enough space for current and future IT components. Additional features are the fire detection and extinguishing system as well as DC-MonIToring. This tool ensures that the limit values regarding humidity, temperature etc. are not exceeded and – if yes – triggers an alarm.



Diagnostic vehicle of SBB.

Joël Casutt in front of the DC-ITSafe.



“ It was important to us to find a supplier who could offer the whole package. ”

Joël Casutt
Head of technology and development

The special characteristic of the UPS system providing an autonomy time of 45 minutes is not only the emergency power supply of the components inside the DC-ITSafe. It is also used to regulate voltage peaks that could occur from surrounding 15,000 volt railway overhead lines.

“It was important to us to find a supplier who could offer the whole package”, says Casutt. “The DataCenterGroup was the only company that offered a tailor-made solution with the DC-ITSafe. At the same time the price was also more attractive compared to other suppliers.”

In the meantime, the diagnostic train unloads its digital freight in Bern every week, which is directly transmitted to the DC-ITSafes via a specially designed fiber optic connection. It took only 6 months from the first contact to operation.

“ The advantage of the DC-ITSafe? We have significantly optimized our life cycle costs. ”

Joël Casutt



Facts

LOCAL PARTNER:
LESCOM AG

- DATA CENTER:
- DC-ITSafe 62 HE DUO
 - Redundant rack inverter cooling system 2 x 6.2 – 15 kW
 - UPS system 40 kVA
 - Fire detection system / extinguishing system
 - DC-MonIToring DCM Detection
 - Annual maintenance by RZservices

“OPEN SKIES ONE”

DataCenterGroup specialists convince



■ **prego services develops and operates scalable, secure and future-proof IT and business solutions at the sites Saarbruecken and Ludwigshafen for medium-sized companies with focus on the sectors energy industry, public administration and health care. The comprehensive and tailor-made services in the areas information technology, human resources, materials management and purchase as well as energy-economic services are offered across all sectors, too. With the help of approximately 500 employees and a high-performing infrastructure prego services provides consulting, solutions and services from one single source.**

prego services strengthens the location in Saarbruecken with the new highly-secure data center. “Open Skies One” offers companies a secure home for their data and represents the starting point for perfectly tailored services all around internet-based applications.

“Security, sustainability and efficiency build the company’s highest priority”, emphasizes Jürgen Kömen (team leader data center, prego services). The company’s future-orientated strategy is also strengthened by the decision for the new state-of-the-art data center.

The new data center offers space for 3,500 physical servers in cold-aisle containment, redundant power supply via multiple-redundant UPS systems, redundant supply of energy and data lines into the building, cable trays for the energy supply in the heavy-duty raised floor, cable trays for data lines as mesh tray system above the racks, 360 kW cooling capacity via modern cooling systems, a cold-aisle containment for high-efficient and temperature-homogeneous cold air supply to the server racks, a modular fire detection system with direct connection to the professional fire department, an early fire detection system via smoke aspiration system (SAS) as well as a modern extinguishing system with NOVEC™-1230 extinguishing gas.

“A failure of our IT would cause serious consequences. Thanks to the DCG solution we are well-prepared for the future”, points out Kömen.

A large number of companies still hesitates to switch over to Office 365 from the Cloud as there are many providers who are processing and storing their customers' company data in server farms spread all over the world and all continents. “In opposite to this fact our customers can rest assured that their data will completely remain in Germany, even with applications from Microsoft, SAP and other software manufacturers and thus will also be subject to German law. By doing so our customers make use of the comprehensive and fully developed functions for online cooperation without worrying about regulations that are relevant for data protection (DSGVO) when hosting”, underlines Kömen.

Additionally, prego services uses “Open Skies One” as an official partner to picture the software infrastructures of large software manufacturers. A Microsoft Azure-Stack creates the preconditions to operate a hybrid and flexible infrastructure model to unite all levels – on premise, private Cloud and public Cloud.

Specialists support the customers in shift operation for a smooth operation, day and night, 365 days a year. “We have decades of experience with critical networks in energy supply and transfer these high-security mechanisms to solutions for medium-sized companies”, affirms Peter Lieb (division manager sales and marketing, prego services GmbH).



Facts

PROJECT MANAGEMENT:
Tim Kohlhaas

DATA CENTER:

- Room-in-room system DC-ITRoom QuartzITe 9.0, 136 sqm
- DC-ITRoom QuartzITe 9.0, 40 sqm as technical room
- Realization during operation
- Cold-water cooling including connection to the house network
- Fire detection system / extinguishing system with NOVEC 1230
- UPS system 250 kVA
- TÜV.tekit certification, level 3

DURATION OF
OF CONSTRUCTION:
March until October 2018

” Right away we felt safe with the DataCenterGroup and received target-oriented consulting. “

Jürgen Kömen
data center team leader





“ It was important to us to cooperate with professionals to build and operate our new data center. ”

Jürgen Thoma
managing director



(f. l.) Rico Siefermann, Dr. Ulrich Kleine, Dennis Spies, Dr. Claus Börschig, Marco Müller, Ralf Schaufler, Ralf Siefen, Jürgen Thoma.



Photo: Leitwerk

Opening celebration in Appenweier.



MISSION ACCOMPLISHED

LEITWERK data center starts operation

■ The first of two planned data centers of the joint venture **LEITWERK Rechenzentren Appenweier GmbH**, consisting of equal shares of **E-Werk Mittelbaden** and **LEITWERK AG**, started operation at the ending of February.

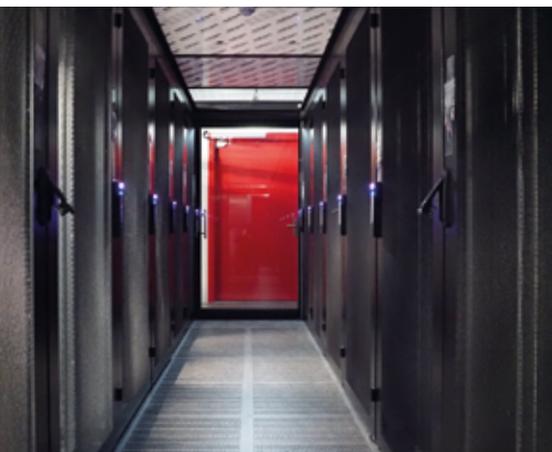
The final approval took place within the framework of the opening celebration. Ralf Siefen (managing shareholder, DCG) and Dennis Spies (project manager, DCG) could officially hand over the key to the management of LEITWERK Rechenzentren GmbH.

With this data center which sets new standards in the region in view of efficiency, sustainability and security LEITWERK Rechenzentren GmbH provides a new, modern home for their customer's IT.



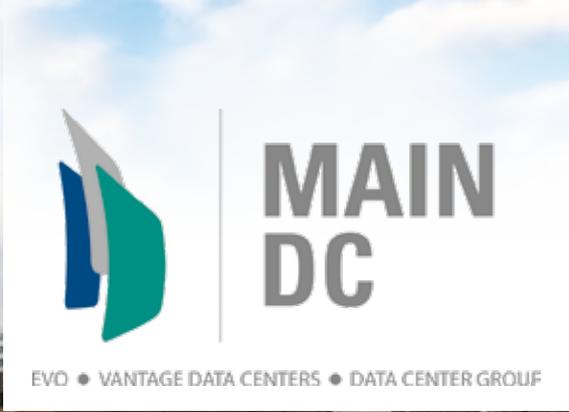
” The first customers have already moved in. Together with DCG we have created a secure home for their data. “

Dr. Claus Börschig
authorized signatory at LEITWERK
Rechenzentren Appenweier GmbH



Emergency power supply system in the outdoor area.

Fire protection by modern extinguishing technology.



MAIN DC DATA CENTER IS GROWING

Construction in Offenbach on Main is progressing quickly

The first part of the ultramodern data center that will provide a secure and highly-available home for approximately 3,000 racks is currently being built on a floor space of 7,800 sqm in the immediate proximity of Germany's capital city of data centers and the globally important DE-CIX internet exchange point.

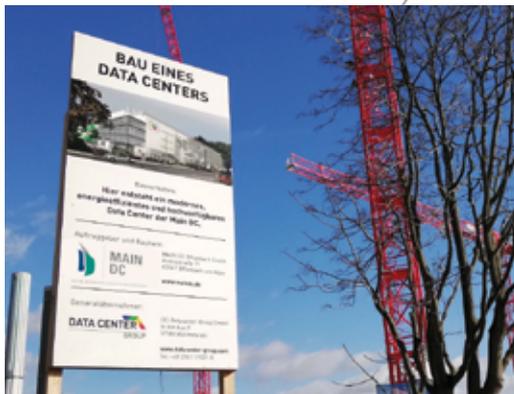
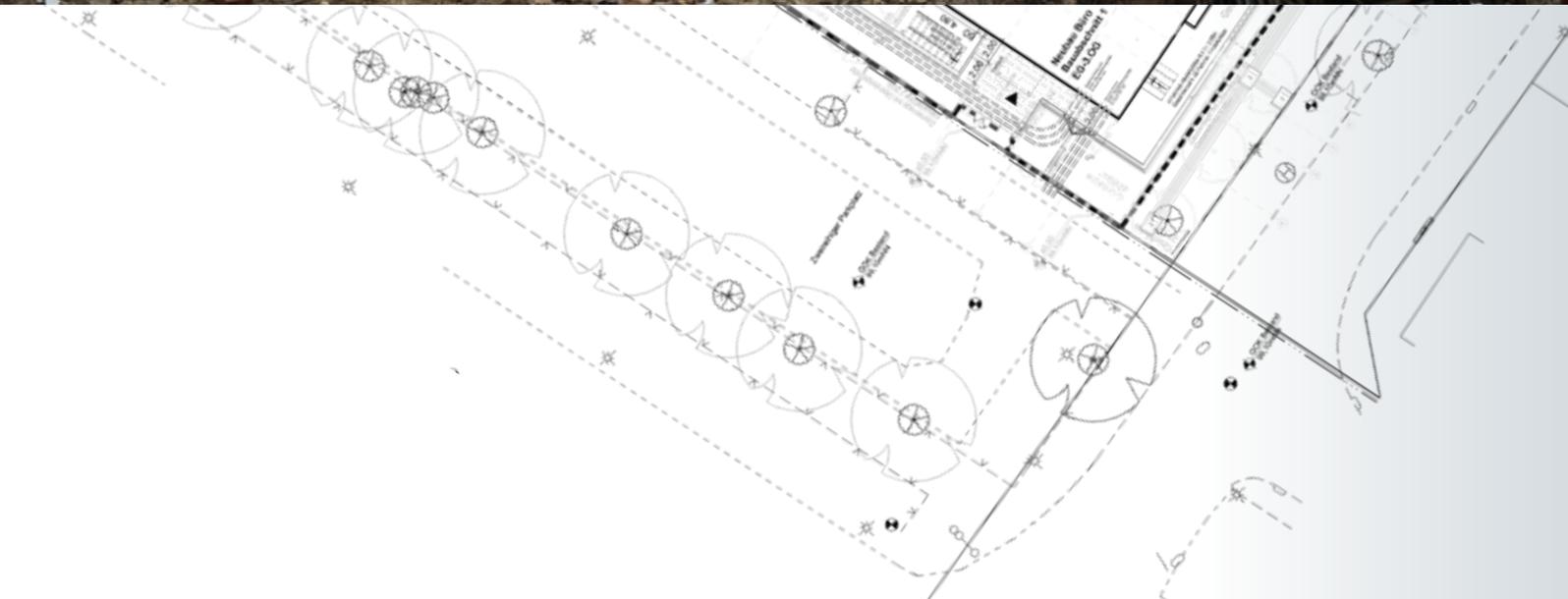
At present the DataCenterGroup as general contractor is building the first of a total of three data center modules.

We will report on the construction progress in the following editions of the DC MAG.



„ It is a great pleasure to see how fast our data center grows day by day. Since our first customers want to move in already in this year's November it is our highest priority to keep the time schedule. “

Dr. Kurt Schuller
managing director MAIN DC Offenbach GmbH



F-GAS REGULATION AFFECTS 90 % OF ALL DATA CENTERS

Conformity of cooling systems should be checked at an early stage

■ In connection with the realization of the EU climate goals in view of fluorinated greenhouse gases the German legislator already passed the f-gas regulation in 2015. This regulation is supposed to persuade cooling system operators to use climate-friendly alternatives to f-gases.

This development takes place in 7 steps [Phase-Down] from 100 % in 2015 to 21 % in 2030. At present, more than 90 % of all cooling systems in data centers are affected. The purchase of coolants such as R410A will become more and more difficult, on the one hand due to constantly increasing and decreasing production quantities.

When replacing existing systems or even new purchase a specialist should estimate and analyze the system's dimension and potential coolants, for example water, ammonia and propane. These coolants will still be available after 2030 and they can help to reduce the carbon emissions and to sustainably operate data centers.

During the last years the DataCenterGroup expert team for refrigerating and air-conditioning technology has already developed efficient and future-proof data center climate control concepts for many customers, for example MARC O'POLO.

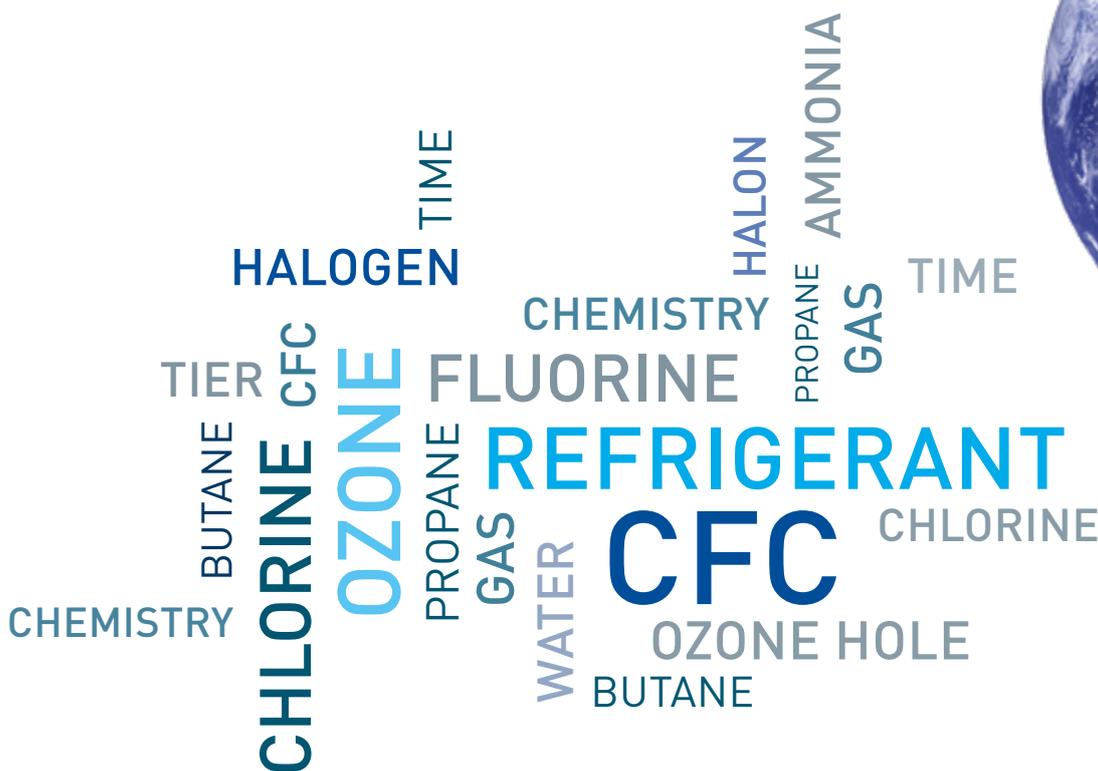


Photo: © Tom Bayer / stock.adobe.com



SEVEN QUESTIONS FOR...

Michael Stöhr,
IT manager at Albrecht Bäumer GmbH & Co. KG

In our column “Seven questions for...” IT managers and experts respond to questions all around data centers and IT infrastructures thus allowing us to gain an insight into their everyday work.

Which 3 terms come into your mind spontaneously when talking about data centers?

- Data processing, server, backup.

Could you please describe a typical working day for an IT manager?

- In the last 3 years the daily schedule was dominated by the ERP implementation with many meetings, coordination and data subjects. Otherwise, the everyday work is rather divided as follows: You take care of major IT problems and requests in day-to-day business, on the other side you are in charge with future-oriented conceptual design and consulting of the specialist departments regarding IT and process topics.

Why did you become an IT manager?

- I have had fun with computers since I was a kid, starting with commodore and today with hyper-convergent systems. Additionally, a strictly regulated daily schedule sounds horrible to me. I love challenges that also strengthened me to grow as an IT manager.

How do you picture the IT's future? Which technology will prevail in the future, what will soon disappear?

- In my opinion, Public Cloud and local systems will endure in the server sector. I am rather worried with the security aspects in view of data theft or data loss, where IT will have to strengthen and enhance its position.

What makes a day a particularly good day in IT?

- A good day in IT is a day with mastered challenges, and from time to time a quiet day without major incidents for recovery. ;-)

What would be a worst-case scenario and how would you deal with this situation?

- A company's data heart is the IT. If this does not work for different reasons and the business process is disrupted or prevented, it is a worst-case scenario for me.

What is your IT headline?

- IT as a future shaper – get better, more flexible and pro-active.



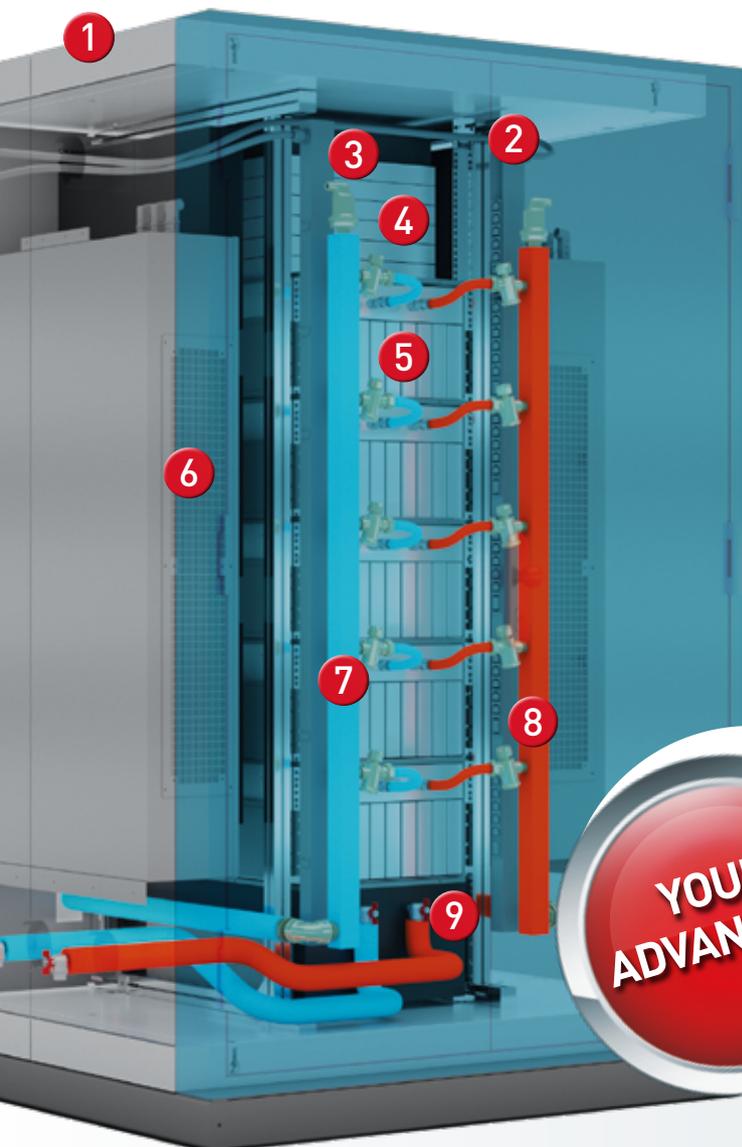
More about the Albrecht Bäumer GmbH & Co. in Freudenberg and the company's data center can be found in the DC MAG, edition 12 or online under datacenter-group.com/dc-mag.

DC-ITSAFE HIGHDENS EDITION

The world's most secure location for your high-density applications



■ The turnkey IT-solution is a joint development of RZproducts and Cloud&Heat Technologies. On the hardware side, the solution consists of a safety cabinet with certified physical resistance and integrated water cooling. Prefabricated hardware compilations and server compatibility lists are available for configuration. An optional pre-configured Cloud-Platform completes the solution.



- 1 Safety housing (DC-ITSafe)
- 2 19" Rack
- 3 Early fire detection system
- 4 Monitoring system
- 5 Water-cooled server
- 6 Redundant air cooling unit
- 7 Hydraulic distributor
- 8 Hydraulic distributor
- 9 Pump box

**YOUR
ADVANTAGE**

- High performance & efficiency
- Certified & secure
- Equipped with direct hot water cooling
- Turnkey solution from a single source

DC-MONITORING

Keeping an eye on your data center's costs and status



■ The analysis, monitoring and evaluation of alarm and energy data enhances the availability and efficiency of your IT infrastructure. With the relaunch of the DC-MonIToring components we support our customers even more to avoid predictable failures, an increased power consumption and needless costs.



DCM Detection

The DCM Detection is a device that offers basic monitoring of a rack or network cabinet. It is suitable for integration into an IT monitoring or can be used as an extension for the DCM Delivery.

Alarm monitoring for:

- Office edition
- Decentralized server cabinets/ network cabinets



DCM Agent

The DCM Agent is a compact monitoring providing numerous physical interfaces and thus an ideal device for permanent IT infrastructure monitoring and evaluation. It builds the basis for DCM Delivery.

Alarm monitoring for:

- DC-ITSafe
- Small data centers
- Medium-sized data centers



DCM Extension

This device can be used to integrate up to 64 additional measuring stations. It is also possible to use DCM Extension in combination with DCM Agent and DCM Detection.

- Easy installation via plug & play
- Excellent price / performance ratio
- Comprehensive equipment (water sensor, motion sensor, cameras, temperature and humidity sensor, vibration sensor and much more)
- Telephone support by skilled personnel
- Multilingual software (10 languages)



All technical specifications can be found on our website.



„ It is their flexibility that makes containers a popular primary and backup solution. “



TENDENCY: INCREASING

Flexibility pushes the popularity of container data centers

■ **Until today almost 75 % of all realized data centers are classic inhouse solutions but container solutions are pushing forward, particularly for special demands.**

Tim Kohlhaas is project manager at the DataCenterGroup, taking care of the realization and construction supervision of data centers. Thus, he took part in the successful realization of more than 100 data centers in the last 12 years, including a large number of outdoor data centers. In our interview he reports on his experiences.

Do you consider container data centers to be state-of-the-art?

A trend is developing among data center managers in all sectors and branches: they decide more and more often for container solutions. In view of security containers are at eye level with classic solutions – even in case of outdoor solutions. As most containers have an F90 fire protection level is basically identical to classic data centers. An additional enhancement of the fire protection is also possible.

Data center managers do not need to be concerned about unwanted access and attacks because – amongst other things – outdoor containers are still located on the company premises.

So why do data center managers decide to go for containers?

To be honest there are circumstances that allow nothing but a container, for example if there is no adequate location or capacity in the company building. Sometimes the speed up to initial operation is a decisive criteria: Special solutions as a result of modular construction for example are turnkey ready in 4 months – a proud 70 % faster than the traditional inhouse data center. But even if new container solutions are available earlier, they must be projected, manufactured, implemented at site and equipped with servers, switches and co. by the operator or on his behalf, too.

The main reason is therefore another one: It is their flexibility that makes containers a popular primary and backup solution. Data center managers choose containers because they do not depend on certain locations. Of course they do not roll over the company premises, they remain at the same place simply because of any foundation and various connections for electricity and data.

What advantages do IT containers offer?

Monitoring and maintenance are not more complicated than for their inhouse counterparts. Apart from viewing fences that offer a certain access protection camera supervision and illumination concepts with motion detectors are often used. Most customers use corresponding monitoring solutions right from the start to ensure the hardware control on the inside. Maintenance management is the same as for every other data center. No matter what type, location or size – every data center needs regular maintenance by trained technicians. This is the only way to guarantee secure operation.

In opposition to inhouse solutions, construction measures, changes of the existing building or rather expensive new constructions are not necessary. There is a reason why more and more individual containers are planned and realized as outdoor solutions on the green meadow or located in a storage hall. Just like inhouse data centers containers are already planned future-proof as a data center is supposed to be operated for several years. The differences between the data center types are as follows: when planning a classic data center, a location with the possibility of expansion needs to be chosen. Container solutions simply get replenished with a second container.

What is your conclusion regarding container solutions and how do you rate the current market development?

Container solutions are not a general-purpose product so data center operators should thoroughly check which solutions matches best with their company. Of course, classic data centers, room-in-room solutions or mini data centers absolutely have a right to exist. Even containers require permissions and construction steps and they are not less secure than the inhouse counterparts. Added value may lie in the speed of commissioning. However, the biggest advantage is the flexibility regarding the choice of location and any expansion.

70%
faster to
implement and
yet secure!



Tim Kohlhaas

Age 36
 Marital status Married
 Background Commercial training at GLS
 Internal project coordinator proRZ
 Project manager proRZ
 Hobbies Cycling, running

EN 50600

„ EN 50600 makes it possible to compensate technical deviations with organizational measures.“



IN THE LABYRINTH OF DATA CENTER STANDARDS

■ There are many data center Standards. But what hides behind EN 50600, Tier, ISO 27001 or TSI? Which certification fits best and why do more and more data center operators decide for a certification? We light up the 3 most certified data center Standards together with Fabian Buda, competence field data center infrastructure and member in the Bitkom working group data centers.

What significance do Standards and certificates have today for the planning and operation of a data center?

Standards play an important role for every construction and every operation of a building and thus for data centers as well. Complying to specific Standards such as EN 50600, Tier classifications of the American Uptime Institute or also TÜV Trusted Site Infrastructure (TSI) methods is just optional. I do recommend every data center operator to stipulate and to realize compliance with one of these Standards within a future project. This way the operator can visualize and document the hazard risk and thus transparently reflect the topic for himself.

How high would you rate the risk for a data center without any certification?

A general statement is not possible. There are certainly large data centers online that work smoothly and error-free without a certification. In exceptional cases an IT manager's years of experience can compensate the Standard deviation. In this case the risk of misjudging this Standard deviation always remains. Consulting 2 experts then often results in more than 3 evaluations.

Which Standard would you recommend?

I recommend compliance with EN 50600 as this does not consist of a strictly defined standard catalogue ensuring security or rather availability but provides a sound amount of flexibility because its structure allows operators to set up a risk analysis and to compensate every deviation with corresponding measures. In my opinion the

different topics of EN 50600 are some kind of check list. If I consider a different measure to be more reasonable than defined, I will document it in the risk analysis and point out the advantage of this deviation.

Could you give us an example of such a compensation?

According to EN 5600 that all connection lines including electric as well as water-bearing ones must be laid in monitored and non-public areas. We worked on a project where we had to plan a data center according to EN 50600 availability classification 3 that required path redundancy (2 passive connections, pipes or electric lines). We solved this case by installing 1 path in a "semi-public" area and the second one in a strictly monitored area. Due to the fact that construction was carried out during operation it was not possible for us planners to change the building's cubage that much to evaluate and exclude the risk of total failure of both paths by sabotage. It was possible to compensate this with the help of a risk assessment anchored within our risk analysis.

Would you prefer a data center constructed according to EN 50600 to a data center with Tier certification?

I am definitely aware of the effect that a Tier certification has on a data center's image. At present the Tier certification catalogue is the international standard and simply a must-have for some IT infrastructure operators. However, you should always take into consideration that following this catalogue leads to a high-class data center you might not necessarily need. In this context, EN 50600 is more flexible and more practice-oriented.

What does a certification process according to EN 50600 look like?

First of all: Data centers cannot achieve an EN 50600 certification as this Standard is not accredited. But you have the possibility to have a Standards compliance test done by an external auditor. This is something I would recommend as TÜV companies evaluate EN 50600 according to their own Standard catalogue. In general, there is nothing wrong about this procedure but it leads to differences between an EN 50600 certificate by TÜV Süd and TÜV Hessen, because different criteria are evaluated in the course of the risk analysis. This makes the biggest advantage of the EN 50600 its most serious disadvantage. In the end the most important thing is that the operator can cope with the risks named within the complete risk analysis.

What do you think about an ISO 27001 certification?

ISO 27001 is a comprehensive IT Standard that does not attach very much importance to infrastructure. This part is fulfilled if an EN 50600 conformity or a Tier certification exists.

The SECURisk team carries out EN 50600 audits. How do they differ from those of other providers?

Our biggest advantage is that we have bundled our expertise and know-how in all competence fields in our own, regularly checked and completed check list. Our customers absolutely benefit from this workflow during our consulting. Thus, we also offer EN 50600 workshops with the SECURisk since 2019.



Fabian Buda

Age	30, Single
Background	Study of mechanical engineering Electrical installer Project manager and planner for technical building equipment, Deerns Deutschland GmbH Dual student faculty energy saving contracting, Siemens AG Consultant DataCenterGroup
Hobbies	Ballroom dance, carpentry, music entertainment





READY, STEADY, GO

DATA CENTER GROUP attends traditional Kick-Off in Betzdorf town hall

■ Moreover, this year more than 170 employees from all fields came together for the company's Kick-Off. Besides the review and the analysis of the past year, targets and projects for 2020 and 2021 were of course the event's main topics. "There is plenty of work ahead of us. The DCG faces strategic and sales challenges that will set the course for the company's future", says Ralf Siefen (shareholder and managing director).





DATA CENTER CERTIFICATIONS— YES, WE CAN

Andreas Schürkamp and Oliver Bohr
entitled “Accredited Tier Designer” by Uptime Institute



■ After theoretical and practical training in Prague in June 2019, the manager of our consulting division SECURisk was awarded the title “Accredited Tier Designer”. Thus the 7-man expert team completed its know-how for data center certification.

“This qualification enables us to support operators of data center infrastructures on their way to achieve a certification based on the Uptime Institute’s Tier classifications”, says Andreas Schürkamp. On the basis of the Tier classifications 1 (lowest level) to 4 (high availability) operators have the possibility to have their data center infrastructure availability rated to get certified. In other words: The Tier certification helps companies, owners and operators to rate and rank a data center’s availability for themselves and for their customers.

“For that reason it is important to us to offer our customers professional and comprehensive support as well as to be familiar with the differences from other certifications or Standards.”

In March 2020 Oliver Bohr – consultant for infrastructure – also received his “Accredited Tier Designer” certificate. “Thanks to expanding our competencies in this section we are now in the position to design new data centers for our customers corresponding to the Tier requirement catalogue – beginning with the first idea and finishing with the final draft”, says Oliver Bohr.

The SECURisk offers

- Analysis of the data center infrastructure based on the Tier requirement catalogue
- Documentation of the current status and creation of a measurement catalogue
- Preparation and examination of the certification documents

TRAINING: CHECKED

Young talents successfully finish basic and advanced training

■ In the last months the division managers and the training team had several reasons to be happy:

Luca Becher, the youngest member of the group completed her training as industrial clerk IHK with “very good” at the beginning of the year. Now she starts her business career in the RZservices team.

Our colleague Marvin Brenner also wanted to gain more knowledge and completed an extra-occupational, technical school training to become a state-certified technician. The chamber of commerce awarded his project work on container data centers with “very good”.

Jonas Schukowski also finished the chamber of commerce exam as technical system planner with “very good” in the context of his dual studies – as one of the best in the county Altenkirchen.

“The demand of the DataCenterGroup to be No. 1 in the data center also transfers to our trainees, dual students and employees. We are proud and very happy with Luca, Jonas and Marvin about their outstanding exam results”, says Kim Blecker, division manager personnel and legal affairs.



(f. l.) Kim Blecker, Jonas Schukowski, Luca Becher, Marvin Brenner, Nadine Weibler

WELCOME TO TEAM DCG

We are constantly expanding our expertise and happy to welcome the following new colleagues:

From September

Matthias Mittermeier Service technician
Carolin Klein Assistant RZingcon division management

From October

Annan Demirdilek Production expert
Olga Trifonova Project manager

From November

Obeid Muradi Service technician

From December

Christina Leukel Commercial assistant RZservices

From January

Matthias Grond Project manager
Marcus Groos Architect
Uwe Hopf Subsidiary manager
Kai Schäfer IT system administrator
Sonja Vierbuchen Architectural draftswoman
Sarah Zöllner Cleaner

From February

Marco Grimm Object supervisor
Martin Jung Sales engineer
Paul Pauls Project purchaser

From March

Frank Ernst Managing director sales
Franz-Josef Rebmann Project manager technical building equipment

From April

Bankin Heso Service technician

ANNIVERSARIES

Congratulations

10-year company anniversary

Ulrich Eisel · Maximilian Ramb · Swen Groß
Martin Hüscher · Dagmar Raskop · Robin Pfeifer
Sieglinde Schlosser · Bernd Schmidt
Albert Gerhardus · Peter Gerhardus
Stefan Schäfer

15-year company anniversary

Frank Schmidt · Markus Böhmer

The DataCenterGroup team says thank you for the great commitment and wishes you much success furthermore!

LinkedIn

Become part of our online community.



Vote for us!

READERS' CHOICE
AWARD 2020

Category Pre-Built Datacenter

www.datacenter-insider.de/award

IMPRINT

DC MAG – A Magazine of the DC-DATACENTER-Group GmbH

Editor

DC-Datacenter-Group GmbH
In der Aue 2
57584 Wallmenroth
Phone +49 2741 9321-0
Fax +49 2741 9321-111
info@datacenter-group.com
datacenter-group.com

Responsible for the editorial content

DATA CENTER GROUP
Katja Pfeiffer

Concept and realization

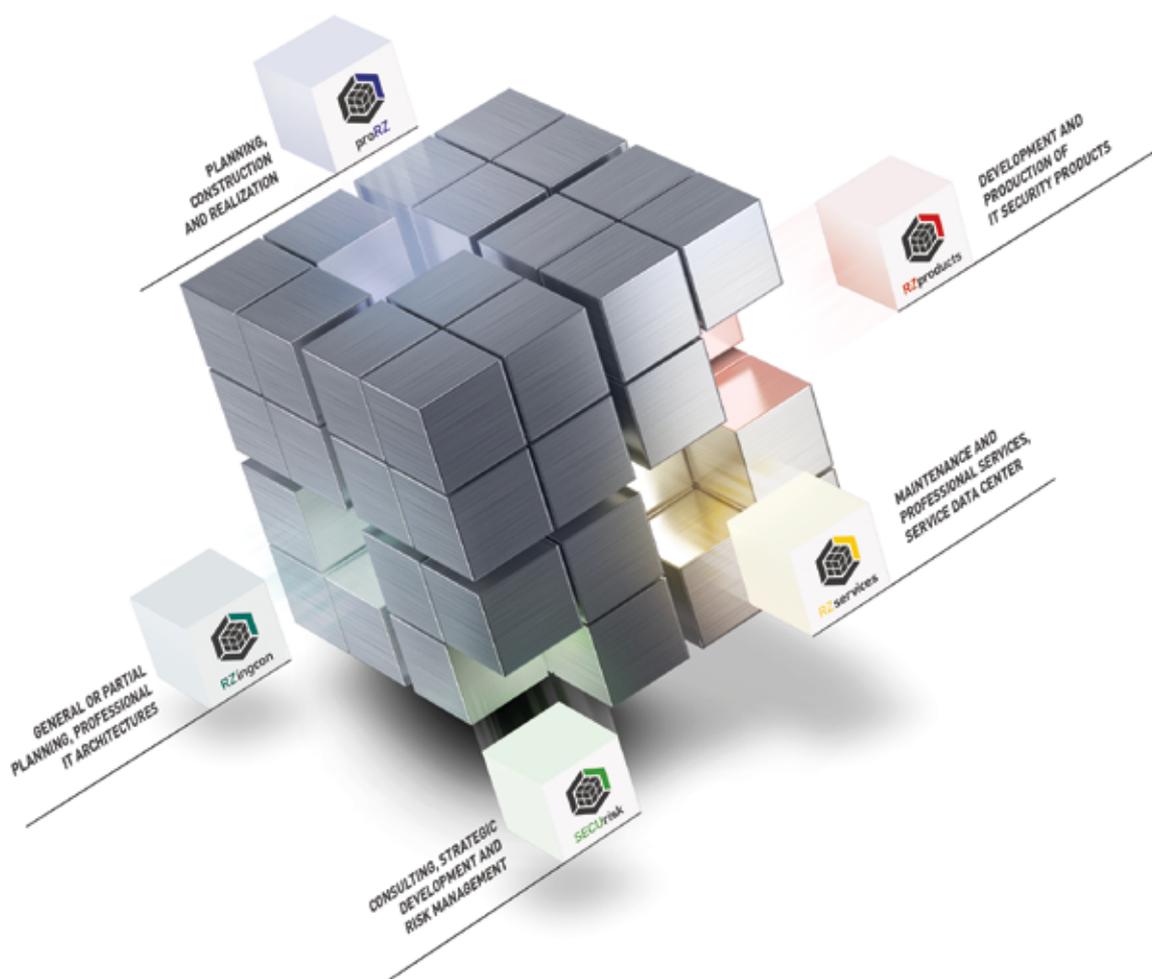
DATA CENTER GROUP
Claudia Lassacher

Main cover picture

© Alexander Supertramp/
shutterstock.com

WE PROTECT IT!

DC MAG – A MAGAZIN OF THE DC-DATACENTER-GROUP GMBH



DC-Datacenter-Group GmbH

In der Aue 2 | 57584 Wallmenroth

Phone +49 2741 9321-0

Fax +49 2741 9321-111

info@datacenter-group.com

datacenter-group.com