Results of the FY11 User Survey
for the
Lattice QCD (LQCD) Computing Facility

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with input from the LQCD Project Team

Change Log

Revision No.	Pages Affected	Effective Date
Revision 0.0	Entire Document	

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1 Objective

In order to serve the USQCD user community in the best possible manner, anonymous online surveys are conducted on an annual basis to quantify the level of user satisfaction with the services provided by the LQCD computing project facilities, and to identify potential areas for improvement. Annual surveys have been conducted since 2007, with results summarized in written reports. The FY2011 survey was conducted during the fall of 2011. Results of the FY11 survey are presented in this document. Using the results of these surveys, the LQCD-ext Integrated Project Team (IPT) considers ways to improve and optimize services using the limited resources available to the project.

2 Executive Summary

The FY11 User Survey was conducted in Oct-Dec 2011 and measured user satisfaction during FY11 (i.e., the 12 month period from Oct 2010 through September 2011). The online survey consisted of 22 questions designed to measure the level of satisfaction with the compute facilities operated and managed by the LQCD project team, and with the annual resource allocation process conducted and managed by the USQCD Scientific Program Committee.

The survey was distributed to individuals who had submitted compute jobs to one of the three host facilities during the year. A total of 102 individuals submitted jobs to LQCD compute facilities in FY11; 61 of these individuals participated in the FY11 survey. This response rate of ~60% was significantly better than the 39% response rate achieved in FY10. The increased user response rate is attributed to efforts by the project team to simplify the survey, as discussed later in this document.

Questions related to facility operations were designed to quantify the level of satisfaction on a per-site basis. Results were then aggregated to obtain an overall score for the project. Table 1 shows the aggregate scores for the key facility measurement areas over time. In all areas, satisfaction ratings in FY11 met or exceeded ratings from the previous year.

Table 1. Satisfaction Ratings for Compute Facility Operations

Category	FY07	FY08	FY09	FY10	FY11
Overall Satisfaction	82%	91%	96%	81%	87%
System Reliability	74%	90%	84%	76%	91%
Ease of Access	73%	74%	77%	76%	83%
User Support	86%	100%	92%	88%	92%
User Documentation	78%	92%	81%	73%	81%
Responsiveness of Site Staff	89%	97%	98%	90%	90%
Effectiveness of Online Tools	77%	72%	83%	86%	88%

Although the overall satisfaction rating was noticeably improved over FY10, it was still below the target goal of ≥92%. We believe that a number of unusual events that occurred in FY11 may have negatively impacted the overall satisfaction of our user community; these are discussed in detail in Section 5. Notwithstanding, there were several free-form comments received from survey

respondents that indicate a very high level of satisfaction with the user support and service provided by some project team members. These comments can be found in Section 7.

Questions related to the annual allocation process operations were designed to gauge the level of satisfaction with several aspects of the allocation process, from the clarity of the Call for Proposals, through the transparency and fairness of the allocation process, to the extent to which the process maximizes scientific output. Table 2 shows the aggregate scores for the key measurement areas over time. Satisfaction ratings in FY11 met or exceeded ratings from the previous year in all but two areas.

Table 2. Satisfaction Ratings for the Resource Allocation Process

Category	FY07	FY08	FY09	FY10	FY11
Overall Satisfaction with the Proposal Process	69%	81%	84%	86%	84%
Clarity of the Call for Proposals	79%	91%	93%	93%	93%
Transparency of the Allocation Process	61%	64%	79%	86%	74%
Apparent Fairness of the Allocation Process	63%	73%	88%	86%	93%
Belief that the allocation process helps maximize scientific output	70%	78%	85%	79%	88%

The overall satisfaction rating dropped from 86% in FY10 to 84% in FY11. Given the small statistical sample for this data set, we believe the slight decrease may not be statistically significant. Of more concern is the significant decrease in the rating for the transparency of the allocation process, which dropped to 74% in FY11. Several free-form comments provided by survey respondents indicate that some effort may be necessary to further improve the transparency of the allocation process, perhaps by providing feedback on why proposals received the allocations they did.

The following sections of this document describe the survey methodology, summarize the survey results, and provide an initial analysis of the survey data. Results of this survey are shared with the LQCD Integrated Project Team for further analysis and follow-up action to identify areas for potential improvement and to implement corrective actions.

3 Survey Methodology

The survey, targeted toward users of the LQCD Computing Facility, was executed using the Zoomerang Survey Tool already in place at Fermilab. A total of 22 questions were posed, many of which included sub-questions specific to the three host laboratories. Answers to some of the questions had alphanumeric values. For subjective questions, we asked users to choose a satisfaction rating from 1 to 5, with 5 being "very satisfied" and 1 being "very unsatisfied." Graphical views of the data collected and tabulated are given in the section titled "Detailed Analysis." Since the number of users using the various facilities varies significantly, the statistical data for subjective ratings presented are normalized for each laboratory to remove any bias.

For the subjective ratings, rankings of 4 and 5 were used to infer satisfaction. Users were also asked to provide short comments in several categories. Comments are included in this report verbatim. These comments often reveal underlying issues and may be helpful to the site managers. If, for an area of the survey, more than one laboratory has a percentage rating below 80%, considered with associated negative comments, that particular area may be an area of concern. These items are bolded in the summary section.

It is important to put forth a word of caution regarding the survey. Since the total population of users is relatively small, outliers may affect the results of the survey significantly. A single unsatisfied customer may affect the satisfaction ranking for an area.

The target audience of the survey includes USQCD collaborators, Principle Investigators, faculty members, researchers, students and post-docs who submit jobs to the LQCD Computing Facility at any of the three sites, BNL, FNAL, and JLab.

The general requirements for survey are:
- The on-line survey should be easily accessible from various outside organizations for a limited time.
- The survey must be anonymous.

The new USQCD mailing list member@usqcd.org was used to invite all USQCD members to participate in the survey. The total membership of the list is approximately 170, including about 102 active users. A significant effort was made to assure that all active users of LQCD computing facilities are included in this list. The new mailing list replaces the older "sdac" mailing list.

4   Survey Results

A comprehensive set of questions for the FY2011 survey was defined by the project team in collaboration with the USQCD Executive Committee and the Scientific Program Committee. The questions were designed to identify the performance of the individual facilities, namely, the operation and management of the compute clusters at Fermilab (FNAL) and Thomas Jefferson Lab (JLab) and the QCDOC machine at Brookhaven National Laboratory (BNL). Although each site is managed by a dedicated site manager following host laboratory policies and procedures, it should be noted that the site managers at all three facilities work closely together to fulfill the collective goals of the project, and to share best practices.

A total of 22 questions were presented to the users. A total of 61 users completed the survey. A summary of the survey results for each category is given below:
1. General: Questions under this category are designed to collect demographic data of the user community.
   a. Among the total of 61 respondents, 36 users are employed by a university or a college, the rest are mostly employed by the participating laboratories.
   b. Twenty-one users are faculty members. Post docs make up a significant portion of the rest.
   c. 31 users submit jobs daily. 15 users submit jobs occasionally.
   d. Most active users submit 1 to 10 jobs per week.

e. Among respondents, 35 users submitted jobs at FNAL. JLab and BNL had 18 and 9 users.

2. User satisfaction: Overall satisfaction rating for FY11 survey is 87%. Ratings associated with these questions assessed the overall user satisfaction with the LQCD facility and related satisfaction levels related to documentation, user support, system reliability, responsiveness of site support, accessibility, and tools support. As with other years, overall satisfaction rating for the LQCD facility is determined by the ratings of 4 and 5 given by the participants. Ratings are normalized by the number of users associated with each laboratory. Detailed ratings are given below.

	BNL	FNAL	JLab
Overall satisfaction	89%	92%	73%
Documentation	80%	82%	80%
User support	78%	95%	93%
Reliability	89%	94%	86%
Responsiveness	78%	95%	86%
Ease of access	100%	78%	83%
Tools support	64%	97%	90%

3. Allocation process: Questions associated with the allocation process are designed to assess different aspects of the computing resource allocation process. They are associated with allocation process itself, clarity of call for proposals (CFP), allocation transparency fairness, and achieving the goal of maximizing the scientific output through allocation process.

	Rating
Allocation process	84%
CFP clarity	93%
Allocation transparency	74%
Allocation fairness	93%
Maximizing scientific output	88%

4. Helpdesk: All three LQCD facilities operate site-specific helpdesks. An extensive set of questions were posed to determine the usage and efficacy of the helpdesk at each site. After determining the awareness of the existence of the helpdesk, users were asked to rate their satisfaction regarding the last helpdesk request they submitted in terms of time to initial response and close out of the helpdesk ticket, and the level of satisfaction with the helpdesk request. This year, 100% of users knew how to ask for help for the first time since we started taking surveys. They were asked to consider the last problem report they submitted. The responses to the evaluation of the last problem report is given below:
    a. The normalized spread of the helpdesk request submission among BNL, FNAL, and JLab is 9%, 50%, and 41%
    b. Time to initial response: 47 out of 53 helpdesk requestors received initial response within 1 day.
    c. 65% of problems were solved using the initial response. About 94% of the problems were solved within 3 days. It is likely that a small fraction of problems may require modification of the system and may not be solved for months.

General comments: Users provided an extensive set of comments, both general and specific. They are included in the "survey data" section.

5   Survey Analysis

Items with normalized subjective rating less than 80% are considered issues requiring further analysis and attention. Using this criterion, the following conclusions may be drawn from our analysis of the survey data.

BNL: With an overall satisfaction rating of 89%, BNL did not fare quite as well as in previous years. BNL only had nine respondents and no actionable comments on the survey. With such limited input, it can be difficult to determine precisely why ratings were lower than in past years.   However, we suspect that some of the lower rating may be due to some unique circumstances that occurred in FY11. In particular, two key personnel left their positions for other jobs, which left the project understaffed for most of the fiscal year. Existing personnel had to be trained to be able to provide the same level of support, which may have affected user satisfaction ratings.

Going forward, BNL is now in a much better position to provide the support needed for the new BlueGene/Q. The existing staff has significant experience administering both the BlueGene/L and BlueGene/P computers that currently exist at BNL and that expertise directly relates to the operation of the new platform.

FNAL: Like other years, FNAL did not do well in the accessibility area due to Kerberos authentication issues. Although the general satisfaction rating (92%) for FNAL improved over the past year, we suspect the rating may have been higher were it not for unplanned power outage issues that affected FNAL operations, and ongoing challenges due to Kerberos.

- FNAL had two major unplanned outages during the year. During a period of very hot weather during the week of July 18, 2011, the cooling infrastructure in the GCC-C computer room was unable to sustain proper operating temperatures. Starting the morning of July 20, the JPsi and Ds clusters were powered off as directed by laboratory management. As this outage was unplanned, all "inflight" user jobs were terminated. Portions of both clusters (40% of JPsi, and 75% of Ds) were brought back online on July 22, and the rest of these clusters were brought online on July 25. Another weather-related outage occurred on July 28th at 1 AM, when a lighting strike dropped all power to the laboratory. Full operations were not restored until 11 AM on July 29.
- By laboratory policy, driven by the DOE mandates for strong authentication, all outside access via the internet to Fermilab LQCD systems requires the use of Kerberos authentication. Kerberos software is available on all major operating systems, but it is not widely used; further, site-specific configuration of the clients is necessary to access the LQCD systems. With respect to Kerberos configuration, the Fermilab Computing Sector only officially supports certain versions of Linux (Scientific Linux, based on Red Hat Enterprise Linux), of Apple OSX ("Leopard", "Snow Leopard", and "Lion"), and of Windows (XP and Windows 7). Since many users of our facilities do not use these specific operating system instances, the Fermilab LQCD staff provides additional

documentation and support as necessary. In many cases, such support requires many steps and direct interactions with the users to isolate and solve any configuration issues.

JLab: JLab's overall satisfaction rating (73%) was notably low this year due in part to the timing of the survey with respect to two significant events and a less significant one.

In any given year, there exists the potential for external events to impact facility operations and negatively affect user satisfaction, but this year external events had an especially large impact. JLab's overall satisfaction rating was notably low this year due to the timing of the survey with respect to two significant events and a less significant one. Most important was a cyber-security incident that forced the lab to disconnect from the Internet, leaving only email functional. For nearly two weeks, only onsite personnel could access the LQCD clusters. Fortunately, they were able to keep the system delivering towards USQCD allocations. Within one week, it became possible to add white-listed IP addresses to the systems, but it took a while before many of the users became aware of this and responded, since we had no web pages online. It was a full 5 weeks before offsite file transfers were possible, and then also only to white-listed sites.

All of this took place right at the start of the allocation year, which was accompanied by an upgrade to CentOS 5.5. As that system was being debugged, one of our three system administrators gave two weeks' notice, and by mid-July, in the middle of the cyber incident, JLab was understaffed with no ability to draw on computer center staff as they were consumed with completely re-building JLab's Windows infrastructure. The staff member could not be replaced until well after the survey was conducted.

To further compound the situation, just as JLab was starting to come out of the cyber incident fallout, a hurricane threatened the area and the lab decided to drop power to as much of the lab as possible as a safety measure.

Most of the survey responses were entered in a 3 week period one month later, thus at a time in which over half of the previous 3-4 months was pretty ragged. We suspect that the timing of these events, and their subsequent impact on operations, contributed to the significantly lower satisfaction ratings.

Scientific Program Committee: Overall transparency of the allocation process was rated at 74%.

The broad scientific goals of the USQCD collaboration are set forth by the Executive Committee in the most recent SciDAC and LQCD Project proposals.   The most important scientific goals are to deliver the lattice calculations most needed by the experimental programs of the Offices of HEP and NP. Each year, the Scientific Program Committee calls for proposals and recommends a program to accomplish these goals. It may also recommend evolution of the goals with the passage of time. Besides alignment with the goals of the collaboration, criteria for judging proposals include intellectual excellence, and scientific output. This process is supposed to be spelled out each year for the collaboration by the chairs of the Executive and Scientific Program Committees at the All-Hands' Meeting.

The supercomputing centers used by USQCD sometimes have additional criteria for their use. The Leadership Computing Centers at Argonne and Oak Ridge are designed for the largest computing jobs. Work that can be also accomplished on capacity clusters is strongly discouraged.

The priority between subfields is determined to first approximation by the importance of the experiments served. Innovation also plays a role, as do investigations contributing to the long-term health of the field, such as algorithm research, and formal investigations of quantum field theories.

6 Timeline and Significant Events

The request to participate in the survey was sent to the newly created USQCD mailing list on September 29, 2011, followed by multiple reminders. After the closing the survey on December 2, 2011, the survey data was retrieved in a tabulated format from the survey website.

To get a better perspective of the outcome of the survey results, it may be useful to examine a few significant events that occurred during period under consideration for the survey. These are described in the following table:

JLab	12/24/10	Cooling failure resulting in 4days of outage
JLab	6/30/11	Late June cyber penetration (Windows) forced the lab to disable external logins (3 DOE labs have been penetrated)
FNAL	7/19-25/11	A load-shed plan was put into place in GCC-C due to cooling issues of the CRAC units due to high temperature. Machines operated at a reduced level.
FNAL	7/28/11	The Fermilab campus sustained site-wide power loss due to storms. LQCD was restored after 8 hours.
JLab	8/26/11	Lost 3.5 days when the lab took the preventative measure of shutting down the chiller plant due to hurricane Irene.

The events listed above are related to lab operations and are beyond the control of the LQCD project office and site managers. Associated risks are recorded in the project contingency log. Associated risks were also identified in the LQCD Risk Management Plan and Risk Register documents.

Although it is possible that these events affected the User Satisfaction rating, the above events did not appear to affect other performance ratings of the project.

7 Survey Data

This section contains the data collected through the survey. In some cases, data is presented in tabular form. In other cases, data is shown in graphical form to provide a better picture of response distribution. For those survey questions that also allowed user to enter free-form comments, we have included those comments in this section verbatim. These comments are extremely useful in providing additional insight into areas in which we as a group, or individuals, are performing well. They also provide insight into potential areas for improvement.

7.1 Institution of employment

Employed by	Count
BNL	8
FNAL	4
JLab	7
University or college	36
Other	6

7.2 Employment level

Type	Count
Student	9
Postdoc – University	7
Faculty - University (tenured or tenure track)	21
Research Scientist - University (non-tenured)	2
Research Scientists – Laboratory	13
Lab computing professional	0
Other university staff	0

7.3 Usage of LQCD computers

Usage	Freq.
Daily	31
Weekly	15
Monthly	2
Occasionally	15

7.4 Job submission

Avg. Jobs (<)	Freq.
1	8
10	11
20	7
50	4
100	9
200	4

500	6
1000	8
5000	0

7.5 Facility usage

Facility	Users
BNL	9
FNAL	35
JLab	18
Other	3

7.6 Overall user satisfaction

Normalized General Satisfaction

	1	2	3	4	5
Satisfaction at BNL	0.0	0.0	11.1	33.3	55.6
Satisfaction at FNAL	4.0	0.0	4.0	32.0	60.0
Satisfactions at Jlab	6.7	3.3	16.7	23.3	50.0

(Level: Highest = 5)
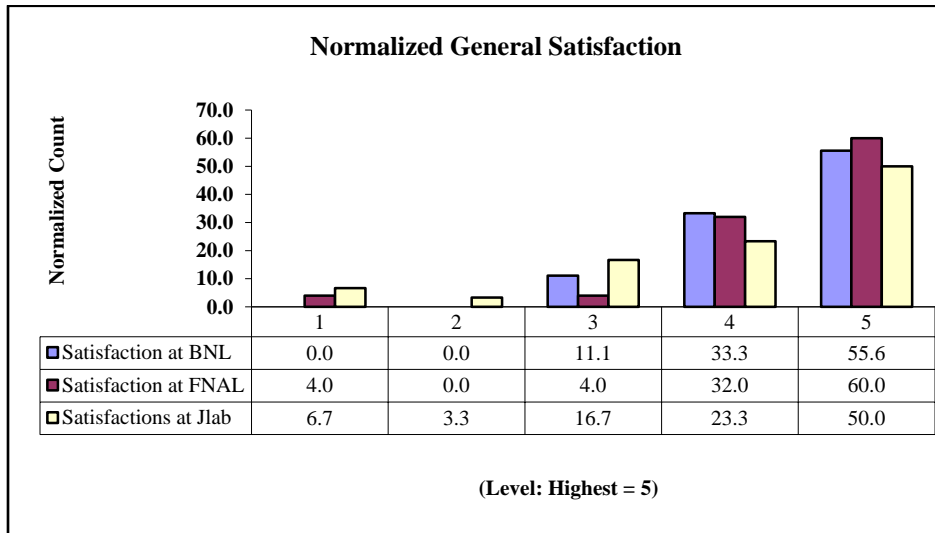
Comments:
BNL: None

FNAL:
- Staffs are very helpful in terms of file backup and binary compiling.
- Great support
- Support staff are extremely responsive
- Administrative team at FNAL is very responsive whenever issues arise.
- As far as I can tell, they do everything possible to provide smoothly running machines. However, extreme hot weather is also beyond their powers.
- Don Holmgren is an angel!

JLab:
- Very slow response from JLab administrators. FNAL is much better at responding to your requests and queries.
- The handling of LQCD during the security breach was not very transparent or well thought out. Not being able to move files for a month or more was a problem
- Accessing JLab and transferring data to and from this site became very much easier when a colleague explained to me how to set up ssh port forwarding, something I wish I had heard about years ago.
- I don't use JLab computers.
- It takes too much time to wait for the que submission. Our job is sitting on the PBS system too long.
- Overall, the site has functioned well. The down time due to the security incident was annoying, but the site had the computers available in a tolerable time frame.
- Crucial info only announced to JLab email address which users don't necessarily check (or don't want to forward the 1000000000 useless emails to their regular email address, hence the 1-2 crucial email gets lost).
- "The sys administration is seriously too slow at JLab. The requests from a user side takes way too long to address.
- Also, apparently the jobs submitted at JLab are always in the queue and somehow the people working in JLab get much more priority. Not trying to blame out of frustration here. I seriously feel this bias. I would prefer Fermilab clusters way over the JLab one."

7.7 Documentation

Satisfaction with Documentation

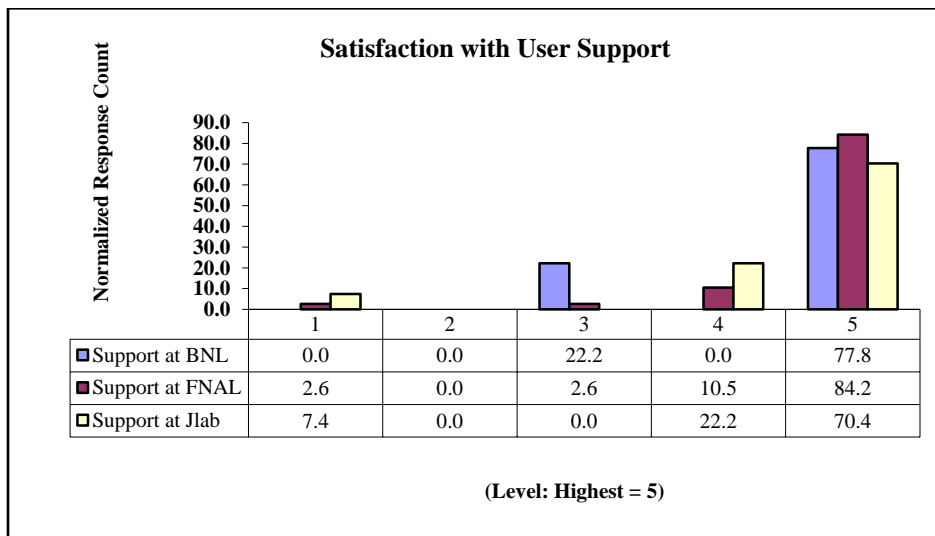|	1	2	3	4	5
Documents at BNL	0.0	0.0	20.0	20.0	60.0
Documents at FNAL	5.3	2.6	10.5	21.1	60.5
Documents at Jlab	3.3	0.0	16.7	36.7	43.3

(Level: Highest = 5)
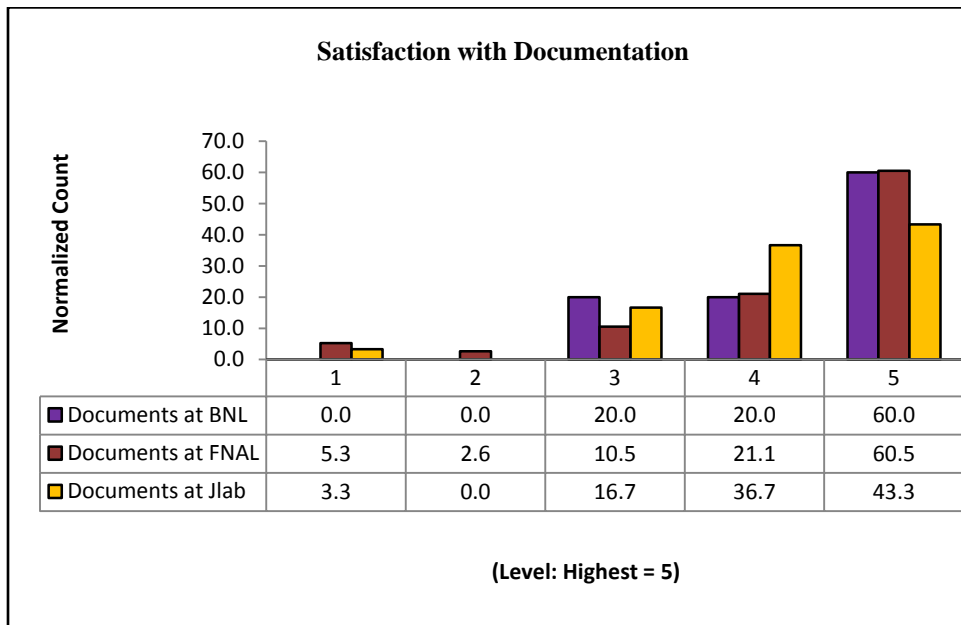
Comments:
BNL: None

FNAL:
- Some documents are out dated some are not, while the machines are updated. Because of this, there are some conflicts between documents as well. This makes very confusing.
- Some webpages are/were outdated. However if pointed out they update immediately.
- Don Holmgren is an angel!
- Some documentations are either missing, hard to find, not up to date, or at times even misleading.
- It was impossible to get started without extensive help from consultants. Online material was either minimal or not updated to current systems.

JLab
- Ability to see graphically usage by node, user, project is extremely valuable. Need to update some of the software documentation, but this is complicated by the dynamic nature of the software with the addition of new elements.
- At least some sections of the Web site (e.g., SciDAC libraries) remained non-functional from July until September.
- It is very difficult to find anything useful.

7.8 User support

Satisfaction with User Support

Normalized Response Count

	1	2	3	4	5
Support at BNL	0.0	0.0	22.2	0.0	77.8
Support at FNAL	2.6	0.0	2.6	10.5	84.2
Support at Jlab	7.4	0.0	0.0	22.2	70.4

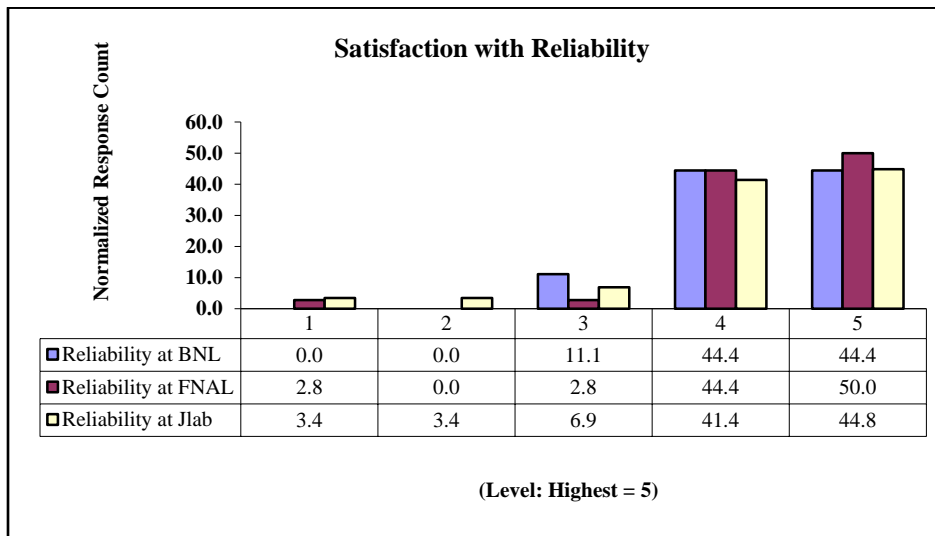**(Level: Highest = 5)**

Comments:

BNL: None

FNAL:
- In my experience, the user support has been and continues to be excellent.
- see previous comment
- Highly responsive and extremely knowledgeable. They always take the time to investigate a problem or ask/warn before rebooting machines.
- Don Holmgren is an angel!

JLab:
- Response both from HPC group, and in general user support of lattice activities, very good.
- We receive a response within 24 hours. Hence this is working well.
- Support is for clusters, as well as disk, tape, OS issues, etc. Both disk and tape, in particular, have improved significantly since even a year ago.

7.9 Reliability

Satisfaction with Reliability

	1	2	3	4	5
Reliability at BNL	0.0	0.0	11.1	44.4	44.4
Reliability at FNAL	2.8	0.0	2.8	44.4	50.0
Reliability at Jlab	3.4	3.4	6.9	41.4	44.8

(Level: Highest = 5)

Comments:
BNL: None

FNAL:
- The clusters run well and when every there is an issue the staff is very helpful about finding a solution quickly.
- Except for the hot weather jpsi and kaon are running without major interruptions. Great job! - I didn't run on Ds. So the hardware trouble with the head node didn't affect me.
- Don Holmgren is an angel!

JLab:

- Cyber "Event" over the summer affected uptime, but that is the main issue.
- I wasn't able to access JLab for weeks over the summer, fortunately not at a time I was running anything. The only announcement I received about qcdi being made directly accessible from off-site came when that arrangement was ended.
- It happens sometimes that the job fails in disc access. This is the only problem with reliability.
- The gpu cluster is as reliable as expected for the system - pretty good, but can get bad nodes. Intel cluster is reliable. 7n, however, is problematic for large IB jobs. It's showing its age as expected.

7.10 Responsiveness

Satisfaction with Site Response

Normalized Response Count

	1	2	3	4	5
■ Response at BNL	11.1	0.0	11.1	11.1	66.7
■ Response at FNAL	2.5	2.5	0.0	12.5	82.5
□ Response at Jlab	7.1	3.6	3.6	17.9	67.9

(Level: Highest = 5)
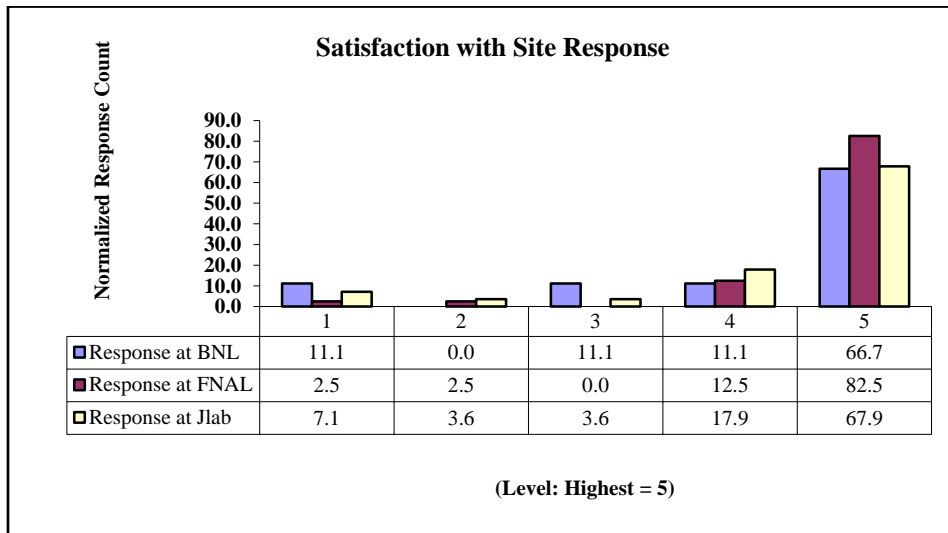
Comments:
BNL: None

FNAL:

- I always get a response and resolution to my questions/problems quickly.
- The FNAL staff is always very prompt and effective in dealing with problems that arise.
- In my admittedly limited experience they're the best I've ever seen.
- Fast - even on weekends.
- Don Holmgren is an angel!

JLab:

- They are very responsible for their jobs.
- Problem tickets response is reliable.

7.11 Ease of access

Ease of Access

	1	2	3	4	5
Access at BNL	0.0	0.0	0.0	20.0	80.0
Access at FNAL	2.4	0.0	19.5	9.8	68.3
Access at Jlab	6.7	0.0	10.0	36.7	46.7

(Level: Highest = 5)
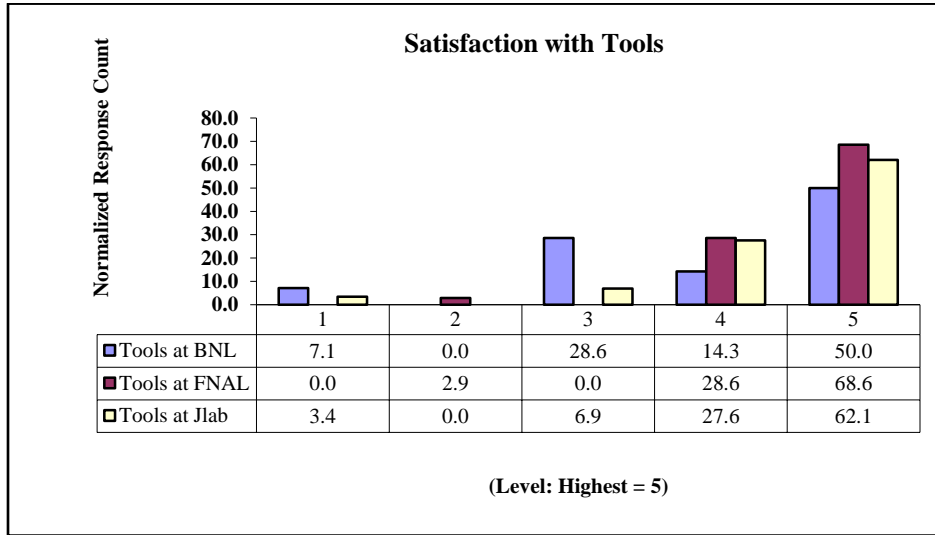
Normalized Response Count
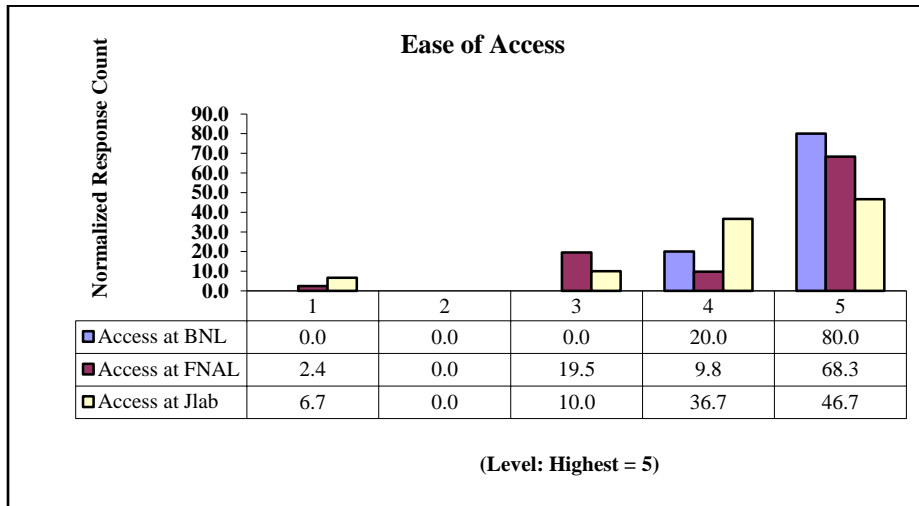
Comments:
BNL: None

FNAL:
- Though am not a regular user, I do note that the Kerberos access is very convenient.
- I still haven't been able to set up Kerberos on my laptop; I need to go through another server where things work.
- Kerberos bad.
- Once setup Kerberos is a tame animal.
- Don Holmgren is an angel!

JLab:
- Cyber event the main impediment to access this year.
- Accessing JLab and transferring data to and from this site became very much easier when a colleague explained to me how to set up ssh port forwarding, something I wish I had heard about years ago.
- Difficult to get to after the security incident.
- There are no separate tokens. Access is straightforward,
- Can't create files on main login site, restricted shell, from lqcd front end in and out bound scp/ssh limited.

7.12   Satisfaction with tools

Satisfaction with Tools

	1	2	3	4	5
▢ Tools at BNL	7.1	0.0	28.6	14.3	50.0
▢ Tools at FNAL	0.0	2.9	0.0	28.6	68.6
▢ Tools at Jlab	3.4	0.0	6.9	27.6	62.1

Normalized Response Count

(Level: Highest = 5)

Comments:
BNL: None

FNAL:
- The new lquota is available on all head nodes. That made it even easier to check.
- Don Holmgren is an angel!
- It was hard to manage my allocation since the account status was only updated once a week. It is also inconvenient that I had to log into a different machine to check this status.

JLab:
- As noted above, the graphical way of interrogating and displaying status of queues, allocations, etc is very clear and helpful.
- Very useful tools are the "srm" utilities as well as "jobstat".

7.13   Knowledge of how to ask help

Knows	Count
Y	61
N	0

7.14   Help request by facilities

Help asked	BNL	FNAL	JLab
Y	5	27	22

7.15 Time to initial response

Days	Freq.
<= 1 day	47
2-3 days	6
4-5 days	0
>5 days	0

7.16 Closing tickets at initial response

Closed?	Count
Y	43
N	9

7.17 Time needed to resolve a ticket

Days	Freq.
<= 1 day	35
2-3 days	16
4-5 days	1
>5 days	2

7.18 Feedback on helpdesk

Comments

- Help request more as a general user, albeit lattice-related request, rather than specific to LQCD cluster.
- JLab help desk should be improved a lot. From my experience FNAL help desk is way better.
- Just to clarify the above responses, I never received a direct response, but the problem I pointed out was resolved quickly (a misbehaving node was taken offline).
- I've always found the helpdesk to be well run and responsive.
- The answers to our inquiry are sometimes not to the point of the inquiry. Hence, we need to ask the same question again.
- Things work fine. No changes needed.
- nothing. FNAL admins are very helpful and responsive
- (1) Transferring many large files (2) unstable performance (for communication and/or I/O) (3) adjusting disk quota and instruction for appropriate use of storage (local vs global)
- We need a Don Holmgren at every site!
- None

7.19 Allocation process and clarity of CFP

Allocation Process and CFP Clarity

	1	2	3	4	5
Allocation Process	0.0	0.0	15.9	43.2	40.9
CFP Clarity	0.0	0.0	7.0	44.2	48.8

(Level: Highest = 5)
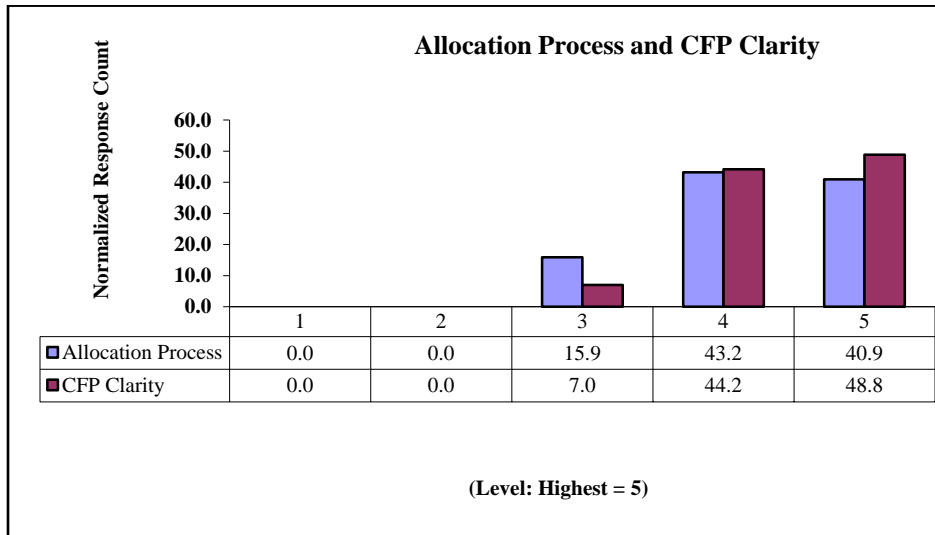
Comments:

Allocation
- Allocations do not seem to be based on measured scientific output.
- It would be nice to have the program committee give a brief review (like other supercomputer facilities) why certain proposals are preferred and some aren't. It would really help future proposals that can benefit the USQCD community as whole if they know how the big allocations are decided.
- we can always use more time
- The allocation process should be conducted more often than once a year.

Clarity of CFP
- It would be useful to have a clear statement of the scientific criteria under which the proposals are to be evaluated, and of the scientific goals of USQCD.
- It is getting too long, because each new development makes it longer. I worry that subtle, but important, changes could go unnoticed.
- While I'm not quite sure how to remedy this, but the CFP is too long. I would gather that the majority of those receiving the CFP are familiar with it, and I think whatever is new to a given year should be very much the first part of the email, including the computer resources available and conversion factors. I find myself often hunting the email for relevant information.

7.20 Preparation time for CFP

Rating	Time adequate
Yes	41
No	1
N/A	19

7.21 Allocation Transparency, Fairness and Maximizing Scientific Output

Allocation Process

	1	2	3	4	5
■ Allocation transperancy	4.7	4.7	16.3	27.9	46.5
□ Allocation fairness	0.0	2.4	4.8	40.5	52.4
■ Maximizing scientific output	0.0	2.3	9.3	44.2	44.2

Normalized Response Count

(Level: Highest = 5)
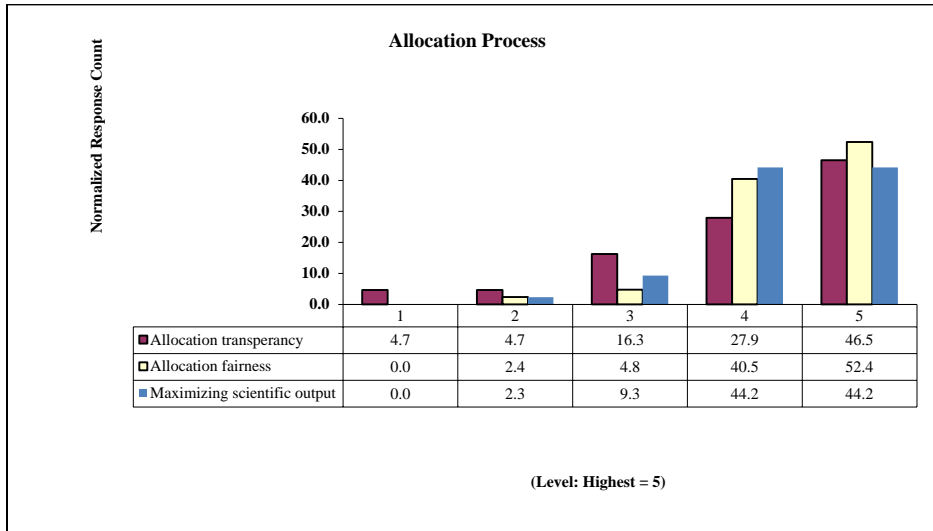
7.22 General comments

- It takes a while to have an account set up at Fermilab. I wonder if the application process can be streamlined.
- JLAB: It would be very helpful to make some nodes reserved for the code tests.
- It is not clear how decisions on allocations are made and why certain resources such as INCITE and ANL is off limits to users that are not connected to certain large collaborations. In the past there have been cases where certain users consumed abnormally large amounts of resources that were not originally part of the CFP. These resources should be distributed to general users in a transparent and fair manner. This did not happen in the past and I do not see the mechanism for happening in the future.
- As a whole USQCD collaboration, it's not currently clear how to decide the priority among each sub-field and each project. I personally think current allocations are sensible and fine, but this question seems to be repeatedly asked.
- Don Holmgren is an angel and he deserves a giganormous prize from the Executive Committee!
- Documentations can be enormously improved. Especially in setting up Kerberos accounts for off-site users, and information about the compilers.
- It'd be greatly useful if the FNAL site added the Intel fortran (ifort) compiler to their software.

8   Survey Questions

This section contains the contents of the survey that was presented to the user community.

2011 Lattice QCD User Satisfaction Survey

Page 1 - Heading
Objective: The LQCD Computing Facility is a distributed facility with dedicated clusters at FNAL and JLab, GPU-accelerated clusters at JLab, and the QCDOC machine at BNL. Some of the questions are site specific and others are generic. This survey covers all three sites, namely, BNL (please note that QCDOC was decommissioned at the end of August 2011), FNAL, and JLab. The survey aims at capturing feedback for all three components of the LQCD facility. Although it may not directly impact you, some questions related to Cyber Security, Storage, and Network issues are asked. The time period you should consider is the last 12 month period.

Our objective is to know how we are doing. Your honest opinions really count! Please take few minutes to fill out the following on-line survey by November 1, 2011.

Page 1 - Question 1 - Choice - One Answer (Bullets)
Who is your employer?

☐ BNL
☐ FNAL
☐ JLab
☐ University or college
☐ Other

Page 1 - Question 2 - Choice - One Answer (Bullets)
What is your job classification?

☐ Grad student - University
☐ Postdoc - University
☐ Postdoc - Laboratory
☐ Faculty - University (tenured or tenure track)
☐ Research Scientist - University (non-tenured)
☐ Research Scientists - Laboratory
☐ Other, please specify

Page 1 - Question 3 - Choice - Multiple Answers (Bullets)
How often do you use any of the LQCD computers?

☐ Daily
☐ Weekly

☐   Monthly
☐   Occasionally

Page 1 - Question 4 - Open Ended - One Line

During periods when you are using the LQCD facilities, please enter the approximate number of jobs you submit on average in a given week.

Page 1 - Question 5 - Choice - Multiple Answers (Bullets)

Which LQCD computers do you use for most of your work?

☐   QCDOC
☐   JLab Clusters
☐   FNAL Clusters
☐   Other, please specify

Page 2 - Heading

User Satisfaction: In this section, we ask you questions about your satisfaction levels in different categories.

Page 2 - Question 6 - Rating Scale - Matrix

If you have used LQCD computers in the past year, please rank your overall satisfaction level of service for the three laboratories (1 — very dissatisfied to 5 — very satisfied; N/A — site not used).

	1	2	3	4	5	N/A
BNL	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment						
FNAL	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment						
JLab	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment						

Page 2 - Question 7 - Rating Scale - Matrix

Please rank your level of satisfaction with documentation including web pages, status reports etc. over the last year (1 — very dissatisfied to 5 — very satisfied; N/A — site not used).

	1	2	3	4	5	N/A
BNL	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment						
FNAL	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment						
JLab	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment						

Page 2 - Question 8 - Rating Scale - Matrix
Please rank your level of satisfaction with the user support at each site (1 — very dissatisfied to 5 — very satisfied; N/A — site not used).

	1	2	3	4	5	N/A
BNL	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment
FNAL	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment
JLab	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment

Page 2 - Question 9 - Rating Scale - Matrix
Please rank your level of satisfaction with the reliability (e.g., uptime, job failure rates) at each site (1 — very dissatisfied to 5 — very satisfied; N/A — site not used).

	1	2	3	4	5	N/A
BNL	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment
FNAL	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment
JLab	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment

Page 2 - Question 10 - Rating Scale - Matrix
Please rank your level of satisfaction with the responsiveness of the site staff at each site (1 — very dissatisfied to 5 — very satisfied; N/A — site not used).

	1	2	3	4	5	N/A
BNL	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment
FNAL	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment
JLab	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
☐ Additional Comment

Page 2 - Question 11 - Rating Scale - Matrix
Please rank your level of satisfaction with the ease of access to the LQCD computers at each site (1 — very dissatisfied to 5 — very satisfied; N/A — site not used).

	1	2	3	4	5	N/A
BNL	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
FNAL	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
JLab	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A

Page 2 - Question 12 - Rating Scale - Matrix
Please rate the effectiveness of other tools (e. g., command line tools to check jobs, quotas, allocations): at each site (1 — very dissatisfied to 5 — very satisfied; N/A — site not used).

	1	2	3	4	5	N/A
BNL	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A

☐ Additional Comment
FNAL ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A
☐ Additional Comment
JLab ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ N/A
☐ Additional Comment

Page 2 - Question 13 - Choice - One Answer (Bullets)
Do you know how to request help?

☐ Yes
☐ No

Page 3 - Heading
Help desk evaluation: Based on your last help desk request, please answer the following questions.

Page 3 - Question 14 - Choice - One Answer (Bullets)
Which site were you using when you needed help?

☐ FNAL
☐ BNL
☐ JLab
☐ None

Page 3 - Question 15 - Choice - One Answer (Bullets)
How long it took to get an initial response in terms of working days?

☐ <= 1 day
☐ 2-3 days
☐ 4-5 days
☐ >5 days

Page 3 - Question 16 - Choice - One Answer (Bullets)
Did the initial response solve your problem?

☐ Yes
☐ No

Page 3 - Question 17 - Choice - One Answer (Bullets)
How long did it take to solve your problem in terms of working days?

☐ <= 1 day
☐ 2-3 days
☐ 4-5 days
☐ >5 days

Page 3 - Question 18 - Open Ended - Comments Box
Regarding helpdesk, what needs should be better addressed? Please specify.

Page 3 - Heading
Call for Proposals (CFP) and project allocations process evaluation: Please let us know your feedback.

Page 3 - Question 19 - Rating Scale - Matrix
Please rate your overall satisfaction with the allocation process and clarity of Call for Proposals (CFP) (1 — very dissatisfied to 5 — very satisfied; N/A — not applicable).

	1	2	3	4	5	N/A
Allocation	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
CFP	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A

Page 3 - Question 20 - Choice - One Answer (Bullets)
Were you given enough time to prepare your proposal?

☐ Yes
☐ No
☐ N/A

Page 3 - Question 21 - Rating Scale - Matrix
For the project allocation process, please rank the transparency (in SPC deliberations, All Hands' Meeting, e-mail communications from the SPC), fairness (all proposals are treated fairly, not just your own), and maximization of the scientific output (using proposal process) (1 — very dissatisfied to 5 — very satisfied; N/A — not applicable).

	1	2	3	4	5	N/A
Transparency	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
Fairness	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A
Scientific output	☐ 1	☐ 2	☐ 3	☐ 4	☐ 5	☐ N/A

Page 3 - Question 22 - Open Ended - Comments Box
General Comments: Please share with us any additional comments or suggestions regarding the operation and use of the LQCD computing facilities.
Thank You Page
Thank you very much for completing the survey. If you took the survey anytime during the past three years, please accept our appreciations. If you would like to get a copy of previous survey reports or you have any other questions, please contact Bakul Banerjee (bakulb@fnal.gov). <http://www.usqcd.org/>