

Packet switching - GCSE Computer Science video for packet switching

TELEVISION: Welcome back to Packet Switching Explained Boringly.

DENISE: Oh, this documentary is sending me to sleep.

TELEVISION: Packet switching is used to send data over networks. It divides the data into sections or packets which are sent individually across the network.

DENISE: (YAWNS)

TELEVISION: Finally, they're put back together to reform the message at the other end.

DENISE: If only there was a way to explain packet switching which wasn't quite so boring. What are you buying?

VICKY: Mobile phone mast.

DENISE: A what?

VICKY: My signal's always rubbish.

DENISE: Height: 100 metres!

VICKY: Buy now. Track order. Yes.

COMPUTER: We have located your order in our warehouse.

DENISE: Ooh, it talks.

COMPUTER: Mobile phone mast.

VICKY: Oh look, there it is.

DENISE: Amazing.

COMPUTER: Your order is too large to ship in one go.

VICKY: Yeah, and?

COMPUTER: We have divided it into THREE separate packets.

VICKY: What?

COMPUTER: Which will arrive separately.

VICKY: Separately?

COMPUTER: Delivering smaller packets means we won't block the road networks, plus we can send many deliveries to different customers at the same time.

B B C Bitesize

VICKY: Forget the other customers.

DENISE: Hey.

VICKY: What?

DENISE: This delivery process is just like packet switching.

COMPUTER: Each packet is made up of the header and the payload. The header contains both the sender's and the recipient's IP addresses, details of any protocols used, the size of the packet and information about the total number of packets. This information will help you reassemble your order.

VICKY: What?

DENISE: You've got to put that mast together yourself?

COMPUTER: Good luck with that.

VICKY: Cha!

COMPUTER: The payload is whatever is being sent. Before your delivery leaves us, we always secure the packet to prevent unauthorised access. Packet number ONE has been dispatched.

DENISE: Oh, look. You can see it driving along.

VICKY: My days of rubbish phone signal will soon be over.

COMPUTER: Packet number ONE has encountered heavy traffic.

VICKY: No.

COMPUTER: Packet number TWO has been dispatched.

VICKY: It's gonna get stuck in traffic again.

COMPUTER: Alternate route taken.

DENISE: That one's smaller, fits down the side street.

VICKY: Get in!

COMPUTER: Packet number THREE has been dispatched.

VICKY: Come to mamma.

COMPUTER: Shortcut route located.

VICKY: What? Where's it going?

DENISE: Er ... That area is dodgy.

B B C Bitesize

VICKY: Oh no.

COMPUTER: Packet number TWO has arrived at its destination.

DENISE: That was quick.

VICKY: Is that my neighbour in the bath?

DENISE: Where?!

VICKY: Can you get the door, please?

COMPUTER: Packet number ONE has bypassed the heavy traffic.

VICKY: Yes, my gee.

COMPUTER: The journey of packet number THREE has been hindered by thieves.

VICKY: What?

COMPUTER: Thieves, robbers, highwaymen.

DENISE: Highwaymen? What is this, the 1800s?

COMPUTER: The highwaymen have gained access to the package but cannot work out what it is.

VICKY: Wait here while I sort this out. Cha!

COMPUTER: Packet number ONE has arrived at its destination.

DENISE: What the ...? Vicky, what are you doing?

VICKY: Clear off, you little idiots. Go on.

COMPUTER: Even if the thieves managed to open the packet, it would be useless to them. You need all three packets to reconstruct and make any use of it.

DENISE: Well, she needed exercise anyway.

VICKY: Shut up.

COMPUTER: Packet number THREE has arrived at its destination.

DENISE: Blimey, that was hectic.

VICKY: Right, let me call my brother so he can help me put this mast together.

PHONE: Your phone signal is too low to make a call.

VICKY: Signal low!

PHONE: Please try again later.