

Trainee's Project Report

Job Code	IT4448
Department	IT
Discipline	Computing
Supervisor	GIRONE Maria

Description

Cloud Computing presents an attractive new approach to distributed computing that may lead to improvements in the operations (e.g. simplicity, reliability, and elasticity) of the Worldwide LHC Computing Grid. Some LHC experiments are working to evaluate and integrate these new standards, services and resources into the existing distributed computing infrastructure.

In this project, the trainee will work on topics related to cloud job management and in particular will help to evaluate and develop different strategies to add cloud-based resources to the existing workload management systems.

The tasks will include:

- 1) Participate in the evaluation of remote cloud facilities.
- 2) Development of a "Cloud Factory" tool to monitor cloud instances.
- 3) Work on standards to sign and catalog virtual machine images and contextualize them at boot time.

Special Requirements

University degree in Computer Science and knowledge of Software Engineering and development. Previous experience in Python development and Dynamic Web Development (e.g Django) would be an asset.

Training Value

The trainee will work in a passionate environment and will gain professional experience in computing projects aimed at the evolution of today's large-scale computing infrastructures, with particular experience in cloud job management.

