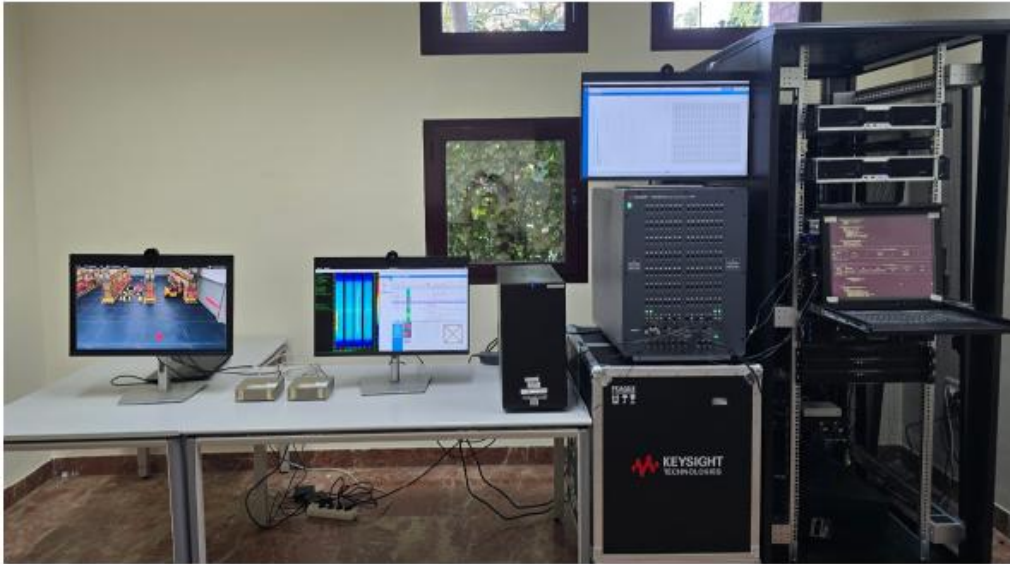


SLICES-RI

Basic Infrastructure Service

09/06/2026

Brecht Vermeulen (imec)



Testbed for software defined radio and channel emulation -
Credit: Pablo Picazo, UC3M.



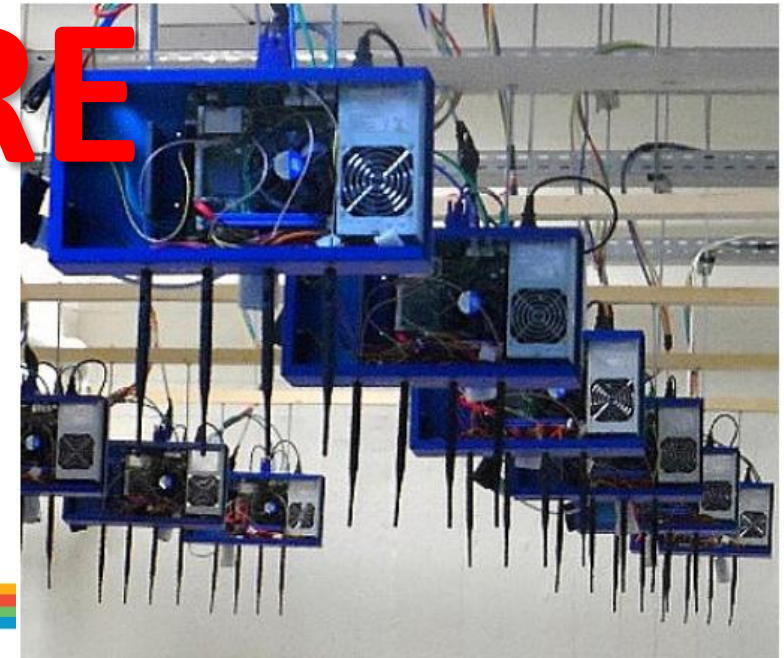
IoT sensors at the French Node - Credit: Inria Photo G. Scagnelli.



Belgian node distributed cloud infrastructure - Credit: IMEC/
Ghent University Photo: B. Vermeulen.

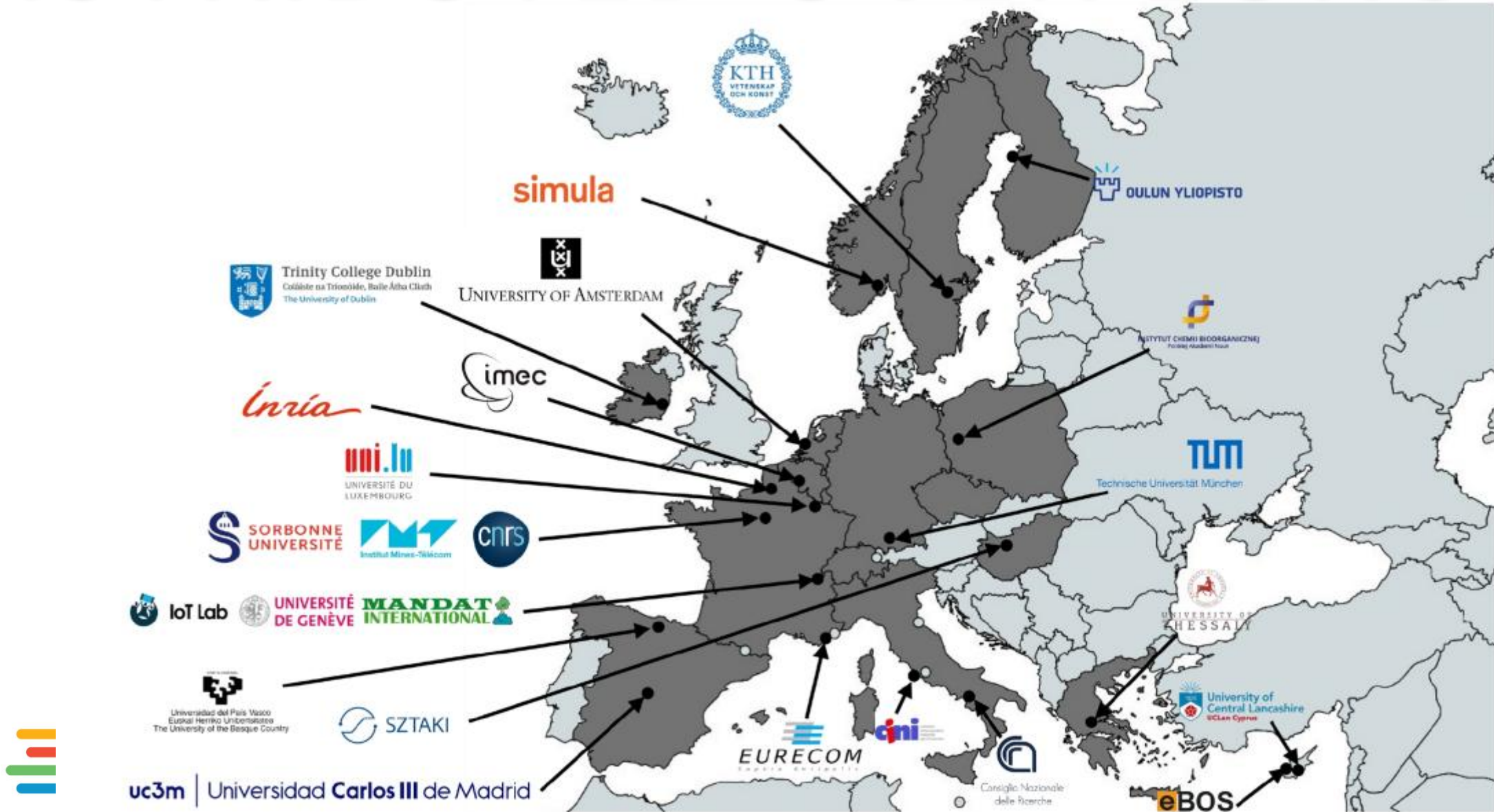
REAL

HARDWARE



Nodes for wireless network experimentation at the Greek node -
Credit: NITLAB, University of Thessaly.

DISTRIBUTED OVER EUROPE

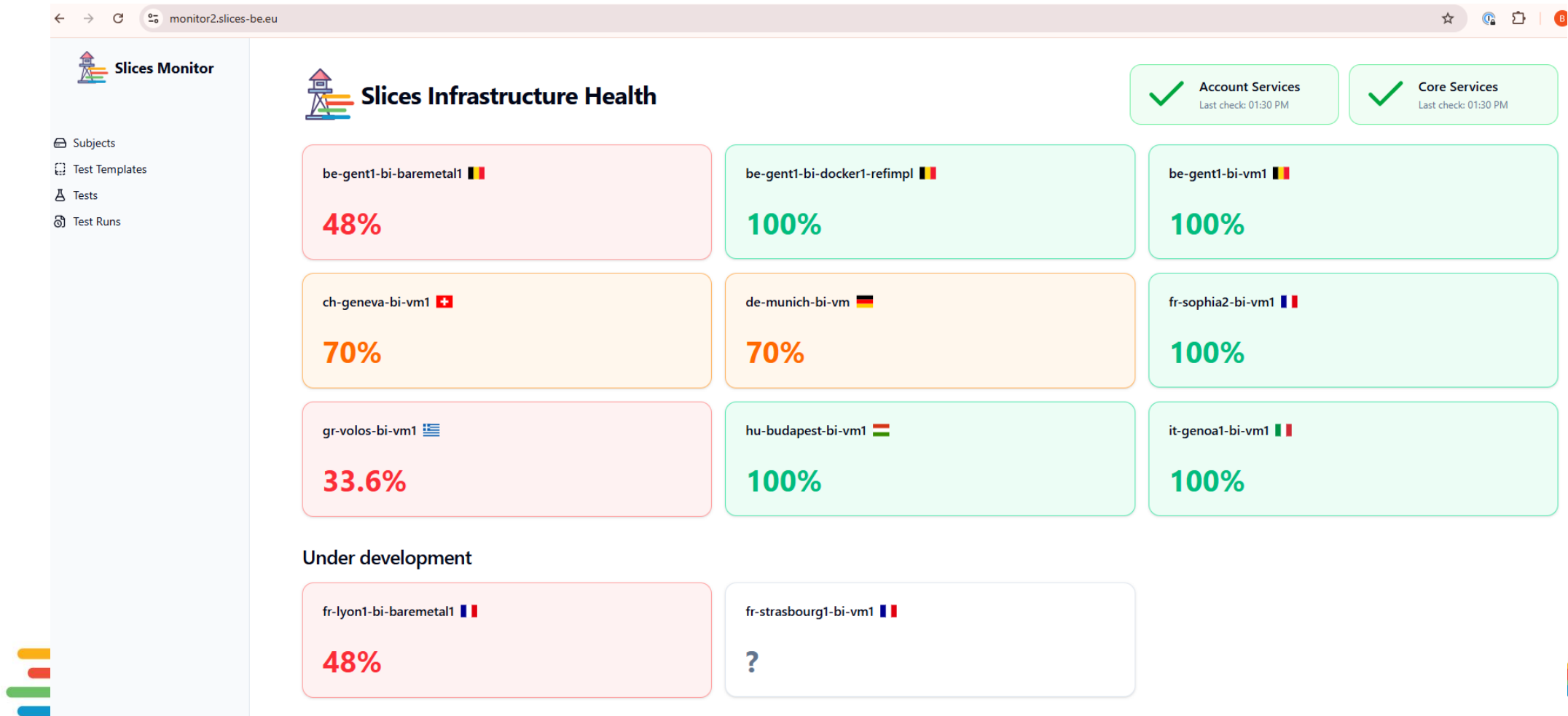


Geographically distributed SLICES nodes interconnected across Europe - Credit: Inria.

slices bi infra list --all

Infrastructures	
ID	Tags
bi-orchestrator	
be-gent1-bi-baremetal1	
be-gent1-bi-docker1	dev
be-gent1-bi-vm1	
ch-geneva-bi-vm1	dev
de-munich-bi-vm	dev
fr-grenoble1-bi-baremetal1	dev
fr-lille1-bi-baremetal1	dev
fr-louvain1-bi-baremetal1	dev
fr-luxembourg1-bi-baremetal1	dev
fr-lyon1-bi-baremetal1	dev
fr-nancy1-bi-baremetal1	dev
fr-nantes1-bi-baremetal1	dev
fr-rennes1-bi-baremetal1	dev
fr-sophia1-bi-baremetal1	dev
fr-sophia2-bi-vm1	dev
fr-strasbourg1-bi-baremetal1	dev
fr-toulouse1-bi-baremetal1	dev
gr-volos-bi-vm1	dev
hu-budapest-bi-vm1	dev
it-geoa1-bi-vm1	dev
fr-strasbourg1-bi-vm1	dev
localhost	dev

https://monitor2.slices-be.eu



One more thing...

Basic Infrastructure service is **not** about

- Basic hardware
- Basic service

It's a service offering Basic Infrastructure blocks for experiments or other services.

These resources can be anything: bare metal servers, VMs, user defined radios, IoT, wireless devices, ...

<https://portal.slices-ri.eu>

Organised in projects
with project lead/admin
and members

Project has expiration time

Project is approved by SLICES
Members are approved by
project lead/admin

e.g. share experiments/data
in a project

Project *summerschool2026*

Slices ID: proj_account.ilabt.imec.be_0e0b3rq16q95saqqq2dpeqsq0h

Description: Slices summer school project for all tutorials

Lead: Brecht Vermeulen (bvermeul)

Created: 2026-05-19 08:50 CEST

Expiration: 2026-07-10

S3 storage bucket name: `ilabt.imec.be-project-summerschool2026` ([How do I use this?](#))

portal.slices-ri.eu/projects/

Projects

Request to join a project Request a new project

Project Name	Status	Role	Members
justtesting	DENIED		
testing2	DENIED		
bvermeu2		Lead	1
testwimthijs	EXPIRED	Lead	4 (+ 1 pending)
rsporto	EXPIRED	Lead	19 (+ 2 pending)
icn2020	EXPIRED	Member	4
tutorial1		Lead	28
eucnc	EXPIRED	Lead	2
summerschool2	EXPIRED	Admin	25
ilabt-dev		Viewer	7
slicesbv2		Lead	1
slices-bv3		Lead	2
summerschool2026		Member	10

<https://portal.slices-ri.eu/invite/summerschool2026>

Example service: S3 storage in Belgium

<https://s3.slices-be.eu>



Use SLICES-RI account - iam

The screenshot shows the MINIO Object Store web interface in a browser. The address bar shows the URL "s3-gent.slices-be.eu/minio/ui/browser/ilabt.imec.be-project-summerschool2026". The interface has a dark blue sidebar on the left with the MINIO logo and navigation links: "Object Browser" (selected), "Access Keys", "Documentation", "Administrator", and "Buckets". The main content area shows the "Object Browser" for the bucket "ilabt.imec.be-project-summerschool2026". It includes a search bar, a "Created on" timestamp, "Access: PRIVATE", and buttons for "Rewind", "Refresh", and "Upload". Below this is a table of objects with columns for "Name", "Last Modified", and "Size". One object is listed: "SLICES-ES Summer School logistics.pdf" with a size of "542.7 KiB".

Name	Last Modified	Size
SLICES-ES Summer School logistics.pdf	Today, 23:45	542.7 KiB

What will we do today?

- Use jupyter notebook with SLICES CLI to set up and control virtual machines
- More in depth view of cloud-init for initial configuration
- Example of bare metal with link impairment
- Setting up a Kubernetes cluster with Talos on SLICES

Basic infrastructure service ^

Virtual or baremetal machine

Cloud-init

Resource specifications

Kubernetes

Advanced BI Topics

<https://doc.slices-ri.eu>

Future

- future: USRP, IoT, more hardware flavors
- Programmable firewall/IP groups/reverse proxy

Welcome to SLICES-RI: Scientific Large Scale Infrastructure for Computing/Communication Experimental Studies