

New components of the information- software environment of the heterogeneous cluster HYBRILIT

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on behalf of the

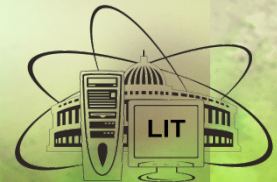
Heterogeneous Computation Team HybriLIT

Laboratory of Information Technologies, JINR

Dubna

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Heterogeneous Computation Team, *HybriLIT*



HybriLIT

Software and Information Environment

OS: Scientific Linux 6.7
Nano RAMFS
(bootloader Linux)

SLURM
(workload manager)

NFS
(file system)

EOS
(file system)

CernVM-FS
(Virtual Software Appliance)

MODULES

System Level

Software for parallel computing:
OpenMPI 1.6.5, 1.8.1;
CUDA 5.5, 6.0, 6.6, 7.0, 7.5;
GNU 4.4.7, 4.8.4, 4.9.3
Intel Parallel Studio XE 2016;
PGI 15.3

FreeIPA
(identity manager solution)

HybriLIT web-site

<http://hybrilit.jinr.ru/>

Indico:

<http://indico-hybrilit.jinr.ru>

GitLab:

<https://gitlab-hybrilit.jinr.ru>

HybriLIT user support:

<https://pm.jinr.ru/projects/hybrilit-user-support>

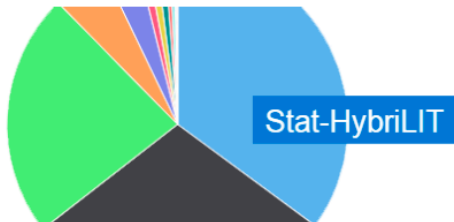
Monitoring:

<https://stat-hlit.jinr.ru/>

User level

New updates in the structure of the services

Stat-HybriLIT



Stat-HybriLIT – a web-service for information support of users of the heterogeneous cluster “HybriLIT”.

MobiLit



MobiLiT – a native Android (iOS asap) mobile application for users of the HybriLiT HPC cluster.

Cloud&HPC ASP



Cloud&HPC_ASP – a new service for sharing applied program packages



Mattermost– a new online chat space for HybriLIT users



Heterogeneous Computation Team, HybriLIT



MobiLIT

drawit diagram

Available Resources

Details of available resources:

Queue:	CPUS	Total Nodes ...
long	74	152 blade[04-05,09]
cpu	88	144 blade[03,06-07]
gpu	44	96 blade[06-07]
phi	44	48 blade03
gpuK80	54	112 blade[09-10]
interactive*	0	48 blade02
tut	0	56 blade08

Available 54 CPU-core out of 112

Tap for more details

Tap for available Nodes

Node

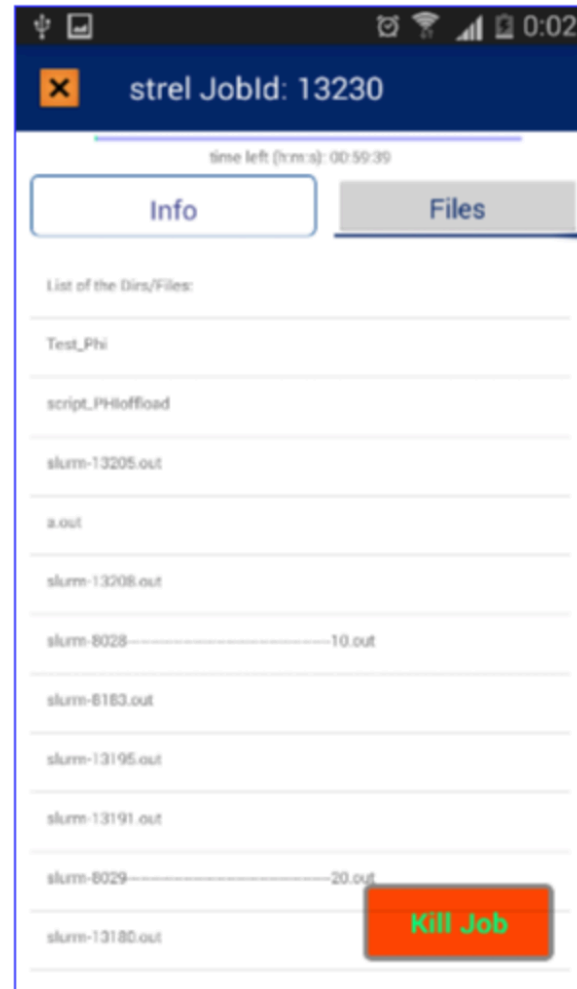
HybriLiT: All active jobs

guest Search

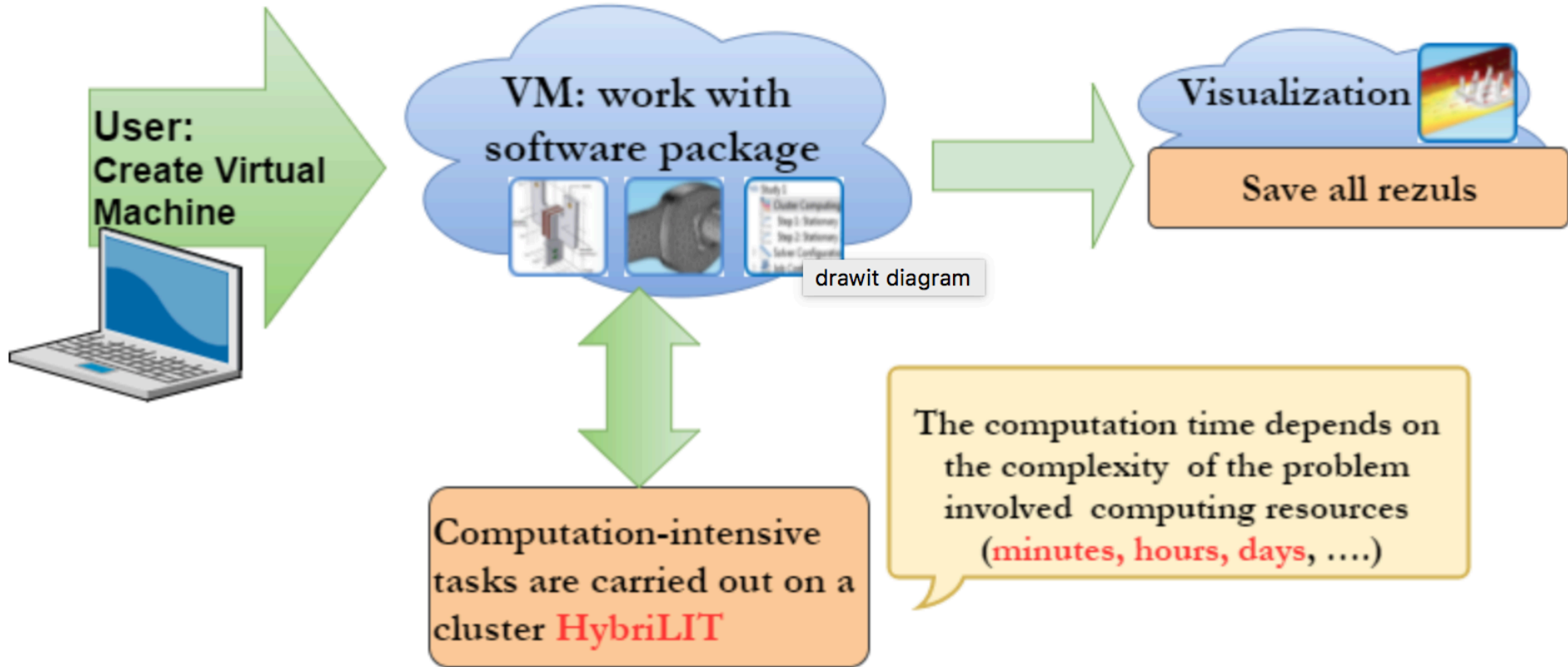
strel	1:inte	script_P	PENDING	1:00:00
strel	1:inte	script_P	PENDING	1:00:00
strel	1:inte	script_P	PENDING	1:00:00
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MobiLIT



Cloud&HPC_ASP



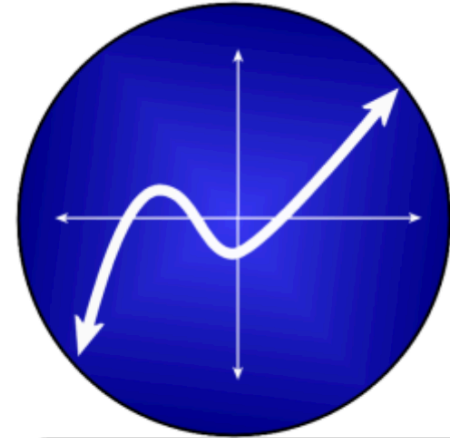
Cloud&HPC_ASP



User-friendly interface for creating Virtual Machines (VM)



Monitoring of available resources, licenses, etc.



Setting geometry using graphic user interface (GUI)



Using applied program packages in VMs



Computations within VMs & on the HybriLIT cluster



Saving data between sessions



Mattermost – online chat



You have one new message.

CHANNEL:

mvala - [12:40 MSK](#), February 1

0.115

[Go To Post](#)

@shusha
Hybrilit



CHANNELS



hlit-user-support

Off-Topic

Town Square

More...

PRIVATE GROUPS



DIRECT MESSAGES

amayorov

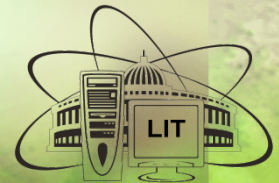
mvala

ybutenko

More...



Thank you for attention



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