UTN ✵
Facultad Regional Córdoba

TUP

Tecnicatura Universitaria en Programación

INGLÉS II

Unidad Temática N° 2:
Organización Conceptual del Texto

DESCRIBING TECHNICAL PROCESSES

A. A technical process: how VoIP works

> With VoIP Voice over Internet Protocol your voice **is digitized** and then broken into small data packets.
>
> To make a phone call, an analogue telephone must **be hooked up**, linked to an ATA, an analogue telephone adaptor. When you pick up the receiver and dial a number, the tones **are converted** by the ATA to digital data and temporarily stored. When your friend picks up the phone, a session **is set up**, established, between both computers. During the conversation the systems transmit packets of data that are sent back and forth through your VoIP company's call processor. They are received by the ATA and converted to the analogue audio signal that you hear. When you hang up, a signal is sent by the ATA to finish the session.
>
> VoIP calls can also be delivered via an IP telephone with an Internet connection.

When describing a technical process, we often use the present simple passive, e.g. *is digitized /are converted / is set up*, to explain how something is made or used. The agent is not as important as the process. Compare these sentences:

Active / Passive
Someone *sets* up a session. A session *is set* up.
The ATA *receive*s packets. Packets *are received* by the ATA.

B. The Use of the Passive

The passive is often used to describe areas of computing. Look at these examples:

INPUT, PROCESS, OUTPUT
The data **is fed into** the computer system. Instructions **are processed** by the CPU. The results **are displayed** on the monitor.

COMPUTER COMPONENTS AND CONFIGURATION
The icons and taskbar can **be customized**, configured, to cater for your needs.

Your computer system may need to **be upgraded**, improved, by adding devices or updating software.

STORAGE

Today a lot of information **is held**, kept, on optical discs.

The data in the hard disk should **be defragmented**, rearranged, so it can be accessed more quickly.

INTERNET

Messages **are posted**, sent, to a newsgroup where they **are threaded**, grouped, by subject.

Files can **be uploaded**, transmitted, to another computer by using FTP, File Transfer Protocol.

C. Sequencing a Process

The use of time and sequence connectors means we can show the different stages of a process.

Typical connectors

First... Then / Next… Finally…

First, the computer is switched on. **Then**, the OS is booted. **Finally**, the application is run.

As…

As the laser printer drum rolls, the toner gets stuck to it and reproduces the original image.

After / Once…

After you have had a program for a while, it may have to be updated.

Once a CD-R has been written to, you can't alter the data.
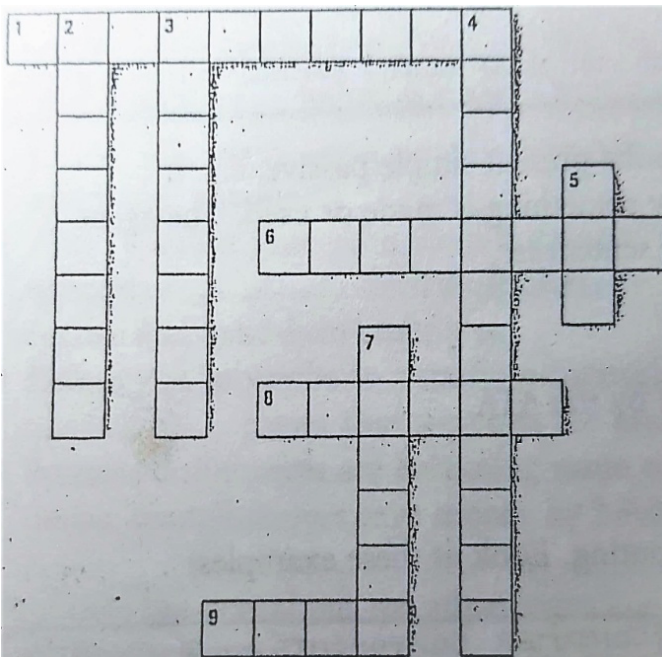
Before…

Before you can recover the files that have been deleted, you must unformat the hard disk.

1. **Complete the sentences with verbs from sections A and B above**.

   a. In order for your voice to travel over the Net as email does, it must be _____ from an analogue to a digital signal, i.e. it must be _____ , and then broken into small envelopes of data called Internet Protocol packets. Voice communication that is _____ in this way is what's known as Voice over IP.

   b. The Pocket Weather Tracker, which is the size of a mobile phone, measures temperature, humidity and barometric pressure. The results are _____ on an easy-to-read LCD screen.

   c. One football coach who uses high-tech training methods says: 'We have 11 cameras strategically positioned on the stands and they film an entire match. Then, the recording is _____ into a main computer and 24 hours later we have a CD-ROM disc which presents everything in a tactics board format.

2. **Solve the clues and complete the puzzle with verbs from section A and B above**.

   ACROSS ⟶

   1. It has been _____, i.e. laid out according to the user's specifications or needs.

   6. The web page will be _____ to the server, where it will be published.

   8. Different peripherals can be _____ up to a PC.

   9. More data is _____ on a DVD than on a CD.

DOWN

2. After my computer had been _____ by adding more RAM, it had better performance.

3. In an Internet discussion group, the messages are _____ in reply to an initial post.

4. The disk was _____ to optimize the data storage.

5. A video conference was _____ up to present the new products to the customers.

7. A lot of responses to that controversial message were _____ to the newsgroup.

3. **Rearrange the paragraphs in the text below by referring to the connectors in section C above.**

   a. Then, a pure silicon crystal is cut into thin wafers, which are covered with two other layers of protective materials.

   b. First, engineers design the construction plans for the chip.

   c. After the chemical treatment, the chip undergoes a process that alters its electrical properties.

   d. Chip production today is based on photolithography. Here is a sequential description of the process.

   e. Finally, when all the components are ready, metal is added to connect the components to each other.

   f. Next UV-light is shone through the mask and onto the wafers. The protective materials break apart on the parts of the chip that are hit by light. Then, it has to be treated with chemicals before the protective material can be removed.

Bibliografía

Marco Fabré, E. & S. Remacha Esteras. (2007). *Professional English in Use ICT* (Intermediate to Advanced). Cambridge, UK. Cambridge University Press.