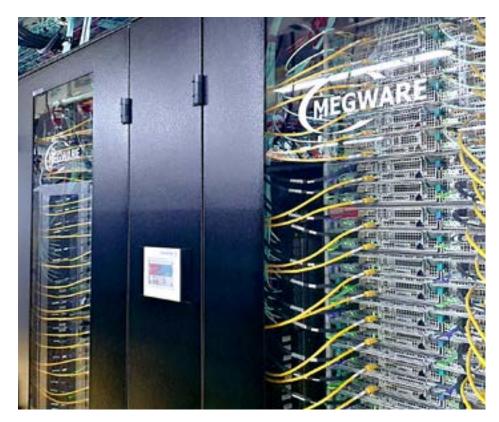
# Digital transformation needs strong partners

## MEGWARE, IP Exchange and Cloud&Heat cooperate with iQdata from SCHÄFER IT-Systems

As digitalisation advances, the demand for the appropriate technical equipment rises. This of course increases the need for space, energy and cooling capacity. When it comes to planning and implementing efficient solutions, both IT experts and an appropriately compatible and proven portfolio of components are needed.



CHÄFER IT-Systems is now cooperating with MEGWARE in the field of high performance computing (HPC) Whether in the automotive industry, weather forecasts, medical research or animated films: there are more and more fields of application and development scenarios that would simply not be feasible without high-performance computing (HPC). For high-performance computing, tasks are parallelised and the computing power of several systems is aggregated. In this context, SCHÄFER ITSystems, the German specialist for data centre infrastructure and network technology, is intensifying its current cooperation with MEGWARE. The core of this strategic technology partnership is the joint development of future-oriented

infrastructure for High Performance Computing (HPC).

"I am very pleased that, together with MEG-WARE, we can offer customer-specific solutions from a single source in this very significant high-performance computing market. The aim behind this is clear: we want to utilize synergistic effects, develop products together and thus contribute to making the best and most advanced HPC technologies available in Germany and Europe – to ensure the success of science and industry," explains Thomas Wermke, who, as Business Unit Director at SCHÄFER Interior Systems, is also responsible for sales at SCHÄFER IT-Systems.

André Singer, managing director of MEGWARE Computer Sales and Service, continues: "Today Germany already has one of the ten most powerful super computers in the world – and it's the most energy-efficient, too. To make sure it stays that way, we're taking our successful cooperation with SCHÄFER IT-Systems to a new level and are expanding it even further. Especially in high performance computing, SCHÄFER IT-Systems and MEGWARE have their own specific expertise and core competencies, which are now available to our customers from a single source."

In its iQdata portfolio, SCHÄFERIT-Systems offer system solutions for the full-scale equipping of data centres, in particular sustainable cooling systems with waste heat utilization, modular IT racks, high-availability power supply systems, failsafe rack monitoring and services.

### IP Exchange operates data centre infrastructure showroom with iQdata from SCHÄFER IT-Systems (in the field of colocation data centres)

Am Tower 5 in Nuremberg is the address of the former US hangar for combat helicopters, which now accommodates a showroom for data centre solutions, featuring SCHÄFER IT-Systems' iQdata product range. This is a partnership project, in which the housing and hosting experts IP Exchange provide the premises, while SCHÄFER IT-Systems, specialists for data centre infrastructure and network technology, supply and install the data centre components. In IP Exchange's new showroom with cold aisle enclosures, there are currently eight different IT racks installed, each with varying equipment and safety features. These include access control using radio handles, glass and steel doors with and without door contacts, cable managers, separator panels, intelligent power distribution units, LED lighting and rack-based climate control solutions,

to name some of the central components.

Connected sensors for measuring temperature, humidity and vibration are evaluated in real time via the iQdata rack monitoring system (RMS).

"As a colocation supplier, we demand the highest standards of quality and security for our data centre infrastructure. IP Exchange has been able to rely on the performance of SCHÄFER IT-Systems' iQdata product range for some 10 years now and meanwhile exclusively uses iQdata components for our clients' data centre solutions", explaind IP Exchange managing director Cornelia Lindner. When it comes to planning and implementing efficient solutions, both IT experts and an appropriately compatible and proven portfolio of components are needed, as actually seeing concrete objects makes decision-making easier.

The main beneficiaries of the data centre expertise available in the showroom will be decision-makers in southern Germany, investing in future-oriented infrastructure solutions as part of their digital transformation strategies. Besides the showrooms at IP Exchange and at SCHÄFER Interior Systems in Betzdorf, SCHÄFER is still on the lookout for locations partners to strengthen their regional presence and provide personal advice directly to the customer.

### Cooperation with Cloud&Heat to increase data centre energy efficiency (in the field of Edge data centres)

The declared aim of the cooperation between SCHÄFER IT-Systems and Cloud&Heat Technologies is to reduce the electricity needed for data centre cooling to a maximum of 15% of the overall energy requirement and to make full use of the waste heat generated. IT hardware transforms almost all the electric energy it uses into thermal energy, which is why IT racks need such elaborate and expensive cooling.

In conventional data centres, only about half the electricity consumed is actually used by the processors, storage media, network cards and other computer chips: between 40 % and 60 % of a data centre's entire electricity demand is used for cooling IT components. For this reason, the existing approach based on direct water cooling is now being optimised and improved with the help of iQdata Cooling. "The products in our iQdata Cooling range are designed not only to efficiently dissipate unwanted IT waste heat, but also to make it available for further use elsewhere", explains Thomas Wermke from SCHÄFER IT-Systems.

That's because SCHÄFER IT-Systems' InRackcooler already makes it possible to cool the CPU directly with hot water-based cooling technology, without the need for any energyintensive fans. To achieve this, the water flows through heatsinks, which are in direct contact with the components to be cooled, in particular with the processors. Consequently, direct water cooling dissipates the unavoidable waste heat from IT components at the very place it is generated.

Working together with the specialists from Cloud&Heat, SCHÄFER IT-Systems has further

optimised the InRackcooler to meet the complex technical requirements of heat recovery. As a result, the cooler is now always adapted to the relevant server manufacturer or to the particular project in hand. Cloud&Heat Technologies, for example, work with cooling water temperatures of up to 55° C, as this is necessary for the economical operation of heating and warm-water supply systems. The compact design enables the device to be installed inside the IT rack, as the name implies. For the conversion of existing data centres to water-based direct cooling, Cloud&Heat Technologies can quite easily retrofit the pump box, the InRackcooler's core component.

"Together, we have set ourselves the goal of jointly developing systems that will achieve highly efficient cooling and waste heat utilization for data centres and future Edge locations", says Jens Struckmeier, founder and CTO of Cloud&Heat Technologies in Dresden.

#### More information about our partners:

MEGWARE Produkte: www.megware.com

IP Exchange GmbH: www.ip-exchange.de

Cloud&Heat Technologies GmbH: www.cloudandheat.com



Thomas Wermke (Business Unit Director at SCHÄFER Interior Systems), Guido Klinkhammer (SCHÄFER Werke Managing Director), Dr. Jens Struckmeier (founder and CTO of Cloud&Heat Technologies in Dresden) (left to right)



- IT rack solutions for server and network cabinets
- Data centre and water-cooled server cabinet solutions

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