

## Call for contribution of expertise

CERN invites collaborating institutes and universities to contribute with 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 3 years.

*Project/Activity:* Websites migration to modern infrastructure

### *Detailed description of Activity:*

The expert will join the IT-CDA group. The main tasks will be the following:

- Replacement of the CERN Web Services Registration mechanism that is presently based on Windows technologies, with a new modular design to support a wide range of Web Frameworks applications and that takes advantage and closely integrates with our PaaS Web Application Hosting solution based on OpenShift.
  - Develop integration API's between <http://cern.ch/web-frameworks-dev> and underlying hosting services.
  - Develop integration template for new microservices management and integration with Web Frameworks portal e.g. Discourse, Docs, and other services coming along SharePoint decommissioning.
  - Implement web resources lifecycle management with MIM provided by new Authorization Service.
- Designing and implementing a migration path for DFS based Windows IIS/Websites towards using the next generation EOS based Apache hosting.
- Develop migration tools, to automate the site migrations where possible and to identify and detect applications that need special attention, .e.g. .NET Framework to .NET Core.

*Profile:* Master degree in computer science

*Specific details:* Experience with systems configuration, web hosting, applications containerization, front-end development and Go/Python is desirable, but other frameworks and libraries will be considered as well. Knowledge of version control systems like GIT and tools like OpenShift, Docker and Agile, DevOps in general.

Experts will be expected to possess a good working knowledge of either English or French. Documentation shall be produced in English.

*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:* 2019\_Q2\_022