



REMOTE OPERATIONS CENTER **ROC**

REMOTELY MANAGED SERVICES



AROUND THE WORLD IN 80 MILLISECONDS REMOTE SIGNAL MANAGEMENT, MONITORING & CONTROL

Riedel's ROC in Wuppertal was instrumental in the first-ever fully decentralized production of a live, global music event: "Around the World in 80 Milliseconds". The collaboration with Remote Recording Network (RRN) and 15 other partners brought together teams working remotely across four countries and three continents, and demonstrated the ability of all technical disciplines involved to remotely control an entire show.

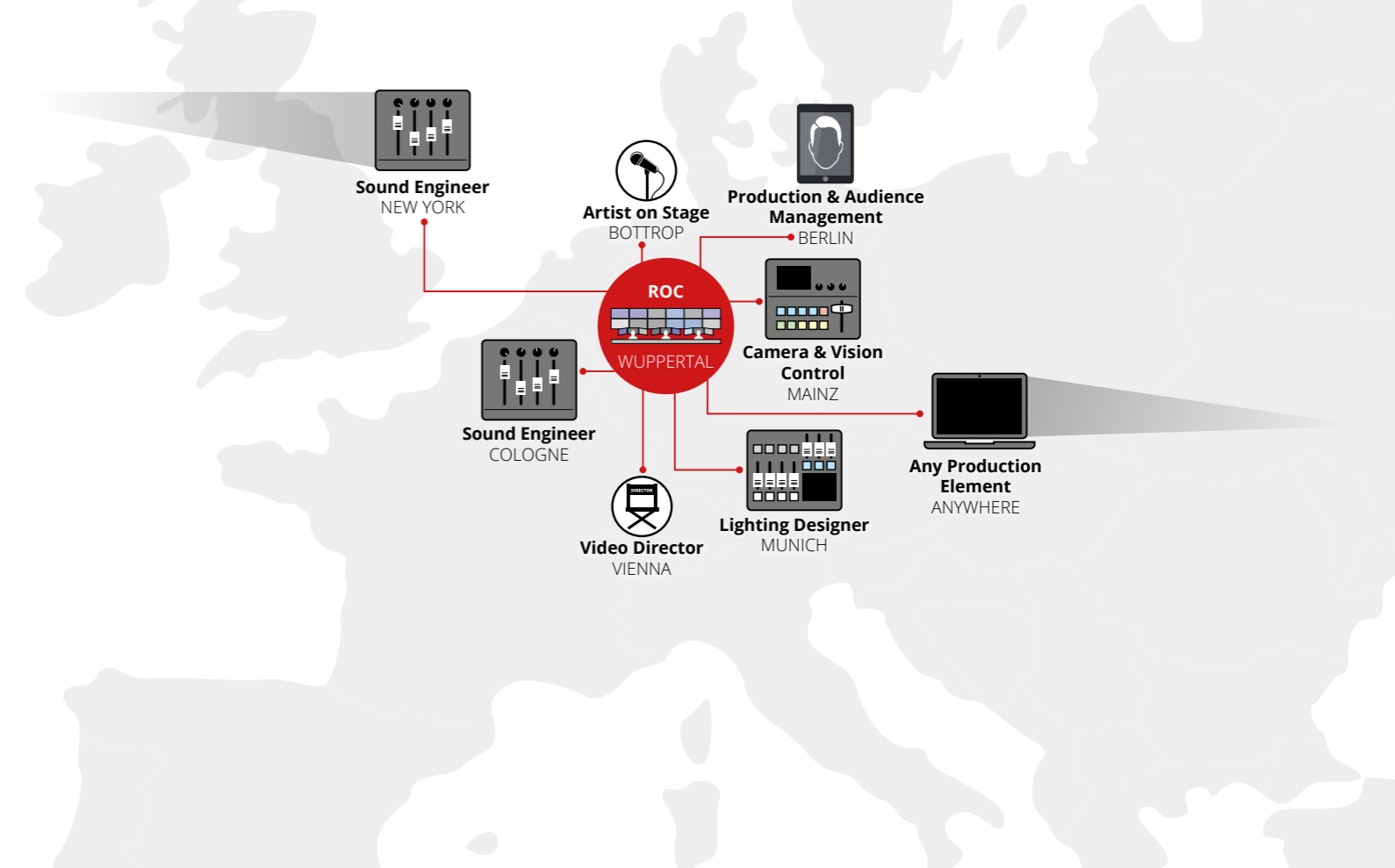
The on-site production team in Bottrop worked with a minimal cast, with the director working remotely and in real time from Vienna, the lighting designer from Munich, and the lighting operator from Frankfurt. FOH and broadcast sound was mixed in Cologne, and the parallel sound recording was controlled in 5.1.4 from Valhalla Studios in New York. The TV Skyline Skycenter in Mainz acted as a hub for camera control, image mixing, and stream delivery.

The technological heart of the production was the Riedel ROC, the communications and signal control center through which all remote production connections converged. From the Riedel HQ in Wuppertal, the ROC team managed, programmed, and monitored all signals, streams and feeds. Vision mixers, audio and lighting consoles were all mirrored for remote equipment control, so whenever an operator moved faders from their remote office, the action was mimicked by the equipment in Bottrop. But some remote hands also required remote eyes, so the ROC not only handled equipment control, intercom, and audio signals, but also several video streams: The lighting operator in Frankfurt, for example, could rely on two CCTV PTZ cameras to oversee his work in Bottrop in real time.



ALL ROADS LEAD TO ROC – THE NETWORK

Even a complex remote production like this does not necessarily require a dedicated direct connection. „Around the World in 80 Milliseconds“ relied on secure VPN tunnels for the flexibility to connect any production element, anywhere, and at any time.





24/7 INTERCOM & IT SUPPORT

REMOTE SUPPORT FOR MOTORSPORTS

■ Fixed Installations: 24/7 Intercom & IT Support for 24 Hours Nürburgring

Our 24/7 intercom support enables powerful efficiencies for 24 Hours Nürburgring touring car races. Thanks to our fixed backbone installation at the Nürburgring race course, we can easily control the pitlane, paddock, and race car communication from the ROC. Remote intercom operators can perform programming & support to reduce the workload of colleagues on site, and help maintain a three-shift rotation from the Wuppertal. Event organizers can leverage powerful synergies, as the backbone network can also be used for links to other sites and broadcast centers, and save time, nerves, travel and accommodation costs. It really doesn't matter where your race is taking place; the Riedel Group can supply a customized backbone for direct connections.

■ Temporary Installations: 24/7 Intercom & IT Support for Formula 1

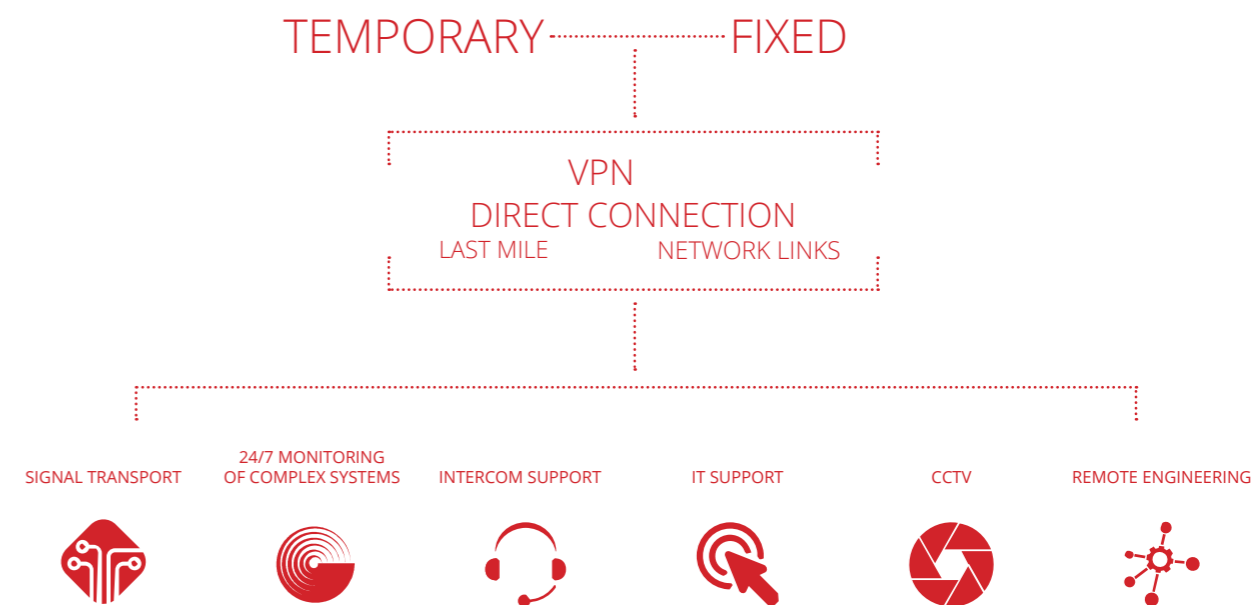
Extraordinary flexibility is required for global racing series with race tracks spread across the globe. That's why for Formula 1, ROC support runs over temporary, bundled services on a redundant connection. Here, the Remote Operations Center is part of an overall network that also includes the end customer's locations. This allows ROC operators to control and monitor both the systems at the race track and those at the customer's facilities. And we are not just talking comms here; IT specialists can remotely dial into the trackside IT infrastructure to get access to all switches, and firewalls to proactively monitor traffic, bandwidth and server workload and provide immediate support. These advanced remote monitoring and control workflows help get the most out of any Riedel system.



„THE RIEDEL TEAM MAY NOT BE THE ONLY ONE TO OFFER SERVICES FOR TODAY'S REMOTE PRODUCTIONS. BUT THEY'RE THE ONLY ONE THAT CAN OFFER TRUE TURNKEY SOLUTIONS, AS THEY CONTROL THE ENTIRE PRODUCTION CHAIN: THEY GOT BACKBONE NETWORKS, 360 DEGREE EXPERTISE IN VIDEO, AUDIO, AND IT INFRASTRUCTURES - ALL COUPLED WITH ROC-SOLID ADVANCED REMOTE SUPPORT.“

WERNER EKSLER, MANAGING DIRECTOR, CIRCLE-O

RIEDEL GROUP BACKBONE





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