ILCDIRAC

A grid solution for the LC community

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CERN

October 1st, 2013
CLIC detectors & physics meeting

Outline

Current status

ILCDIRAC now stable, no more major developments, only bug fixes.

ILD concept now moves towards using ILCDIRAC:

- ▶ Used it for user jobs
- ▶ Several questions came
- ▶ ILCDIRAC required a few fixes to adapt to that use case: Production job class, support for application specific inputs (ILDConfig package)
- ▶ File Catalog meta data adjustements required for ILD
- ▶ The web interface to the File Catalog has issues (DIRAC, not ILCDIRAC), but working on those now. Next major version of the portal will have a different interface.

Eduard Avetisyan[1]:

> "ILCDIRAC is an appropriate system for future ILD productions"

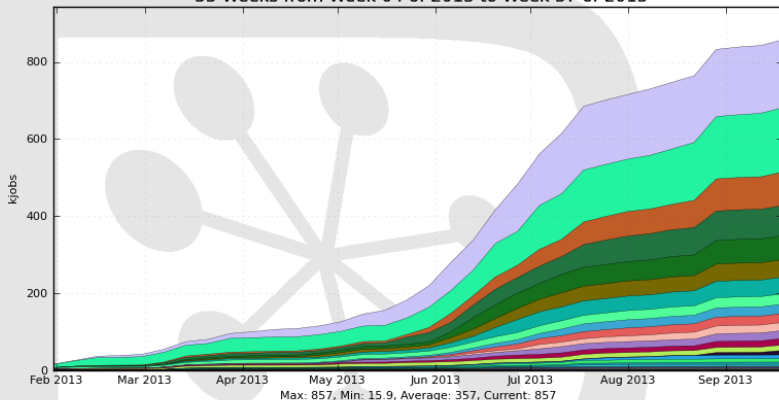More users are coming every week, now $\approx$ 100 registered, 20 active

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[1]`http://ilcagenda.linearcollider.org/conferenceOtherViews.py?view=standard&confId=6113`

Current status: User jobs

User jobs since Feb. 2013

33 Weeks from Week 04 of 2013 to Week 37 of 2013

Max: 857, Min: 15.9, Average: 357, Current: 857

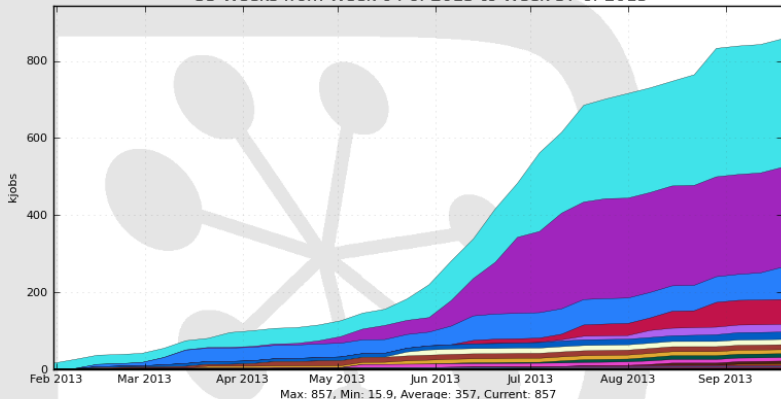|			
LCG.CERN.ch	176.2	LCG.LAPP.fr	23.4
LCG.DESY-HH.de	166.9	LCG.Freiburg.de	21.0
LCG.KEK.jp	87.1	LCG.QMUL.uk	20.5
LCG.IN2P3-CC.fr	77.5	LCG.UKI-NORTHGRID-LIV-HEP.uk	17.1
LCG.Bristol.uk	62.7	LCG.UKI-SOUTHGRID-RALPP.uk	14.0
LCG.Manchester.uk	45.4	LCG.SCOTGRIDDURHAM.uk	11.6
LCG.Brunel.uk	43.1	LCG.GRIF.fr	9.8
LCG.IN2P3-IRES.fr	26.7	LCG.Birmingham.uk	8.7
LCG.NIPNE.ro	24.1	... plus 14 more	

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Current status: User jobs

User jobs since Feb. 2013

33 Weeks from Week 04 of 2013 to Week 37 of 2013

Max: 857, Min: 15.9, Average: 357, Current: 857

■ calanchac	333.1	■ esicking	10.0	■ bkrupa	0.3	■ mszalay	0.0
■ nalipour	259.2	■ tjunping	9.1	■ bvormwald	0.3	■ jengels	0.0
■ alucacit	83.8	■ avetisyan	6.3	■ vchobano	0.1	■ lweuste	0.0
■ jstrube	64.4	■ sredford	5.0	■ sposs	0.1	■ giwai	0.0
■ jmarshall	19.9	■ jrouene	3.5	■ mavogel	0.0	■ potter	0.0
■ cgrefe	19.2	■ igarcia	2.2	■ pdoublet	0.0	■ hmiyake	0.0
■ amiyamot	13.6	■ sailer	2.2	■ fgaede	0.0	■ aespargi	0.0
■ proloff	12.9	■ blaising	1.2	■ mschram	0.0		
■ homer	10.3	■ slukic	0.5	■ milap	0.0		

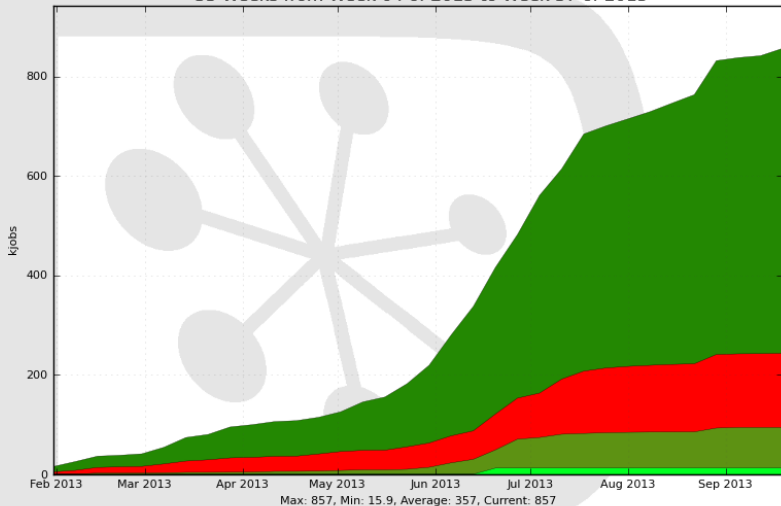*Generated on 2013-09-26 17:26:16 UTC*

Current status: User jobs

User jobs since Feb. 2013

33 Weeks from Week 04 of 2013 to Week 37 of 2013

Max: 857, Min: 15.9, Average: 357, Current: 857

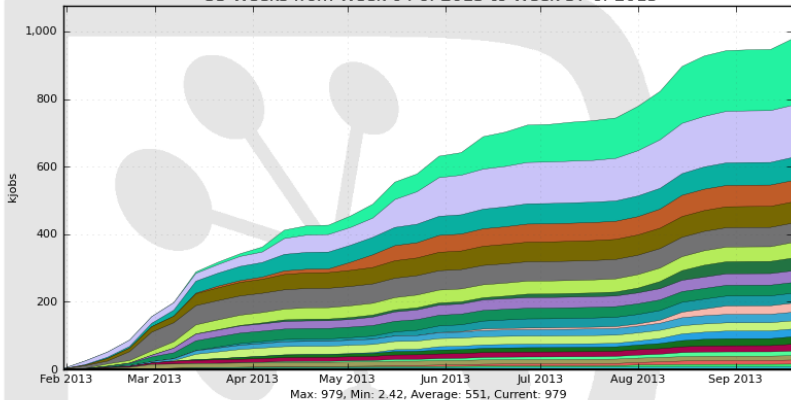| ■ Done | 613.6 | ■ Failed | 149.1 | ■ Rescheduled | 81.6 | ■ Completed | 12.9 |

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Current status: Production jobs

Production jobs since Feb. 2013

33 Weeks from Week 04 of 2013 to Week 37 of 2013

Max: 979, Min: 2.42, Average: 551, Current: 979

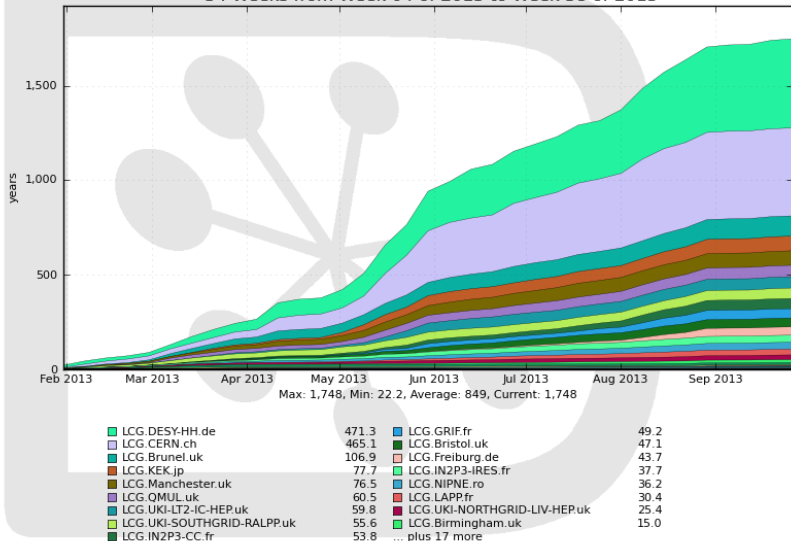|			
LCG.DESY-HH.de	197.1	LCG.UKI-NORTHGRID-LANCS-HEP.uk	31.7
LCG.CERN.ch	154.5	LCG.UKI-LT2-IC-HEP.uk	29.4
LCG.Brunel.uk	68.7	LCG.Freiburg.de	26.9
LCG.KEK.jp	63.4	LCG.NIPNE.ro	25.4
LCG.Manchester.uk	62.6	LCG.BNL.us	24.2
LCG.PNNL.us	57.5	LCG.GRIF.fr	22.9
LCG.UKI-SOUTHGRID-RALPP.uk	46.0	LCG.Bristol.uk	22.2
LCG.IN2P3-CC.fr	38.0	LCG.UKI-NORTHGRID-LIV-HEP.uk	20.4
LCG.QMUL.uk	34.5	... plus 14 more	

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Current status: All jobs

CPU usage per site

34 Weeks from Week 04 of 2013 to Week 38 of 2013

Max: 1,748, Min: 22.2, Average: 849, Current: 1,748

■ LCG.DESY-HH.de	471.3	■ LCG.GRIF.fr	49.2
■ LCG.CERN.ch	465.1	■ LCG.Bristol.uk	47.1
■ LCG.Brunel.uk	106.9	■ LCG.Freiburg.de	43.7
■ LCG.KEK.jp	77.7	■ LCG.IN2P3-IRES.fr	37.7
■ LCG.Manchester.uk	76.5	■ LCG.NIPNE.ro	36.2
■ LCG.QMUL.uk	60.5	■ LCG.LAPP.fr	30.4
■ LCG.UKI-LT2-IC-HEP.uk	59.8	■ LCG.UKI-NORTHGRID-LIV-HEP.uk	25.4
■ LCG.UKI-SOUTHGRID-RALPP.uk	55.6	■ LCG.Birmingham.uk	15.0
■ LCG.IN2P3-CC.fr	53.8	... plus 17 more	

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Data management

DIRAC File catalog (DFC) knows about:

- most files produced for the ILC DBD
- all files for the SID DBD
- all files for CLIC

Lcg File Catalog and DFC are written in parallel, and thanks to the failover mechanism: NO DATA LOSS

Storage elements:

- Failover mechanism also protects physical files: automatic replications between sites
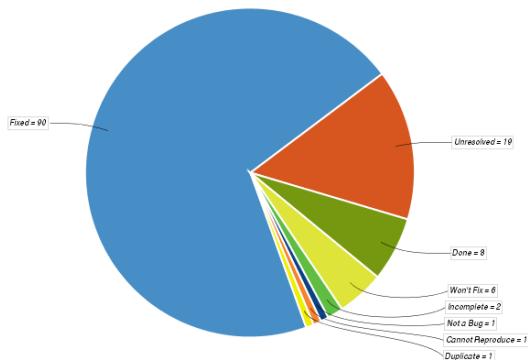- Top 5 storage element usage (FC:/>size -l):

Storage	Usage	CLIC	ILC	Files
CERN-SRM	868 TB	861 TB	7 TB	4 053 817
DESY	96 TB	0	96 TB	306 585
KEK	95 TB	76 GB	94 TB	244 148
RAL-SRM	93 TB	4TB	89 TB	1 026 781
PNNL-SRM	25 TB	0	25 TB	733 423

Most data produced for the CLIC CDR.

Bug tracking

Use of JIRA: `http://its.cern.ch/jira/browse/ILCDIRAC`

Bug tracking

From Web portal:

	JobName	LastUpdate [UTC]	LastSignOfLife [...	SubmissionTim...
	00002792_0000...	2013-09-26 18:50	2013-09-26 18:50	2013-09-26 18:50
	00002792_0000...	2013-09-26 18:51	2013-09-26 18:51	2013-09-26 18:50
	00002792_0000...	2013-09-26 18:51	2013-09-26 18:51	2013-09-26 18:50
	00002791_0000...	2013-09-26 18:51	2013-09-26 18:51	2013-09-26 18:50
	00002791_0000...	2013-09-26 18:51	2013-09-26 18:51	2013-09-26 18:50

Report a Problem

Mailing lists

Register: `ilcdirac-register@cern.ch`

Questions: `ilcdirac-support@cern.ch`

Forum: `http://forum.linearcollider.org/index.php?t=index&cat=22&rid=0`

Information: `https://twiki.cern.ch/twiki/bin/view/CLIC/DiracUsage`

<p style="text-align:center; color:red;">Any new user is welcome!</p>

Thanks

Our thanks go to
- the Site administrators for fixing the issues quickly
- the DIRAC developers for fast replies and discussions
- the users for positive feedback