ICTP Computer Facilities

ICTS, January 2022

The ICTS

This is the **I**nformation and **C**ommunication **T**echnology **S**ection.

We are in charge of

- Network (IT and telephony) infrastructure
- Computers, multifunction devices (printers/scanners)
- Software development for internal use
- Multimedia equipment of lecture halls
- Video conferencing, streaming and recording

Our web portal: https://icts.ictp.it/

Video meetings - Best practices

For best audio:

- Keep your mic muted unless it's your turn to talk
- Use headphones rather than loudspeakers
- Have your mic close to you and far from sound reflecting walls
- Best solution: a headset with mic

For best video:

- Have a good light source in front of you (or even more than one)
- Avoid backlighting, e.g. a window or lamp behind you

Video meetings - Troubleshooting

- Keep your software (web browsers or dedicated programs) up to date
- If you experience problems with one web browser, try a different one (Firefox, Chrome, etc.)
- If there's a problem with bandwidth, turning off your webcam (if accepted by lecturer) can help

Your ICTP Computer Account

The account provides:

- Access to Windows and Linux on the PCs of the ICTP campus
- Networked file storage ("home directory")
- Remote login and file access
- Access to the global **eduroam** wireless network
- An email account (_username_@ictp.it)
- Various web based services, e.g. file synchronization

It usually has a duration corresponding to your stay at the ICTP.

Password

You can change your password

- Via https://icts.ictp.it/password_form
- At the ICTP from the Linux command line using the command passwd

IMPORTANT:

- Never disclose your password to anyone
- Don't choose a password that is easy to guess
- Don't reply to or follow links in suspicious emails. Contact us if in doubt.

Email

You can check your mail via

- Webmail: https://webmail.ictp.it/
- Any mail client (in particular Thunderbird), after configuration
  - Thunderbird only needs to know your name, ICTP e-mail address and password to configure itself correctly
  - For other mail programs, use these parameters:
    IMAP server imap.ictp.it with SSL/TLS on port 993 and normal password authentication
    SMTP server smtp.ictp.it with STARTTLS on port 587 and normal password authentication

Storage space

Every user has a so-called home directory with the following properties:

- Initial quota (space limit) of 2 GB
- Daily backups to tape, files can be recovered up to 6 months later (by IT staff on request)
- Self-service restoring of files from previous day (found in read-only subdirectory named YESTERDAY_FILES)
- Accessible on ICTP PCs from Linux and Windows (drive O:)
- Accessible remotely via Secure Copy to ssh.ictp.it
- Directories can be shared with other users

Remote access to home directory

To access your files in the home directory from a non-ICTP computer:

- Linux and macOS: use the Secure Copy command, e.g.
  - Copy file sample.txt from your computer to ICTP home directory:
    ```
    scp sample.txt username@ssh.ictp.it:
    ```
  - Copy file sample.txt from ICTP home directory to your computer:
    ```
    scp username@ssh.ictp.it:sample.txt .
    ```
- Windows: install WinSCP and connect to the server ssh.ictp.it with your ICTP credentials   VIDEO

File synchronization and sharing

All ICTP users have access to a service similar to Dropbox.

It allows you to synchronize folders between different computers and share files or directories with other users.

The space limit is 5 GB.

Please see our webinar from June 15, 2020, for further details:
https://icts.ictp.it/webinars/

Computer Helpdesk

To report problems, get information, etc., you can

- Send e-mail to helpdesk@ictp.it
- Use the web form at https://icts.ictp.it/help
- Call phone number 353 or 999 (from outside +390402240353 resp. …999)
- Come to the office number 137 in the Leonardo Building (same corridor as Library)

Please provide all possibly useful details (name of computer, operating system, error messages, room number for calling back, etc.)   VIDEO
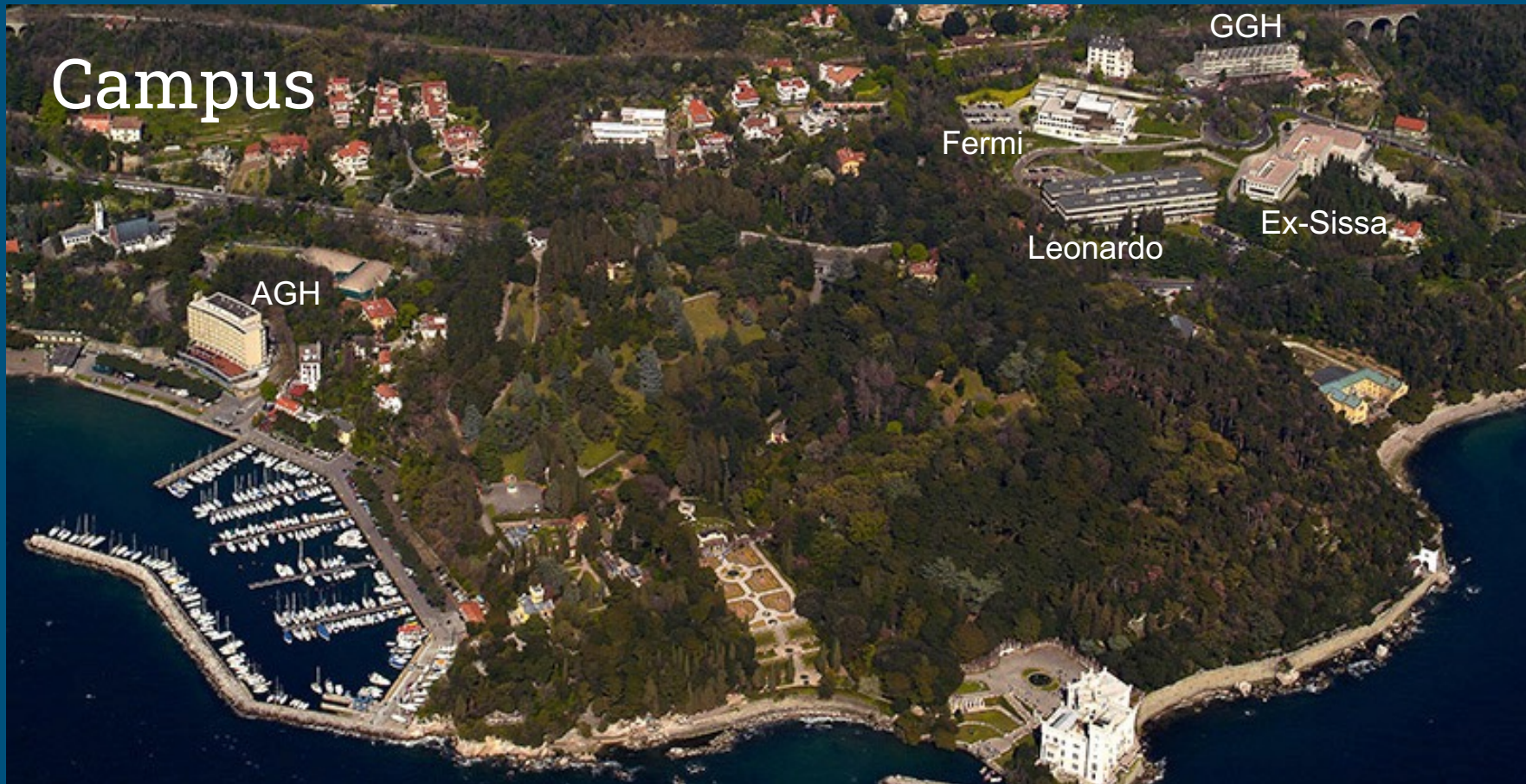
Campus

6

3

4

1

Legend

1. Leonardo Building
2. Former SISSA Building
3. Galileo Guest House
4. Enrico Fermi Building
5. Multidisciplinary Laboratory
6. Adriatico Guesthouse

• • • Park route
• • • Underpass

Campus

GGH

Fermi

Ex-Sissa

Leonardo

AGH

Wireless network

With your ICTP credentials you can connect to the eduroam wireless network of the ICTP and other academic institutions worldwide.

- Network name/SSID: eduroam
- Data encryption method: AES or TKIP
- Phase 2 authentication: MSCHAPv2
- Network authentication method: WPA2 or WPA3 Enterprise
- CA certificate: built-in or system
- Domain: ictp-secure.ictp.it
- Username: your ICTP username followed by @ictp.it

Desktop PCs

- On startup, the PCs show a boot menu allowing you to choose between Linux and Windows.
- Your credentials work for both.
- If you exceed your disk quota in the home directory, login to Linux will fail, but login to Windows will continue to work.

VIDEO

Disk space

	Local hard disk	Networked home directory
Windows	Standard Windows Users directory	Network drive O:
Linux	/scratch	Standard Linux home directory

|		
Advantages & Disadvantages	+ lots of space - no guarantee against data loss - bound to a single computer - Windows cannot see /scratch	- small + covered by backup system + accessible from all computers + Usable in both Linux and Windows
Use for	Temporary data Files available also elsewhere	Your (permanent) work files

Available software

- Firefox, Google Chrome
- Thunderbird for e-mail
- Microsoft Office (Windows), LibreOffice (Linux)
- Mathematica
- Matlab
- Lots of software for programming and scientific use in Linux
- In Linux, you can install standard software packages via the command
  sudo apt install *package-name*
- In Windows, users cannot install software

Printers

- All printers are accessible from the whole campus.
- Check the name of the printer nearest to you and send your output there.
- The printer in the GGH that you can use is named **gpubc1** and located near the reception. In the lower floor of the AGH there are apubc1 and apubc2.
- The first letter in every printer's name is a reference to the building where it it located (a for **A**GH, g for **G**GH, e for **E**nrico Fermi Building, l for **L**eonardo Building, s for ex-**S**ISSA Building)
- In the interest of the environment, keep printer usage at a minimum

Printer setup in Windows

1. Open the Control Panel
2. Click on Devices and Printers
3. Add Printer
4. Click on "The printer I want isn't listed"
5. "Select a shared printer by name" and
6. Enter the URL http://printsv.ictp.it/printers/*printername* where *printername* is apubc1 or gpubc1 etc., as indicated on the printer
7. Proceed using the *Generic postscript driver* or download the *Universal Ricoh print driver* (available on the ricoh.com websites)
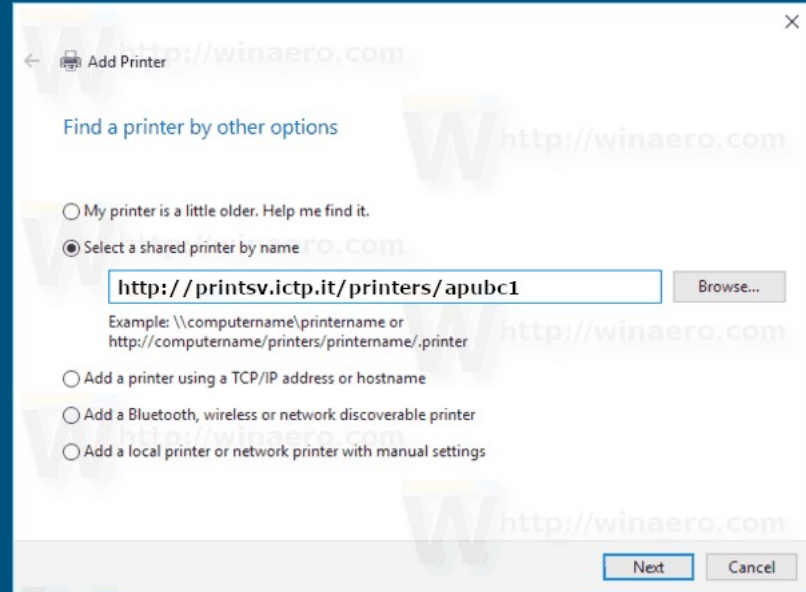
Scanners

- Most printers on the campus (including **gpubc1**) can also work as scanners and photocopiers
- To scan a document, use the touch screen to select the scanner function, tap on the e-mail button and enter your e-mail address. Press the green button to start scanning.
- Unless you are using the automatic document feeder (where all sheets are scanned immediately), you can:
  - Continue to scan additional pages
  - Press the # button to finish scanning.
- A PDF file will be sent to you.

Recommended Watching and Studying

ICTS webinars: https://icts.ictp.it/webinars/

Linux command line tutorial: https://www.linuxcommand.org/

ICTP diploma lectures:
https://www.youtube.com/channel/UCBlqfZZYQWKyr6qLAB7LINw
(or search on youtube for ICTP Postgraduate Diploma Programme)