Puhti Computing Service
Service Level Agreement

1. GENERAL

This Service Level Agreement (hereafter called SLA) is made between the customer, Puhti Computing Service user and the service provider, CSC - IT Center for Science, Ltd. to cover the provision and support of the service as described hereafter.

Amendments, comments and suggestions must be addressed using the communication channels defined in section 8.1.

The service provider retains right to introduce changes to the infrastructure. If Customer does not accept changes, this service subscription can be terminated.

2. SCOPE & DESCRIPTION OF THE SERVICE

This SLA applies to Puhti Computing Service\(^1\) (hereafter called Puhti or Puhti service).

The Puhti service is a supercomputer that allows customers to run serial and small parallel jobs through a batch queueing system. Puhti includes CPU based nodes with a range of memory, and nodes with Nvidia Volta GPUs (Puhti-AI) for HPC and AI workloads.

This service is provided under CSC General Terms of Use\(^2\) and CSC’s Security Policy\(^3\).

\(^1\) https://research.csc.fi/csc-s-servers
\(^2\) https://www.csc.fi/general-terms-of-use
\(^3\) http://www.csc.fi/security
3. SERVICE HOURS & EXCEPTIONS

The service is designed to run continuously. However, the following exceptions apply:

- Planned service breaks - Announced to the customer in at least three weeks in advance
- Unplanned service breaks.

4. SERVICE COMPONENTS & DEPENDENCIES

The service covered by this SLA is made up of the following (technical and logical) service components:

- Kajaani datacenter infrastructure
- Funet network
- CSC helpdesk
- CSC Puhti Computing Platform

5. SUPPORT

Support to the services covered by the scope of this SLA are provided through CSC Service Desk channels and under CSC Service Desk policies:

<table>
<thead>
<tr>
<th>CSC Service Desk</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating hours</strong></td>
<td>Mon-Fri (excluding Finnish public holidays), see CSC's contact information page[^4]</td>
</tr>
<tr>
<td><strong>Phone</strong></td>
<td>+358 (0) 94 57 2821</td>
</tr>
<tr>
<td><strong>E-Mail</strong></td>
<td><a href="mailto:servicedesk@csc.fi">servicedesk@csc.fi</a></td>
</tr>
<tr>
<td><strong>Webpage and contact form</strong></td>
<td><a href="https://research.csc.fi/support">https://research.csc.fi/support</a></td>
</tr>
<tr>
<td><strong>Response time</strong></td>
<td>Within Three Working Days</td>
</tr>
</tbody>
</table>

[^4]: https://www.csc.fi/en/contact-info
a. INCIDENT HANDLING

Disruptions to the agreed service functionality or quality will be handled according to an appropriate priority based on the impact and urgency of the incident. In this context, the following general priority guidelines apply:

1. Ensuring normal levels of security
2. Restoring normal service operation

Response and resolution times are provided as service level targets (see section 5).

b. FULFILMENT OF SERVICE REQUESTS

In addition to resolving incidents, the following standard service requests are defined and will be fulfilled through the defined support channels:

- CSC user account management
- Resource requests
- User support through CSC’s ticket system.

Response and fulfilment times are provided as service level targets (see section 5).

6. SERVICE LEVEL TARGETS

The Puhti service adheres to the following targets specified in JHS212:

<table>
<thead>
<tr>
<th>Service level</th>
<th>Service time / incident handling</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic</td>
<td>Weekdays 8.30-16.00</td>
<td>97%</td>
</tr>
</tbody>
</table>

7. LIMITATIONS & CONSTRAINTS

The provisioning of the service under the agreed service level targets is subject to the following limitations and constraints:

5 https://www.suomidigi.fi/ohjeet-ja-tuki/jhs-suositukset/jhs-212-ict-palvelujen-palvelutasonhallinta-slm
• Support is provided in following languages: English and Finnish.
• Availability and reliability is calculated based on internal monitoring results available to the customer upon request through the agreed communication channels (See sections 5 and 8).
• Downtimes caused due to upgrades for fixing critical security issues are not considered SLA violations.
• Any other causes outside provider’s direct control.

8. COMMUNICATION, REPORTING & ESCALATION

a. GENERAL COMMUNICATION

The following contacts will be generally used for communications related to the service in the scope of this SLA:

<table>
<thead>
<tr>
<th>Description</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact for the customer</td>
<td><a href="mailto:servicedesk@csc.fi">servicedesk@csc.fi</a></td>
</tr>
<tr>
<td>Contact for the service provider</td>
<td><a href="mailto:servicedesk@csc.fi">servicedesk@csc.fi</a></td>
</tr>
<tr>
<td>Security incident reporting</td>
<td><a href="mailto:security@csc.fi">security@csc.fi</a></td>
</tr>
<tr>
<td>(CSC’s Head of Security)</td>
<td>+358 (0) 94 57 2253</td>
</tr>
</tbody>
</table>

b. REPORTING

Service reports regarding Availability can be requested by users through the appropriate communication channels (See section 8.1). The information provided on requested Service Reports is limited to data availability and by data security and privacy constraints.

c. SLA VIOLATIONS

The Service Provider commits to inform the customer, if this SLA is violated or violation is anticipated. For this, the general communication channels will be used (See section 8.1).

The customer may notify SLA violation by contacting CSC Service Desk within 2 weeks of the violation. The case will be analysed internally, if the violation is confirmed, the Service Provider will inform the Customer about the reasons for the violation, planned mitigation actions and expected resolution time.

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6 English support is preferable and expected to be provided faster because not all of our staff members are Finnish language speakers.
d. ESCALATION & COMPLAINTS

For escalation and complaints, the defined service provider contact point shall be used, and the following rules apply:

1. First contact shall be established, preferably by e-Mail, to Contact for the customer address (See section 8.1) explaining the reason for the complaint with a sensible level of detail and clarity. Please also include, if possible, the following information:
   ◦ Name of the service
   ◦ Date and time of the events
   ◦ Usernames of affected users
   ◦ Channel to use on following communications (If other is preferred)

2. CSC Service Desk will contact you back within three working days with the more information about the incident and which procedures are or will be adopted to minimise its impact.

9. INFORMATION SECURITY & DATA PROTECTION

The management processes for maintaining Puhti have been certified by the ISO 27001 standard. CSC has approved a security policy and also follows security best practices. For CSC’s customers, providers and staff there are detailed security guidelines. Many items in our security policies and guidelines refer to external compliance requirements. CSC has also procedures for risk and security management. For more information, please refer to the following page:

https://www.csc.fi/security

10. ADDITIONAL RESPONSIBILITIES OF THE SERVICE PROVIDER

Additional responsibilities of the Provider are as follow:

• Adhere to all applicable operational and security policies and procedures defined in CSC’s Security Policy (See section 9) and to other policy documents referenced therein
• Use communication channels defined in the agreement
• Provide monitoring data to measure fulfillment of agreed service level targets.
11. CUSTOMER RESPONSIBILITIES

The Customer agrees to follow the General Terms of Use for CSC’s Services for Science\(^7\), and CSC’s Security Policy\(^8\).

12. REVIEW

There will be reviews of the service performance against service level targets and of this SLA at planned intervals according to the following rules:

- Annual reviews are done internally and based on customer feedback
- Major changes to the service may trigger a review.

13. GLOSSARY OF TERMS

For the purpose of this SLA, the following terms and definitions apply:

**SLA** – Service Level Agreement (this document)

**Response time** – Time spent between the arrival of a customer’s support request and the first response from CSC Staff

**Working days** – Monday to Friday (Excluding Finnish public holidays)

**Working hours** – Period between 8:30 and 16:00 in working days (Helsinki Time)

An extended list of term definitions adopted on this document can be found in *FitSM-0: Overview and vocabulary*\(^9\) document.

14. DOCUMENT CONTROL

<table>
<thead>
<tr>
<th>Document ID</th>
<th>PUHTI-SLA-2021-08-13</th>
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<tr>
<td>Document title</td>
<td>Puhti - Cluster Computing Service; Service Level Agreement</td>
</tr>
<tr>
<td>Document owner</td>
<td>CSC Custer Computing Platform SLM Process Owner</td>
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</table>

\(^7\) https://research.csc.fi/en/general-terms-of-use  
\(^8\) https://www.csc.fi/security  
\(^9\) https://www.fitsm.eu/download/280/
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| Version & change tracking | 0.001 First version  
                         | 1.0 Updated links and added ISO 27001 certification |