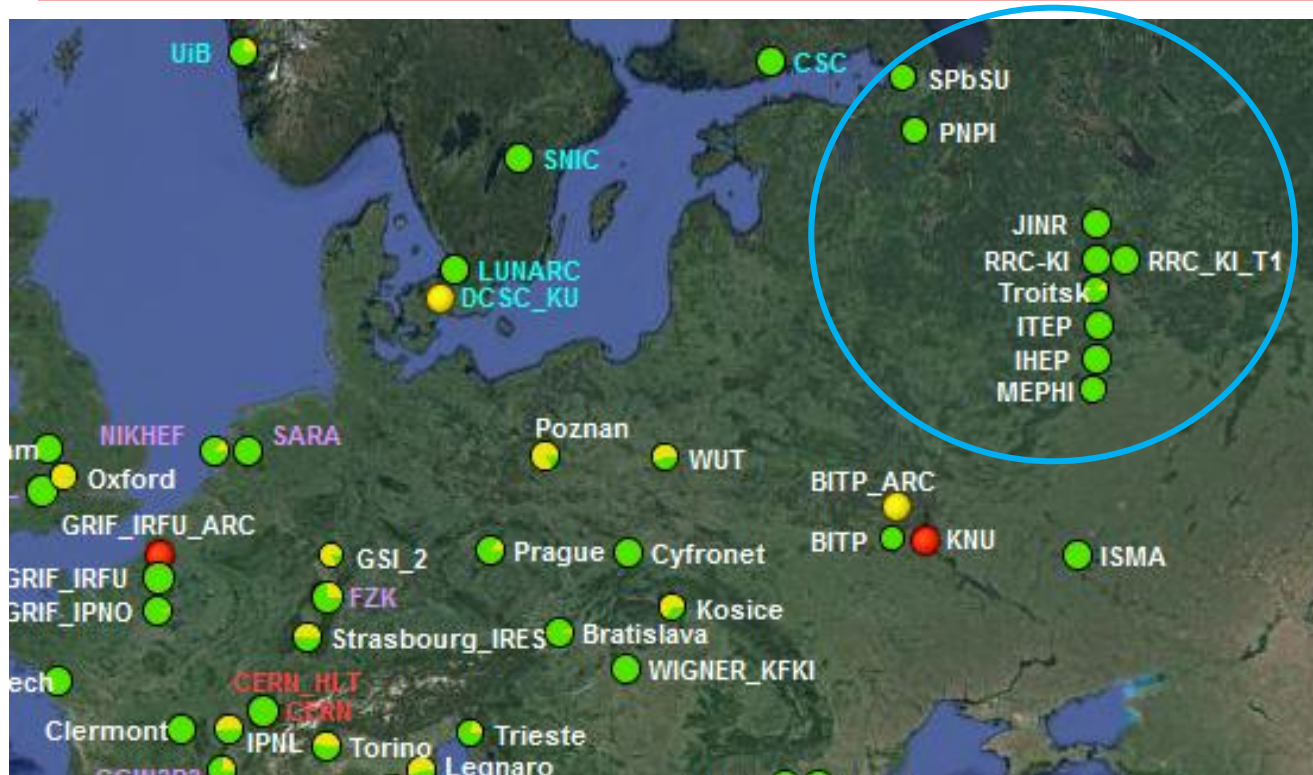

Operations and plans – Russian Data Intensive Grid T2 sites.

Andrey Zarochentsev
SPbSU, St. Petersburg
Gleb Stiforov
JINR, Dubna

ALICE T1/T2 workshop in Torino, Italy, 23-25 february 2015

RDIG sites in ALICE



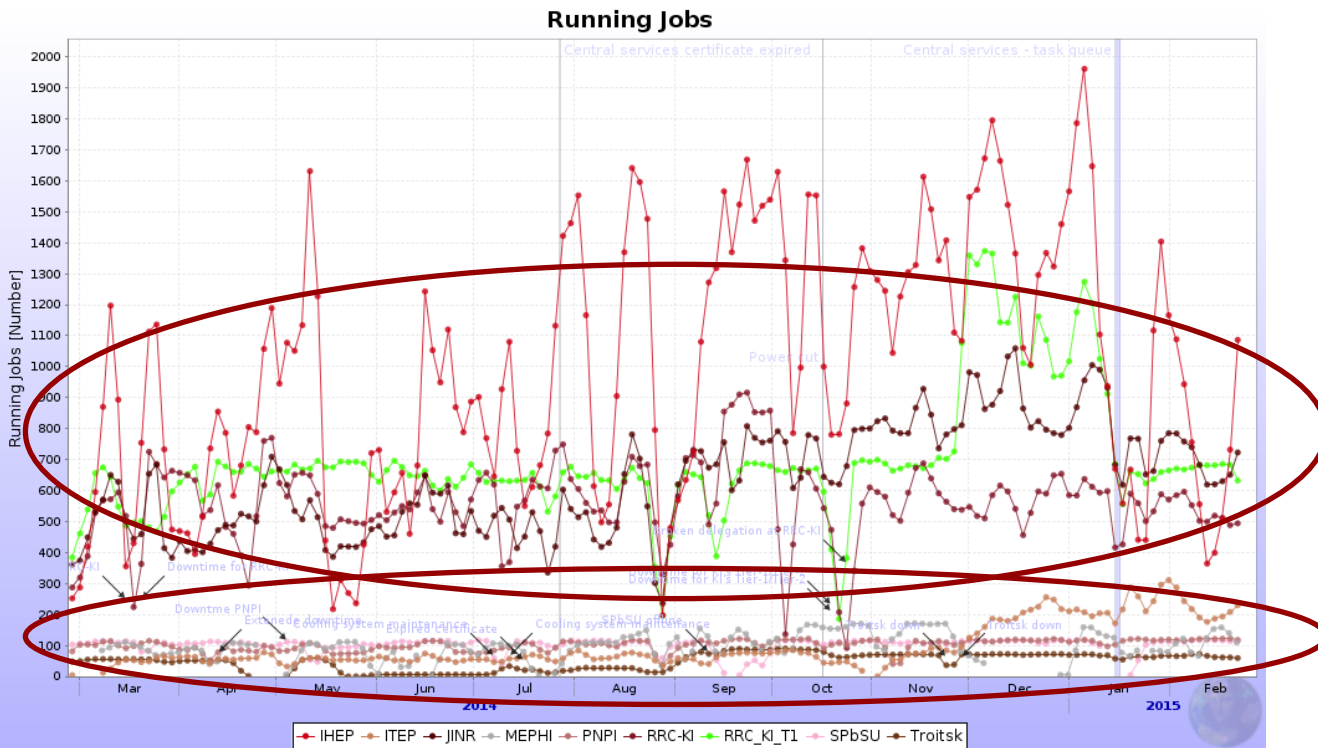
8 T2 sites:
4 sites are unified to
Regional Research Center
Kurchatov Ints. (KI):
RRC-KI, IHEP,
ITEP, PNPI

3 independent Russian sites:
SPbSU, Troitsk, MEPHI

International site:
JINR

And 1 T1 site:
RRS_KI_T1

Jobs per Russian sites in 2015



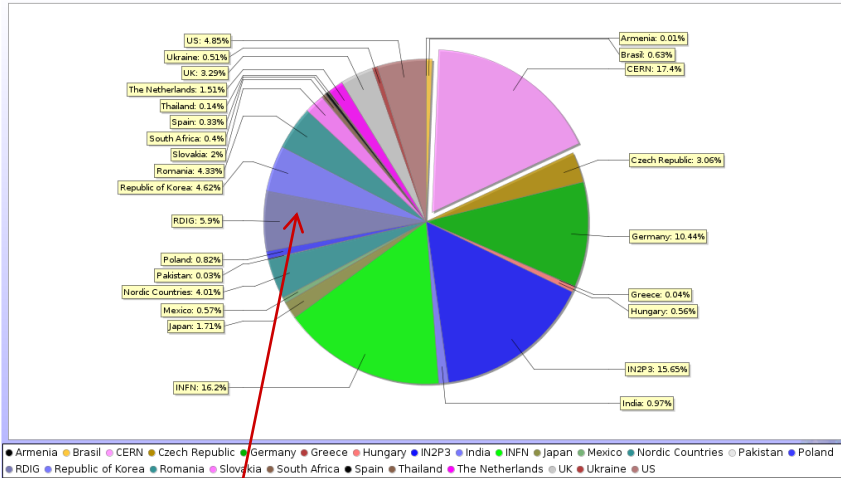
BIG sites:
IHEP
JINR
RRC-KI

Small sites:
ITEP
TROITSK
PNPI
SPbSU
MEPHI

Production in 2014

Interval selection: last year or 2014-02-11 08:00 2015-02-11 08:00

DONE jobs

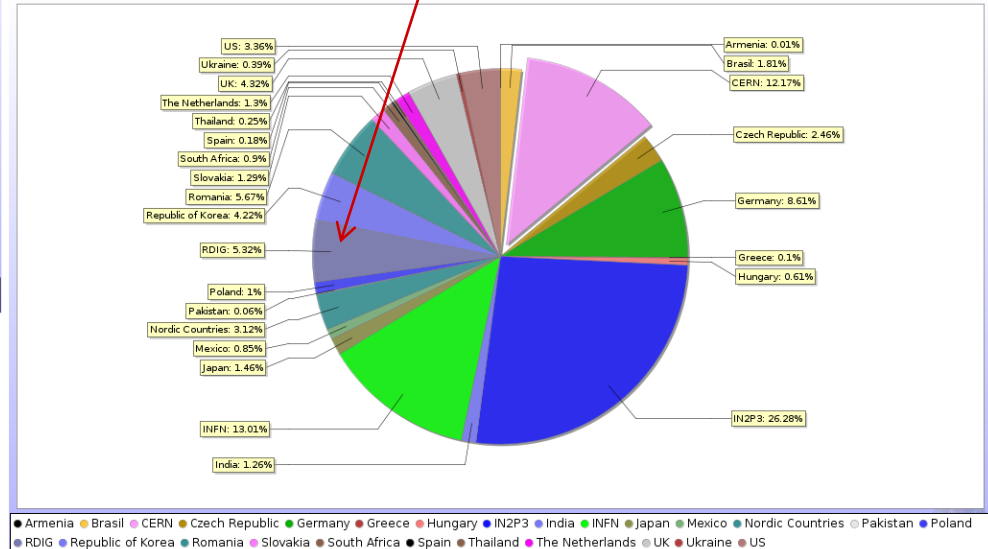


Done jobs 5.9% (vs 4.94% in 2014)

Resources usage 5.32% (vs 3.9% in 2013)

Interval selection: last year or 2014-02-11 08:00 2015-02-11 08:00

Total CPU hours for ALICE jobs



Resources on end of 2014

Site name	CPU(HEPSPEC 2006)	vs 2014	SE(TB)	vs 2014
SPbSU	648,32	0	43	0
PNPI	604,8	0	40	0
JINR	6456	0	408	58
RRC-KI	3755,58	0	339	39
Troitsk	273,315	0	94	0
ITEP	461,7	0	140	0
IHEP	7303,31	0	270	0
MEPHI	851,84	851,84	40	40
	20354,865	851,84	1374	137

SLIDE from report 03.2014 in JAPAN:

New resourcers of Russian sites 2014

Requested by REBUS (<http://wlcg-rebus.cern.ch/apps/pledges/resources/>): (T2 only) DISK = 1645 TB , CE = 20467 HEPSPREC2006

information on 28 February 2014 year:

SPbSU: + 20 TB (old server)+ 66 TB (New), +96 Cores (new) (11.53 HS2006)

MEPHI: + 40 TB + 136 Cores (10.41 HS2006)

JINR: +0

Troitsk: +0

RRC-KIAE (ITEP only): +0

Sum: DISK=1238+ 126=1364TB (82 %)

CE~19503+1213=22025 HEPSPREC2006 (107 %)

Resources to update in 2015

Confirmed:

JINR – 90 TB

Expected:

SPbSU ~ 60 TB, 100 Cores

New site in Sarov ~200TB , 400 Cores

WLCG software on sites

	EMI	cvmfs	wlcg-voms- alice	xrootd version	xrootd version monalisa
SPBSU	3	"2.1.19"		1 v3.3.6	v20140506-4d557f2
PNPI	3	"2.1.19"		1 v3.3.6	v20140506-4d557f2
JINR	3	"2.1.19"		1 v3.3.4	v3.3.4
RRC-KI	3	"2.1.19"		1 V4.1.1	-----
Troitsk	2	"2.1.19"		1 v3.3.6	v20140506-4d557f2
ITEP	2	"2.1.19"		1 v3.3.6	v20140506-4d557f2
IHEP	3	"2.1.19"		1 v3.2.4	v3.2.4
MEPHI	3	"2.1.19"		1 v3.3.6	3.3.6(EOS)

Question about software

- What is the future plans for xrootd storage?
 - Xrootd-apmon on rpm
 - Xrootd 4 from epel or from eos repo
 - We use Debian Linux will the future xrootd storage support it?
 - Are there any plans to use EOS?
 - Is Alice going to use Multicore?
 - Is Alice going to use GPU, Xenon Phi?
-

Additional computing activity for ALICE:

1) Local JINR cluster:

JINR team ALICE launches local cluster on 48 cores and 14 TB, for running local tasks (accounts) ALICE and launch generator EPOS.

2) Simple elastic cloud for alic on distributed storage SPbSU + BITP.

Cloud on Openstack with CEPH for data storage (xrootd) and object storage (cinder)

Elastic cloud

- easy deployment (via packstack)
 - xrootd service
 - distributed storage(CEPH) for openstack block devices(VMs) and xrootd service
 - easily scalable due to the CEPH backend
-

Conclusions

- 1) Rdig upgrades its resources for ALICE (but not as fast as we want/expect)
 - 2) Russian sites already for alice production.
 - 3) Questions from site admins - it would be nice to discuss here...
-

Thank for support to administrators of Russian Tier-2 sites

IHEP V.Kotlyar, JINR V.Mitsyn,
RRC-KI E. Ryabinkin, ITEP Y.Lyublev,
PNPI A.Kiryanov, MEPHI S. Smirnov,
Troitsk L.Stepanova
