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Implementation and Testing of OpenStack Heat [1]

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Project Specification: CERN is establishing a large scale private cloud based on OpenStack as part of the expansion of the computing infrastructure for the LHC. Many cloud based services use auto-scaling and orchestration to expand and contract their resources according to user load. The OpenStack Heat project provides an open source framework to organize the configuration and deployment of cloud applications. After the implementation of a working environment, was tested a sample use case, developing a template that deploys webservers within an auto scaling group behind a Load Balancer and serving webpages hosted on a NFS server. Webservers scale up and scale down according to current load. Abstract: The aim of this document is to describe the project that was implemented during the openlab Summer Programme ?Implementation and testing of OpenStack Heat?. This document gives a quick brief of what ?Cloud Computing? is and which are the technologies and models used to build a Cloud Computing infrastructure; then it gives an overview on OpenSatck project. The main part of this document gives details on how Heat works and how it has been integrated in the OpenStack project, and gives a reference on how to install and use it. The last part describes a use case that has been deployed to test Heat features, giving some details about the template that implement it.
Report on ZENODO:
Document on ZENODO [2]

Links
[1] http://test-static-05.web.cern.ch/publications/technical_documents/implementation-and-testing-openstack-heat
[2] https://zenodo.org/record/7571?ln=en