

ONLINE DISTRIBUTION AND INTERNET SERVICES

The distribution of BBC Online is based on Kingswood Warren. Here are located the master distribution servers which feed the public access servers located at Telehouse in the London Docklands and Telehouse in New York, USA.

Telehouse in Docklands is a secure building in which most of the UK's Internet Service Providers (ISPs) come together to pool their traffic and thus it is an ideal point for us to connect with one of the Providers and get our content to the customers of the other ISPs. Not all ISPs take part in these peering arrangements, however, and for these we need to make alternative arrangements. In addition, the cost of sufficient bandwidth across the Atlantic to carry our traffic, particularly the bandwidth-consuming content such as video streams, is prohibitive and so we decided to establish a presence at Telehouse in New York. This means that we have distribution servers located in New York which can supply the North American users

and also connect to the eastbound bandwidth that is being paid for by the ISPs.

The distribution arrangement is shown in the diagram overleaf while the equipment area at Kingswood Warren used to distribute BBC Online and code the audio and video-streaming services is shown below.

A growing use of the Internet is the delivery of audio and video streams. Unfortunately, the bandwidth available over most connections is not adequate for good quality video. The demonstration shows the quality achievable using current technology to code audio and video at various bit-rates, typical of those in use today as well as those that may be possible in the near future.

The BBC has a number of streaming services, ranging from the World Service's various vernacular and English-language audio streams to the Parliamentary Channel and three daily television news bulletins. At the time of the Budget coverage we were delivering 3,000 concurrent video streams to the Internet.



Servers at Kingswood Warren.

The distribution arrangement.

