



UL HPC School 2014

UL HPC Management Team

University of Luxembourg, Luxembourg

Welcome to the UL HPC School

- **First edition**

be indulgent :)

- ↪ Ambition: yearly event
- ↪ 66 registered participant
- ↪ 6 distinct speakers
 - supported by some of the leading UL computational scientists
- ↪ Open and public access – content on [GitHub](#)





UL HPC School Overview

- **2 keynotes** (including top users presentations)
- **8 practical sessions**
 - ↪ Focusing on observed daily usage of the platform
 - ↪ basics, sequential / MPI jobs, Matlab, R, parallel debuggers (TotalView, Allinea DDT)

Agenda - Day 1 (May 6th)

May 6th	By	Title	Location
9h00-9H10	S. Varrette	Opening	P. Feidert
9h10-10h15	S. Varrette	<i>Keynote</i> : HPC platforms @ UL: Overview and Usage	P. Feidert
10h15-10h30		Coffee break	P. Feidert
10h30-11h15	S. Varrette	<i>PS1</i> : Getting Started (ssh, scp, rsync, oar, modules, builds)	P. Feidert
11h15-12h30	H. Cartiaux	<i>PS2</i> : HPC workflow with sequential jobs (C,python,java)	P. Feidert
12h30-13h30		LUNCH	
13h30-14h30	S. Varrette	<i>PS3</i> : HPC workflow with MPI jobs. Ex: OSU MB/HPL	P. Feidert
14h30-16h30	S. Grimonet	<i>PS4</i> : Direct, Reverse and parallel Memory debugging with TotalView	P. Feidert
16h30-17h30		Roguewave Open discussion and Day 1 Closing	P. Feidert

Agenda - Day 2 (May 7th)

May 7th	By	Title	Location
9h30-10h00	S.Varrette	<i>Keynote</i> : Effective storage and data management	P. Feidert
10h00-10h30		<i>Keynote</i> : Experience reports from top users	P. Feidert
10h30-10h45		Coffee break	P. Feidert
10h45-11h45	V.Plugaru	<i>PS5</i> : Using Matlab on the UL HPC Platform	P. Feidert
11h45-12h30	J. Emeras	<i>PS6</i> : Using R on the UL HPC Platform	P. Feidert
12h30-13h30		LUNCH	
13h30-14h30	V.Plugaru	<i>PS7</i> : Bio-informatic softwares on the UL HPC Platform	P. Feidert
14h30-16h30	P. Wohlschlegel	<i>PS8</i> : Unified profiling and debugging with Allinea	P. Feidert
16h30-17h30		Allinea Open discussion and Day 2 Closing	P. Feidert

`http://hpc.uni.lu/hpc-school`

Github Tutorials:

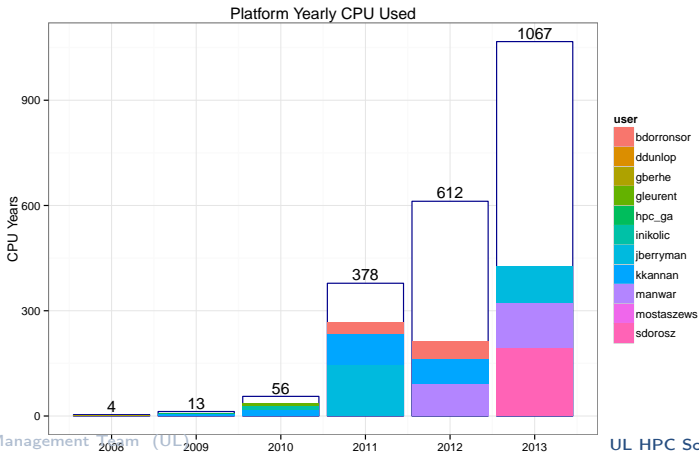
`https://github.com/ULHPC/tutorials`

UL HPC website

`https://hpc.uni.lu`

Top 2013 User reports

- Total **Asked** resources: **5426 years**
- Total **Used** resources: **1067 years**



Top 2013 User reports

login	total_asked	total_used	CPUHour used
1 sdorosz	9709174185	6148413886	0195 years 307 days 04:44:10
2 manwar	13959518400	4016640130	0128 years 105 days 21:21:34
3 jberryman	8573504004	3241265570	0103 years 262 days 15:32:14
4 ekalesaki	8459145012	2361077982	0075 years 301 days 06:59:06
5 jmuszynski	19900143685	1956299480	0062 years 364 days 08:30:44
6 aolteanu	7905085200	1745973682	0056 years 122 days 00:40:46
7 ahunegnaw	4360286897	1553142135	0050 years 081 days 04:21:39
8 golivares	5618160000	1147204753	0037 years 130 days 19:58:37
9 vsatagopam	3249313260	871469440	0028 years 227 days 10:50:04
10 siturriaga	2401056000	860787580	0028 years 103 days 19:39:04
11 bdorronsor	12562085920	776484502	0025 years 223 days 02:07:46
12 sjafarnejka	3338095620	680219654	0022 years 204 days 21:53:38
13 mmichael	1123605822	625350123	0020 years 300 days 20:21:27
14 snielsen	2219393548	570838898	0019 years 034 days 22:21:02
15 fpinel	1209427200	491600541	0016 years 213 days 19:41:45

```
## Function to convert cpuhour (in s) into a readable time formatting
getTime <- function(x) {
  str = format(as.POSIXct('0001-01-01 00:00:00') + x, "%Y years %j days %H:%M:%S")
  return (str)
}
```