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.

This SLA was 1st approved on October 25th 2019 and is valid until a newer version is approved and publicly available.

Amendments, comments and suggestions must be addressed using the communication channels defined in section 8.a.

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.

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[1] https://research.csc.fi/csc-s-servers

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This service is provided under *CSC General Terms of Use*[2] and *CSC's Security Policy*[3].

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:

CSC Service Desk	
Operating hours	Mon-Fri (excluding Finnish public holidays), see CSC's contact information page[4]
Phone	+358 (0) 94 57 2821
E-Mail	servicedesk@csc.fi
Webpage and contact form	https://research.csc.fi/support
Response time	Within Three Working Days

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[2] https://www.csc.fi/general-terms-of-use
[3] http://www.csc.fi/security
[4] https://www.csc.fi/en/contact-info

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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[5]:

Service level	Service time / incident handling	Availability
Basic	Weekdays 8.30-16.00	97%

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[5] http://docs.jhs-suositukset.fi/jhs-suositukset/JHS212/JHS212.html

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7. LIMITATIONS & CONSTRAINTS

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

- Support is provided in following languages: English and Finnish[6]
- 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:

Description	Contact
Contact for the customer	servicedesk@csc.fi
Contact for the service provider	
Security incident reporting	security@csc.fi
(CSC's Head of Security)	+358 (0) 94 57 2253

B. REPORTING

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

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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.

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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.a).

The customer shall notify SLA violation by contacting CSC Service Desk. 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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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 a) 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. Puhti service manager 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

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.

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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

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Document title	Puhti - Cluster Computing Service; Service Level Agreement
Definitive storage location	https://gitlab.csc.fi/HPC-ENV/development/tree/master/service-description

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[7] https://www.csc.fi/general-terms-of-use
[8] http://www.csc.fi/security
[9] https://www.fitsm.eu/download/280/

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