

# UDIMED-UDIGIGA

GIGA Doctorate School  
October 5th, 2020  
Welcome Newcomers

# UDIMED-UDIGIGA

- UDI = **U**nité **D**élocalisée d'**I**nformatique = Local IT Service
  - Manages local computer park and network needs
  - 1st level helpdesk
  - Deploys Institution softwares
  - Administrative software development
- UDIMED-UDIGIGA
  - 4 agents (1 currently missing) + manager
  - ~ 1000 people (FACMED) + 600 (GIGA) + 200 (CHU)
  - ~ 3000 devices
- Single Point of Contact : if necessary, we relay !

# UDIMED-UDIGIGA

- UDIMED-UDIGIGA 1st level helpdesk
  - ANY question about computers and computing
  - Help with hardware (choosing, buying, delivery, repairs...) and O.S. : Windows, macOS, Linux
  - Help with ULiège softwares (installation and basic use) : Dox, Zimbra, Gitlab, MS-Office, SAP, SAS, AV, Mathematica, Matlab...
  - Computers in meeting room, classrooms, amphi...
  - Computer lifecycle, insurance (theft and damage)
- Scientific level helpdesk ⇒ IT GIGA
  - Bioinformatics group
    - Mass-storage usage
    - Grid Computing Gurus
  - GIGA Specific softwares : Krino, Xenia
- Institution level helpdesk ⇒ SeGI

# ULiège IT : SeGI

- Service Général d'Informatique
  - Certifications : ISO 9001, ISO27001, PRINCE2
  - micro-computing, grid-computing, multimedia, telephony, institution servers management, Internet and Intranet services, institution administrative applications, videoconferencing, posters and mass printing...
  - Institution softwares : Dox, Zimbra, Gitlab, MS-Office, SAP, SAS, AV, Mathematica, Matlab...
  - computer networks : Wi-Fi (+1500 AP) and wired (10gb, 1gb, 100M)
    - SeGI only manages networks : other networks are forbidden (local switches or routers, Time Capsule, ...)
    - **Do not connect to other networks !**
  - VPN : be anywhere at work !
    - Enlarges ULiège network to include your computer
    - **Do not use « free » unsafe networks for critical apps or data !**

# ULiège IT : Zimbra

- Zimbra : e-mail, calendar, contacts and tasks (students : only e-mail)
  - Thru Web interface, classic applications (Outlook, Thunderbird...), smartphones and tablets
  - Do not use « free » mailboxes (hotmail, gmail...) for critical communications or data !

# ULiège IT : Dox

- Cloud storage based on ownCloud (staff only)
  - iCloud, Dropbox, OneDrive, Google Drive... drop-in replacement
  - 100GB
  - Security and confidentiality : managed by SeGI
  - Sharing and collaboration (online office)
  - Use thru web browser, computer O.S. integration or smartphone/tablet
  - **Do not use « free » cloud storage for critical data !**

# ULiège IT : Gitlab

- 2 development forges with backup, synchronisation, CI/CD
  - `gitlab.uliege.be` : available inside and outside ULiège for collaborations with external developers
  - `gitlab-priv.uliege.be` : local to ULiège only, but with increased security for critical developments
- **Do not use « free » forges for critical developments !**

# Global WarNing !!

DO NOT USE « FREE » ANYTHING !!

- 1) if it's free, that's because YOU are the product !
- 2) if you deal with critical data about people ⇒ GDPR



# ULiège IT : Grid-Computing

- NIC5 (ETA December 2020)
  - 70 nodes with two 32-cores AMD EPYC 7542 at 2.9 GHz and 256 GB of RAM, 3 nodes with 1 TB of RAM, 50 TB /home NFS, 520 TB of fast BeeGFS /scratch and a 100 Gbps Infiniband interconnect, for a total of 4672 cores
  - CentOS8, Slurm, EasyBuild
- NIC4 (no new accounts)
  - 128 compute nodes, two 8-cores Intel E5-2650 processors at 2.0 GHz, 64 GB of RAM, 144 TB parallel filesystem, 70 TB NFS server, 20GB per user
  - Linux, Slurm, OpenMP, MPI, BLAS, LAPACK, R, Octave, Python, etc.
- NIC4 is one of CÉCI (Consortium des Équipements de Calcul Intensif) 5 clusters
- 2 Linux clusters for Matlab and SAS
- cluster.calc.priv : cluster for GIGA (24/30) and CHU (6/30)
  - 816 cores, 5.77 TB RAM

# ULiège IT : MassStorage

- Once a GIGA initiative, now a ULiège device
  - 2PB on disk, 5PB on tape (Backup and Archive)
  - HSM (stub on disk, data on tape), Archive (on-demand / if needed)
  - Access to mass data producers thru 10Gb network
  - 100GB home directory (GIGA staff only)
  - Access thru NFS, CIFS or SFTP
  - Versionning : 25 versions. Inactives : max 4 weeks
  - Shared space with cluster.calc.priv

# UDIMED-UDIGIGA

Remember :

ULiège IT :

<https://my.segi.uliege.be>

Faculty of Medecine and GIGA IT :

<https://udimed.uliege.be>

# UDIMED-UDIGIGA

Questions ?