

DISCOVERING THE E-MAIL

TEACHING DOCUMENT





WHO ARE WE?

Mailo is an **Internet messaging service** that has made it possible, since 1998, to communicate among e-mail addresses.

Mailo is a European service that **fully respects the privacy** of its users.

In 2010, Mailo invented the first **safe e-mail service for children**.

In 2016, Mailo set up the first **e-mail service for schools**. The goal is to teach pupils the theory and practice of the Internet in general and e-mail messaging in particular.

To that end, Mailo has prepared **teaching materials** to help understand this technological environment.

DISCOVERING THE COMPUTER

DISCOVERING THE INTERNET

DISCOVERING THE E-MAIL

E-MAIL MESSAGING

E-mail messaging was one of the first applications available on the Internet.

It allows two people to exchange **electronic messages** via Internet.

To exchange e-mails, both parties must have an e-mail address.

Today, e-mails are **increasing replacing paper mail**.

An e-mail address is the Internet equivalent of a postal address.

An e-mail address always has this form:

e-mail address name @ domain name of the e-mail service

The character @ is pronounced **at**.

The part after @ is called **domain name** and refers to the service that hosts the e-mail address.

It is comparable to the **city** in a postal address.

E-MAIL MESSAGING SERVICES

The choice of an e-mail address is important because it is the **digital identity** of its owner.

A multitude of Internet messaging services are available.

Free messaging services, often called "freemail"

European freemail: Mailo offers @mailo.com @net-c.com, @netc.eu ...

Other freemails: Google (@gmail.com), Microsoft (@live.com), Yahoo! (@yahoo.com)

Messaging services from Internet access providers

Private messaging services from companies, public administrations, educational establishments, organizations

These messaging services are generally used in a professional context.

Many people use multiple e-mail addresses:

- a professional e-mail address, provided by their company
- one or more personal e-mail addresses, usually from a freemail or from their Internet provider

Freemail e-mail addresses are interesting because it is possible to keep them even when changing Internet provider or employer.

Freemail addresses are the only durable ones.

ACCESS TO AN E-MAIL SERVICE

There are three different ways to access an e-mail messaging service:

Using a webmail from a computer, a tablet or a smartphone

A webmail is a website which allows to manage a mail account to read and send e-mails. Like any website, it is accessed with a browser.

It is the simplest and most flexible method since it can be done from any terminal connected to the Internet, at home, at school, at work, at a friend's place or at an Internet café.

Using an e-mail app on a tablet or a smartphone

It is the fastest method since the app is always easily accessible on the tablet or the smartphone.

Using an e-mail software on a computer

This method is more complicated since it requires choosing software, determining which protocol to use and configuring it properly.

Several protocols exist:

the most used:	IMAP4 to read messages in all folders and SMTP to send messages
the oldest:	POP3 to read messages only in the inbox and SMTP to send messages
other:	ActiveSync used by Microsoft

It is important to check that e-mail access is secure:

- On the webmail, the URL should begin with **https://** and a padlock should appear on the browser.
- With messaging software, the configuration must use SSL security.



DESCRIPTION OF AN E-MAIL

An e-mail is an electronic message sent by a user to one or more correspondents.

The structure of an e-mail is described by a standard known as MIME.

An e-mail is composed of three parts:

- a header, also called envelope
- a message body, which contains the message itself
- possible attachments sent with the message

The header consists of fields, which are important for the understanding of the message:

Field	Name of the field	Description of the field
Sender	From	Contains the e-mail address of the sender of the message
Recipients	To	Contains the e-mail addresses of all the recipients of the message
Subject	Subject	A few words or a short sentence explaining what the message is about
Copy to	Cc meaning "carbon copy"	It is possible to send a copy of the message to some people, even if they are not the real message recipients. This will inform them of the existence of the message. This field then contains all the e-mail addresses receiving a copy of the message.
Blind copy to	Bcc meaning "blind carbon copy"	It is possible to send a blind copy of the message to some people. This will inform them of the existence of the message without the recipients knowing about it. This field then contains all the e-mail addresses receiving a blind copy of the message.

The message body has no size limit: it can be very short or very long.

It is possible to include some graphic elements: color, images, tables... This is achieved through the used of HTML, the same format used to build web pages of most websites.



ATTACHMENTS

In an e-mail, in addition to the text message, it is possible to send files, then called **attachments**.

The usual denomination is: to include attachments.

In all messaging services, attachments are symbolized by a paper clip, with which you can tie together several sheets of paper.



Attached files can be text files, images, videos and even programs or games.

It is possible to attach multiple files, but it is advisable not to exceed 20 MB because some services will not accept large e-mails.

Mailo supports sending and receiving e-mails up to 50 MB and offers, for larger e-mails, to send files as links.

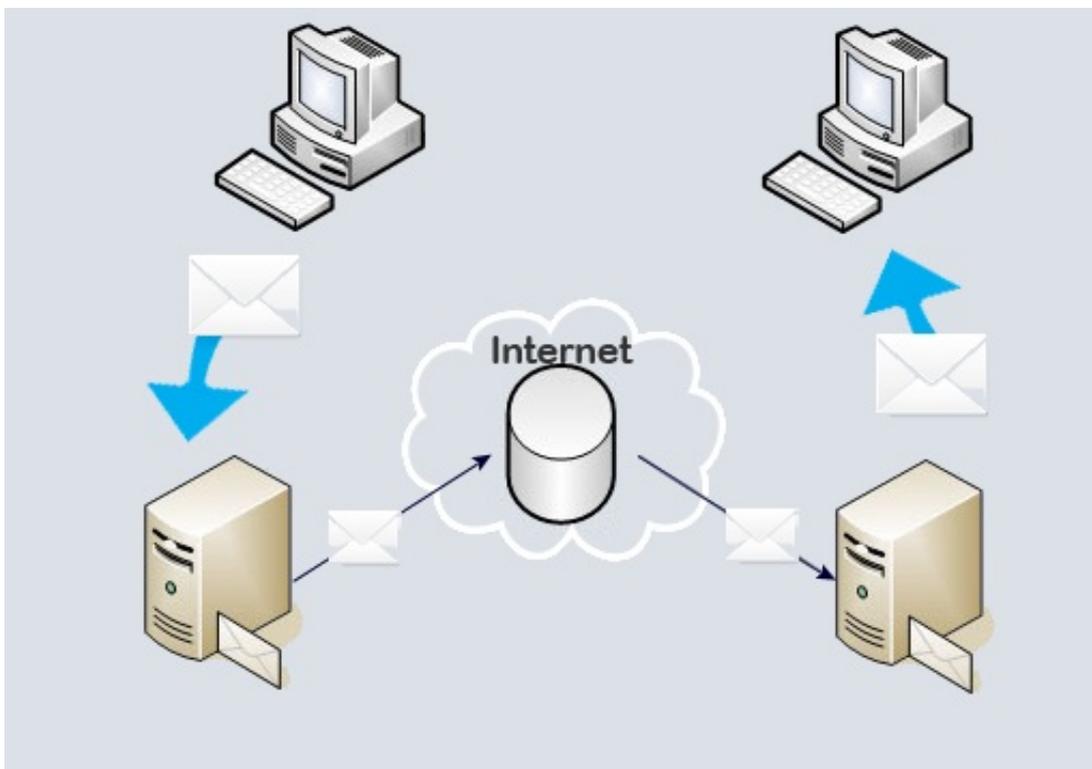
An e-mail without attachment is then sent to the recipients, with a link allowing them to easily download the large file.

EXCHANGING E-MAILS

The exchange of e-mails between two people is always done through their respective **messaging services**:

the service managing the e-mail address of the sender

the service managing the e-mail address of the recipient



Each of the two people is in direct contact only with their own messaging service.

The two messaging services thus serve as **relays** to transmit e-mails between the correspondents.

E-mails are exchanged between different computers by using a protocol called **SMTP**.

HAS THE MESSAGE BEEN READ?

When sending an e-mail, we should consider **two distinct phases**.

1 The delivery of the e-mail to the recipient's mail service and the storage in their inbox

This phase is generally **very fast**, sometimes immediate.

However, it can sometimes take time when a temporary problem occurs on a mail server or on the Internet in general.

If the routing of the message cannot be done, the sender receives a notification that the message could not be sent. This notification is sent by a relay server and explains the cause of the failure.

Warning: the fact that the message is routed to the recipient's mailbox **does not mean that they have read the message**.

2 The reading of the message by the recipient

The recipient will be able to read the message the next time they will access their inbox. This can be very fast if they access it regularly with their smartphone, but can also take a long time.

To be informed of the reading of the message by the recipient, it is possible to add a **read receipt** to the message when sending it.

However, the receipt will only be returned to the sender if the recipient agrees to send it! Therefore, if the sender receives the requested read receipt, they will know that the message has been read; but if they do not receive it, they cannot know whether the message has been read or not.

To ensure that an e-mail has been read by its recipient, use a system of registered e-mail, such as the one offered by Mailo.



ADDRESS BOOK AND VIRTUAL DISK

Messaging services usually offer an address book to keep **e-mail addresses** of all your correspondents.

When a message is received from a new e-mail address, one can add a new contact to the address book.

When writing a new e-mail, one can select its recipient(s) from the **contacts in the address book**.

Most address books can also contain **groups of contacts**.

Each contact can be placed in one or several groups.

This makes it easy to send several e-mails to the same group of correspondents, without having to select them manually every time.

The virtual disk is a documents storage space also offered by the main messaging services.

Storing documents on a virtual disk on the Internet makes them available to their owner from anywhere, in the same way as e-mails.

The usual expression is:

The documents are stored in the Cloud.

It refers to the Internet network that spans the globe like a cloud.

Documents received as **attachments** can easily be saved in the virtual disk and, conversely, any document in the virtual disk can easily be sent via e-mail.



WHAT IS SPAM?

A spam, or **unsolicited message**, is an e-mail which reaches your mailbox without your consent, and which bothers you.

Numerous spam messages are detected and blocked by the mail servers before they reach your mailbox.

Unfortunately, some messages are not blocked by the servers and reach your mailbox. Depending on the type of message, different behaviors are recommended.

There are three main types of spam:

Newsletters or commercial messages sent by well-known advertisers

Advertisements sent massively and regardless of ethics

Fraudulent messages sent by malicious persons

Newsletters and commercial messages

Numerous well-known companies send e-mails to whomever has already visited their website, used their services or purchased something.

In most cases, they allow users to unsubscribe from their newsletters, which is a good way not to receive any further e-mails from them.

However, some of them only allow partial unsubscriptions, which will not prevent further messages from being received.

Advertisements without ethics

It is very difficult to guard against these messages, since the advertisers use different sender addresses for each message, precisely to get around the antispam measures set by the servers and the users.



FRAUDULENT MESSAGES

There are lots of fraudulent messages on the Internet and it is important to recognize them and to defend against them.

These messages are sent by malicious people trying to con users.

The spammer can for instance:

- pass himself off as your bank or a similar organization, to get your access login and password to your bank account
- pass himself off as your Internet provider or your e-mail provider, to get the password of your e-mail account
- pretend that you have won a lottery, or that you inherited a large sum of money; his/her goal is to make you pay fees or charges before vanishing
- ask for your help to transfer a large sum of money and offer you some of it; his/her goal is to make you pay fees or charges before vanishing

Why do you receive spam?

You can receive spam as soon as your e-mail address is known by a spammer. Spammers are then likely to exchange it, which increases the amount of spam you receive.

Your e-mail address can be known by a spammer in the following cases:

- you have given out your e-mail address on a unreliable site whose service you wanted to use
- one of your correspondents has a virus and its address book has been compromised
- you have a virus yourself and it has accessed your computer's configuration

PROTECTING YOURSELF AGAINST FRAUD

Mail services protect their users as much as possible, but malicious messages can nevertheless sometimes go through.

A few easy rules to avoid frauds:

- If you receive an e-mail from someone you do not know and who does not know you, do not answer.
- If you receive an e-mail which pretends to come from a service which you use, and which asks for your password for any reason, do not answer and inform the customer service which handles your e-mail.
- If you receive an alarming message asking you to securize an online account which you use, it is most certainly a fraud attempt.

Once you have identified a fraudulent message:

- Do not click on any links in the message
- Delete the message by using the "This is spam" button in your mail system

One should be especially careful with e-mails which seem to come from:

- a bank or an online payment service
- the police or a public administration service
- your Internet service provider
- your e-mail service

In all of these cases, if the message refers to a threat or an emergency, it is very likely



PROTECTING YOUR MAIL

Your password must be chosen carefully to ensure the safety of your e-mail account.

It is in particular recommended to avoid:

- too short passwords
- obvious sequences of numbers or letters, such as 1212 or abab
- dates which could easily be known or found, such as your date of birth

Only you should know your password and you should of course never give it to anyone.

In particular, never reply to spam messages asking you for your password, whatever reason is mentioned.

Do not use the same password for several different services.

If this password were to be discovered by a malicious person, it would give them an easy access to your accounts on all these services.

LEXICON

.com	Most used extension
@	Character used in e-mail addresses to separate the name from the domain name (pronounced "at")
Address book	List of all contacts
App	Downloadable application on a smartphone or a tablet
Bcc	Blind carbon copy
Cc	Carbon copy
Cloud	Documents storage on the Internet
Domain name	Right part of an e-mail address, indicating the service provider
E-mail	Electronic message
E-mail address	Electronic address to send and receive e-mails
Extension	Final part of a domain name, such as .com
Freemail	E-mail service available for free to all users
HTML	File format used to build web pages or write e-mails
IMAP4	Synchronization protocol for e-mail messaging
ISP	Internet service provider
MIME	Format used for e-mails
Password	Secret code allowing access to an account
POP3	Access protocol to the inbox of an e-mail address
SMTP	E-mail exchange protocol
Spam	Junk mail that arrives without having been requested
SSL	Data exchange security protocol
Virtual disk	Internet location where documents can be stored, also called Cloud
Webmail	Internet application for the management of an e-mail address, especially to read and send messages