

# The users of the IBiSCo-ReCaS-Bari data center and their support: organization and tools

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# Three paradigms for computing resources

## Cloud computing

Computing resources available  
**online, (on-demand), elastic** and  
**scalable**

Example: software development

## Distributed computing

Split a computation **on a large**  
**number of independent**  
**computing nodes**

Example: particle physics

## Parallel computing

Processing complex problems on  
computing nodes **rapidly**  
**communicating** with each other

Example: weather forecasts

IaaS

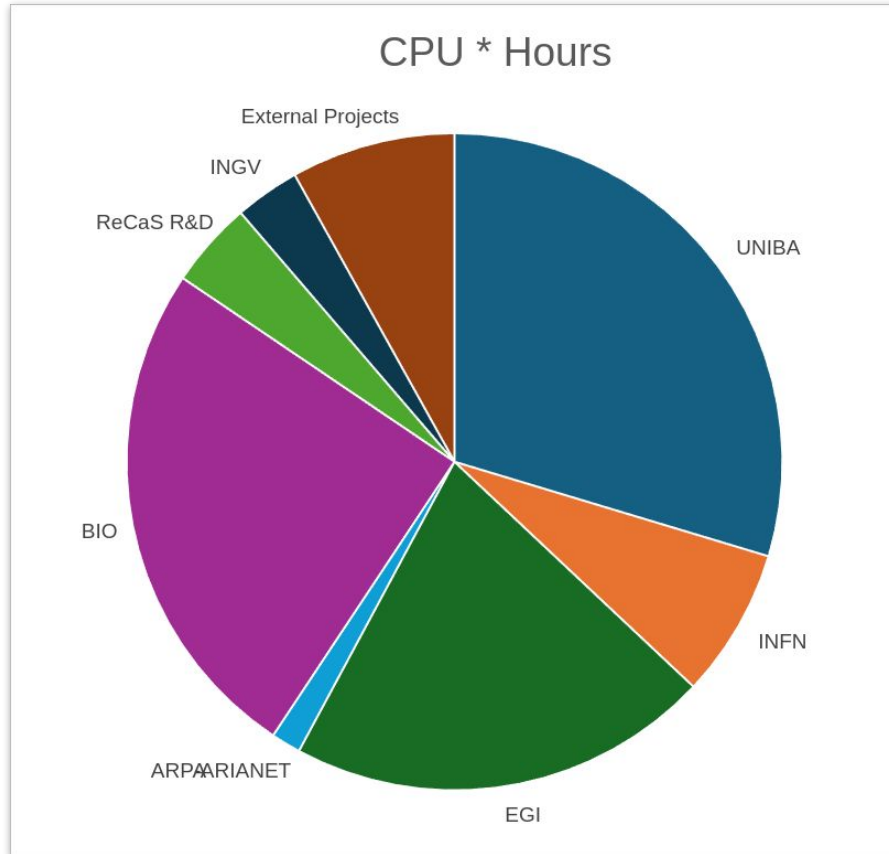
PaaS

JupyterHub

HTC/HPC cluster

Mesos cluster

# Cloud usage



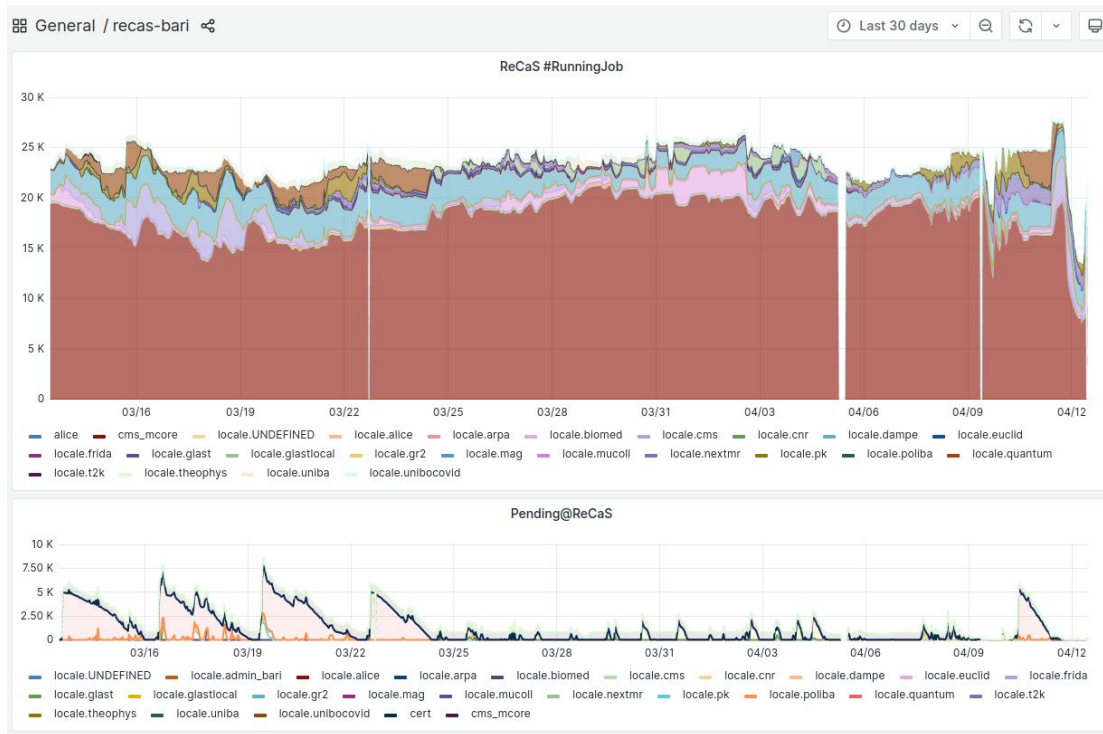
ReCaS users: 48

EGI users: 21

INFN-CLOUD users: 19

TOT: 88 users

# HPC/HTC usage



~ 850 users

mainly HEP

also:

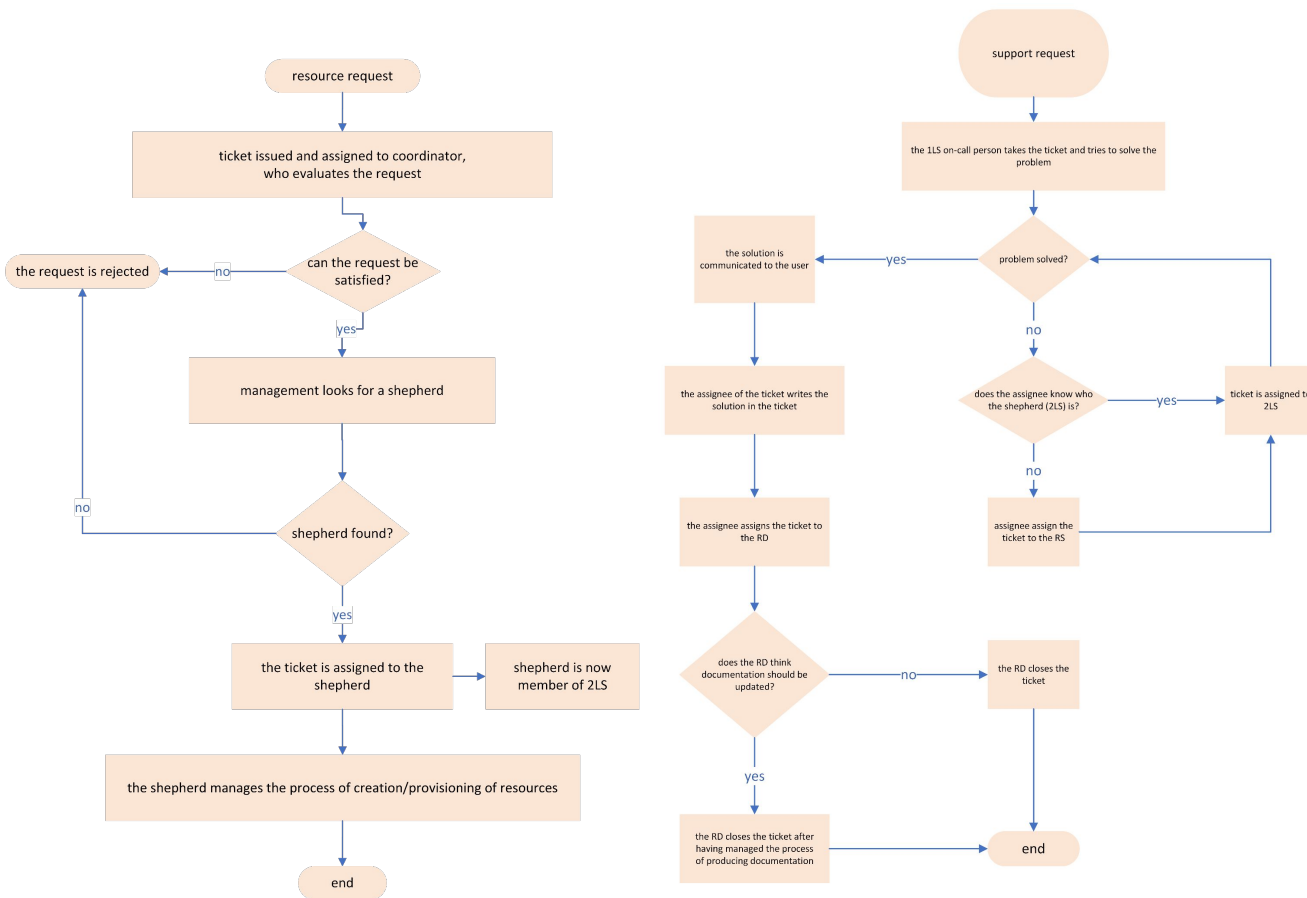
- BIO
- quantum
- astro
- environmental science
- companies

# User support

The user support follows a two-tier paradigm:

- 1st-level support:
  - the point of contact between the user and the sysadmins
  - most problems are solved here
  - a group of 8 people (including the responsible)
  - 1-day shifts, with rotation
  - weekly meeting + continuous collaboration
- 2nd-level support:
  - group made of shepherds, i.e. domain experts of each use-case and responsible of services (as e.g. cloud infrastructure, HTC/HPC cluster, etc)
  - the most difficult/technical problems are solved here

# Resource and support requests



process are managed through workflows

# User support - tools

Request management: user portal developed and deployed in-house

Ticket management: OpenProject (on-premises)

Collaborative platform: Microsoft Teams

Shift management: Microsoft Shifts

Knowledge base, minutes of the meeting, wiki: OpenProject, MKDocs, Git

Communication with users: email, mailing list



Thank you