



Liverpool FC



Exterity helps Liverpool FC create a visually compelling in-stadium digital video and signage environment

Home to one of the English Premier League's most iconic football clubs, Liverpool FC's Anfield stadium underwent a major redevelopment scheme in 2016. By adding 8,500 seats to the Main Stand, Liverpool FC now boasts one of the largest all-seater single stands in European football, within a ground capable of holding 54,000 fans, along with first class VIP, hospitality and executive conference facilities.



“Exterity’s plug-and-play solution was ideal for this project, with its ability to easily integrate with other third-party systems and manage delivery of all video content from a central location, as well as locally in each supporters’ lounge. What’s more, Liverpool FC can easily add displays to the system, wherever there is a network connection.”

Ian Scott, Managing Director at Lumino AV



The challenge

With a history spanning 124 years, Anfield is the tenth largest sports stadium in the United Kingdom and the home ground of Liverpool FC since its formation in 1892. In common with football clubs across the country, demand for season tickets has grown over the years, prompting Liverpool and many other clubs to extend capacity through new or enlarged stadiums. To ensure the match day experience fulfils the needs of fans, Liverpool FC has added additional features such as improved access for wheelchair users, high-speed Wi-Fi and a complete suite of video display monitors across the stadium.

The displays are used for streaming live match footage, video from LFC TV (Liverpool FC’s official TV channel), broadcasting sports channels, and displaying advertising content and match day information. As part of the redevelopment project, Liverpool FC decided to upgrade the capability of its displays to deliver better quality and more features, including the ability to quickly change content to meet the requirements of guests across its hospitality suites, press box and corporate offices.

A key requirement was for an integrated system with the flexibility to deliver a variety of branded content, including individual menu boards at food counters, all the way through to live premium channels in its executive boxes. The solution needed to be managed centrally, with complete synchronisation to ensure all supporters could watch the same feed throughout the venue.

The solution

Based on these requirements, Liverpool FC selected an Exterity IP video system, deployed by AV integrator, Lumino AV. The heart of the Exterity solution includes AvediaStream TVgateways for delivering Freeview TV channels to screens around the stadium and AvediaStream e3655 Encoders to stream the LFC TV channel direct from its in-house production studio across the network to every screen in the ground. An Exterity AvediaServer provides central management of the IPTV system and delivers TV, video and digital signage to the right screens at the right time across the stadium.



A bank of Exterity AvediaStream e3635 Encoders delivers digital signage content from the Exterity’s ArtioSign players as multicast channels. This makes efficient use of the stadium-wide IP network and ensures that the right content is playing on each screen. Across the ground, each of the 598 Samsung screens is connected to an AvediaPlayer Receiver set-top box, able to deliver synchronised HD TV and video from multiple sources.

“Live TV, video and digital signage are an integral part of the in-stadium experience these days, and we wanted to ensure that we offered the most advanced service possible following the expansion of the stadium,” said Lyndon Tudor, Technical Services Manager at Liverpool FC. “By deploying the Exterity IP video system and integrating it with our digital signage solution, we can also manage our content and messages at scale. When you have almost 600 on-site screens, you really want to make sure your system is easy to manage, a promise that Exterity has consistently delivered on.”

The system enables the Premier League football club to:

- Provide a first-class fan experience with state-of-the-art digital communications
- Showcase Anfield Stadium and the brand new Main Stand
- Distribute live and recorded content to 600 screens on-site
- Manage its integrated IP video and digital signage infrastructure via mobile devices



The result

Following a successful implementation project, the new digital video and signage solution is delivering an enhanced level of visual quality, reliability and features for both staff and supporters at Anfield stadium. The Exterity system displays live TV, video and digital signage on just under 800 screens, showcasing the latest news, exclusive interviews, videos, live commentary and match highlights via a number of channels, including LFC TV, Sky Sports HD, BT Sport HD and Freeview. ArtioSign makes it simple for administrators to quickly modify signage content and deliver it to any location across the stadium using web-based tools on a desktop PC or mobile tablet.

Across Liverpool FC's numerous executive boxes and lounges, screens can be set up to display any video source or signage requirement. Members of the press box also have the ability to quickly select relevant channels. The Exterity system features unit-to-unit synchronisation — a vital consideration for the deployment given the number of side-by-side screens in each location.



As well as having central control through the Exterity AvediaServer, stadium administrators use the Exterity Avedia Remote Web app on their iPads and smartphones to quickly change channels or select different video sources for each or all of the screens in different hospitality areas.

"Liverpool FC offers an experience that highlights the flexibility and power of a modern IP video and digital signage solution within a stadium environment," commented Exterity CEO, Colin Farquhar. "The mix of video, display, cloud-based and on-premise technologies enables the club to tailor its content easily while providing future-proof capabilities, allowing them to deliver new services and features over time."

About Exterity

Since 2001 Exterity has been designing, developing and manufacturing technically innovative products that deliver video over an IP network to some of the leading organisations across the globe. Our IPTV technology solution enable the distribution of TV, video and digital signage over enterprise IP networks to an unlimited number of end points, supporting large volumes of content and receiving devices without compromising system performance or availability.

In 2021, Exterity was acquired by VITEC, a worldwide leader in IP video streaming solutions. The move signals VITEC's intention to accelerate growth and strengthen its leadership position, with natural technology and customer synergies between the two companies that will enable VITEC to extend its reach into new geographies, market verticals and partners.