

2TI anglais général

Syllabus Q1 (2023 – 2024) – TI250



Learning material mainly inspired by and taken from
“Information Technology: Unit 1” (Pearson BTEC, National Level 3)
as well as other sources provided and created by the language teachers

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OBJECTIVES

This year, the lesson's main topic will be **ONLINE SYSTEMS**.

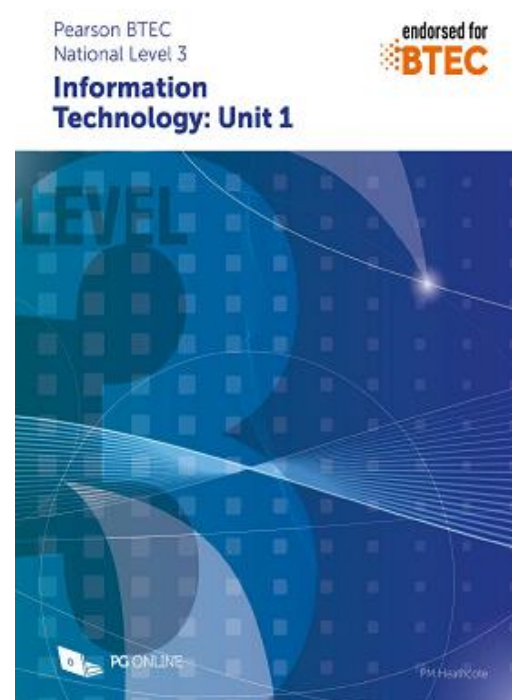
The first chapter's goals are for you to learn about:

- The personal and professional uses and applications of **cloud storage** and **cloud computing**,
- The **impact and implications** on individuals and organizations of using cloud storage and computing.

The second chapter's objectives are to get to know more about:

- Systems that enable and support **remote working**: VPNs, remote desktop technologies.
- Factors affecting the use and selection of online systems: **security, cost, ease of use, features, connectivity**.

The course's structure is similar to the one exposed in the book *"Information Technology: Unit 1"* (Pearson BTEC, National Level 3). This syllabus also includes other sources that are relevant to this year's topic.



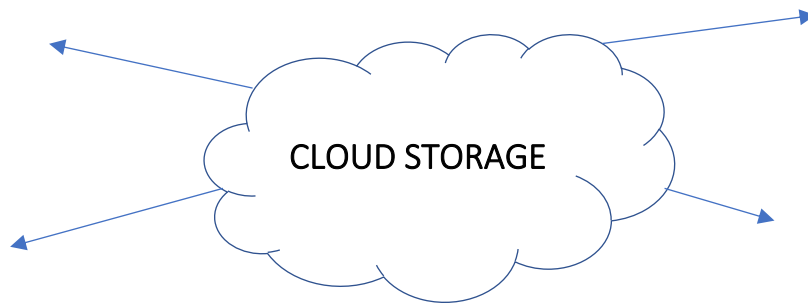
Let's get right into it! 😊

CHAPTER 1: “ONLINE SYSTEMS & CLOUD STORAGE”

1. Personal uses of cloud storage

a) Introduction: defining cloud storage

Let’s brainstorm: what do you know about CLOUD STORAGE? How would you define it?



b) DROPBOX, an example of a cloud storage and sync service

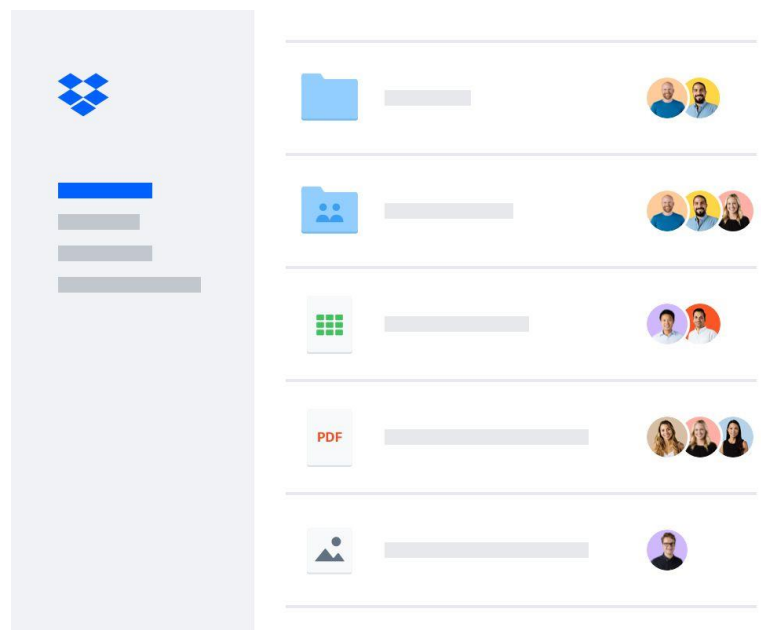
Cloud storage comes in many different forms.

→ Dropbox is an example of that: it is a well-known cloud storage provider.



- Before reading the text on the next page, fill in these three sentences by choosing the correct proposition to end them.

- 1) Dropbox is available...
 - for MACs and PCs.
 - for MACs, PCs and most mobile devices.
- 2) Dropbox is a...
 - paid service only.
 - free service only.
 - free service which includes paid features.
- 3) Dropbox’s “basic” version gives the user up to...
 - 2GB of cloud storage.
 - 5GB of cloud storage.
 - 1TB of cloud storage.



▪ Read the text and answer the questions below in English.

Once you sign up for an account, a Dropbox folder appears in your list of folders, for example in Windows File Explorer, just like any other folder. By default, Dropbox will synchronise (**sync**) a copy of all your files to the Dropbox folder on your computer. *Selective Sync* lets you choose which folders you want to keep on your hard drive, and which folders you only want to keep online in the cloud.

For example, if you do not want large media files synced (automatically copied) to your laptop, taking up all the disk space, you can disable syncing to your laptop, but still access all these files from your PC or through an online portal.



You can:

- create as many folders as you like within the Dropbox folder
- save files and folders from your PC to a Dropbox folder
- share any of these folders with friends or colleagues who have accounts with Dropbox
- upload photos and videos to Dropbox directly from your phone, and then delete them from your phone to free up space

Shared storage space in the cloud makes it easy to share large files with friends or colleagues. It also ensures that you will never lose files or precious photos and documents you have stored, since backup is done automatically by the cloud service provider. Dropbox and other cloud storage providers also offer enterprise level facilities for businesses.

1) Explain the differences between the terms “sync” and “selective sync” in your own words. Give an example from the text.

.....

.....

.....

.....

.....

2) Are these statements **true or false**? Correct if false.

a. The number of files and folders created within the Dropbox folder is limited.

.....

b. You can share your files and folders with your friends and colleagues, the only restriction being they need to have a Dropbox account too.

.....

c. You cannot directly upload photos and videos from your phone to Dropbox.

d. Dropbox also offers enterprise level facilities for businesses.

3) Give two reasons why people would use Dropbox.

-
-



For each word, fill in the table with the correct translations from English to French.

ENGLISH	FRENCH
to sign up for (an account)	
a folder	
a file	
a hard drive	
to synchronize (abbr. « to sync »)	
to disable	
a laptop	
an online portal	
a PC → a p..... C.....	
to store	

2. Personal uses of cloud services





a) Examples of cloud computing applications & services

Dropbox is a great example of cloud services but, needless to say, there are many more.



- Name some more cloud apps that you know:

- Here are four cloud services that you probably know. Find their names from their logo and match them with their correct description.

 <p>.....</p>	<p>A popular photo-sharing and hosting service that allows people to share each other's photos. You can create albums tag and organize photos, add notes and search for photos.</p>
 <p>.....</p>	<p>A productivity and collaboration tool. You can access it via the Internet in the same way you can access your email account. It allows you to share documents for viewing and editing and allows multiple users to collaborate simultaneously on a project over the web.</p>
 <p>.....</p>	<p>A cloud service built into every device of the brand. Photos, files, notes, and more are automatically saved, updated and available. All users get 5GB of free storage and can add more at any time.</p>
 <p>.....</p>	<p>A stripped-down collaborative tool, free to use through a browser. In 2019, it provided users free cloud storage of up to 5GB.</p>



For each word, fill in the table with the correct translations from English to French.

ENGLISH	FRENCH
a tool	
to allow	
to edit	
a user	

stripped-down (adj.)	
a browser	
to host	
A device	
a brand	
to update	

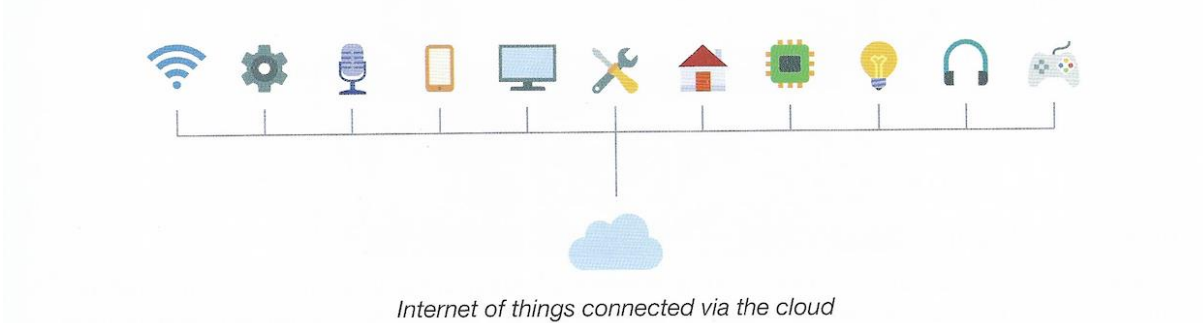
b) The Internet of Things

- You have probably heard of the term “*Internet of Things*” (“IoT”) before. Read its description below and match these definitions with their English equivalents from the text.



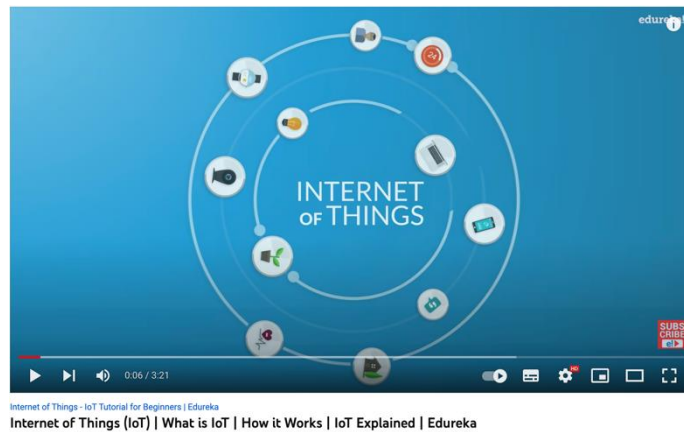
The **Internet of Things (IoT)** is the term used to describe the network of physical devices, vehicles, home appliances, and other items with embedded software, sensors and actuators. Wireless connection to the Internet enables these things to connect, collect and exchange data.

Home automation, wearable technology and **appliances with remote monitoring capabilities** are all applications used by individuals.



ENGLISH DEFINITIONS	ENGLISH WORDS
(noun) a device or machine used especially in the home to carry out a specific function.	
(adj.) far away, far distant in space.	
(adj.) something capable of being worn.	
(adj.) mapping a set into another set.	
(adj.) pertaining to any of various devices that are operated with or actuated by electromagnetic waves.	
(noun) something or someone that puts something into action, starts a process or turns on.	
(noun) an association or combination of interconnecting pieces.	

- Let's watch a short YouTube video¹ about the basics of IoT, its applications and its future.



1) Draw a list of at least four examples it gives.

2) What does the video mean by “*dumping data*”?

.....

.....

3) Explain the example given in the video where “*IoT is doing wonders*”.

.....

.....

4) What do the numbers “*24 billion*” and “*three hundred and fifty-seven billion*” refer to?

- *24 billion*:
- *Three hundred and fifty-seven billion*:



For each word, fill in the table with the correct translations from English to French.

ENGLISH	FRENCH
To gather	
A sensor	
To emit	
The state	
To dump	
To do wonders	

¹ Source: <https://www.youtube.com/watch?v=LhmzVL5bm8&t=5s>

A manufacturing industry ➤ The manufacturer	➤
The health	
An issue	
Beforehand	
A retailer	
The customer care	
To provide = to	

3. Uses of cloud computing

There are three distinct kinds of services provided via the cloud (i.e. the Internet):

- **Applications**, referred to as Software as a Service (SaaS)
- **Platforms**, referred to as Platform as a Service (PaaS)
- **Infrastructure**, referred to as Infrastructure as a Service (IaaS)

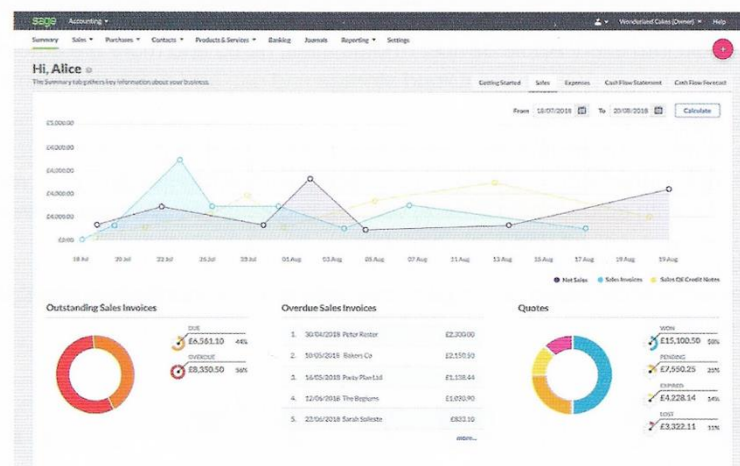
- Read the short texts below about what SaaS, PaaS and IaaS mean. Once you are done reading, sum it all up and try to differentiate them.

a) Software as a Service (SaaS)

Using the cloud, once the software licence is purchased, the software is not downloaded to any of the computers. It remains with the software provider in the cloud. The user, either personally or professionally, has access to their version of the software with personalised settings, and all the data that they create. They can log on to the software from any computer, anywhere in the world.

Using a cloud-based application means that the computing manager of an organisation does not have to worry about installing the application on new machines or applying upgrades. For a small monthly fee, the application provider takes care of all the detail. They will ensure that the system runs on the company's operating system platform.

Accounting services are commonly provided by cloud applications. Sage is one of many companies providing such a service for a monthly fee.



An online accounting package

b) Platform as a Service (PaaS)

This service provides an organisation with a complete, remote, functional virtual machine fully configured to run an application. This is most commonly used to host a company's website. An organisation using this type of service takes the responsibility of customising applications to run on the website or platform, and the PaaS provider maintains the platform, including the operating system and the hardware on which the website or other service runs.

An organisation using PaaS can develop their own customised software to run on the remote platform. They can also make use of specialised software such as data storage, online order processing and credit card payment systems included by the PaaS provider.

c) Infrastructure as a Service (IaaS)

IaaS typically provides access to networking services, computers (virtual or on dedicated hardware) and data storage space. It is up to the user to manage and configure the remote computer in whatever way they need. The user decides what software to put onto the virtual machine and how the virtual disks are organised. The IaaS provider will provide storage and other resources as they are needed.

- Let's summarize: what are the main differences between these three cloud computing services? Fill in the table below with elements from the text.

SaaS	PaaS	IaaS



For each word, fill in the table with the correct translations from English to French.

ENGLISH	FRENCH
To purchase = to	
To remain = to	
The settings	
To log on to...	
A fee	
To run (an application)	

d) Listening comprehension: a closer look at SaaS

- Watch the video² that mainly focusses on the pros of SaaS. What are the main benefits of using this cloud system? Make a list below.



-
-
-
-
-
-
-
-
-
-

- Everything is not all sunshine and rainbows though: can you think of some disadvantages when it comes to SaaS?

² Source: <https://www.youtube.com/watch?v=20QUngFlrK0>

4. Advantages & disadvantages of cloud computing

- Think about six advantages of cloud computing in organizations. Try to find them all without reading the text at first, then go to the text for help.

ADVANTAGES	EXPLANATION
1)	
2)	
3)	
4)	
5)	
6)	

Cost: Cloud storage is typically less costly than buying sufficient disk storage or equivalent to store all the applications, organisational data and customer data.

Data security: Data held on a server on the premises is always at risk. Cloud providers have data centres located in several different geographical areas, with multiple redundancies so that data is always safe even if one data centre is catastrophically destroyed.

Reliability: Cloud services and storage are more reliable than in-house applications. System maintenance, software updates and backups are all taken care of.

Scalability: As an organisation expands, its storage needs will grow accordingly. When a 1TB server is close to filling up, should the company buy another 1Tb server at huge expense, which may not be used to capacity for many years? If the data needs become less, you cannot return the server and get a refund. With cloud storage, the organisation pays for the storage they are actually using, and this expands and contracts according to demand.

Flexibility: Organisations which experience very high activity on certain days of the year may find that a website held on a company server cannot cope with the extra demands, and the users may then experience very slow response times. A cloud-based website will allocate the necessary resources to cope with any level of activity.

Global access: Applications and data held in the cloud are available from anywhere in the world where there is an Internet connection. Employees working for an organisation with offices in different towns can all access the same software and data, and can access them from home or while travelling.

- Same exercise, but with the disadvantages of cloud computing in organizations. Try to find two of them without reading the text at first, then go to the text for help.

DISADVANTAGES	EXPLANATION
1)	
2)	

Internet connection speed and reliability

Without a fast broadband connection, users in the office may find that it takes much longer to download data and perform application tasks than when everything is held on the local server.

If the Internet connection fails, no one in the office can access the cloud applications or data if synchronised versions are not held locally. Business could grind to a halt until the connection is restored. Contingency plans are needed to cope with this situation.

Security threats

Data transmitted over the Internet is vulnerable to hackers. The best protection is to educate all employees:

- to use strong passwords on all their devices
- to recognise possible phishing attacks
- not to open email attachments from unknown sources



For each word, fill in the table with the correct translations from English to French.

ENGLISH	FRENCH
costly (adj.)	
on the premises	
the reliability ➤ to be reliable	➤
the scalability	
to expand	
the expense	
to get a refund	
on demand	
to cope with...	
to allocate	
a broadband	
to grind to a halt	
a contingency plan	
a threat	

Aaaand... that's a wrap! Chapter 1 is now over and done with 🎉 Let's look at what you need to study for the January speaking exam. Here is a list to guide you:

- Defining “cloud storage”.
- Dropbox as a (great?) example of a cloud and sync service.
- Advantages and disadvantages Dropbox offers & the difference between “sync” and “selective sync”.
- Other (good or bad?) cloud apps and their use.
- Defining “the Internet of Things” (IoT), how it works, its applications and its future.
- Cloud computing models: defining SaaS, PaaS and IaaS & explaining what their differences/similarities are.
- Cloud computing models' benefits and weaknesses, especially the ones related to SaaS.
- Studying all the vocabulary tables from this chapter.



Good luck already!

