

BROADBAND

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All about Broadband

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- What is Broadband
- What choices are there
- How fast will it go
- How do you install it
- How do you change ISP

What is Broadband?

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- Did you ever use Dial Up?
 - ▣ Remember how fast it was?
- “Broadband” covers all faster technologies
 - ▣ Via Telephone line
 - Asynchronous Digital Subscriber Line
 - ▣ Via Cable
 - ▣ Via Wireless technologies
 - Wi-Fi
 - Cell phone (3G and variants)

ADSL

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- Via standard BT telephone line
 - ▣ ADSL up to 8 Mbps download
 - ▣ ADSL2 up to 24 Mbps
- Actual connection speed depends on
 - ▣ Exchange
 - ▣ How far away you are
- Actual Transfer speed depends on
 - ▣ Error rate on local line
 - ▣ Contention Ratio between Exchange and ISP

ADSL Suppliers

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- Need copper connection to local BT Exchange
- Can choose Internet Service Provider - they do vary
 - ▣ Speed
 - Bandwidth to BT core network
 - Contention Ratios on links to BT
 - Links to other ISPs – how many
 - Own servers can limit performance
 - ▣ Cost per month and contract terms
 - ▣ Support

Cable

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- Get with Phone and TV package
- Speed
 - ▣ 10 Mbps
 - ▣ 100 Mbps
- Limited to whoever supplies cable services

Wireless Technologies

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- WiFi
 - ▣ Rural areas have invested in equipment
 - ▣ May be the only choice in some places
- Cellular Technology
 - ▣ 3G - 4 Mbps download and upload
 - ▣ GPRS – 300 Kbps Fallback if 3G service not available
 - ▣ Can be used if no landline or cable
 - ▣ May be expensive but may depend on cellphone contract

What do you need

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□ ADSL

▣ Router

- frequently incorporates a Wireless Access Point
- Either supplied as part of ISP contract e.g. Plusnet
- Separate purchase (£20-£200+)
- Can support many computers on local network

▣ USB modem

- Were popular when ADSL was first introduced
- NO NOT USE - Buy a router

ADSL Filters

- An ADSL filter separates ADSL signals from telephone signals and have two sockets
 - BT socket
 - ADSL socket
- ▣ You need a filter between every telephone device and the incoming line
- ▣ You need a filter between the telephone line and your ADSL router
- ▣ You can feed more than one telephone from an ADSL filter

Cable

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- Cable
 - ▣ Need Cable modem
 - ▣ And a Cable router
 - Can support several computers on a local network
 - NOT same as ADSL router!

How to set up

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- Instructions should be provided by ISP
- Plusnet's are along the lines of
 - ▣ Unpack
 - ▣ Plug in to power, telephone line, and computer with cable supplied
 - ▣ Switch on and use (it is preconfigured with your account)
 - ▣ Wireless setup needs to be configured in PC
- All routers have a web interface which can be used to set up if not pre-configured

How to change ISP

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- Telephone your current ISP
- Ask for a MAC code
- Give MAC to your new ISP
- Reconfigure your router or replace on change over day