

CASE STUDY SPORTEC SOLUTIONS



Rolling data centres

Video-Assist-Technology



RNT Rausch. Making IT possible.





With the beginning of the 2022/2023 season, sports technology specialist

SPORTS SOLUTIONS

has launched its new Video-Assist-Technology in the German Premier Football Leagues (1. und 2. Bundesliga) – with rolling data centres from RNT Rausch.

At the first time

The Video Assistant Referee (VAR) got introduced to the league during season 2017/2018 and has been continuously developed further on both the technical as well as professional side. Since the current season 2022/2023 all stadiums are equipped with the latest and greatest goal-line and video-assist technologies to take fair play to the next level in professional football. Thus, by matchday 25, a total of 80 interventions by the video assistant led to 74 correct interventions by the referee on the pitch.

(Source: <https://www.dfb.de/news/detail/dfb-schiri-gmbh-startet-technologie-partnerschaft-mit-sportec-solutions-238032/>)

How it works

In each stadium, a total of 14 goal-line cameras now capture the action and transmit at 200 frames per second to the video assistant teams based in the Cologne Video Assist Centre (VAC), from where they can follow up to 10 matches in parallel. These qualified experts extend the referee's team on the pitch and get a 360 degree overview of the entire goal area. Thanks to the new technology there's no longer just one camera monitoring the goal area but there are seven cameras on each side in operation.





The technology challenge

The use of video assist technology is still a hot and highly emotional topic for many passionate football fans. For this reason alone, all server systems must be highly available and fast in order to process huge amounts of data in real time and thus with minimal latency. To make this happen, sports technology specialist Sportec Solutions AG joined forces with technology pioneer RNT Rausch GmbH. In just six months the experts designed, built, tested, and deployed brand new server and storage systems in the VAC as well as twelve self contained mobile data centres.

Sportec's Video-Assist-Technology is replacing a mature predecessor product which has been up and running successfully for five years. As a main prerequisite for a smooth deployment of the new technology, the old hardware had to be replaced or redeployed in both the central Video Assist Centre (VAC) in Cologne and all Bundesliga stadiums across Germany. This roll-out had to take place during the summer off-season which left a short time window of only four weeks for implementing and testing.



Mirko Janetzke,
SVP Germany, Sportec Solutions AG:

"We selected RNT Rausch because they designed extremely stable and, above all, fully customised quality systems. All hardware included the best of everything without breaking our budget and were able to deliver on time despite the global supply chain challenges. RNT thinks and acts in a solution-oriented way, so that all concepts were always tailored to our requirements and we never had to enter a compromise. Right from day one onwards, the RNT experts were always available and ready to take timely action."



The solution: rolling data centres

Hardware specialist RNT Rausch has converted 12 VW Crafter 3.5t vehicles in such a way that in each van has inside:

- ▷ 8x high performance GPU-systems
- ▷ A redundant network architecture
- ▷ 3x 19" racks
- ▷ 1x operator-desk equipped with 6 monitors
- ▷ 2x independent climate zones
- ▷ Multiple fibre optic connections

To accommodate and cool all the high-tech equipment even during the hottest summer days as efficiently as possible, while the operators can also work under optimal temperature conditions, extensive interior modifications had to be applied. As even height and weight of the vehicles changed due to the necessary modifications, the vans required a new certification of the German Technical Inspection Authority (TÜV) before RNT was able to deliver the rolling data centres to Sportec Solutions.

On a matchday, one rolling data centre is driven to each stadium and is not only the central point for the goal-line technology, the video assistant and the offside line payout, but also transmits the camera feeds to the Cologne VAC via fibre optics. In addition, each rolling data centre is the interface to the media's outside broadcast vehicles that transmit the match to all fans in front of TV screens. In the Premier League, the two operators in each vehicle have to deal with 30-40 incoming and outgoing signals. They are also the central point of contact for all radio communication with the referee in the stadium.

The advantages

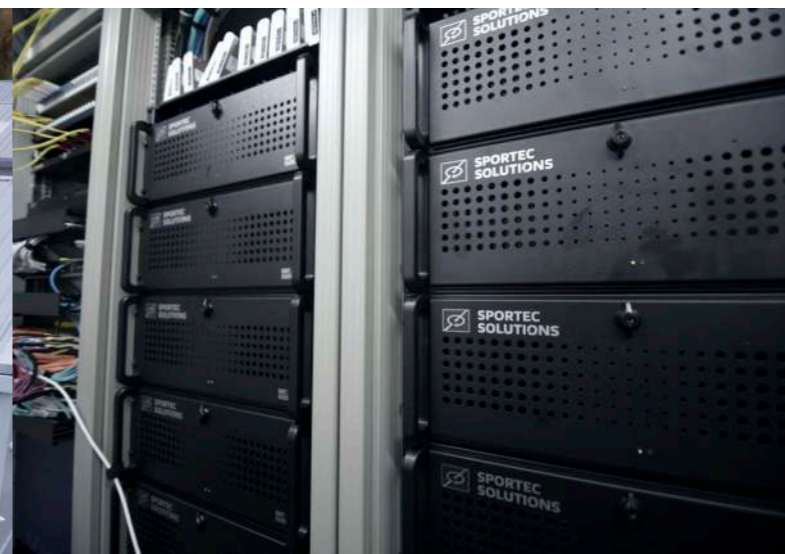
As a specialist for personalised high-quality server and storage solutions, RNT was able to build, test and deliver vendor neutral systems based on Sportec's technical specifications within the extremely short time span of only six months. If a certain hardware component was not available on time, an alternative was quickly procured without the need to make any compromises in terms of quality or performance. Around 90% of the technology deployed in the VAC comes from RNT who also modified the interior of all rolling data centres prior to the deploying servers, network, and more. Thus, the end-to-end responsibility was in RNT's sole hands and due to the perfect coordination and cooperation of all interfaces, both the test phase and the overall deployment ran smoothly and successfully.

As an additional benefit, Sportec was involved and kept up to date at all times. During the test phase Sportec's software specialists even came to Ettlingen and worked hand in glove with the RNT experts on site.



Sebastian Nölting,
CEO RNT Rausch:

"We love challenges and thinking out of the box. Thanks to our strong supplier network connections, we could even modify the vehicle interior ourselves. This was great for our customer Sportec Solutions because they neither had to build the expertise inhouse nor find and coordinate additional vendors during this very time sensitive project."



About Sportec Solutions AG

As a joint venture between Deltatre and DFL Group, headquartered in Munich, Sportec Solutions develops next-gen solutions in the fields of match data and sports technology.

Founded in 2016, the collaboration between Deltatre – the global leader in fan-first experiences – and DFL Deutsche Fußball Liga was conceived as an innovation-focussed internal lab, tasked with improving data deployment in German football.

Today, it delivers products and solutions that enable international sports properties to truly maximize the potential of their owned data ecosystems.

Sportec Solutions offers the most advanced gathering, storage, analysis, distribution, and analytics of live match data to clubs, licensees, partners, and clients. It also collaborates with renowned companies and scientific institutions to enhance its product development through expanded data processing.

Sportec Solutions also provides support in many other areas of sports technology, among which include officiating services, such as Goal Line Technology (GLT), and centralized Video Assistant Referee (VAR) services.

If you would like to receive more information on the brand or the products and services, please visit: <https://www.sportec-solutions.de/en/index.html>



About RNT Rausch

RNT Rausch is a Germany based technology pioneer with 25 years of experience in the high-tech server and storage industry. The company rethinks future-proof server and storage solution designs that go hybrid and tackle business challenges to make SMBs, enterprises, data centres and service providers around the world fit for tomorrow's technical revolution. RNT offers tailor-made products and services that help customers enhance security, flexibility, scalability and sustainability.

If you would like to receive more information on the brand or the products and services, please visit: <https://www.rnt.de/en/>



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Let´s talk!

The RNT sales team is looking forward to getting in touch with you now!

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