

Team Meeting

Hyacinthe Cartiaux

University Of Luxembourg

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Plan

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- 2 HPC
- 3 Other services
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Introduction

Introduction

Training

- DUT in Computer Science
- Professional Bachelor Degree in systems, networks and applications administration

Experiences

- 2007, VersusMind : web development
- 2009, Faurecia : administration of a computing cluster
- 2011, Tutored Project : experiments and comparison of cloud computing solutions on Grid'5000
- 2011, WHD-RS : web hosting
- 2011 -, University of Luxembourg : HPC system administration !

My role

HPC system administration

- Work under the supervision of Sebastien Varrette
- HPC system administration: Iris / Aion / G5K
 - Configuration management with Puppet
 - Storage and Network administration
 - Compute node deployment
- Manage research services (Gitlab, VMs, IPA, Nextcloud, Etherpad, FreeNAS, etc)
- Monitoring, security, backups, hardware maintenance
- User support / doc



HPC

Granduc (2008), Chaos (2008) and Gaia (2011) cluster end of life

- Hardware (storage) could not be maintained anymore
- Some compute nodes repurposed for other teams
- GPU nodes, HPE Moonshot, FC430s nodes to be integrated in Grid5000

Last Iris extension in 2018

- 347.65 Tflops (CPU RPeak) + 748.8 GPU Tflops.
- 196 nodes (**168 regular nodes, 24 GPU nodes, 4 BigMem node**)
- Infiniband EDR network: 100Gb/s











New cluster: Aion

- Based on Atos Sequana systems
- 318 nodes (**2x AMD Epyc Rome 7H12 64 cores, 256GB of memory**)
- GPFS filesystem, shared with Iris, extended (+1.5TB)
- HPC Ethernet and Infiniband network extension
- Installation in progress

Other services

OPEN

 **nDemand**

~~Fusion  Forge ~~



GitLab



etherpad

Open OnDemand - hpc-portal.uni.lu

Provide web access to the HPC clusters

- Command-line shell access
- Job management and compositor
- File management
- Graphical desktop environment

The screenshot shows the GForge@Uni.lu website. At the top left is the logo 'gForge uni.lu'. On the right is a 'Log In' link. Below the logo is a navigation bar with 'Home', 'My Page', and 'Projects' tabs. A search bar is located to the right of the navigation bar. The main content area features a large 'gForge uni.lu' logo with a reflection effect. Below the logo is a 'Welcome on GForge @ Uni.lu' section with a paragraph of text and a link to the 'helpdesk website'. To the right is a 'Gforge@Uni.lu Statistics' box containing a list of project statistics. At the bottom left is a 'Latest News' section with a link to 'Migration to Fusionforge 6'. At the bottom right is the 'UNIVERSITÉ DU LUXEMBOURG' logo.

gForge uni.lu

Log In

Projects Search

Home My Page Projects

gForge uni.lu

Welcome on GForge @ Uni.lu

GForge @ uni.lu is a service offered to facilitate the scientific collaborations of people working at the University of Luxembourg. Inspired by the [InriaGforge](#), the general principle is to offer easy access through projects to subversion repositories, mailing lists, bug trackers, message boards/forums, task management, site hosting, permanent file archival, full backups, and total web-based administration. The major features are listed in [helpdesk website](#).

The [helpdesk website](#) provides informations to facilitate the use of Gforge @ uni.lu.

Latest News

[Migration to Fusionforge 6](#)

Gforge@Uni.lu Statistics

Hosted Projects: 330
Registered Users: 433

Top Project Downloads

- 540 LibGEP
- 67 Backup
- 3 Logics in Security Workshop
- 2 CARBON
- 1 Artificial Conversational Companion

All the ranking

Most Active This Week

- 1 LibGEP

All project activities

Recently Registered Projects

10/28	good-scientific-practise
09/16	NIDISC 2016
08/17	CrowdSenSim: Crowd Sensing Simulator
07/25	CARBON
01/14	MetaBio2015 Workshop

UNIVERSITÉ DU LUXEMBOURG

Collaborative project management platform since 2008

- 541 users, 384 projects
- source code repositories (Git, **Subversion**)
- **static web sites**
- **mailing lists**
- bug tracker...

Collaborative project management platform since 2008

- to be decommissioned at the end of the month as announced
- **all the data will be safely archived or migrated**
- projects must be migrated by the users to an alternative service such as github, gitlab
- **static web sites**, must be migrated either on pcog-server.uni.lu or hosted by the SIU
- **mailing lists**, must be migrated to listserver.uni.lu

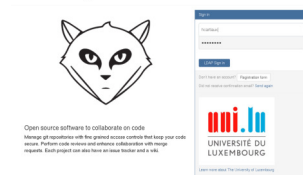
Gitlab.uni.lu

Gitlab is a **modern** collaboration system centered around git.

Features

- git repository management
- continuous integration (docker)
- code reviews
- issue tracking
- wikis

GitLab Community Edition



Other services

Etherpad

- Collaborative and real-time text editor
- <https://hpc.uni.lu/pad/>

Privatebin

- Pastebin-like, text and code sharing
- Client-side encryption
- <https://hpc.uni.lu/privatebin>

Nextcloud

- Dropbox-like
- Data synchronization
- Use your HPC credentials

Conclusion

- Integrate the new Aion cluster
- Finalize the new website and technical documentation

Thank you for your attention !