The TCP/IP model

Whereas the 0SI model remained, to a large extent, abstract and theoretical, TCP/IP was simpler and more practical and became the foundation of today's Internet. The Internet is başed on a two-part networking system in which computers link up over net-works (using Transmission Control Protocol) to exchange information in packets (using the Internet Protocol).

The seven layers of OSI are reduced to just four.

Application. Internet protocols such as HTTP (the conversation' between web browsers and web servers) and SMTP (the/way an e-mail program sends mails through a server) all work at this level, corresponding to the top three OSI layers.

Transport. TCP (Transmission Control Protocol) works at this level, administering the delivery of data. TCP converts data into pack-ets (and back again when they are received) and ensures those packets are reassembled in the same order in which they were sent.

Internet. This is how data is sent over the network (corresponding to the Network layer in OSI). IP (Internet Protocol) packet switc ing - delivering actual packets of data to a computer from the Internetworks at this level.

Network access. This represents the basic network hardware, for example the Ethernet or w-fi connection to the Internet, and cor-responds to the Data link and Physical layers of OSI.