

Wimbledon: Challenging the Status Quo for BBC Sport



BMC enables the finest quality BBC Wimbledon coverage ever

BBC SPORT

THE CHALLENGE

Each year BBC Sport has to work hard to bring an ever richer and more interactive viewing experience to it's Wimbledon audience. Creative use of the latest technology helps achieve their desire to produce more and better services than ever before. At the same time, the BBC needs to maintain it's brand leading quality and reliability.

A key part of this challenge is their need to move the massive amount of content from Wimbledon to the BBC's production centres.

THE STATUS QUO

The standard method to deliver so much live content from a sporting event such as Wimbledon, is to use high levels of compression. On one hand compression is great as it allows the content to be squeezed into a small, commonly available network pipe such as 1Gb. On the other hand;

- It makes the solution more complex
- Uses pricey equipment
- Adds latency
- Makes sound and picture quality worse

THE SOLUTION

For the Championships, Wimbledon 2019, BMC UK successfully transported the BBC content using an alternative approach. This year we chose to use little or no compression. Although using 50x more bandwidth than former suppliers, we achieved this within a very tight budget. We engineered a solution that took the latest, high bandwidth, fibre products

and combined them with the latest studio techniques and standards. We transported uncompressed HD signals, and lightly compressed UHD signals, with maximum simplicity and premium reliability.

Working at Layer 1, we used our Dense Wavelength Division Multiplexing (DWDM) know-how to deploy 10 x 10G services. This level of network connectivity enabled us to avoid complex, temporal, compression completely. All services benefitted from the lowest latency and highest quality possible.

In order to carry UHD signals we used mezzanine techniques, designed for studio working to best utilize our, cost effective 10G channels. Each UHD was reduced by a ratio of 4 to 1.

We made use of the latest SMPTE standards. These standards enabled us to encapsulate the video and audio into IP, and provide the ultimate fault tolerance, using hitless protection for all services.

Contact BMC today to discuss your broadcast and media requirements.

INTERESTING FACTS:

Our novel solution delivered:

24 uncompressed HD streams

2 UHD streams

20 audio only services

2Gb/s for file transfer services

100Gb/s of bandwidth used
50x former solution

Our service helped BBC Sport's digital service to show every match live and on-demand on BBC iPlayer and on the BBC Sport website and app

All Courts shown live in HD

All Centre Court matches were shown live in both UHD and HD

ABOUT BMC

Broadcast Media Communications (BMC) are Live Video experts. Since our incorporation (2007) we have combined years of video network experience to meet the demands of sports, news and special broadcast events. Our Media Quality Network across the City of London reliably transports compressed and uncompressed high value media. We continue to develop and now offer cloud based media processing via our "Broadcast as a Service – BaaS" line offering.

We have steadily built strategic alliances with Global providers to extend our media offering wherever you need it.