Operations and plans - RDIG

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RDIG Structure 2017

	NRC KI	WLCG (REBUS)	Works now
RRC-KI-T1	+	+	+
1. RRC-KI	+	+	+
2. JINR	+	+	+
3. IHEP	+	+	+
4. ITEP	+	+	+
5. PNPI	+	+	+
6. SPbSU		+	+
7. Troitsk		+	+
8. MEPhI			+
9. SARFTI			-

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4. ITEP	+	+	+
5. PNPI	+	+	+
6. SPbSU		+	+
7. Troitsk		+	+
8. MEPhI		-	-
9. SARFTI		+-(on near time)	+

RDIG Network structure 2018

	LHCONE	IPv6
RRC-KI-T1	+	technically supports
1. RRC-KI	+	technically supports
2. JINR	+	technically supports
3. IHEP	+	technically supports
4. ITEP	+	In plan
5. PNPI	+	In plan
6. SPbSU	Plan on 2018 year	In plan
7. Troitsk	+	-
8. MEPhI		-
9. SARFTI	+	technically supports

RDIG resource 2017-2018

	SE(2017)TB	CE(2017) HEPSPEC	SE(2018)TB	CE(2018) HEPSPEC
RRC-KI-T1	2520+2960 Type	32800	2520+2960 Type	32800
1. RRC-KI	316	4488	316 (173)*	4488
2. JINR	438	6500	680 (603+109)*	8460
3. IHEP	297	2631	297	2631
4. ITEP	200	2124	300 (179)*	2124
5. PNPI	44	2640	44	2640
6. SPbSU	128	4155	128 (110)*	4155
7. Troitsk	116	641	116	641
8. MEPhI	40	769	40(0)*	769
9. SARFTI	0	0	250 (117)*	7466
Total(T2)	1539(rebus)+40	23179(rebus)+769	1878(rebus)+170	25140(rebus)+8235

* - information form MonAlisa monitoring

Sarov – GRID cluster

- 2011-2012 : VNIIEF buys resources
- 2011 - 2017:

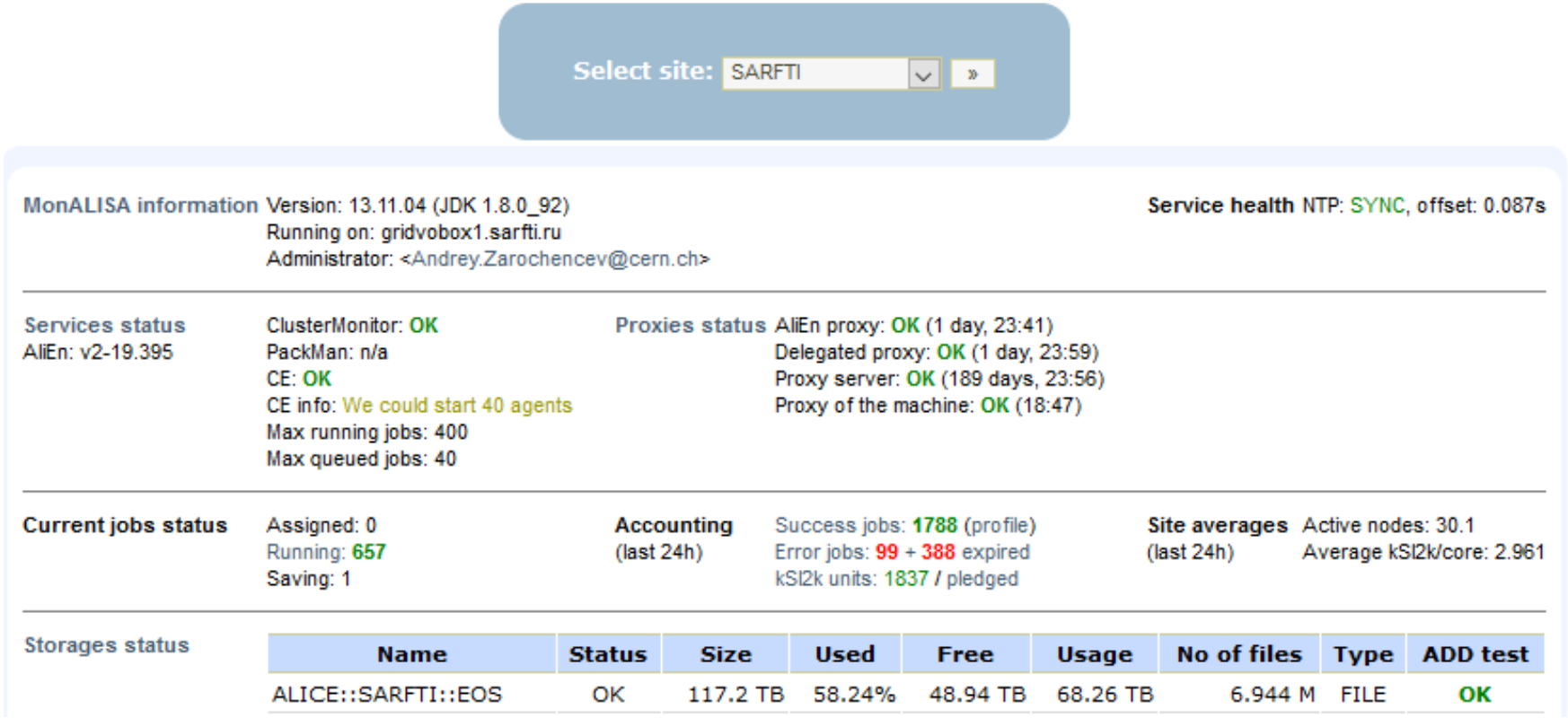
  Solve problems
  - Data center
  - Network connection

- 2017: Beginning

  of work. We hope to finish assembling of the hardware by June and install software by August

T1/T2 workshop 2017

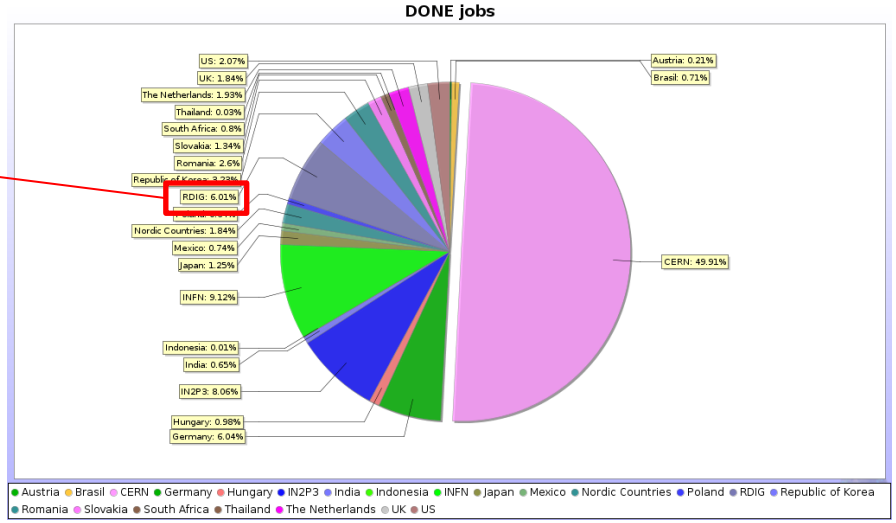
Sarov site - SARFTI



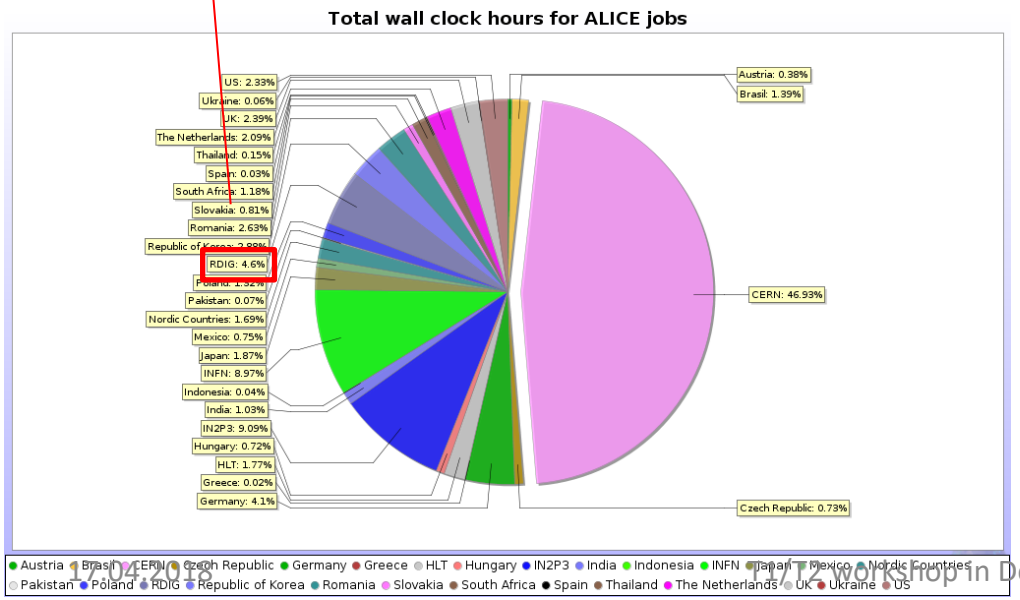
WNs, VOBOX, APEL, Torque server and MySQL DB on CentOS7, but Cream-CE on kvm virtual machine on CentOS6.

RDIG production in the last year (till April)

RDIG 6,1% vs 5,74% on 2017



RDIG 4,6% vs 6,82% on 2018



Higher percent of "Done jobs" – more efficiency

But lower percent of "CPU time" - maybe less dedicated resources for ALICE.

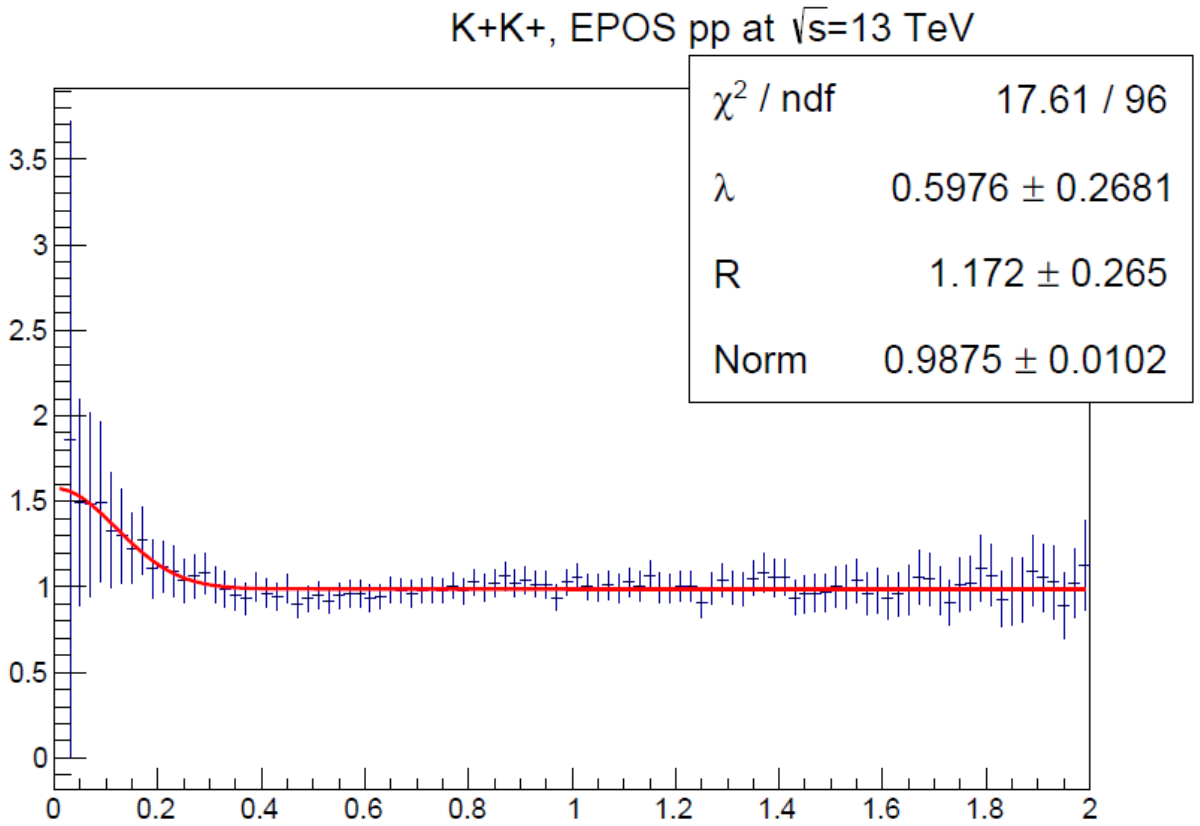
RDIG SE structure 2018

	Type	xrootd
1. RRC-KI	SE	4.50
2. JINR	EOS	3.3.6 (Plan of update in 2018)
3. IHEP	SE	4.2.3
4. ITEP	SE	4.2.3
5. PNPI	SE (Plan of update in 2018)	4.8.1
6. SPbSU	EOS+SE	3.3.6 (Plan of update in 2018) +4.8.1
7. Troitsk	SE	4.8.1
8. MEPhI	EOS	4.3.0
9. Sarov	EOS	4.8.1

Summary

- Appearance of a new site - SARFTI
- JINR SE has finished migration to EOS
- We look forward to:
  - starting all SARFI resources and counting these in REBUS.
  - coming back to the production in MEPHI (in next month).
- Plans for 2018:
  - connect 8 of 9 sites to the LHCONE.
  - 4 sites will support IPv6.

The JINR test local production



- Direct access to: 96 cores, 16 Tb Disk-SE
  Generator of events: EPOS 3111 (+ ALICE packages).
  The load: 10100 root files generated = 20 millions events for March 2018.
- **The main task of this cluster a pocket calculations and tests before big calculations.**

Thank you for your attention!

Questions