

## Call for contribution of expertise

CERN invites collaborating institutes and universities to contribute the expertise of their qualified employees to the activity described below.

*Start date:* Asap      *Duration:* One year, possible extension to a maximum of up to three years.

*Project/Activity:* Scalable cloud automation and monitoring

### *Detailed description of Activity:*

The CERN OpenStack cloud provides over 300,000 computer cores for the processing of the data from the Large Hadron Collider and other experiments at CERN. The cloud service team will take a leading role in the development and operation of the infrastructure used for operation, automation, monitoring, accounting and capacity planning of the CERN Cloud services. As part of the team you will:

- Migrate to a new monitoring solution based on the collected monitoring framework, developing the cloud specific sensors.
- Develop of monitoring dashboards and alarms for anomaly detection using Grafana.
- Implement Automation of procedures enabling self-healing of operational issues.
- Enhance accounting and usage reports.
- Share experiences and code with the upstream open source communities.

*Profile:* Qualification: Bachelor's degree in the field of Computer Science or related field, or equivalent.

*Specific details:* Excellent team-working attitude. Experience with Linux and scripting languages such as Python. Good working knowledge of either English or French.

*Status at CERN:* Associated Member of the Personnel (Project Associate).

Conditions in accordance with CERN's Staff Rules and Regulations and Administrative Circular No. 11. Subsistence allowance is payable by CERN to cover the additional cost arising from the individual's (and, as applicable, their family's) stay in the local area while performing activities at CERN.

*Option:* Collaborating institutes and universities can propose to support the activity of the qualified employees participating in this "Call for contribution of expertise" with students or other employees. Their status and Subsistence allowance when applicable will be adapted to their relation with their institutions

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*Reference:* 2018\_Q4\_032 / IT-CM-15