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THE PERKS OF CENTRAL PARK

FIREHOUSE ROCKS GLOBAL CITIZEN FESTIVAL
COMMS WITH RIEDEL'S ARTIST AND BOLERO

■ Featuring performances this year by Metallica, Mariah Carey, the Jonas Brothers, and other renowned musicians, the Global Citizen Festival is an annual music festival that brings together fans, artists, activists, world leaders, philanthropists, and corporate leaders to take action to end poverty. Timed to coincide with the UN General Assembly, the 10th edition of the event took place Sept. 24, 2022, in New York City's Central Park.





"For the Global Citizen Festival, we were covering a huge percentage of the Great Lawn and required a solution capable of huge scale with clear and reliable communication to connect to the OB truck, which was a quarter of a mile away," says Vinny Siniscal, Account Manager at Firehouse Productions, a designer, installer, and operator of sound reinforcement systems for tours, broadcasts, and corporate events.

Firehouse deployed Riedel's state-of-the-art Artist digital matrix intercom network with Bolero wireless intercom system as a plug-and-play solution to seamlessly integrate and extend the reach of an OB truck using a legacy communication system. Riedel's Artist and Bolero systems provided clear, reliable communications across Central Park's Great Lawn, including communications with drones and helicopters via Riedel's RiFace.

"For this to be quick and easy, the solution needed to be lightweight and integrate seamlessly with the legacy RTS system in the truck while allowing communications to and from helicopters and drones," continues Siniscal. "Riedel's Bolero with an Artist-1024 was ideal as it's both simple to set up with unparalleled clarity, plus it offers virtually unlimited scale of comms as needed."

At the heart of Firehouse Productions' Riedel system were four Artist intercom nodes — one Artist-1024, one Artist-128, and two Artist-64s. The Artist platform integrated seamlessly with the Bolero wireless intercom system, which consisted of 54 Bolero wireless belt packs, in addition to 40 C3 wired digital belt packs. Two Riedel RiFace universal radio interfaces were used to incorporate helicopter and drone communications into the system. For ease of use, crews relied on 34 Riedel intercom panels, half of which were the latest RSP-1200 series SmartPanels.

"The festival presented considerable challenges for providing communications, but Riedel's Artist and Bolero systems not only provided a superior solution but also reduced the setup and strike time," says Brian Hurst, Lead Programmer and Systems Integrator at Firehouse Productions. "The result was a rock-solid communications system that saved us about half a day of set-up time."





SIMPLY BANANAS

SAVANNAH BANANAS CHOOSE RIMOTION R8



■ The Savannah Bananas, the exhibition baseball team based in Savannah, Georgia, has deployed the RiMotion R8 instant replay system for use in their control room at Grayson Stadium. Since installing the system in January, the Bananas have been able to grow the scale of their streaming and social media clips, especially for broadcast on YouTube. Supporting a flexible workflow, the R8 allows the Savannah Bananas production team to capture and share exciting moments from the team's fast-paced games for quick and easy replay — for both home and away games — allowing their fans to experience even more exciting moments.



"It's been such a huge benefit to get into these clips quickly and easily and post them to social media, and to have the ability to grow our social media presence as we turn around content," said Griffin Ellis, Broadcast Engineer, Savannah Bananas. "Being able to create those clips without ripping them from our YouTube stream — instead, it's a clean feed with no bug or anything — is very big with the way the social media team at the Savannah Bananas turns around content. The goal is that you see something live and then there will probably be a clip on Twitter or Instagram or Facebook very quickly."

While they often play against the Savannah Party Animals, the Savannah Bananas occasionally go head-to-head with guest challengers such as the Kansas City Monarchs or the MLB Players Alumni Association. A major contributor to the team's popularity has been their instant replays of backflips and other trick plays on social media. One such event occurs every game during the third inning, second batter, and second pitch, where the pitcher, infielders, and outfielders perform dances that have lately become a TikTok trend. Having shown six games on ESPN last season, the Bananas are working on producing content for NESN and other local networks. The RiMotion R8 is helping the team come closer to achieving this goal.

The Bananas were able to get the RiMotion R8 up and running quickly, with even student workers learning the system in a matter of hours and progressing to more complex

operations using either the touchscreen or desktop controller. All camera feeds, from either the stadium or remote locations, return to the Grayson Stadium control room for production, where they are cut, replayed, and edited with audio and graphics before being exported to social media via RiMotion R8 as clips.

The R8 system provides extensive slow-motion capabilities and supports productions with up to eight cameras — two more than the Bananas had before — while keeping delay low, delivering strong performance and functionality at an attractive price point. And because the R8 system enables remote replays and clip creation for away games, the Bananas need only send cameras and flypacks, with just crew members to carry and operate the equipment.

"Savannah Bananas reached out to us after speaking with ESPN, looking for a reliable, flexible, and growth enabled system that was also cost effective and easy to use," said Greg Macchia, VP Business Development, Live Production. "After working with our team, they discovered how powerful our replay system was and the range of replay we offered with the RiMotion line. They were delighted that we were able to bundle it for an affordable price and since then, their productions have taken off! It's been exciting to watch."



SEE IT. LOVE IT. REPLAY IT.

■ In September 2022, Riedel acquired Simplylive, a provider of software-based solutions for multi-camera production, including an all-in-one production suite, replay/slow-mo, venue gateways, and multiviewers. With the integration of these software-centric and cloud-ready products into the Riedel portfolio, Riedel has moved into the very center of live video production.

At NAB 2023, those familiar with the former Simplylive portfolio will be happy to see not only a lot of familiar products, but also meet some new additions to the Simplylive family: the RiMotion R84, RiCapture i4 Advanced and Venue Gateway Advanced!



Simplylive Production Suite

The Simplylive Production Suite is a multi-camera live production platform compatible with all common video formats and intrinsically migratable to the IP and cloud universe. This highly modular solution lets you choose from a range of application layers, tuned to the tasks you need to do. From slow motion replay, master recording, streaming or referee review to an All-in-One production solution that gives you virtually everything you need to create a show: Live switching cameras and video sources, cueing and scrubbing slomo replays, controlling audio, or adding graphics – all using a single touchscreen interface. You can opt for the All-In-One one stop shop for all things live video production, or choose from the microservices that meet your requirements:

- Slomo – Ultra Intuitive and scalable replay designed for high quality live sports productions of any size
- E-slomo – revolutionary software application that uses AI to create super slow-motion sequences from standard camera footage
- Refbox – Flexible, affordable video review & analysis for referees on the courts or coaches in the locker rooms
- UI Gateway – Affordable bandwidth management for multi-camera remote production
- BMR – Flexible master and ISO recorder that also allows live streaming to different web formats – all at the same time

NEW

RiMotion R84

RiMotion R84, the latest addition to the RiMotion roster, adds UHD support with 4 UHD channels and up to 8 1080p HDR channels. It comes in a compact 2RU chassis with 5 x 2TB SSD RAID store, one Nuc and one RC-10 Remote Control Unit.

RiMotion

Riedel RiMotion is the most intuitive and scalable replay solution in the market, breaking with traditional concepts and bringing a modernized user experience to live replay. RiMotion offers a pioneering solution combining extensive slow-motion capabilities with Simplylive's acclaimed touchscreen UI approach.

With RiMotion R6, R8 and R12 you get to choose from 6 to 12 configurable channels for 4 to 10 camera inputs, as well as an optional UI Mini PC, Dual Operator support and network capability.

RiCapture

With the networked UHD master recorder Ricapture i4 and multi-function recorder Ricapture MMR 110 & 410, Riedel adds broadcast capture solutions to their portfolio. The i4 system offers powerful UHD master recording solution built into a small form-factor with significant cost advantages, while the MMR 110 & 410 multi-function recorders are the most versatile multi-purpose recording, duplication and steaming systems in the industry.

Venue Gateway

The Riedel Venue Gateway is a low-latency, bi-directional, multi-channel and multi-format contribution appliance bridging broadcast production infrastructures with distant venues. It aggregates and transports video signals, audio signals, commentary signals, intercom signals and tally, supports SDI and IP formats, and even includes a built-in multiviewer!

NEW

Venue Gateway Advanced & RiCapture i4 Advanced

The Venue Gateway Advanced is a more powerful version of the Venue Gateway, with two additional 10Gbps RJ45 Ethernet connectors for higher backbone bandwidths and two redundant PSUs in a compact 2RU frame.

RiCapture i4 Advanced comes with all of i4's powerful capabilities, but adds higher bandwidths (2x10 Gbps), redundant PSUs, and up to 100 hours of internal SSD RAID storage to the i4 multi-function recorder.

SERVERS



Web Multiviewer

The Web Multiviewer is a micro-services platform that offers low latency, web browser video and audio multiviewers. The solution brings easy setup and distribution for all of your video and audio feeds to local and/or remotely located users. The Web Multiviewer architecture offers ultimate flexibility and scalability, as its microservices can be split and installed across multiple instances and can be deployed on premise, in private data centers or in public clouds (AWS, Google cloud, Microsoft Azure...).



WATER COOLER TALK

STIJN DE SMET & GREGORY MACCHIA

■ At IBC 2022, there was a loud murmur echoing through the halls: “Did you hear? Simplylive and SDNsquare are now part of Riedel!” Both companies are well-known in their respective fields, but some of you might still wonder what it is exactly these two teams do. So we brought Simplylive’s Gregory Macchia and SDNsquare’s Stijn de Smet together for a little chat about their welcome into the Riedel family, their current projects and future plans.

Stijn: Hey Gregory, nice to meet you!

Gregory: Hey Stijn! Nice to meet you, too! So we’re supposed to interview each other? Well, that ought to be interesting! So, tell me... How did you end up here?

Stijn: Well, my personal journey is very much linked to that of SDNsquare, I’ve basically been with them for my entire professional life. SDNsquare was founded as a spin-off of Flanders’ public broadcaster VRT and Ghent University, where I was working as a research assistant. So I was there from the very beginning. At first, we did research on file-based workflows, but gradually, we grew into the live environment. That’s when I became the main developer of a live IP software-defined networking (SDN) solution to control audio and video flows. And in the end, this is what brought us into massive projects like the Summer Games – and ultimately... here. How about you?

Gregory: Well, I was working in engineering before I found a job in the sports technology industry in 1997 at EVS. Then, when Luc and some other EVS colleagues founded Simplylive in 2015/2016, he asked me to join him on his journey – and the rest is history! After making a name for ourselves in the industry, we were acquired by Riedel... and now I am beyond excited to be part of this family under the Thomas Riedel umbrella! So how are you and your team settling in? What’s different for you here at Riedel?

Stijn: Well, the obvious change is that before, we were a very small team, with just three or four developers. And that’s a big one for me, as I’ve never worked for a large company before. But yeah, I’m really getting into it.

Gregory: Yeah, I guess transitioning from a small company to a larger organization always has its challenges. But Riedel is kind of a big company with a small company feel. It’s like a big family where everyone is working for each other, and that’s a really positive environment to be in. We’re all in the same boat, working towards a shared goal.

Stijn: Yeah, it’s a big boat, but an agile one. One that can turn very quickly and go in any direction, whether it’s an acquisition or a strategic business. I haven’t been to our HQ in Wuppertal a lot, but I think the entire SDNsquare team got a good impression of the Riedel mentality at the big Riedel Christmas party. We went there for two days at the end of the year and had a lot of fun! You could feel it’s a really cool place with a lot of nice, super welcoming people. Ok, my turn: What was the main challenge you had to overcome in your first months here?

Gregory: That would be getting the Riedel sales, pre-sales and support teams trained and up to speed with our technology. We had a lot of momentum as a company that we needed to maintain, while scaling in an intelligent way. Going too fast might have been overwhelming, so it was a balancing act to find the right gear. What was your toughest challenge?

Stijn: Learning a new language. And I don’t mean German (laughs). Here at Riedel, we are using a programming language that I’ve never used. It was challenging but I think I did okay! So, what projects are you most excited about?

Gregory: I’m most excited about our next cloud-based productions. Cloud is the buzzword in the industry right now, but for most, it’s still a thing of the near future. But with our solutions, we’re way past that point. Just take our recent end-to-end cloud-based live production with ESPN, where all remote venue feeds were transmitted with our venue gateway via SRT signals to the cloud. The Simplylive production suite was fully deployed in the cloud for the complete coverage of the college basketball game. It was live, on air, and everyone was super happy with the results (Ed.: see page 44). These distributed workflows that make it almost irrelevant where the system and users are located are part of our DNA. We’ve shown that our technology is capable, and now we need to let more people know that they can be among the first to take this exciting new path with us! What about you? What projects are you working on right now?

Stijn: That I can’t tell ;) Let’s just say I’m working on implementing SDNsquare technology into Riedel solutions... So there’s reason to be curious.

Gregory: Okay, last one: how would you explain SDNsquare technology to a child?

Stijn: That’s a tough one (laughs). So in live IP production you have two separate approaches that are possible. The classic route is to use one enormous switch for the whole network. But we chose a different approach: We use smaller and cheaper switches, but we have a lot of them and connect them to one another. SDNsquare software makes it super easy to set up this network, as it talks to all the switches and makes sure that they all understand each other. It also helps you control how the video is flowing through the network, so you can really use all of it... because if you just let the system flow by itself, some connections will be overloaded and mess up your signal. I realize you would need a very gifted child to understand this (laughs). Now you have a go!

Gregory: Well, I guess mine’s a bit easier (laughs). For Simplylive technology, I would probably start by asking the kid if they like watching basketball on TV. I would tell them that Simplylive provides the tools to make the sporting events look good on TV or their phone. The difference in how we approach it is like... driving a car vs car racing games. If I take your hand and put you in a car and say, „OK, drive.“ you know it’s going to be scary to you. But if I hand you a phone and say, „Here’s a game, you’re doing some car racing,“ you’ll be able to do it very quickly and have fun. So we essentially simplify something technical and overwhelming in a way that anyone can do it. In the end, you get the same result. So what you see on that TV screen, we come at it in a different and simpler way and allow more people to do it while still having good results.

Stijn: I think that’s a good analogy! Well, this was fun... I really appreciate the talk!

Gregory: Same here! See ya!

Stijn de Smet

Network Architect (formerly SDNsquare)

About SDNsquare:

Belgium-based SDNsquare is a leading technology provider of cutting-edge SDN solutions for complex and demanding IP-based media installations. Its technology has been proven in numerous IP-based projects and deployed by its customers in major sporting events such as the Tokyo Games, Roland Garros, and European Athletics Munich. SDNsquare is a recognized innovator when it comes to SDN orchestration in media and will therefore enhance and simplify IP for Riedel customers, as the technologies are integrated into future products.

Gregory Macchia

VP Business Development,
Live Production (formerly Simplylive)

About Simplylive:

Founded in 2016, SimplyLive provides software-based products for multi-camera production, including an all-in-one production suite, replay/slow-mo, venue gateways, and multiviewers, for the most demanding sports video and broadcast applications like the Soccer World Championships, American Football Finals, and Summer and Winter Games. With this step, Riedel has extended its hardware-centric portfolio for video transport and processing with COTS- and cloud-based solutions while gaining valuable expertise and resources to offer new services and deployment models to its customers.



**ARTIST AND BOLERO ON STAGE
AT BURGTHEATER IN VIENNA**

■ Referred to simply as “the castle” by local Viennese, the Burgtheater has roots dating back to the early 18th century, when the Hapsburg empress Maria Theresia allowed the original building to be converted from a ballroom into a theater. The current location of the theater changed nearly a century and a half later, finding its home in a new baroque-style building whose ceilings were graced by the brush of Gustav Klimt and his artist fellows. Today, the Burgtheater — Austria’s national theater — is the second oldest playhouse in Europe and the largest German-speaking theater. The auditorium seats about 1,340 spectators, making it one of the largest among Europe’s playhouses.

A theater of this size, age, and cultural magnitude requires a great deal of behind-the-scenes communication technology to keep up with current demands. Like actors, stage crews take their cues for when to change the lighting, sound, or other technologies. Audience-facing staff, such as ticket collectors and security, likewise need to remain aware of major changes and other areas of attention. Meanwhile, stage managers and operators must facilitate this communication through separate channels and ensure that messages are delivered clearly and reliably.

Despite the need for evolving communications tech, the original structure of the Burgtheater obviously needs to remain preserved. While the theater’s move to radio technology several years ago removed several outdated elements — such as the prompter box, the area at the center-front of the stage that supplies actors with their forgotten lines — conventional radio can only do so much for behind-the-scenes communication, especially with an increasingly narrow frequency spectrum.

To address the requirements of modern productions in a historic building, the Burgtheater began replacing its entire radio technology system in summer 2021, bringing in Riedel’s Artist and Bolero intercom systems. The comprehensive communications solution provides an extension of an existing Artist-64-based intercom and radio network, an Artist-1024 node, and a Bolero wireless system with 85 belt packs and 36 antennas, all of which have been gradually integrated into the venue.

Although the building’s size and majestic styling made it extremely difficult to install a wireless system that fit the environment, Riedel was able to cover the entire building in unrestricted density with the antennas, including the workshops, lounges, the canteen, and the studio stage. Now, well over 20 departments at the Burgtheater use the Bolero system in their daily operations. All employees benefit from flexible, clear, and reliable multi-channel communications and new optimized workflows. As part of the agreement, Riedel can also access the theater’s system remotely to provide immediate support in case of problems or to adjust configurations.

With its stand-alone license, Bolero also offers the technical teams enormous flexibility and advantages for guest performances decoupled from the house. For large guest performances, such as the legendary „Maria Stuart” play at the Kampnagel venue in Hamburg, the Burgtheater often uses a system size of almost 50 belt packs. Thanks to Bolero’s ability to call up preprogrammed system configurations within seconds, the technical team doesn’t need to adapt the system to the on-site infrastructure from scratch for every performance, saving a lot of valuable time.

„The technical requirements for communication have changed dramatically in the theater world,” says Ernst Meissl, Technical Director, Burgtheater Wien. „After initial discussions, a trusting partnership at eye level quickly developed between us and the Riedel team, and the close support during and after the installation really left nothing to be desired. We feel we are in good hands all around and absolutely safe.”





COMMS OF CHAMPIONS

BOLERO DRIVES COMMUNICATIONS FOR GEORGIA BULLDOGS, BACK-TO-BACK NATIONAL CHAMPIONSHIP WINNERS

■ “Communication is vital to the game — for coach and field comms to the booth, and ultimately from coach to player,” says John Meshad, Director of Equipment Operations for the University of Georgia (UGA), whose Bulldogs have won back-to-back College Football Playoff National Championships since switching to Riedel’s intercom systems three years ago.

“As we travel from stadium to stadium, we need to know we’re bringing an on-field communication system that will set up easily and just work,” continues Meshad. “The quality of the Riedel comms equipment speaks for itself, considering how well the Bulldogs performed in the recent National Championships. Switching or upgrading to MV SportsCom and the Riedel system was one of the greatest changes/advancements I made in my 17 years as the director of football equipment at the University of Georgia.”

MV SportsCom began working with UGA about five years ago, and the university’s existing intercom system at the time lacked the reliability and support UGA needed. Both Riedel and MV SportsCom were willing to meet those requirements, and together they helped the university deploy the Bolero and Artist digital matrix intercom system in 2020 and then move on to the Bolero stand-alone wireless intercom system the following year.

Today, UGA relies on the Bolero wireless intercom system during both practices and games. The highly portable solution deploys easily, even at away venues, and performs reliably to ensure clear communications among the team’s booth and field coaches. A smaller support team can handle deployment quickly, and even nontechnical members of the equipment operations team can manage setup effectively.

As UGA travels to different venues for football games, the operations team encounters a different infrastructure supporting on-field and booth communications. With Bolero, the UGA operations team can connect effortlessly, even when other teams or the in-venue production team are using Bolero as well. During the most recent National Championship game, the frequency coordinators reported that UGA used 75 Riedel Bolero beltpacks inside SoFi Stadium — all without a single issue.

PUTTING PEOPLE FRONT AND CENTER

CRAIG THOMPSON, EXECUTIVE DIRECTOR CUSTOMER SUCCESS

■ Craig Thompson joined Riedel in January 2022, taking over the helm of our new customer success department, which was created to deliver a frictionless experience for our customers and to expand our services portfolio. To familiarize our valued customers with the man who plays an integral role in their success, we sat down with Craig to find out what he and his department are all about.

Hey Craig! Why don't you tell us a bit about yourself and how you got here...?

Craig: I fell in love with broadcast & media some 25 years ago when I started my career as support engineer for a company called NDS who designed and made Encoders, Multiplexers, Receivers and Conditional Access systems for broadcasters. Back then I had no idea what an amazing and fulfilling experience this would have turned into as the industry developed and evolved at a rapid pace. The rate of innovation was (and still is) phenomenal in our industry.

I've been fortunate to have worked for various other companies (Tandberg Television, Ericsson, Snell Advanced Media, Grass Valley) where I was able to lead many talented people and teams.

It's been over a year now that you joined our family as executive director customer success. It's safe to say that 2022 was a successful year for both Riedel and our customers... what about you? How are you settling in?

Craig: That first year has gone super fast! My overall feeling is that I joined Riedel at a perfect time with the organisation changes to ensure each division is set up for continued growth and success. The foundations at Riedel are very strong with a great culture of amazing people who have been very supportive and welcoming.

My first year has been, in large, spent developing our vision and strategy for the newly formed customer success team. We've got some exciting developments which are about to be released soon which will really help our customers engagement experience

with Riedel, as well as making the lives of our employees a little better.

With the new customer success department, we're realizing our vision of customer-centric operations. What exactly does "customer-centric" mean to you?

Craig: Customer centricity demands that the customer is the focal point of all decisions related to delivering products, solutions, services and experiences to create customer satisfaction & loyalty. In a nutshell this is what it means to me. I must also add that hand in hand with this goes „employee centricity“. Whilst our revenues and our customers satisfaction are important to our business, so is the culture and environment of the employees which helps us to deliver this. A big part of the journey for me at Riedel is ensuring we do both really well.

For those who don't have a clear image of what exactly a customer success department does... could you break it down for us? What processes and teams do you oversee? What are your goals for this department?

Craig: Customer Success isn't just an organisation, it's also a philosophy built into companies to help engage with customers to ensure that (a) they remain our customer and (b) they buy more 'stuff' from us. In order to do that we have to have a deep understanding of the customer journey and the outcomes they need from our products, solutions and services. We need to build our organisations values around this. Our customers can only remain our customers if we are also obsessed with measuring their satisfaction to ensure we can react and keep them loyal.

Today the customer success department is responsible for all pre-sales technical support and everything post sales (i.e. testing, commissioning, training, tech support & repairs).

What do you consider the main challenge you had to overcome in your first year?

Craig: Time has been a big challenge. There's never enough of it! There are so many areas where we have a great opportunity to develop and improve as a business, yet we are also going through growing pains which cannot be ignored. It's been a balance to ensure that we invest for the future whilst also addressing the needs of today.

If I had to pick just one challenging topic then it has been to find additional skilled resources which will fit into the Riedel family values and culture.

What do you think is special about Riedel? What's special about our products?

Craig: What is special about Riedel is its people and its culture. For me this beats any strategy. On the product side you only have to look at how Riedel's innovative products, solutions and services across all its divisions have contributed towards the many big live events we watch today. Riedel is at the heart of so many productions and we can all be proud of the hard work and effort everyone has made to make this happen. It is truly impressive and 'special'.

Riedel services and SLAs are one big topic for you. What are your goals on that front?



Craig: With the huge Riedel customer install base in the market today we have the opportunity to develop services and SLAs which help our customer get a better return of investment from their products. A side effect of that is we can generate future re-occurring revenue business models to help support both our business developments and the customer centric services.

Could you share some of your plans for the Americas region?

Craig: The Americas region has been delivering very impressive growth as they break through many major accounts and large deals. Last year we took some steps towards significantly increasing our resources and restructuring the customer success business in the region. My first step was to find a customer success leader in the region to help sustain the growth and development of the team. I was really pleased Marcus Wheelwright agreed to join Riedel in September last year. Marcus comes with a wealth of experience in leadership and is well known throughout the industry for his ability to deliver. Further to that we

„Marcus comes with a wealth of experience in leadership and is well known throughout the industry for his ability to deliver. Further to that we have also restructured the team which is not unusual as we grow“

have also restructured the team which is not unusual as we grow. Dan Bakies now leads our newly formed Professional Services business, reporting into Marcus, which will focus on the delivery side of our project management and commissioning services. Since 2022 we

have doubled the number of employees in the Americas Customer Success team, this really shows the investment we are making to support our business and customers.

In your 25 years in the broadcast and entertainment industry, you've seen technologies come and go. Of all the tech buzzwords thrown around these days - which do you think will fade away quickly, and which are here to stay?

Craig: That's a good question to come back and bite you later! I've seen many technologies come and go over the past years. 3D Television came and went for various reasons, but it also helped generate interest in augmented reality and VR. So from everything which has come and gone there have been lessons to be learned and new technologies which have

been born out of this. I do however think that remote production is here to stay for some time as it has many benefits which are impossible to ignore. It will also be interesting to see how AI production evolves that's for sure.



Marcus Wheelwright -
Vice President Customer Success, Riedel Americas

BETTER SAFE THAN SORRY

ZÜRICH'S PROTECTION AND RESCUE DIVISION COUNTS ON RIEDEL

■ Schutz & Rettung Zürich (SRZ), Switzerland's largest civilian rescue organization, has successfully completed several missions with its new command vehicle, equipped with Riedel Communications' Artist and Bolero intercom systems, and RSP-1216HL SmartPanel. The emergency command vehicle, which began operating in the summer of 2022, has been praised for its ease of use, reliability, and efficiency. The Riedel communications setup allows for radio, telephony, and intercom communications to be readily accessible via easy-to-use, six-button Bolero backpack devices.



Thomas Hauert, Staff Officer and Chief Situation and Command Support at SRZ, expressed his gratitude for Riedel's assistance over the past few years, not only in the extensive concept and planning phase but also in implementation. „Thanks to Riedel's assistance over the past few years — not only in the extensive concept and planning phase but also in the implementation — SRZ has a command vehicle worthy of the latest generation,” he says.

As a service division of Zürich's Security Department, SRZ unites the fire brigade, ambulance service, civil defense, operations control center, and fire police under one roof. SRZ responds to major incidents with a potentially high number of injured persons, such as bus, train, or plane accidents; major fires and storms; and operations involving biological or chemical substances. In addition, the rescue organizations of Zürich Airport are integrated with SRZ's operational areas and services. Measuring 10.25 meters by 2.55 meters with a 6-meter slide-out, SRZ's imposing command vehicle is designed to support the management of a major incident. When fully expanded, the vehicle accommodates a report room, a separate workroom, and a command support room.

The Riedel solution deployed in the SRZ command vehicle proved to be the most convincing system capable of integrating with the Polycom digital radio system SRZ uses to exchange real-time information about emergency events. This consolidation of all voice applications on one system relieves the officer-in-charge from the stress of monitoring multiple emergency communication sources. Volunteer members of the rescue team find the Bolero backpack easy to use not just for making calls but also for monitoring and responding to the two digital Polycom radio channels.

By consolidating and simplifying communications, the Riedel Artist, Bolero, and SmartPanel systems ensure reliable performance in the event of a crisis, in turn supporting SRZ as it responds to major incidents affecting the city and canton of Zürich.

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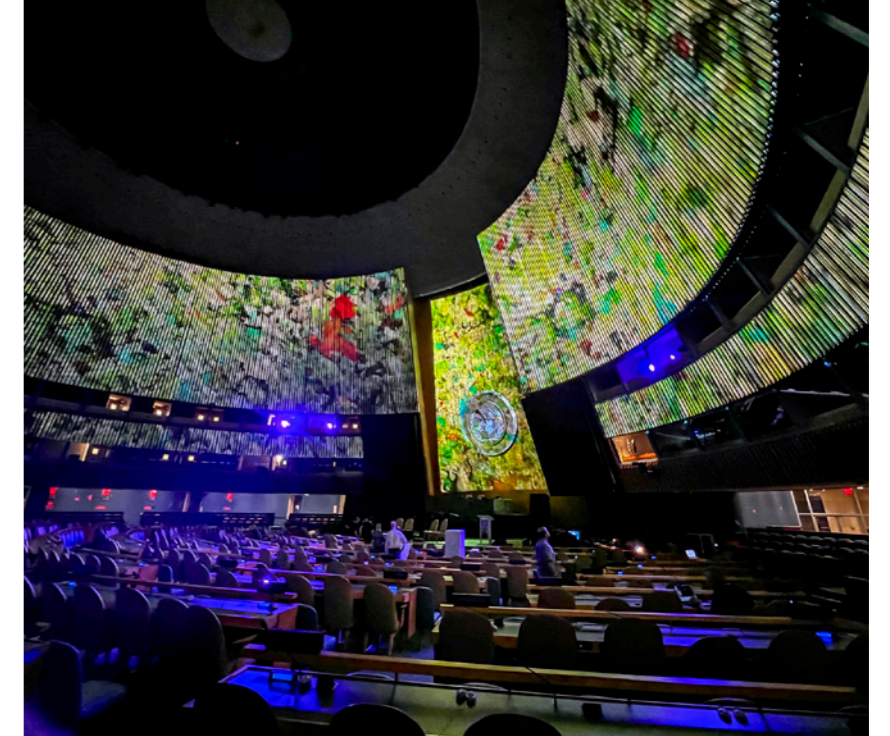
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MAPPING UNCHARTED TERRITORY

QUINCE IMAGING GOES IP
WITH MEDIORNET FUSION
& VIRTU

■ For over 25 years, Quince Imaging has created unique and visually stunning events thanks to its expertise in video projection mapping and immersive experiences with 3D and volumetric displays. Acting as IP video consultants for large eSports events, Quince Imaging provides high-resolution holographic displays that allow audiences to become truly immersed in competitions.

During one of its latest high-profile eSports projects, Quince Imaging needed to establish an IP signal throughout the entire arena — all within three weeks. Under this tight deadline, the team worried about moving to the ST 2110 system so quickly and ensuring high-quality delivery in the end. Therefore, to manage the project adequately, the team needed an all-in-one, end-to-end solution rather than just one piece of technology.



After vetting multiple options, Quince Imaging chose Riedel, who finished the project in a third of the time than what the other companies had promised — and did so flawlessly. In its technology stack, Quince Imaging deployed Riedel's FusioN standalone IP converter and multiviewer, 40 FusioN 6B standalone processing frames, multiple MuoN Small Form-factor Pluggable (SFP) devices, and a VirtU 48-S compact 1RU frame.

"With Riedel, everything just worked," said Liam O'Hanlon, Director of Engineering, Quince Imaging. "Not only did the Riedel FusioN solution work so well, but the packaging and delivery of the product was incredible and the nicest I've ever seen. Riedel was so easy to get in touch with directly, and the commissioning of the product was extremely smooth. We're grateful to Riedel for helping us manage such a major opportunity in a tight turnaround."

Used as an edge device, Riedel's FusioN solution allowed for easy third-party operation and provided high-quality 4K video throughout the large venue. FusioN also performed the necessary IP to HDMI conversion on each of the 24 projectors throughout the venue, right at the point it is needed. Overall, the FusioN Edge Devices streamlined the live event production work, enabling high-resolution projection mapping workflows for the high-end event by using 4K and volumetric projection.

Moreover, Quince Imaging also used VirtU 48 as a dual-purpose device — mainly, as a switch. With fiber-connected projectors in six different locations across the venue, VirtU acted as a straight switch for distributing 4K video, further streamlining the process.

"Riedel is excited to be involved in the extraordinary imagery for these eSports events," said Dave Caulwell, Regional Sales Director, Riedel Communications North America. "We are happy the solution worked so well for Quince Imaging, and we look forward to helping them in future events. We are proud to supply them in-time and enable such a smooth installation."



RIEDEL CONTINUES GROWTH IN THE AMERICAS

Riedel's presence in the Americas has exponentially continued to grow and expand since the last NAB. First, the sales team has added several new representatives to cover increasing demand across the United States, Canada and Latin America. Within the US, Dover Mundt (Mid Atlantic, NY Metro), James Skupien (North Central), Ben Gabrielson (South Central) and Ben Mariage (Director of Sales, CALA). Dave Caulwell was promoted to Regional Sales Director, East and Todd Gardner recently joined and took over as Channel Manager, North America. In addition, Greg Macchia has taken on the role of VP Business Development, Live Production, while Rick Seegull has ascended to VP Technology and Business Development.



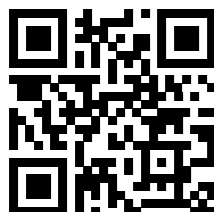
With the increasing sales and business development activities, an increased focus on customer success is paramount. Guiding that focus is Marcus Wheelwright, VP Customer Success, Americas. He has been growing a team of Service, Support and Project Engineers adding eight experienced engineers in the US, two in Canada plus three U.S. based system consultants and one in CALA.

In addition, that has meant increasing product development, including a new Head of Product Management for Video, Drew Martin, and several development engineers, manufacturing personnel and quality and test. All of these new people also require new people management, so there are two new human resource managers; one in the U.S. and one in Canada, plus additional finance personnel.

The growth of Riedel in the Americas is indicative of the strong market and demand for innovative, quality products that Riedel delivers. The excitement and growth continue as we are still looking for qualified candidates to fill roles.



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FAMILIAR FACES FOR RIEDEL'S PRODUCT DIVISION MANAGEMENT TEAM

Riedel has strengthened its Product Division management team with the promotion of Jan Eveleens to chief operating officer (COO) and the appointment of Daniel Url as chief commercial officer (CCO). As part of this move, Oliver Zimmermann will take on the role of executive director, digital transformation, leading Riedel's transformation journey.

These key appointments come following the company's recent acquisitions of Simplylive and SDNsquare and the strong business growth of Riedel's Product Division.

"I am thrilled to welcome Jan, Daniel, and Oliver to their new roles within our management team," said Rik Hoerée, Riedel's Product Division CEO. "The expertise and experience that Jan and Daniel bring on board will be invaluable as we continue to innovate and grow, offering more services and new business models to our customers, while with Oliver we will make great strides on our path to digital transformation, resulting in a unique customer experience."

Eveleens joined Riedel in 2018 as director of business development for video, and he has been instrumental in driving the company's growth in this area. Before joining Riedel, he served as the CEO of Axon and general manager of the Camera Division of Grass Valley. Eveleens worked closely with Hoerée on the integration of Embrionix and over the past year teamed up with Zimmermann to help the company navigate the global component shortage and supply chain disruption. As COO he will oversee all aspects of the company's production, logistics, and supply chain, ensuring that Riedel continues to deliver innovative products and solutions to customers worldwide.

Url brings over 20 years of experience in sales and customer success to his new role

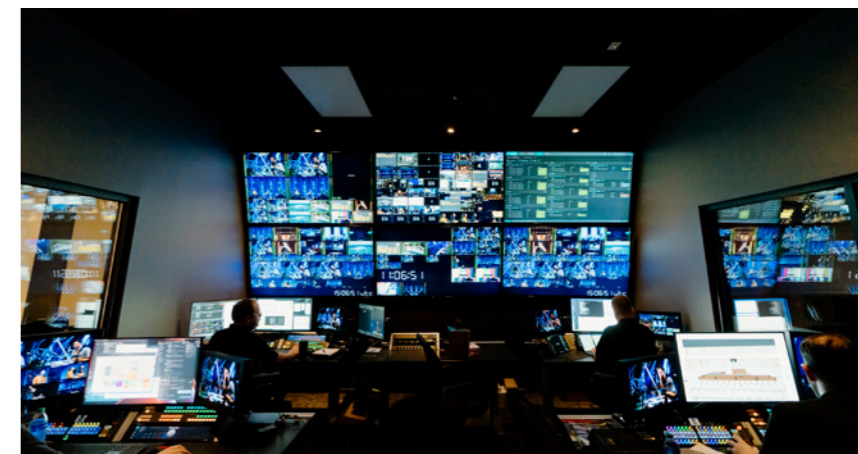
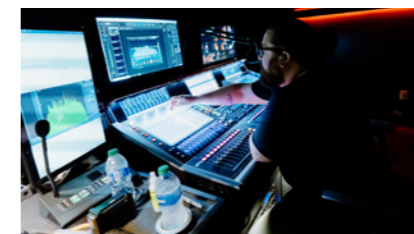
as CCO, having worked on the broadcaster, system integrator, and manufacturer side. He previously served as managing director and CSO of Qvest. In the past couple of years, Url was head of global product management at Vizrt and chief product officer for Grass Valley. In his new role at Riedel, he will be responsible for driving the company's global commercial strategy, working closely with Riedel's customer-facing teams, including global sales, customer success, sales operations, and business development, to identify new market opportunities and develop effective go-to-market strategies.

Zimmermann, Riedel's new executive director of digital transformation, previously served as executive director of manufacturing operations and helped the company achieve its most successful fiscal year to date, despite the ongoing supply chain crisis. In his new role, he will lead the development and implementation of the company's digital strategy, leveraging cutting-edge technologies to drive innovation and enhance customer experience.

Eveleens, Url, and Zimmermann, along with the R&D, product management, and marketing departments, report directly to Hoerée.

"It's great to see our reorganization into three divisions, each led by their own division CEO, bearing fruit already. Our new structure has enabled us to drive more focus and growth in each of the divisions while staying close to our customers and company values," said Thomas Riedel, Group CEO of Riedel. "Still, we know that constant reinvention is needed to support our massive, ongoing growth. With Jan and Oliver, two great appointments from our own ranks, and another industry heavyweight like Daniel, our Product Division will remain as agile, modern, and innovative as ever."





SPREADING THE GOSPEL NORTH POINT MINISTRIES

Over its 25-plus years of operation, North Point Ministries has grown immensely from its central location in Atlanta, Georgia. Like spokes on a wheel, the church's eight campuses spread out from the center at a 20-to-40-mile distance. And whether online or in-person, more than 50,000 people attend the services, sermons, and leadership messages each week.

As the number of locations and services grew, the need to communicate and transfer audio and video across multiple locations became far more essential. North Point hosts two main services every Sunday at all eight campuses, plus unique environments for preschool, elementary school, middle school, and high school students that meet simultaneously. On top of that, there are other various events scattered throughout the schedule. While North Point Ministries employs about 30 production staff members, Sunday services require hundreds of people — mostly volunteers — to work across all locations.

The challenge is joining together remote campuses, enabling both independent and combined services, using one, reliable, connected system. This starts with reliable equipment and signals at each location. Riedel's MediorNet TDM, with glue functionality built in, such as audio embedding and de-embedding, frame sync, frame delay, and multiviewing serves as the main bridge between audio and video systems. The MicroNs support MADi for easy audio channel management. The full featured de-centralized routing solution proved to be the most flexible and cost effective per-channel solution for interfacing video signals with a large number of audio sources in a single venue while being able to connect multiple venues within a single campus. The MicroNs also provide the ability to delay, and frame sync the signals, providing a solution to keep all signals timed in unison.

The distribution to campuses is done through an ST 2110 routing network connected via dark fiber. In order to manage this network, the NPM engineering team converted four control rooms to sit natively in that ST 2110 environment. Eight FusioNs are placed at the edge for signal conversion of IP ST 2110 signals to/from SDI and HDMI enabling easy access to sources and displays. Twenty-one MuoNs inside a VirtU 32 frame and other COTS switches handle other signal conversion and processing, including the up down and cross conversion of HD and UHD. With this solution, North Point is able to effectively connect, process and synchronize the services across the venues ...and then some.

On the comms side, North Point replaced its older analog intercom system with a Riedel Digital Artist intercom system, which includes 56 beltacks of Bolero Wireless, eleven antennas, 30+ panels, and four matrix frames spread across three campuses. By switching from analog to digital, the production staff noticed an immediate improvement in audio quality and realized that even a panel box could process audio at a much higher quality.

Their collection of panels includes twenty-six 2300 Series SmartPanels and six 1200 Series SmartPanels stationed throughout the buildings. Between the panels and the Bolero beltacks, they have precise control of who they are talking to and can reach virtually anyone, anywhere. During the pandemic, Artist, Bolero and MediorNet, allowed North Point to continue its services outside in the parking lot — keeping the people connected with its messaging of hope in troubled times.

By simply bringing a network switch outside, they were able to expand the installed intercom system to a temporary outdoor venue. "I mean the things we do because we have the equipment is crazy. I don't know that I'd ever spec the system to do this...", stated Matthew Drury, Production Systems Engineer, North Point Ministries. "But when I sat down and realized I needed all these [audio] signals and intercom...transported inside and outside the building... the things we've been able to do...it's been pretty nice."

"It was funny to see our production company, who have lots of experience with intercom systems, become staggered when they saw our Riedel deployment," said Drury. "They were even more surprised to be out there, on a field, running an outdoor event with real panels and just some Bolero packs. But honestly, it was the easiest solution."

"We are grateful for the long, expanding relationship we have with North Point, who continue to add new products from us as they become available," said Trip Wooten, Regional Sales Manager, Southeast, Riedel Communications. "They pay close attention to what's new and who we've acquired to see if it is a fit for them. They believe in the robustness, reliability, and quality of our products, and they use our full palette of products in some unique ways."



GRANDE PARTITA! SIMPLYLIVE PRODUCTION SUITE CHANGES THE GAME FOR NVP'S SERIE B REMOTE PRODUCTION

■ Broadcast production services company NVP started working with OB vans more than 25 years ago, and remote production remains the company's primary focus. Today, however, NVP emphasizes the power of digital transformation to enable customers to think in new ways about broadcast production. The company itself has embraced new ways of working, as well.

Working with Sky for many years, NVP has driven innovation in the Italian broadcast sector. As tech partners, Sky and NVP have brought to the market 4K HDR technology, cinema cameras during live production, 5G immersive production, and remote production.

In yet another advance, NVP worked with systems integrator Video Progetti to select and implement Riedel's Simplylive Production Suite to support remote production for Serie B football matches in Italy. Rather than send OB trucks and full crews to every stadium for every match, NVP has begun deploying the software-driven live multicamera production platform for select matches, leveraging Simplylive to increase capacity and productivity while reducing costs and emissions.

"Serie B is the perfect project for our Simplylive deployment because it's complex content with wide national coverage," says Ivan Pintabona, CTO at NVP. "While our move to these new workflows will allow us to leverage innovation to reduce emissions and improve the editorial plan of the broadcast product, it also gives us the opportunity to ensure a high level of professionalism on all events. The Simplylive Production Suite is an amazing and versatile product, and because new machines are so powerful, we also can manage more services simultaneously."

Through an agreement with Sky Italia, NVP will be the sole provider of HD/UHD television broadcasting services for the entire Serie B Football Championship (Serie BKT) for the 2022/23 and 2023/24 seasons, including championship matches and related playoffs/playouts. The company is rolling out the Simplylive Production Suite solution on a testing basis this season, with plans for more extensive implementation after this first phase. As matches are moved to Simplylive will have the resources and capabilities it needs to produce events that it couldn't previously, due to personnel, equipment, or scheduling constraints.



The Simplylive Production Suite provides application layers that can be tuned to specific tasks — slow motion replay, video mixing, audio mixing, graphics, web commentary, multiviewing, master recording, streaming, or referee review — or serves an all-in-one production solution that delivers virtually every capability needed to serve a live production. With a single touchscreen interface, users can perform tasks such as live switching cameras and video sources, cueing and scrubbing slowmo replays, controlling audio, or adding graphics.

The configuration for NVP includes two ViBox servers, each of which may act as an all-in-one production control system or as a slow motion replay system, depending on the needs of the moment. Each system is designed to support two users and multiple simultaneous operations but can be scaled up to accommodate more. Camera and audio feeds will be sent from each pitch over fiber to the NVP innovation hub in Cologno, where the Simplylive Production Suite will provide all the necessary protocols and functions for managing remote production. The NVP team will use the Suite for slow motion replay and third-party tools to handle other aspects of production.

NVP is an Italian leader in broadcast production that already has chosen the top of the line with Riedel intercom systems and the MediorNet audio video, signal distribution and processing system. Now with Simplylive, NVP has committed to new workflows, deployment types, and business models that enable it to innovate and move ahead into the future of live production.



Article courtesy of
BROADCASTPRO
MIDDLE EAST

streaming audiences. This is where Riedel was called in “to provide a service solution that sets new standards and a benchmark for TV audiences with close insights of videos and audios from each yacht”, according to Jonas Badura, Junior Project Manager at Riedel. Although experts on land, the sea called for a raft of revised wireless solutions, modifications to cameras and several alterations to existing solutions to make them work efficiently in water.

“Sailing was pretty new territory to us,” explains Thomas Riedel, Group CEO of Riedel Communications. “The event came with requirements of very long distance and wireless connectivity, not just for video but for audio-video communications and all kinds of telemetry data. We had to customise a full system for sailing because salt water is incredibly aggressive to electronic gear. Every connector needed to be right. “Secondly, RF on water is not easy because of the reflections you get from the water. So we were not just working on unidirectional video, but audio, video and then bi-directional communications and data. This is the second season we are working with SailGP, and they are high-tech and truly modern in their approach.”

As a new entrant, SailGP has been fortunate to begin, CTO Warren Jones puts it, with “no legacy contracts, no legacy hardware and no legacy ways of doing things”. As a staunch advocate for the environment, SailGP lays down ground rules for all participants. One is a limit on the number of containers each team or solutions provider can bring to an event – four for teams, two for suppliers – and SailGP itself only uses one. “Back in 2013, with another organisation, we carried 38 containers. With SailGP, we have one. I call this progress,” says Jones.

Sustainability is a key part of SailGP’s agenda, and Riedel’s essential equipment is stored in two 40” sea freight containers which travel with the other SailGP containers, with everything else maintained remotely.

“We start with an empty ground and two containers full of gear, and the rest is all handled remotely,” explains Badura. “The only given local infrastructure is an internet connection. In three days we usually finish installing the broadcast compound, rigging the race yachts, checking the cameras on the boats, setting up the workshop and making everything fully operational for the

GOOD TIDE-INGS

RIEDEL AND SAILGP BRING VIEWERS AN INTIMATE VIEW OF SAILING ACTION

■ In November last year, the world’s sailing elite descended on Dubai for a leg of the third season of SailGP. In an interview with SailGP CTO Warren Jones and the Riedel tech team, Vijaya Cherian learns that bringing that sailing experience to TV and streaming fans across the world required a potent combination of technical strategy, out-of-the-box thinking and a raft of technologies modified for the sea.

SailGP may be a new entrant to the sail racing scene but it is fast attracting some of the world’s best sailors. In this annual global championship, national teams compete using identical hydrofoiling F50 catamarans designed to race at speeds exceeding 100km/h. Established by Oracle co-founder Larry Ellison and champion yachtsman Sir Russell Coutts in 2018, and headquartered in London, the

competition sees teams compete across a season of multiple grands prix at some of the world’s most iconic harbours.

Each SailGP event has two competition days featuring all nine boats going head-to-head in fleet races. The top three then face off for the individual Grand Prix win. The season culminates in the SailGP Grand Final, where the top three boats compete in a final podium race and the overall champion walks away with \$1m in prize money. This season the total bonus prize money has grown to \$4.3m, with a final prize purse of \$1m for the Grand Final in San Francisco.

A significant part of the competition is communication between the teams and SailGP’s HQ in London, which produces and broadcasts the championship for TV and





The weight on the high-performance F50 race boats is a challenge, as they are designed to be as lightweight as possible to slice through the water while remaining sturdy. And there are other logistics to deal with – some on water, some technical.

Badura explains: “The course can be changed due to the wind conditions as well as the water’s current direction. It is also well accessible to spectators with their own boats. It is often very close to the seafront; you need to respect and consider harbour traffic, ferries, cruise ships, etc. And on water, everything needs to be wireless – data transfer, GPS from various assets like buoys, as well as racing yachts. Critical event communication as well as video footage needs to be transmitted reliably and constantly. The system we designed needed to be flexible in a modular way. The entire technical system had to be planned and designed for future growth of SailGP with more boats, more venues and events.”

Riedel solutions were used in various parts of the workflow. At the heart of the communications operation is the Riedel Bolero, which helps with crew communications and connects radio and intercom with the official committees around the globe.

“We connect all our systems, like Bolero stand-alone on the yachts and chase boats, Tetra for all SailGP crew members, and Remote Artist intercom panels for the umpires around the globe. Our technologies are interconnected with various stakeholders such as the Oracle Cloud or the SailGP systems department,” explains Badura. “For SailGP, we’re using 4K video transmitters to transmit the video from the race boat, from the camera boat and the helicopter. We even have a data mesh that helps get telemetry data for the cameras from the boat. We get very high-quality audio from the races for interviews that go live for broadcast, for example. And we’re using our Riedel radio solutions for all end users here, and it’s fully connected into each other.”

What makes this event truly hightech, however, is how data is processed and shared with everyone so that participants can learn from other teams and plan their own strategy. The day prior to our chat with Jones, SailGP had generated 46bn data requests.

“We know exactly what everybody does on the boat, how many times they press a button, what the road differential is, what the heart centre of the athlete is and so on. The data goes to the boats from our data logger. It goes up to the top of the wing. And when you see the boats, you’ll see a little white masthead that is supplied by Riedel. From there it then goes to shoreside, and from them to the Oracle Data Centre in London,” Jones elaborates.

“SailGP is a little bit different to other federations in that our data is open source. Each team can see what the other team is doing and learns from them. If you go to the Oracle Cloud Analytics dashboard, all the information is there for anyone who wants it. It took 120ms for the data to go from the boats to our data centre in London and back to Dubai for broadcast. We have a live leaderboard. Then we’ve got augmented reality graphics. All the AR graphics then work out where everything is on the racecourse, and we paint the full picture.”

From SailGP’s TV studio in London, footage is distributed to 187 broadcasters around the world, Jones goes on. “We are very proud to be working with Oracle. It has huge data centres around the world. We have our core in London, and then we build edge devices around the world. We’re totally wireless. We don’t use satellite trucks. We have no producers anywhere but back home in London. Everything is blended in from London, and then it is sent back here to watch the show in its full glory from that point of view and on the big screens. That round trip takes around 200ms and is the beauty of a full remote production.”





SPAIN'S FIRST RIEDEL ARTIST-1024 SETUP IS AT TV3!



The Catalan public media company, **Corporació Catalana de Mitjans Audiovisuals**, has upgraded its audiovisual production center (CPA) and news editing facilities for its primary television channel, **TV3**, by moving to a Riedel Artist intercom ecosystem. Supplied by Spanish reseller **Crosspoint**, two Artist-1024 nodes integrate seamlessly with Riedel's Bolero wireless intercom and 1200 Series SmartPanels, enabling TV3 to shift to IP and realize decentralized, scalable communications and signal distribution for news teams on any audio or intercom application. The new system is the first of its kind in Spain.

According to Ignasi Jauset, Head of Projects at TV3, Riedel and Crosspoint were the most competitive and compelling offer during the public tender, providing "without any doubt, one of the best intercom systems in the world."

The installation of the Riedel systems commenced in two phases, with the deployment of a first Artist-1024 node in the CPA, followed by a second node in the news editing facility. Crosspoint provided continuous training and support to the TV3 team throughout the process.

Jordi Soler, Technical Manager Studio Facilities at TV3, notes that the IP-based intercom system provides the company with incredible flexibility in configuring communications, allowing operators to use the panels for audio monitoring and reducing the need for extra equipment and rack space. Roger Maneu, TV3's MCR Technician, added that Artist's ability to integrate telephone systems into the network has created a much quieter environment for TV3 teams to work in, a great improvement from previous workflows.

The Bolero deployment includes 10 antennas supporting 28 belt packs, which afford TV3 greater versatility while preserving audio intelligibility. In addition to providing long battery life, the Bolero belt packs offer a comfortable fit that enables TV3 managers to wear them without noticing.

Through their shared passion for innovation, TV3, Riedel, and Crosspoint partnered to make this project a success and bring unified yet flexible IP-based communications to TV3's new production teams.



MEDIA-OVER-IP VIA MEDIORNET IP TDF BUILDS MEDIA-OVER-IP NETWORK ON MEDIORNET MUON TECHNOLOGY



France's TDF Group operates and manages telecommunications and broadcasting infrastructure, secure networks, and connectivity services that support the media industry. In 2022 the group completed a new multi-client media-over-IP network that allows the whole French market to securely exchange media content regardless of format and supports TDF Group customers with a smooth and safe migration to IP.

"At TDF, it's in our DNA to be at the leading edge of technology in the media industry, and our new media-over-IP network reflects that," says Daniel Rodriguez, Head of Media Innovation Programs at TDF. "Riedel's MediorNet MuoN technology is deeply embedded in the network and has been critical to its success on a national scale."

Part of the new media-over-IP network tailored to meet TDF's own operational and service workflows, compact MuoN SFPs from Riedel Communications are enabling the migration from legacy SDI formats using the SMPTE ST 2110 standard to process uncompressed signals. Riedel's SFP-based MediorNet MuoN IP gateways provide multiple practical interfaces for bridging SDI signals into IP. With their small form factor (SFP+, SFP28), the 3G/HD capable MuoN A SFPs can even be installed inside a standard 10GE/25GE IP switch. The software-defined modules are available with a range of different input and output configurations—including BNC, fiber, or HDMI—and can be configured to run encapsulation such as SMPTE ST 2110 and ST 2022-6.

"Squeezing the horsepower of a cutting-edge FPGA into the compact size of an SFP is no easy feat, and it certainly drew us to Riedel for this ambitious project," adds Rodriguez. "The company's MediorNet MuoN technology supports our strategy of progressively migrating from legacy SDI to IP, at the market's pace, with minimal risk thanks to its hybrid nature."

TDF's media-over-IP network not only features MuoN A Series SFPs housed directly in IP switches for HD video resolutions, but also MuoN B Series SFPs being used with Riedel's VirtU 32 aggregator for high-end UHD video processing. With up to two UHD channels per SFP, the granularity of Riedel's MediorNet MuoN technology allows TDF to scale its network as needed while decreasing the risks associated with hardware failures. In addition, Riedel's MuoN technology supports the RESTful API, which made it simple for TDF to tailor the system to its unique needs.





RELIABILITY IS KING

ARTIST-1024 AND BOLERO S ENABLE REMOTE VAR COMMUNICATIONS FOR ROYAL BELGIAN FOOTBALL ASSOCIATION

■ Located in the small town of Tubize just 25 km south of Brussels, Belgium, the Proximus Basecamp is home to the Royal Belgian Football Association (RBFA) and its regional wings, ACFV and Voetbal Vlaanderen. From here, the Video Assistant Referee (VAR) Replay Centre communicates clearly and reliably with all Jupiler Pro League stadiums across the country — all thanks to Riedel's Bolero wireless intercom and Artist digital matrix intercom systems, both of which were deployed at the site earlier this year.



With VAR, referee assistants watch the video of a match from a remote location, getting a bird's-eye view of everything in the game. By monitoring for critical game situations, such as goals, penalties, red cards, and incidents where the wrong athlete is benched, the assistant relays the information to the on-field referee so they can make a fairer and more informed final decision. To do so, teams in the VAR Replay Centre need access to clear and fast communication systems so they can reach referees in time and without sound interference.

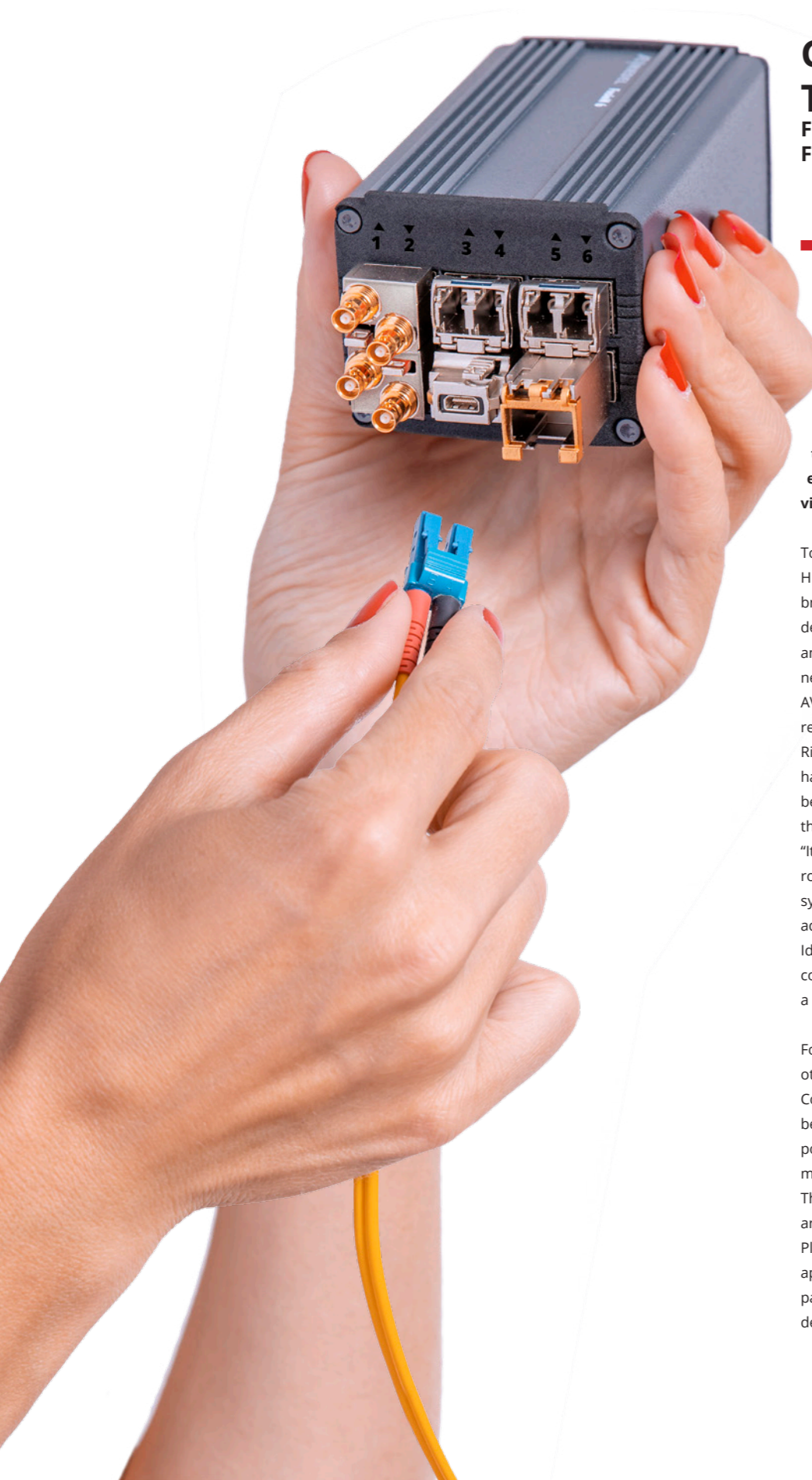
In February, Riedel partnered with broadcast solutions and service provider EMG to supply kits to all the stadiums. Referees working on the pitch received Bolero-S stand-alone wireless intercom systems, including antennas, backpacks, and run headsets. Five desks/stations at the VAR Replay Centre, plus one spare and a supervisor desk, were equipped with Riedel's Artist 1024 intercom system, with 1216 intercom panels that support overlapping matches (in parallel) per match day. And over the last two match days of the regular league competition, the system was expanded with flight packs to support up to nine concurrent matches.

No matter the distance between each stadium and the VAR Replay Centre, the Bolero and Artist systems help produce exceptional sound quality. Anyone on the teams — from the referees to their on-field assistants to the remote video assistant referees — can easily use the systems to establish the right connection, even amid an intense match. Riedel also offers professional support to ensure that integration and configuration of the systems are straightforward.

The Bolero and Artist systems ensure flawless communication anytime calls are made and reviewed between RBFA referee teams in the Jupiler Pro League stadiums and the VAR Replay Centre. Signals moving between different stadiums and the VAR Replay Centre travel over the Proximus MPLS network, which is designed for premium sports and events — not only for VAR, but also for remote production of Jupiler Pro League competitions. Overall, the intercom solution enables crisp, clear conversations among everyone involved, ensuring outstanding quality in the communication process.

"We're proud that our intercom systems have become an integral part of match-day operations at the VAR Replay Centre and at stadiums across Belgium," said Kristof Vanden Eynde, Riedel's Sales Manager for Belgium. "It's exciting to see the results in the live broadcast as referees effortlessly call on their remote colleagues for the final word on a particular call, and we know it makes a difference for the JPL fans!"





GREAT MINDS THINK FORWARD FORWARD THINKING DESIGN FINDS RIEDEL A PERFECT FIT

■ Corporate boardrooms, network boardrooms or suites, hospitality areas, and even houses of worship, traditionally use highly compressed video and more “AV” quality solutions in their spaces, so when they upgrade their facilities with broadcast-quality equipment, for them, the result is stunning video and audio.

To bring this broadcast-quality, uncompressed HD/UHD, video into these non-traditional broadcast spaces, required a specially designed system. Forward Thinking Design, an audio, video, and control design specialist needed to accomplish this feat, but at an AV comparable price. That challenging requirement led the design team to select Riedel’s MediorNet FusioN edge devices, which have a full-featured, open API allowing them to be controlled by third party systems, such as the Q-SYS audio, video, and control platform. “It’s awesome! Being able to control the FusioN routes, while also controlling the whole AVI system within one platform, is a tremendous advantage”, stated Evan Hall, Chief of Big Ideas, Forward Thinking Design. “Being able to control the routes down to a granular level is a bonus.”

Forward Thinking Design assessed several other solutions, but ultimately found Riedel Communications’ SMPTE ST 2110 solution to be the best option, due to its product portfolio, powerful, open, RESTful API, and history of making mission critical robust products. The company deployed a solution centered around Riedel MuoNs, which are Small Form Pluggable (SFP) devices loaded with processing applications, packed into a VirtU 32 frame, and paired with Riedel MediorNet FusioN edge devices for signal conversion at the edge.



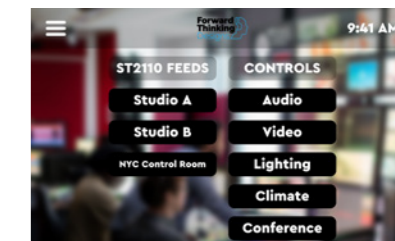
The MuoNs provide processing such as embedding, de-embedding, up/down/cross conversion, gateways and more – that can be controlled and changed per SFP. The FusioN edge devices provide signal conversion, including SDI or HDMI to IP ST 2110 and IP ST 2110 to HDMI conversion right at the source or monitor, reducing cabling and the need for additional devices.

This combination of MuoNs and FusioNs provides SMPTE ST 2110 routing throughout the site via the Q-SYS controller and enables easy embedding and de-embedding of audio into the AES67 ecosystem. One other essential requirement was that the solution would also allow Forward Thinking Design to control which ST 2110 streams were available to which user via each wall mounted touchscreen in their area.

“Using Riedel’s open API, we are able to build highly customized control systems that work for the customer– controlling details down to the area, the user, and even down to the time of day”, stated Hall. “Through the API we can control the audio, the video, the intercom and even GPI signals. We can control embedding and de-embedding AES67 signals seamlessly.”

Pairing the SMPTE ST 2110-capable solution from Riedel with Q-SYS controls, Forward Thinking Design was able to build a cost-effective solution for audio, video, intercom, and even GPI control that enables its customer to have ultimate control along with stunning images. The solution has been a game changer as its price point and ease of use, enables Forward Thinking Design to bring ST 2110 and its many benefits, including high-quality video, into the corporate and hospitality space.

“Riedel has been a great partner over the years, from sales, support, and even the access to their leadership team”, said Hall, “They are always available to help us with our bespoke projects. They are a company that is really focused on what they do well.... Which is great – it means they know what they do, and they do it well. And that is also where FTD can help – as we can take Riedel into areas and supply the solutions that are tangential to their focus.”



“Being able to bring uncompressed SMPTE ST 2110 network video to the corporate and hospitality market isn’t something you see a lot and we applaud Forward Thinking Design for designing a cost-effective way to accomplish this goal”, stated Rich Zabel, VP of Sales, North America for Riedel Communications. “Having our products work seamlessly with other platforms is important and we are looking forward to working closely with FTD on future projects.”

HOOPS IN THE CLOUD

RIEDEL'S SIMPLYLIVE PRODUCTION AND VENUE GATEWAY
ENABLE END-TO-END CLOUD PRODUCTION



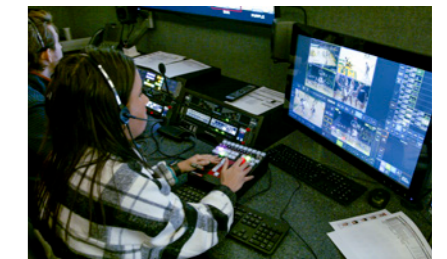
■ Riedel made broadcast history in January with its involvement in the first-ever production of a U.S. sporting event broadcast live on linear TV using an entire end-to-end cloud workflow. The basketball conference game took place in Fairfax and was produced by two major entertainment providers, using Riedel's Simplylive Production Suite and Venue Gateway systems.

The cloud operation was based on Riedel's All-In-One production video switcher and slo-mo replay system. A spokesperson said the equipment helped the production crew achieve the exact same level of quality and resources as a traditional REMI production would have. It afforded them with everything they needed, from switching, audio, graphics, and video to camera ISOs, replay, scorebug, comms, and onsite talent. Moreover, the Simplylive Production Suite not only aided in the reduction of costly hardware and physical infrastructure, but the system also helped eliminate transmission bottlenecks associated with hardware-based REMI productions.

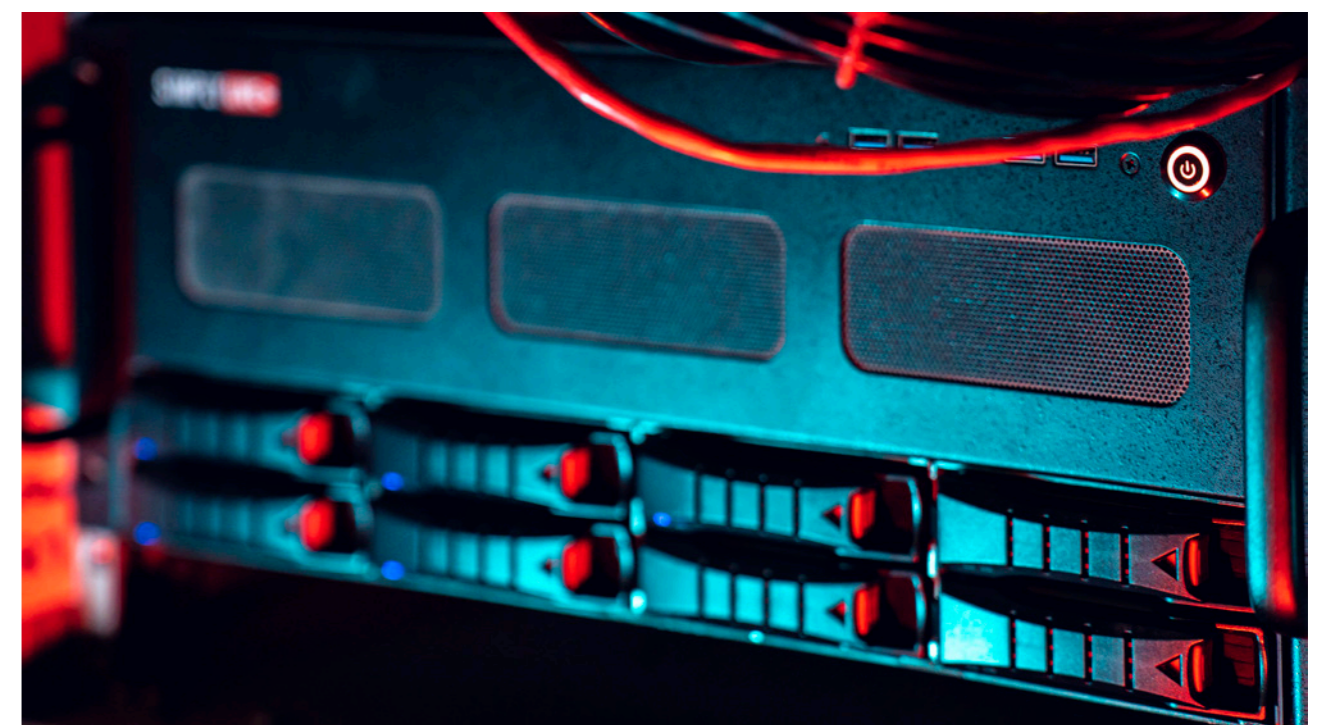
The team also used Riedel's Venue Gateway, an onsite encoder/decoder and multiviewer, to encode all camera footage and audio feeds for IP and transport them to an AWS cloud instance using SRT. After all the camera and audio feeds had traveled via the cloud to campuses in Bristol and Connecticut to be cut and produced, the Venue Gateway and Unity Connect enabled the mix-minus audio, program feed, and tallies to return to the EagleBank Arena in Fairfax, Virginia. Thanks to the unparalleled reliability of the system, the operators, director, and producer said they felt like they were operating in the on-site mobile unit, having no reduction in functionality or experience.



The event marks a major step in the evolution of cloud-based production. The cloud technologies helped the crew take traditional models, like REMI, and turn them into far more scalable solutions — replacing the need to build brick-and-mortar facilities, such as a production-control room or a mobile unit, whenever the need for more resources arises. Additionally, by delivering a single program feed instead of multiple feeds, the cloud cuts down on infrastructure needed to handle each transmission.



Both companies see much potential for the cloud in helping them scale up and scale down busy production windows and the concurrency of different sports. Overall, as it's becoming more popular to see multiple games within a single event or series or multiple presentations within a single production, the cloud will help the team create far more efficient workflows.



From an article courtesy of:





DRIVING THE DIGITAL TRANSFORMATION IN SPORTS

RIEDEL ACQUIRES SPORTS TRACKING TRAILBLAZER INMOTIO



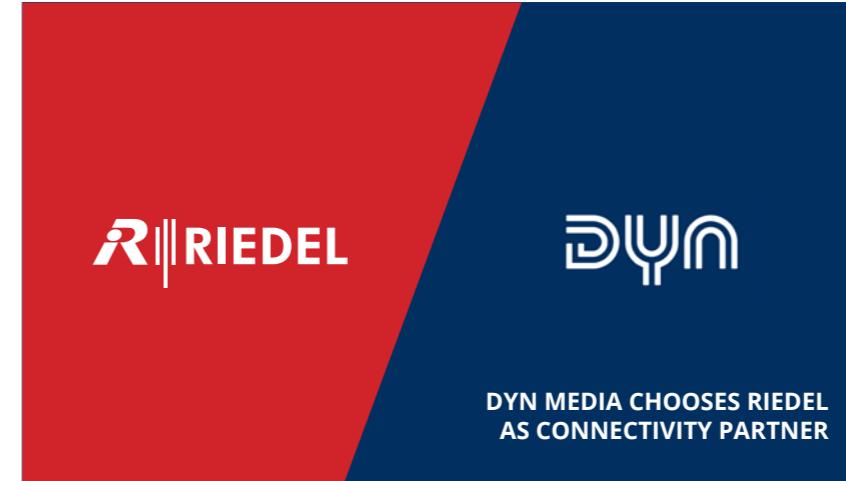
Lutz Rathmann
CEO Managed
Technology

■ Most readers of this magazine already know that our involvement in sports extends far beyond intercom and video solutions. Our teams in New Zealand and Portugal have been exploring new performance analysis technologies for quite some time now, and last year, we partnered with sports technology startup iotis. As the next step on our quest to drive digital transformation in sports, we have acquired the proprietary Local Position Measurement (LPM) technology from Dutch sports performance analysis expert

Inmotio. With this proven technology, we'll help make sports more tangible for consumers — and safer for athletes — through high-end sensor technology and data-driven analysis.

The LPM platform is the most accurate tracking technology available in the market and is built on a real-time network connected to various base stations placed around the measuring site. The radar-based system measures the position of players and assets with an accuracy of +/- 3 cm, in high frequency (1.000 Hz), and in real time. Athletes wear a special vest with a transponder that can be tracked in 2D and 3D space. Today's users appreciate its unmatched precision, its operational range of up to 1000 meters, and its capacity of 1000 users.

Inmotio is one of the true trailblazers of sports tracking, and over the years, their proprietary LPM platform has become the gold standard in sports performance measurement, far surpassing ultra-wideband trackers in terms of capabilities, user capacity, and accuracy. Now that their proven technologies meet our innovative strength, global sales, and marketing power, the LPM solution is sure to reach a wider audience and find application in some of the world's most high-profile projects.



INTO THE SPOTLIGHT

DYN MEDIA CHOOSES RIEDEL AS CONNECTIVITY PARTNER

■ Riedel Networks has been appointed connectivity partner of Dyn Media, the new streaming platform for sports beyond soccer. This means that from the summer of 2023, we will deliver the connectivity services for German national leagues and cup competitions of sports like basketball and handball.

The mission of Dyn Media, founded by former DFL Chairman Christian Seifert, in cooperation with Axel Springer, is to put previously underrepresented sports in Germany's media spotlight and to bring their TV production to a new level. The streaming service has already secured the media rights for other national leagues such as the Table Tennis Bundesliga TTBL and the Volleyball Bundesliga VBL and is scheduled to go live in June 2023.

For Dyn Media, we will bundle all audio and video signals from over 70 venues across Germany at the Dyn sites in Cologne and Munich to be processed in two Virtual Production Units (VPU). These are connected via Riedel Networks' own network in a redundant 10-gig fiber ring to the cloud platform Amazon Web Services (AWS) and the Dyn Operations Centre (DOC) in Wuppertal, where more than 1,300 matches on up to 160 production calendar days are to be serviced.

After more than 10 years in this business with mainly international projects such as Formula 1 or summer and winter games, we are particularly pleased to be able to support such an important national project from the very beginning. This partnership is a perfect match, considering Dyn's glass-to-glass strategy, where new types of content and format production require an IP-enabled, innovative, and highly reliable media backbone.



Michael Martens
CEO Riedel Networks



ORCHESTRATING POSITIVE OUTCOMES

RIEDEL INTERCOM AND SIGNAL DISTRIBUTION SOLUTIONS
SUPPORT 2022 WORLD ECONOMIC FORUM ANNUAL MEETING

■ The World Economic Forum is an independent international organization committed to improving the state of the world. For the 2022 World Economic Forum Annual Meeting, held in Davos-Klosters, Switzerland, the organization brought together nearly 2,500 leaders and experts from around the world to collaborate on tackling global issues and finding solutions to the world's most urgent challenges. To ensure clear, reliable communications for the crew producing the event, and to establish flexible AV signal distribution and processing to support live coverage, the World Economic Forum turned to Riedel Communications.

“Previously, we could only provide production companies with recordings of our meetings, but this year we were eager to offer live coverage to the public,” says Rasha Hasbini, Head of Studios and Live Production at the World Economic Forum. “Riedel made it virtually effortless to do so.”

Deployed by Riedel and its partner Crealine Media Systems, a Riedel MediorNet system facilitated AV signal distribution and processing, providing commissioned television production companies such as SRF, EBU, and Swisscom with video and audio feeds from the meeting, including interpreter channels. The system consisted of more than 30 MediorNet nodes, including MicroN UHD and MicroN high-density media distribution network devices, in addition to nine RSP-2318 panels including the MediorNet Control App for signal routing, all installed across eight production studios and the master control room (MCR).

Riedel's Artist digital intercom matrix, including an Artist-1024 matrix intercom mainframe with 16 RSP-1232HL panels, integrated seamlessly with a Bolero wireless intercom system, which consisted of 18 antennas and 42 wireless beltpacks, to support crew communications. A decentralized, scalable solution, the Artist-1024 allowed for flexible placement of nodes to reduce wiring and setup costs while enhancing system reliability with a dual-ring fiber-optic network topology that provided full redundancy.

“Flexible and simple to use, the company's MediorNet system easily handled the complexity of the 2022 Annual Meeting and all the last-minute changes that come with live productions,” continues Hasbini. “And with the intercom capabilities provided by the state-of-the-art Artist and Bolero systems, the production process was perfectly orchestrated over a very large physical distance. We couldn't be more pleased with the results.”



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