

Quiz name: **HUST15 Attendee Survey**

Date: **11/20/2015**

Question with Most Correct Answers: **#0**

Total Questions: **15**

Question with Fewest Correct Answers: **#0**

1. Who are you?

- 5/29 A Developer
 - 1/29 B HPC User
 - 13/29 C System Administrator
 - 12/29 D User Support
 - 10/29 E Manager
-

2. How do users manage their environment on your HPC system?

- 0/29 A Nothing
 - 10/29 B TCL modules
 - 16/29 C Lmod
 - 0/29 D SoftEnv
 - 2/29 E Dotkit
 - 4/29 F Other
-

3. If using modules (or similar), what module naming scheme do you use?

- 10/29 A Flat
 - 4/29 B Categorized
 - 15/29 C Hierarchical
 - 1/29 D Something else
 - 0/29 E N/A
-

4. Do you automatically generate module files?

- 8/29 A Yes
 - 19/29 B No, we write them by hand.
 - 2/29 C Don't know.
-

5. Do you use tools to build/install scientific software?

- 13/29 A Hand-written scripts
- 12/29 B Build tool

- 7/29 C Binary Packages (RPM, deb, etc.)
12/29 D No. We build manually.
-

6. Do you collaborate with other sites on software deployment?
6/29 A Yes
9/29 B No
12/29 C Sometimes
3/29 D I don't know
-

7. Are you using tools to track executable/library use at your site?
7/29 A Yes
13/29 B No
6/29 C Sometimes
2/29 D I don't know.
-

8. Do you test software builds?
5/29 A Automatically, with each install
8/29 B Manually (always)
18/29 C Manually (sometimes)
1/29 D No testing.
0/29 E I don't know
-

9. Do you test the performance of your HPC software?
6/29 A Yes
5/29 B No
16/29 C Sometimes
1/29 D I don't know.
-

10. Do you monitor the performance of your software over time?
2/29 A Yes
16/29 B No
8/29 C Sometimes
1/29 D I don't know
-

11. What are the biggest user support issues you face at your HPC site?
Anon a1e80

providing many tools and versions for systems without internet access

Anon b4a30

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Anon c5384

Inefficient use of job scheduler.

Anon 13d81

Lack of support staff

Anon 5d124

Users don't know how debug problems or what information to provide when they request help.

Anon eb997

reducing the number of requests that we can automate checks for

Anon 6dc9e

Increasingly naive userbase which requires more and better tools to help them.

Anon 4b42b

understanding performance bottlenecks.

Anon 1ad40

Not enough time

Anon 1a831

Getting users to use the system as intended with a constantly shifting and renewing user base

Anon db4cc

Not enough support staff

Anon 1077a

Naively written job scripts, lack of fundamental understanding of HPC concepts and limitations

Anon 9f591

Lack of times/staff

Anon 22ff8

batch scheduling
parallel file system performance

Anon 54955

not enough staff

Anon 4bd21

Building their custom code and running code.

Anon 5b047

User failure to comply with best practices.

Anon d0729

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Anon 624dd

Retention of high quality staff;
Process improvement

Anon 93ce4

Bad Code

Anon 1d9e0

Would you please help me install xxxx? (Translation: please let me know when you're done installing this for me.)

Anon 80edc

software installation requests, issues with resource manager/scheduler (Torque/MOAB)

Anon 3d70f

staff time for installation of software

Anon 8be08

* Increasing number of projects and users generates increasing and even more varying support load

* Root-causing failed jobs (primarily OOM issues)

* Help with getting jobs to run correctly

* Software installation requests

Anon 2b92d

Anon e4620

Education

12. What is the highest level of support you provide for your users?

0/29

A None

8/29

B Email

4/29

C Telephone hotline with dedicated tech support

2/29

D Telephone hotline with dedicated technical experts

19/29

E Close collaboration between support experts and application teams

2/29

F Other

13. What are the most important performance metrics for your HPC applications?

Anon a1e80

time to solution

io performance

uptime/availability/sla

Anon b4a30

Anon c5384

Time to solution.

Anon 13d81

number of users, student users

Anon 5d124

Time to result for user.

Anon eb997

repeatable, predictable execution times

Anon 6dc9e

Anon 4b42b

run time, queue wait.

Anon 1ad40

Utilization, time to finish.

Anon 1a831

Queuing times
Annual user surveys

Anon db4cc

None

Anon 1077a

Depends on the application

Anon 9f591

None

Anon 22ff8

node utilization

Anon 54955

happy end users

Anon 4bd21

Efficiency

Anon 5b047

cpu usage, ib traffic

Anon d0729

I/O related

Anon 624dd

Time to solution; Memory usage; I/O

Anon 93ce4

Science Output

Anon 1d9e0

Scalability understood in the broadest sense -- e.g. good citizenship with respect to Lustre when running at scale.

Anon 80edc

runtime, memory usage, scalability

Anon 3d70f

memory usage, cpu utilization

Anon 8be08

- * mpi library time
- * memory (max, min, average etc)
- * i/o load (max, min, average etc)
- * cpu usage (max, min, average etc)

Anon 2b92d

mem/core usage

Anon e4620

Memory usage

14. Could your user support issues be solved by better automation? If so, what kind of tools would you use?

Anon a1e80

n/a

Anon c5384

I don't think so, unfortunately...

Anon 13d81

yes, build tools, modules

Anon 5d124

Yes. Very interested in many of the tools presented at HUST'14 and HUST'15.

Anon eb997

automated environment checks

Anon 6dc9e

Would help, both for admin and users. Looking at build tools & user file mgmt tools.

Anon 4b42b

certainly. auto profiling and user notification.

Anon 1ad40

Probably. XALT, EasyBuild, etc.

Anon 1a831

Most likely. Tools which automatically present performance issues and other problems directly to the user as well as provides systemwide views for the administrator. The frontend should be both CLI based and a web GUI that has powerful capabilities to do ad hoc data exploration.

Anon db4cc

Some could.

Anon 1077a

Some could be automated. Run-time monitoring tools would help.

Anon 9f591

No

Anon 22ff8

some could be solved, automated monitoring of i/o may help

Anon 54955

sw package expertise and many of the tools in the morning session were super great!!!

Anon 4bd21

Some.

Anon 5b047

no

Anon 624dd

We use a locally-developed tool tailored to our needs

Anon 93ce4

performance detection

Anon 1d9e0

Tools that detect, prevent, correct common mistakes.

Anon 80edc

YES, and we do that already (EasyBuild for software installation)

Anon 3d70f

yes, and will be. easybuild, spack, and more extensive monitoring for problem identification.

Anon 8be08

Not solved, but helped by:

* Per-job resource utilization reports

* Automatic OOM events reports

* Automatic feedback from the scheduler reg. expected queue time, as well as some submit-time sanity checks

Anon 2b92d

Definitely. Would like to make use of better job analysis tools as described in the workshop.

Anon e4620

Yes, job monitoring would help

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15. What steps could be taken to build wider collaboration among HPC sites?

Anon a1e80

n/a

Anon c5384

A robust and standardized installation procedure, which removes "customization" for path, environmental vars etc from documentations and others.

Anon 13d81

normalize support tool stack

Anon 5d124

The HUST workshop has been a great start, provides a venue for tools work. Discussing the need with program managers/funding agencies, will also help community get resources to develop these tools. Ensuring that tools are flexible so that they can be adapted to the eccentricities at each site is also important.

Anon eb997

continued venues like hust

Anon 6dc9e

HUST is a great start. Is there something similar for cluster sysadmin? Only see occasional BOFs. Is operations mgmt within HUST's scope?

Anon 4b42b

it would help if sites took a look at what's out there before creating new stuff. i found it odd that with so many performance monitoring tools out there (collectl, collectd, ganglia, etc.) that Tacc decided to start from scratch with tacc stats. wouldn't it make more sense to work within the community?

Anon 1ad40

Not sure.

Anon 1a831

Contributing recipes / configuration management playbooks into a central repository. The OpenHPC initiative's repository could perhaps provide a good platform for this.

Anon db4cc

Workshops, mailing list, web site

Anon 1077a

I don't know.

Anon 9f591

More events like HUST

Anon 22ff8

hust is a great start
awareness and availability of automated tools in opensource community

Anon 54955

I would love to help establish a formal HUST user group!! Count me in...skalwani@yahoo.com

Anon 4bd21

Open source tools with good documentation

Anon 5b047

na

Anon 624dd

More workshops for HPC support staff; mailing lists targetted at support staff

Anon 93ce4

Sites actually using open tools, and not re-writing tools every time.. For example: tacstats, at the time it was written multiple tools were available to gather metrics, collectd, ganglia, nwperf, etc. and to visualize, cview, ganglia, and others. But it seems they decided to start all over, which makes just one more tool to look at and decide to use. if they had added plug-ins to collectd say, then many people would have access to them, they would have a base of open source developers looking at code, and all the visualization and analytics codes would be able to directly use the data.

Anon 1d9e0

Frankly, more liberal ops/support budgets. Collaboration is rewarding and valuable. But those alligators need attention now!

Anon 80edc

OpenHPC is a good step, workshops like HUST, BoF sessions like Getting Scientific Software Installed

a common mailing list specific to HPC user support!!!

Anon 3d70f

just evangelism

Anon 8be08

This workshop helps.

Anon 2b92d

unfortunately we're a much smaller site with limited staff - this leave little time for spending time on being involved in the collaborations that we'd like. More funding would be great - of course - but we're working towards being even more involved.

Anon e4620

Don't know