Sample Project: The Adoption of Cloud Technologies for a Sustainable Distributed Computing Infrastructure.

Code	IT1406
Programme	FCT
Department	IT
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Title

The Adoption of Cloud Technologies for a Sustainable Distributed Computing Infrastructure.

Description

Cloud technologies are used to deliver Infrastructure (IaaS), Platform (PaaS) and Software (SaaS) as a metered services through th Internet. Their adoption can provide long-term sustainably of those services through the provision of a pay-for-use business model. In addition, the widespread use of open source cloud solutions is supported by a large community and hence can reduce the development, maintenance and operations costs.Cloud technologies therefore present an attractive new approach for the provision of services in a distributed computing infrastructure.

The Worldwide LHC Computing Grid is the distributed computing infrastructure used by the High Energy Physics community handle the tens of petabytes of data generated each year by the Large Hadron Collider (LHC) based at CERN.

In this project the trainee will work on topics related to the adoption of cloud technologies for the provision of services in the WLC The tasks will include: The use of cloud computing technologies to provision capacity for high throughput computing; Development of tooling for monitoring and accounting the resoruces consumed; Defining best-practises for the use cloud technologies in the WLCG.

Skills

Disciplines

Information Technologies