

## Interview with Nicole Cook

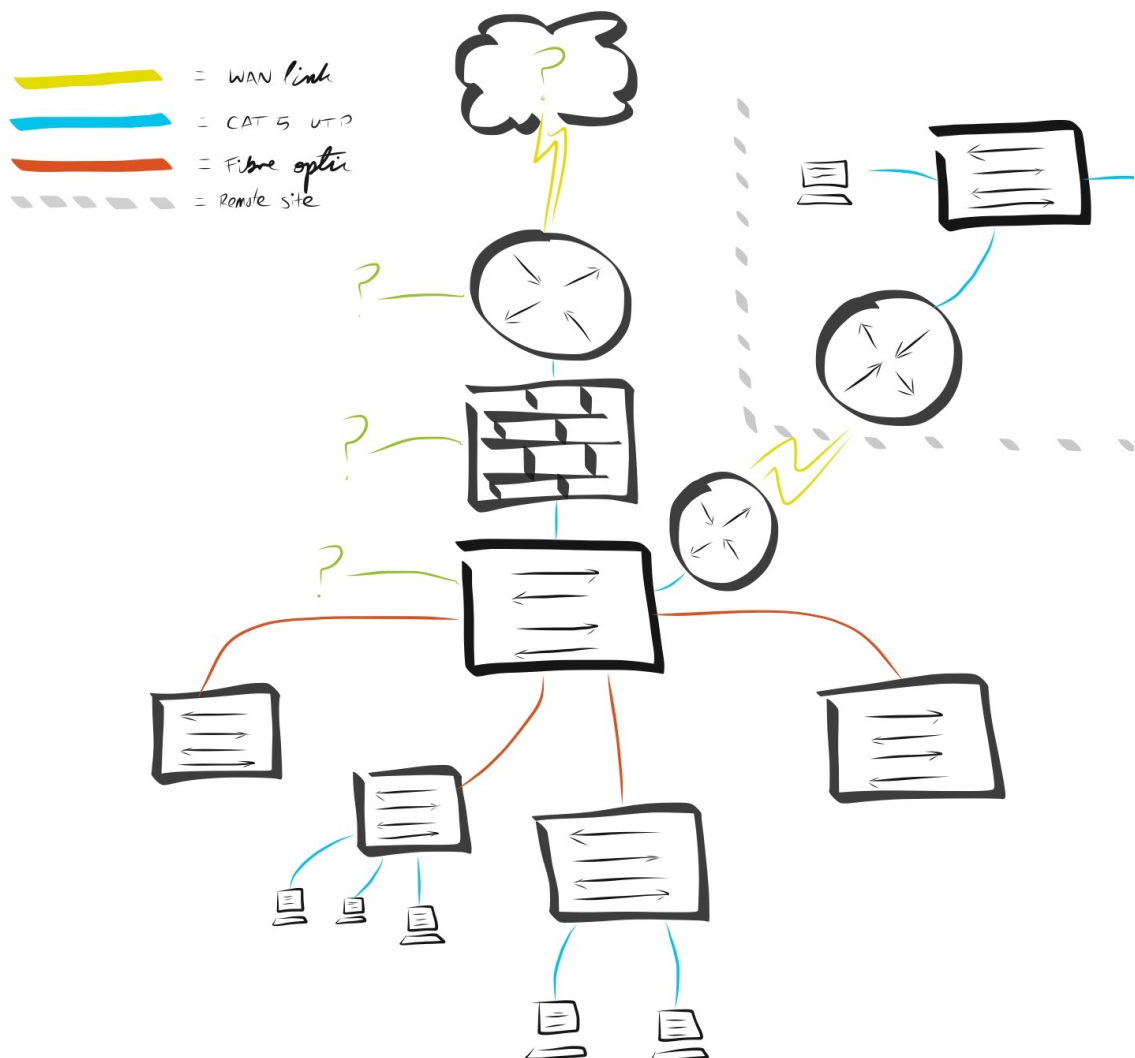
Below are some questions relating to the interview with Nicole Cook. One or two may require some research on the Internet to answer. Watch Nicole's interview in three parts (the times are indicated below in brackets) and then answer the questions from that section.

### **Part 1: infrastructure (0:00 - 5:25)**

- I. Nicole got a network engineer job at Canterbury College whilst on an apprenticeship. Name another possible route into that or a similar career.
- II. The College has two sites in Canterbury: the main campus and a building situated about 1/2 mile away.
  - A. How does the College connect to this remote Canterbury site?
  - B. Name a disadvantage of using this method.
- III. What does VLAN stand for?
  - A. Nicole forgot what VLANs are used for. Can you give a brief description?
- IV. Where are staff and students' data stored?
- V. What is a SAN (briefly)?
- VI. What are two advantages to using VoIP phones compared to analogue phones (like a regular BT style phone)?

### **Part 2: Management (5:25 - 10:59)**

- I. Name two types of device that Nicole is able to configure using Network Management software.
- II. On the network diagram, label the items indicated with question marks.





- III. What type of cable do you think was Nicole installing in Floristry?
  - A. On the network diagram, indicate where the cable could run back to.
- IV. What kind of statistics can Nicole view in realtime using Network Management software?
- V. Is there a limit to the distance over which Nicole can remotely control her switches using Network Management software?
- VI. How many wireless arrays can Nicole configure at once?
- VII. How long does it take Nicole to swap out a wireless array?

**Part 3: Redundancy (10:59 - 14:56)**

- I. The backup server is connected to a storage array, often called a RAID.
  - A. What does RAID stand for?
  - B. Name an advantage of using a RAID array.
- II. The backup server and the SAN storage arrays feature hot-swappable discs. What is the main advantage of these discs?
- III. Nicole showed us the backup management software. What did she call the act of recovering deleted data from the backup system?
- IV. Where is the College's backup system data stored?
  - A. What other storage method for backups could be used?
  - B. What are the advantages to this alternative method?
- V. How much runtime does the College's power backup system give the servers in the event of power failure?
- VI. As we saw, servers generate a lot of heat. Describe and draw a diagram to show how the College deals with this heat.

