



ARCHER SP Service Quarterly Report

Quarter 3 2014



Document Information and Version History

| | |
|--------------------|------------------------------------------------|
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|----------------|-------------|----------------------------------|-----------------------------------------|
| 0.1 | 2014-10-03 | Initial Draft | Liz Sim, Andy Turner, Mike Brown |
| 0.2 | 2014-10-14 | Updates and additions | Liz Sim |
| 0.3 | 2014-10-15 | Review | Alan Simpson |
| 1.0 | 2014-10-16 | Final version for EPSRC | Liz Sim, Alan Simpson |

1. Service Highlights

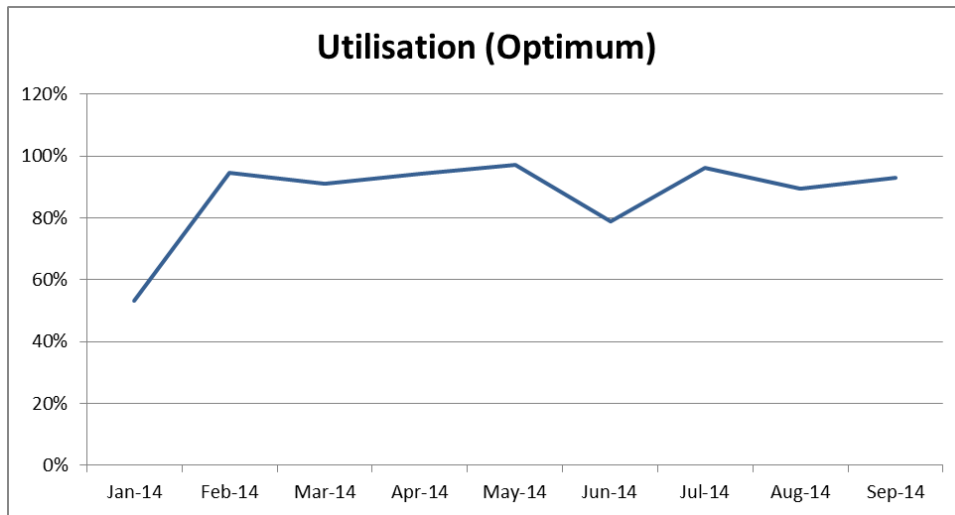
This is the report for the ARCHER SP Service for the Reporting Periods:

July 2014, August 2014 and September 2014.

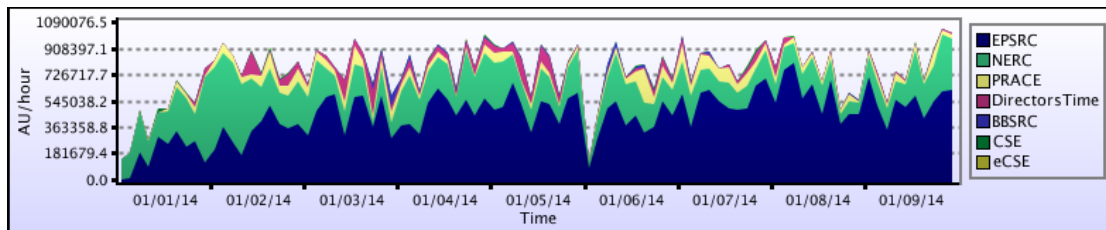
- Utilisation on the system during 14Q3 was 74%, compared to 72% in 14Q2.
- All service levels were met during the period.
- Reporting in SAFE was enhanced to enable analysis of project spend profiles versus their allocations for the period.
- Additional SAFE-generated graphs have been developed to meet the requests of SMB/SAC. These are available in Section 2 of the report.
- User documentation was enhanced with the addition of You-Tube videos for common SAFE tasks.
- The system configuration was revised to include a debug queue for short jobs.
- System reservations are now available via the SAFE for all users. Industrial users have been making good use of this facility.
- Work started in 14Q3 on the development of public facing web pages to help demonstrate the impact of ARCHER. The new pages will be published online during the next reporting period.
- Planning for ARCHER Phase2 commenced in September. Initial communications have been issued to all users. The site is now ready for the arrival of the new equipment in early November.

2. Utilisation

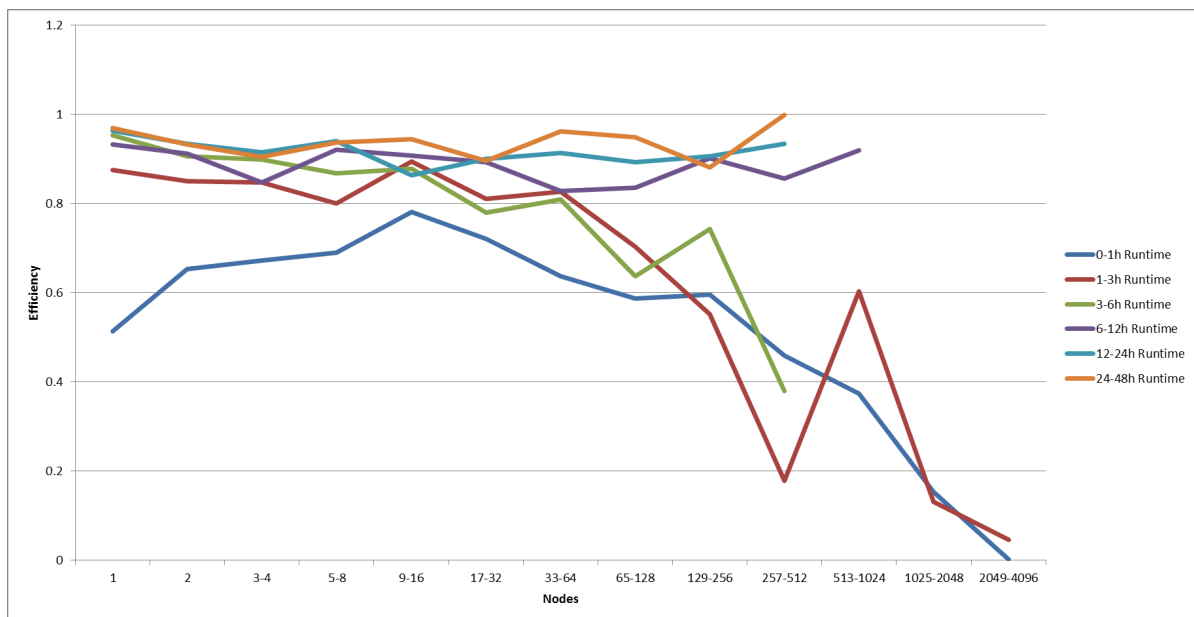
Utilisation over the quarter was 74.3% (or 92.9% of optimum).



The utilisation by funding body can be seen below.



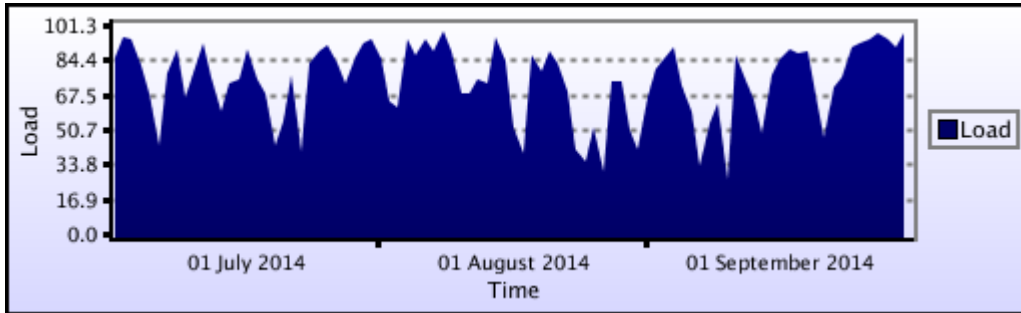
Job Efficiency



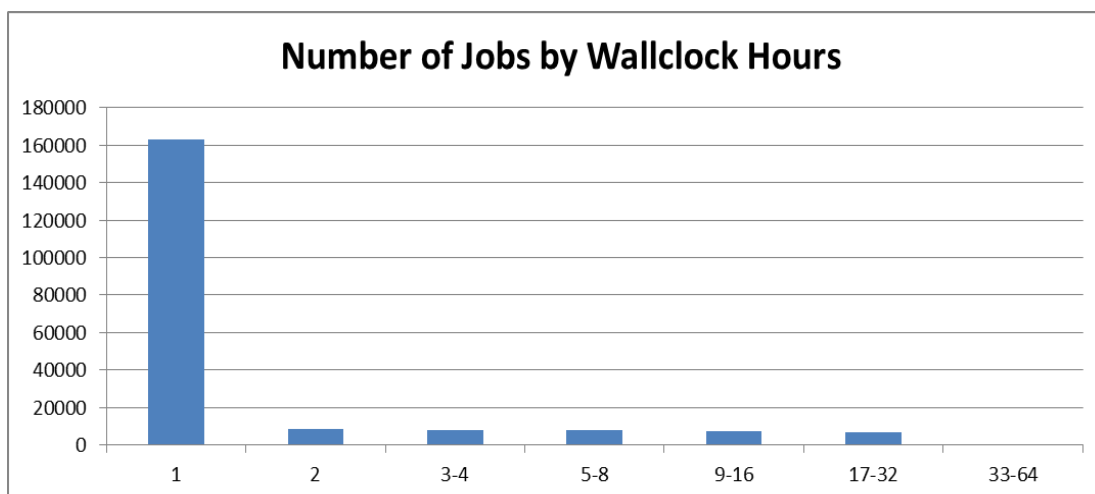
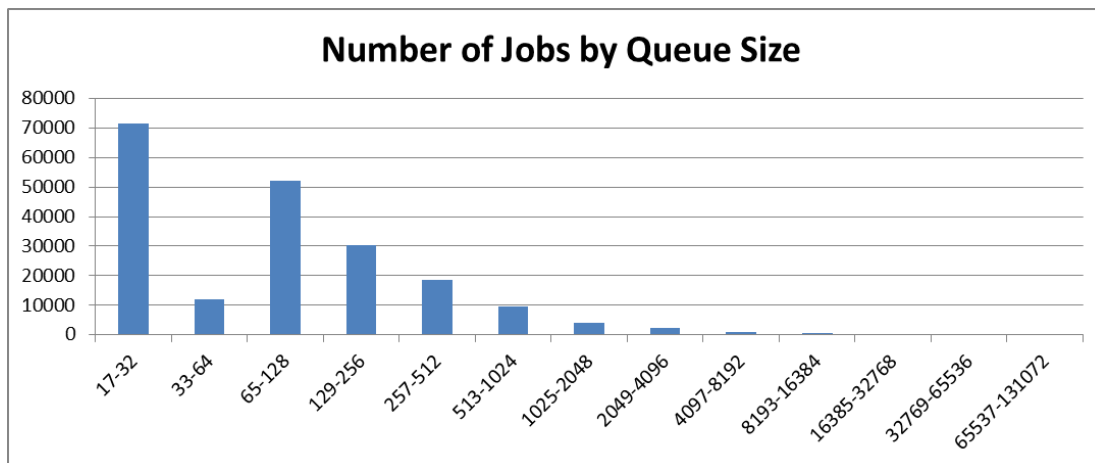
The efficiency index in the above graph is the ratio of job execution time to job wait time. As expected, running very large, but very short jobs is a highly inefficient use of the service.

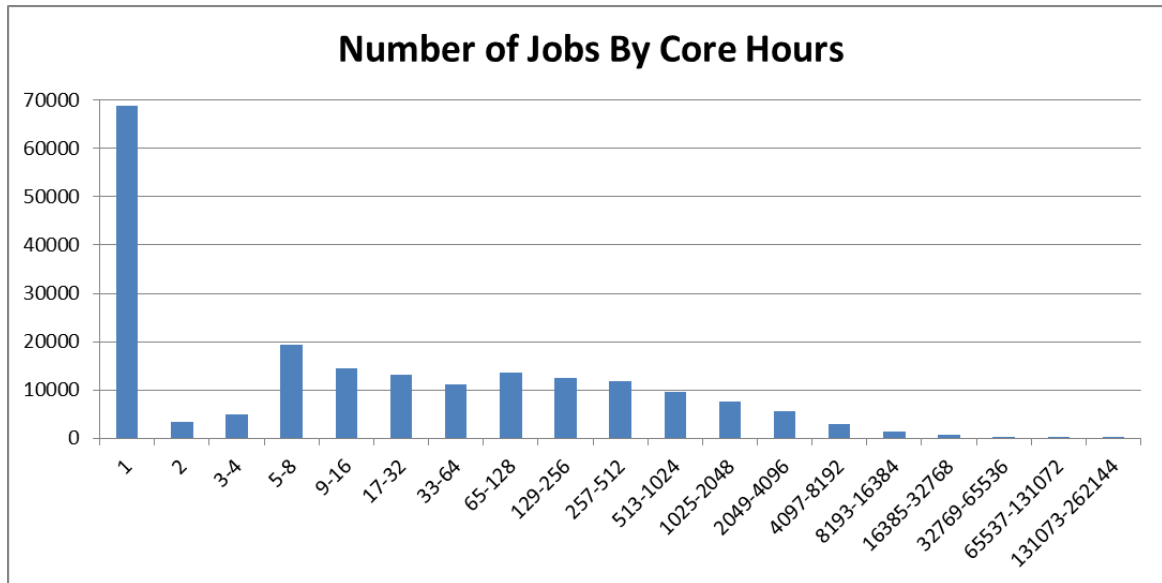
Additional Usage Graphs

The following charts have been added at the request of the ARCHER SMB. The percentage of utilisation on the system over the previous quarter is below:



The following charts provide different views of the distribution of job sizes on ARCHER.





3. Contractual Performance Report

This is the contractual performance report for the ARCHER SP Service for the Reporting Periods: April 2014, May 2014 and June 2014.

Service Points

The Service Levels and Service Points for the SP service are defined as below in Schedule 2.2.

- **2.6.2 - Phone Response (PR):** 90% of incoming telephone calls answered personally within 2 minutes for any Service Period. *Service Threshold: 85.0%; Operating Service Level: 90.0%.*
- **2.6.3 - Query Closure (QC):** 97% of all administrative queries, problem reports and non in-depth queries shall be successfully resolved within 2 working days. *Service Threshold: 94.0%; Operating Service Level: 97.0%.*
- **2.6.4 - New User Registration (UR):** Process New User Registrations within 1 working day.

Definitions:

Operating Service Level: *The minimum level of performance for a Service Level which is required by the Authority if the Contractor is to avoid the need to account to the Authority for Service Credits.*

Service Threshold: *This term is not defined in the contract. Our interpretation is that it refers to the minimum allowed service level. Below this threshold, the Contractor is in breach of contract.*

Non In-Depth: *This term is not defined in the contract. Our interpretation is that it refers to Basic queries which are handled by the SP Service. This includes all Admin queries (e.g. requests for Disk Quota, Adjustments to Allocations, Creation of Projects) and Technical Queries (Batch script questions, high level technical 'How do I?' requests). Queries requiring detailed technical and/or scientific analysis (debugging, software package installations, code porting) are referred to the CSE Team as In-Depth queries.*

Change Request: *This term is not defined in the contract. There are times when SP receive requests which may require changes to be deployed on ARCHER. These requests may come from the users, the CSE team or Cray. Examples may include the deployment of new OS patches, the deployment Cray bug fixes, or the addition of new systems software. Such changes are subject to Change Control and may*

have to wait for a Maintenance Session. The nature of such requests means that they cannot be completed in 2 working days.

In the previous Service Quarter the Service Points can be summarised as follows:

| Period | Jul 14 | | Aug 14 | | Sep 14 | | 14Q3 |
|--------------|---------------|----------------|---------------|----------------|---------------|----------------|----------------|
| Metric | Service Level | Service Points | Service Level | Service Points | Service Level | Service Points | Service Points |
| 2.6.2 - PR | 100.0% | -5 | 100.0% | -5 | 100.0% | -5 | -15 |
| 2.6.3 - QC | 97.8% | 0 | 98.9% | -1 | 99.0% | -2 | -3 |
| 2.6.4 - UR | 1 WD | 0 | 1 WD | 0 | 1 WD | 0 | 0 |
| Total | | -5 | | -6 | | -7 | -18 |

The details of the above can be found in Section 3 of this report.

Service Failures

There were no service failures in 14Q3.

Service Credits

The total Service Credit applicable for each Service Quarter is calculated in the following way:

$$SC = \text{[REDACTED]}$$

Where:

"**Applicable Charge**" = the relevant Annual Maintenance Charge divided by four (4) (to form the Maintenance Charge relevant for the Service Periods being assessed)

"**SC**" = Service Credit

"**TSP**" = Total Service Points for the Service Quarter

As the Total Service Points are negative (-18), no Service Credits apply in 14Q3.

4. Detailed Service Level Breakdown

Phone Response

| | Jul 14 | Aug 14 | Sep 14 | 14Q3 |
|----------------------|---------------|---------------|---------------|---------------|
| Phone Calls Received | 50 | 34 | 38 | 122 |
| Answered 2 Minutes | 50 | 34 | 38 | 122 |
| Service Level | 100.0% | 100.0% | 100.0% | 100.0% |

The volume of telephone calls remained low in 14Q3. Of the 122 calls received in total above, only 28 were genuine ARCHER user calls that resulted in queries.

Query Closure

| | Jul 14 | Aug 14 | Sep 14 | 14Q3 |
|-------------------------------|--------------|--------------|--------------|--------------------|
| Self-Service Admin | 187 | 192 | 663 | 1042 |
| Admin | 117 | 124 | 119 | 360 |
| Technical | 54 | 32 | 26 | 112 |
| <i>Total Queries</i> | <i>358</i> | <i>348</i> | <i>808</i> | <i>1514</i> |
| <i>Total Closed in 2 Days</i> | <i>350</i> | <i>344</i> | <i>800</i> | <i>1494</i> |
| Service Level | 97.8% | 98.9% | 99.0% | 98.7% |

The peak in Self-Service Admin queries in September can be attributed to the mapping of a large number of user accounts to the RDF filesystems.

In addition to the Admin and Technical queries, the following Change Requests were resolved in 14Q3.

| | Jul 14 | Aug 14 | Sep 14 | 14Q3 |
|-----------------|--------|--------|--------|----------|
| Change Requests | 1 | 2 | 1 | 4 |

User Registration

| | Jul 14 | Aug 14 | Sep 14 | 14Q3 |
|-------------------------------------|-------------|-------------|-------------|-------------|
| No of Requests | 65 | 56 | 77 | 198 |
| Closed in One Working Day | 65 | 56 | 77 | 198 |
| Average Closure Time (Hrs) | 0.84 | 0.68 | 0.91 | 0.81 |
| Average Closure Time (Working Days) | 0.09 | 0.07 | 0.09 | 0.08 |
| Service Level | 1 WD | 1 WD | 1 WD | 1 WD |

To avoid double counting, these requests are not included in the above metrics for "Admin and Technical" Query Closure.

5. Additional Metrics

Target Response Times

The following metrics are also defined in Schedule 2.2, but have no Service Points associated.

| Target Response Times | |
|-----------------------|--------------------------------------------------------------------------------------------------------------------|
| 1 | During core time, an initial response to the user acknowledging receipt of the query |
| 2 | A Tracking Identifier within 5 minutes of receiving the query |
| 3 | During Core Time, 90% of incoming telephone calls should be answered personally (not by computer) within 2 minutes |
| 4 | During UK office hours, all non telephone communications shall be acknowledged within 1 Hour |

1 – Initial Response

This is sent automatically when the user raises a query to the address helpdesk@archer.ac.uk. Users may choose not to receive such emails by mailing support@archer.ac.uk.

2 – Tracking Identifier

This is sent automatically when the user raises a query to the address helpdesk@archer.ac.uk. Users may choose not to receive such emails by mailing support@archer.ac.uk. The tracking identifier is set in the SAFE regardless which option the user selects.

3 – Incoming Calls

These are covered in the previous section of the report. Service Points apply.

4 - Query Acknowledgement

Acknowledgment of the query is defined as when the Helpdesk assigns the new incoming query to the relevant Service Provider. This should happen within 1 working hour of the query arriving at the Helpdesk. The Helpdesk processed the following number of incoming queries during the Service Quarter:

| | Jul 14 | Aug 14 | Sep 14 | 14Q3 |
|--------------------------|--------|--------|--------|-------|
| CRAY | 13 | 3 | 8 | 24 |
| ARCHER_CSE | 247 | 64 | 73 | 384 |
| ARCHER_SP | 604 | 566 | 1124 | 2294 |
| Total Queries Assigned | 864 | 633 | 1205 | 2702 |
| Total Assigned in 1 Hour | 864 | 633 | 1204 | 2701 |
| Service Level | 100.0% | 100.0% | 99.9% | 99.9% |

Maintenance

SP is allowed to book a maximum of two maintenance occasions in any 28-day period, and these shall last no longer than four hours; these are defined as Permitted Maintenance. Such Maintenance Periods are recorded in the Maintenance Schedule. A 6-month forward plan of maintenance has been agreed with the Authority.

If greater than 4 hours downtime is required for maintenance, 20 days prior approval is required from the Authority.

Where possible, SP will perform maintenance on an 'At-risk' basis, thus maximising the Availability of the Service. The following planned maintenance took place in the Service Quarter.

| Date | Start | End | Duration | Type | Notes | Reason |
|---------------------------|-------|------|-------------|-----------|-----------------------------|-----------------------|
| 23rd July 2014 | 0900 | 1624 | 7hrs24mins | Permitted | EPSRC Approved 0900-1700 | Network Upgrade |
| 27 th Aug 2014 | 0900 | 1700 | 8hrs | Permitted | EPSRC Approved 0900-1700 | DR and SMW upgrade |
| 10 th Sep 2014 | 0800 | 1951 | 11hrs51mins | Permitted | EPSRC Approved 0800-2000 | Statutory HV test |