The users' PC or LAN connects to a special ADSL modem (or for larger offices an ADSL router) which "talks" to the DSL access multiplexor (DSLAM) in the local telephone exchange. The DSLAM is itself connected through a sophisticated data network to the users' Service Provider.

As an ADSL service shares the copper local loop with the telephone service., it is normal to use a special filter to separate the data and voice frequencies, as older telephone and fax machines are likely to be sensitive to the ADSL frequencies.

Finally, when an ADSL modem is being used, it will be necessary to install PPP software (PPPoE or PPPoA) on those PC's which will be connecting across the ADSL service. If and ADSL router is used then no extra software is required on the user PC's.