Integrating Personal Computers into JANET

Coloured Books

The *Coloured Book* protocol architecture is used to support interactive terminal access to host computers (for both character terminals and screen terminals), inter-host file transfers, electronic mail and remote batch job submission. This protocol architecture has been developed in the UK as an interim set of standards for open networking prior to the availability of suitable International Standards. It comprises a pragmatic mix of international, UK and academic community defined standards that together provide a coherent architecture capable of supporting a range of applications over an infrastructure of interconnected Local Area Networks (LANs) and Wide Area Networks (WANs) of different technologies. The standards are widely implemented on a number of different host computer systems.

Rainbow Software

Until recently the large number of personal computers in use in the academic community communicated via a number of ad hoc methods as there was no *Coloured Book* software available for these machines. In December 1988 the main funding body for JANET, the Computer Board, agreed to fund the purchase of community wide licence for the Rainbow Software which provides support for the Coloured Book protocols for use on IBM (and compatible) PCs under PC-DOS, MS-DOS and OS/2.

The overall aim of Rainbow is to provide support for the *Coloured Book* protocols over a range of different networks but to provide the same user interface irrespective of which network is in use.

Early in 1990 Apple Computers agreed to support the Rainbow Software for the Apple Macintosh family of computers. This means that the great majority of personal computers in use in the community are now able to communicate using the same protocols as those available on host computers. This provides widespread interworking between PCs and host computers in the community.

All PCs can act as terminals to remote host computers.
File transfer is between both PC and host filestores.

Rainbow/X.25
(DOS or OS/2)

MAC Rainbow/X.25

MAC Gateway

Appletalk

Rainbow/WS

Rserver/X.25
(DOS or OS/2)

JANET

Rainbow/WS

Rainbow/WS

Rserver/X.25
DOS or OS/2

Netbios

Rainbow/WS

Rainbow
YB/CONS
Gateway

Rainbow OS/2
CONS

MAC Rainbow/CONS

Rainbow/CONS

Rserver/CONS
(DOS or OS/2)

Netbios

Rainbow/WS

Rainbow/WS