Scientific Computing Engineer (M/F)
In charge of the support to LHC Experiments

Located in Lyon (France), the IN2P3/CNRS Computing Centre is a national facility providing computing and storage services for scientific research needs, mainly in the field of corpuscular physics (nuclear physics, particle physics and astroparticle physics). More than 2000 users working on 40 international scientific experiments use its services on a 24x7 basis.

The CC-IN2P3 Computing Centre is one of the of the first level component (Tier 1) of the computing infrastructure deployed in the framework of LCG (LHC Computing Project) to provide data storage and processing facilities for the entire high energy physics community that will use the LHC. The LHC collider recorded its first collisions in the autumn of 2009.

The current CC-IN2P3 infrastructure for computing and for storage of large amounts of data is used by the experiments for their data management and analysis tasks. The computing farm capacity features more than 10000 cores and is expected to double every year. The current storage capacity is of order of the Petabyte and is expected to increase by a factor 10 during the next few years.

**Functions**

CC-IN2P3 is looking for an applicant expected to provide support to the activities of CMS experiment at CC-IN2P3. The candidate will as well participate to the general support provided to CC-IN2P3 end-users and their communities. The person will be member of the group “support” composed of 12 engineers. Concerning the CMS experiments, the candidate is expected to:

- Provide a technical support to the computing activities of CMS experiment at CC-IN2P3.
- Act as an interface between the CMS experiment and the expert teams at CC-IN2P3.
- Monitor on the day-by-day basis data transfers, data distribution, and production jobs and solve problems and incidents as they occur.
- Collaborate with the CMS central computing teams.

Furthermore, the candidate is expected to participate in the general support activities:

- Assist end-users of other communities in the context of general support in collaboration with the other members of the group.
- Write and update end-user documentation.
- Contribute to training sessions targeted to end-users on recommended best practices.

We are seeking a candidate with strong scientific and computing background. High interest and aptitude in user support is essential. Prior experience in high-energy physics computing and experience in HEP collaborations and distributed computing is an asset.

**Qualifications Requirements**

**Education**
University degree or equivalent in computing science or in a related scientific field.

**Knowledge**
The open position requires different technical skills. The ideal candidate will be proficient in some or all of the following areas:
Experience in management and treatment of large volumes of data.

Knowledge of the architectures of distributed systems and experience with grid computing tools.

Good knowledge of or experience with software packages used by high energy physics experiments.

Programming and scripting languages, Python, shell, C++.

Experience in UNIX operating system, especially Linux usage.

Besides the technical knowledge, it is required from the candidate to possess:

Good speaking/writing knowledge of French.

Good speaking/writing knowledge of English as a working language (communication, presentations, writing technical documentation, etc.).

Good communications skills, both oral and written.

Excellent social skills, sense of organization and the ability to work in a team within the framework of a service-oriented facility.

Good adaptive capacity, availability and high degree of autonomy.

The position may imply some short-duration travelling in France and abroad.

**Contractual Conditions**

A contract of 2 years duration is proposed for a start as early as possible. It can be renewed in one contract of 3 years renewable once. Salary is commensurate with experience and qualification.

**How to apply?**

Applicants are invited to submit their CV (PDF preferred, MS Word and plain text also accepted) along with cover letter and reference letters to job38@cc.in2p3.fr

Applications will be reviewed until the position if filled. A first review will be held around September 15th, 2010. The selected candidates will be called for a personal on-site interview. The interview will be held in French and English.