

## 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:* 01/09/2018

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

*Project/Activity:* Cloud Test Engineer

### *Detailed description of Activity:*

The expert will join CERN IT Department to be part of the Helix Nebula Science Cloud project team to test hybrid cloud services that will support the computing needs of the LHC experiments.

The Helix Nebula project has contracted external consortia to provide and integrate cloud services: <http://www.hnscicloud.eu/>. The cloud providers are being tested and qualified against a set of scientific workloads: <http://www.hnscicloud.eu/hnscicloud-user-groups>. The results obtained with the suite of tests based on the workloads listed above, will become a technical validation tool for future commercial cloud services procurements for scientific organizations.

The expert's main task will be consolidating and packaging the existing test suite, in order to automate it as much as possible for future usage by many stakeholders as a technical validation tool of IaaS provisioning. The expert will also generate test cases based on the established project requirements and application software, set up the required cloud test beds (hardware, software and network), document test plans and procedures, effectively conduct test evaluation and provide documented analysis of the results.

*Profile:* MSc/BSc in Computer Science, Computing Engineering or related field.

Strong testing skills: able to effectively and autonomously develop a test plan with test cases. Knowledge and familiarity with container automated deployment (Kubernetes) and distributed data object stores. Good knowledge on Linux/Unix system administration. Working knowledge of automation tools (Puppet), software development tools (Git, JIRA, Trac) and scripting tools (Python or similar, Shell scripting). Experience with containerised applications and testing methodologies in cloud environments will be an advantage.

*Specific details:* Excellent team-working attitude. Valid driving license. Good working knowledge of either English or French.

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

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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