

# MexNICA HPC Infrastructure

Luciano Díaz - 16.12.2020

# HPC resources

MexNICA collaboration is one of the HEP projects supported in TOCHTLI@ICN

- Current configuration was improved during last 6 months
- 1 special queue: **mpd**
- 2 nodes assigned = **96 cores**
- 7 shared nodes (336 cores) with other groups with the same priority
- **50 TB used** in lustre FS **/storage/mexnica** without storage quota
- The users have access to the main queues: **icn** and **short**

# HPC resources

Also the cluster has received hardware contributions from MexNICA members

Alejandro Ayala

1 server : 1 Xeon Silver 4110 = **16 cores** / 32 GB ram

Eleazar Cuautle

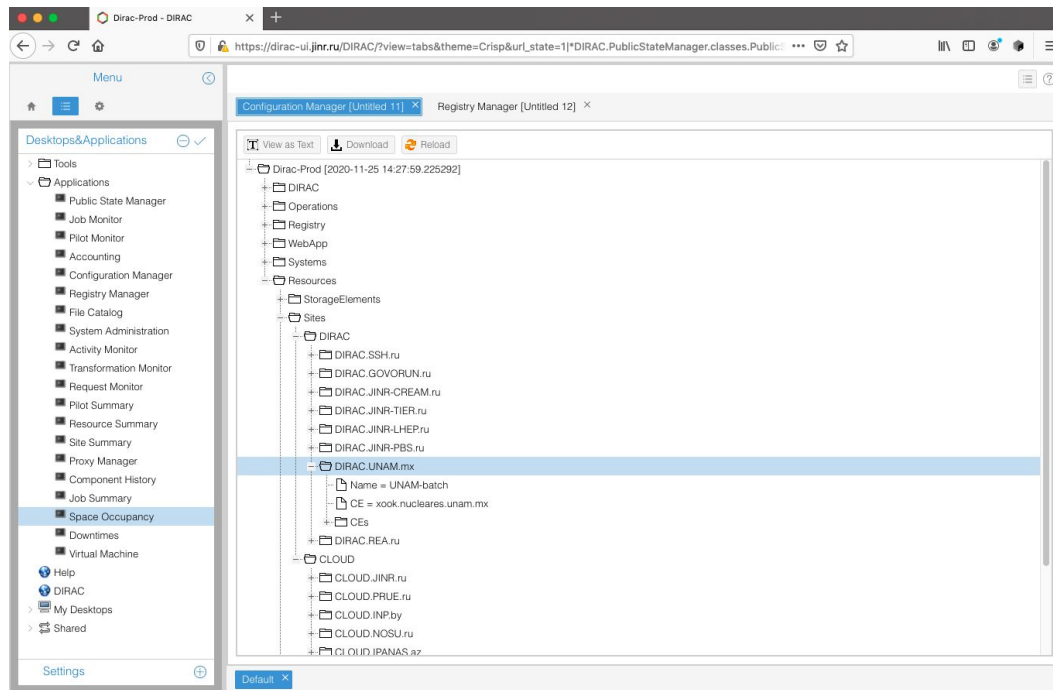
1 server: 1 Xeon Gold 6230R = **52 cores** / 96 GB ram

Coming soon from the project / UCOL (for 2021)

1 server: 2 Xeon Gold 6230R = **104 cores** / 256 GB ram

# DIRAC configuration

The cluster is able to receive jobs from JINR using DIRAC framework



# About software

Software is (should be) installed by the users in /software/mexnica

**mpdroot** has some installation issues due to **CentOS 6** - now obsolete

but, in 2021 the cluster will be migrated to Ubuntu 20.04

**mpdroot and generators could be installed smoothly**

# mpdroot container

A docker container created with mpdroot:

Centos 8

Fairsoft - June 2019 release

Fairroot - 18.2.0

mpdroot - installed on september 2020 but could be updated easily

**docker pull lucianodiazg/c8\_mpdroot-12sep20:1.0**

Created to run mpdroot in OSX but can run on Linux and Windows (not tested)

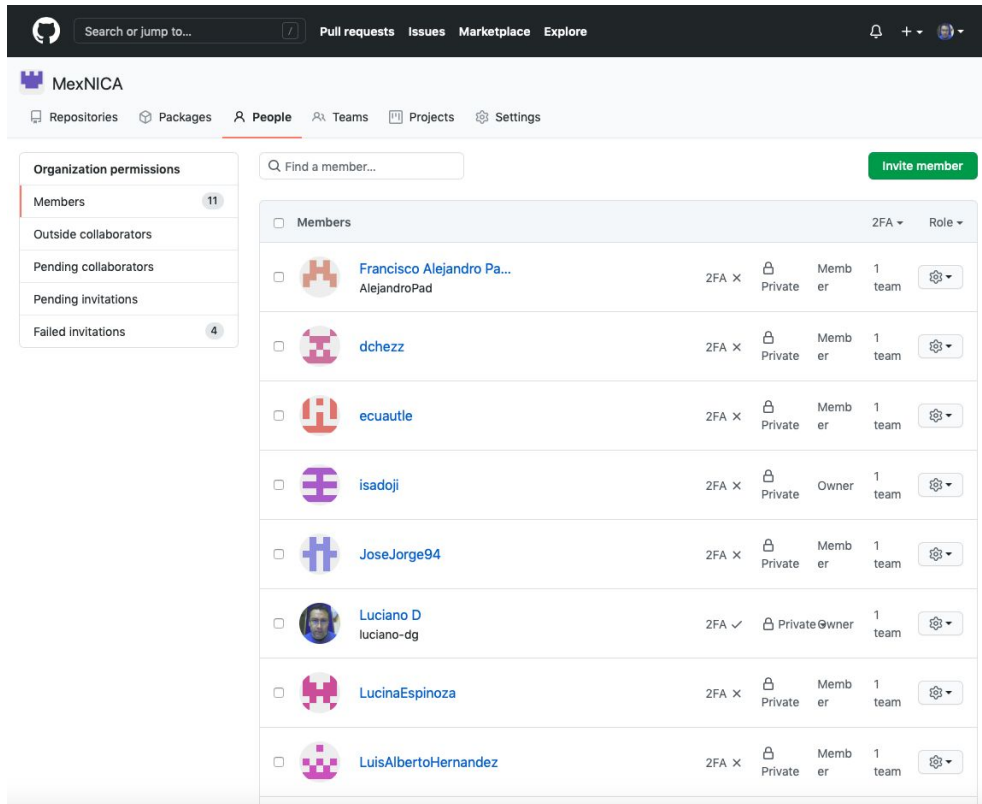
# github

mexnica account is now an  
Organization

















<https://github.com/MexNICA>

- 11 members
- 1 team (full access)
- 13 repos
  - 11 privated and 2 archived

Admins: Isabel , Luciano



The screenshot displays the GitHub interface for the MexNICA organization. The top navigation bar includes a search bar, a notification bell, and links for Pull requests, Issues, Marketplace, and Explore. The organization's name, MexNICA, is prominently displayed. Below the name, a secondary navigation bar offers tabs for Repositories, Packages, People (which is the active tab), Teams, Projects, and Settings. On the left side, a sidebar titled 'Organization permissions' lists various categories: Members (11), Outside collaborators, Pending collaborators, Pending invitations, and Failed invitations (4). The main content area features a search bar labeled 'Find a member...' and a green 'Invite member' button. Below this is a table listing the organization's members. Each row includes a checkbox, a member's profile picture, their name, a 2FA status indicator, a lock icon for private repositories, a role (Member or Owner), a team count, and a settings gear icon.

	Members	2FA	Private	Member	Team	Role
<input type="checkbox"/>	 Francisco Alejandro Pa... AlejandroPad	2FA X	Private	Member	1 team	
<input type="checkbox"/>	 dchezz	2FA X	Private	Member	1 team	
<input type="checkbox"/>	 ecuaule	2FA X	Private	Member	1 team	
<input type="checkbox"/>	 isadoji	2FA X	Private	Owner	1 team	
<input type="checkbox"/>	 JoseJorge94	2FA X	Private	Member	1 team	
<input type="checkbox"/>	 Luciano D luciano-dg	2FA ✓	Private	Owner	1 team	
<input type="checkbox"/>	 LucinaEspinoza	2FA X	Private	Member	1 team	
<input type="checkbox"/>	 LuisAlbertoHernandez	2FA X	Private	Member	1 team	

Thanks!