



# ARCHER SP Service Quarterly Report

Quarter 2 2014

11 July 2014



## Document Information and Version History

<b>Version:</b>	1.0
<b>Status</b>	Final
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<b>Version</b>	<b>Date</b>	<b>Comments, Changes, Status</b>	<b>Authors, contributors, reviewers</b>
0.1	2014-07-02	Initial Draft	Liz Sim, Andy Turner, Mike Brown
0.2	2014-07-08	Initial Edits	Alan Simpson
0.3	2014-07-11	Final review and edits, executive summary	Liz Sim, Alan Simpson
1.0	2014-07-11	Final version for EPSRC	Liz Sim, Alan Simpson

## 1. Service Highlights

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

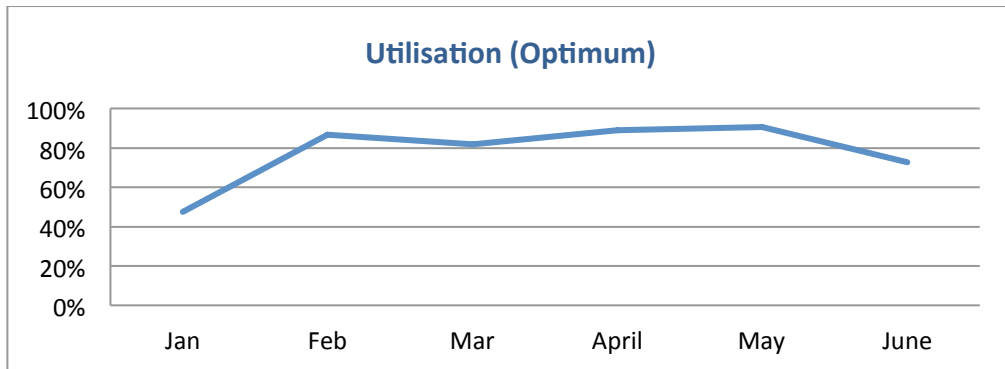
- Utilisation on the system during 14Q2 was 67%, compared to 57% in 14Q1.
- There are now just under 1300 user accounts setup on ARCHER.
- In the reporting period, 20 new EPSRC projects started (3 Grants, 7 RAP and 10 Instant Access). In addition to this, 15 PRACE projects, and 5 Directors Time projects were created.
- Despite a high volume of support queries, all service levels were met.
- Maintenance was kept to a minimum during the period, and where possible at-risk sessions were used to deploy SP changes. A 6-month forward plan for maintenance has been agreed with EPSRC.
- At the request of SMB, an initial analysis of job scheduling efficiency was completed in 14Q2. The details are included in Section 3 of this report.

## 2. Continual Service Improvement

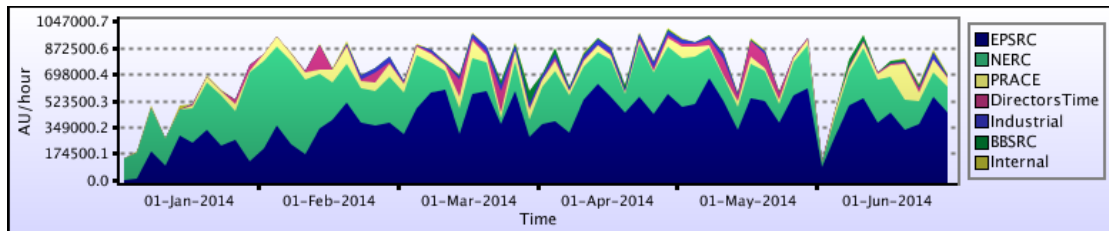
- An initial version of the ARCHER mobile application was deployed in June. This enables users and PIs to check on the service status, and project allocations etc. via mobile devices.
- An upgrade to the Network configuration is planned for early 14Q3. This requires a full maintenance session but will provide enhanced service resiliency.
- The user documentation on the ARCHER website will be enhanced with the addition of screencasts of how to perform common administrative tasks, such as those tasks performed by end users and PIs in the SAFE.

### 3. Utilisation

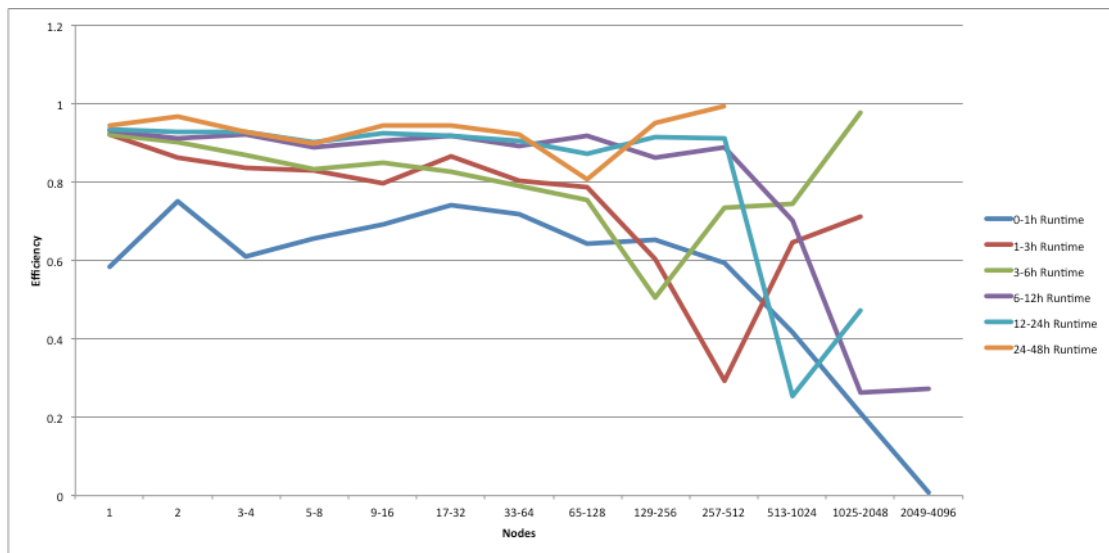
Utilisation over the quarter was 67.2% (or 84% of optimum).



The utilisation above does not take into account periods of machine downtime for Maintenance. In June, ARCHER was unavailable for an extended period from June 2nd to June 5th in order to implement a Cray essential change. This gap can be clearly seen in the chart below.



### Job Scheduling Co-Efficient



The Job Scheduling Co-Efficient 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.

## 4. 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	Apr 14		May 14		Jun 14		14Q2
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	97.17%	0	97.74%	0	97.51%	0	0
2.6.4 - UR	1 WD	0	1 WD	0	1 WD	0	0
<b>Total</b>		<b>-5</b>		<b>-5</b>		<b>-5</b>	<b>-15</b>

*Pink – Below Service Threshold  
Yellow – Below Operating Service Level  
Green – At or above Operating Service Level*

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

## Service Failures

Type	Severity	Notes
Unscheduled Maintenance	Sev-1	Maintenance Over-run 9 <sup>th</sup> April

There was one Service Failure in the Service Quarter. A planned maintenance session took longer than had been pre-approved by the Authority. Details are available in Section 4 of this report.

## Service Credits

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

$$SC = \blacksquare$$

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 (-15), no Service Credits apply in 14Q2.

## 5. Detailed Service Level Breakdown

### Phone Response

	Apr	May	Jun	14Q2
Phone Calls Received	59	100	59	<b>218</b>
Answered 2 Minutes	59	100	59	<b>218</b>
<b>Service Level</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

The volume of telephone calls remained low in 14Q2. Of the 218 calls received in total above, only 28 were actual ARCHER user calls which resulted in queries.

### Query Closure

	Apr	May	Jun	14Q2
Self-Service Admin	229	561	295	<b>1085</b>
Admin	173	221	140	<b>534</b>
Technical	59	59	48	<b>166</b>
<i>Total Queries</i>	<i>461</i>	<i>841</i>	<i>483</i>	<i><b>1785</b></i>
<i>Total Closed in 2 Days</i>	<i>448</i>	<i>822</i>	<i>471</i>	<i><b>1741</b></i>
<b>Service Level</b>	<b>97.18%</b>	<b>97.74%</b>	<b>97.51%</b>	<b>97.53%</b>

The volume of Self-Service Admin queries reduced by 59% from 14Q1. The initial transition of users from HECToR to ARCHER completed in 14Q1 and the service is now entering a steady state. This is further illustrated by a 46% reduction in the number of new user registrations below. The volume of basic Technical and Admin queries remained on a par with 14Q1.

In addition to the Admin and Technical queries, the following Change Requests were resolved in 14Q2.

	Apr	May	Jun	14Q2
Change Requests	5	8	8	<b>21</b>

### User Registration

	Apr	May	Jun	14Q2
No. of Requests	137	111	92	<b>340</b>
Closed in One Working Day	137	111	91	<b>339</b>
Average Closure Time (Hrs)	0.68	0.65	1.16	<b>0.83</b>
Average Closure Time (Working Days)	0.07	0.07	0.12	<b>0.09</b>
<b>Service Level</b>	<b>1 WD</b>	<b>1 WD</b>	<b>1 WD</b>	<b>1 WD</b>

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

As mentioned above, the initial rush of new user requests seen in 14Q1 has now reduced.

## 6. 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](mailto:helpdesk@archer.ac.uk). Users may choose not to receive such emails by mailing [support@archer.ac.uk](mailto:support@archer.ac.uk).

#### 2 – Tracking Identifier

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

	Apr	May	Jun	14Q2
CRAY	13	12	9	34
ARCHER_CSE	84	197	67	348
ARCHER_SP	629	986	793	2408
Total Queries Assigned	726	1195	869	2790
Total Assigned in 1 Hour	725	1195	869	2789
Service Level	99.9%	100.0%	100.0%	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
2 <sup>nd</sup> April 2014	1200	1530	3hrs30	Permitted	EPSRC Approved 1200-1600	CLE Upgrade OS backup
9 <sup>th</sup> April 2014	0800	1742	9hrs42*	Permitted	EPSRC Approved 0800-1700	CLE Main upgrade

\*The maintenance for the CLE Upgrade work was approved by the Authority for a total of 9 hours. The additional 42mins has been recorded as a Service Failure under the category of Unscheduled Maintenance.