Abstract

A model which allows storage of data, data processing and associated application on devices along the edge of a network of a cloud is called Fog Computing. This is also called fogging. In such a model, devices are not concentrated within a cloud. This, therefore, translates to data and information processing carried out on smarter, agile, and entirely local devices. In other words, the bulk of the data processing duties are taken away from the cloud. Fog Computing counts as one of the approaches which deal with the incessant and growing needs of devices which are connected to the Internet. Further, the approach is a key element in support Internet of Things in which components stay connected to each other without interference from humans or from other machines. In this paper, we put forward our proposed model which we call Billboard Manager based Fog Node Management Approach. This model will help user to cater to their processing needs from an appropriate fog node that is registered with the Billboard Manager. The Billboard Manager keeps track of all fog nodes that are currently available and in service. When a mobile user sends a request, the Billboard Manager receives that request and begins ascertaining the best-fit fog node that would be able to process that task. Upon selecting the fog node, the Billboard Manager hands over the processing duties to that fog
node. We also discuss, in this paper, a detailed architecture of our proposed model involving Citrix XenApp.

References


Index Terms

Computer Science
Distributed Systems
Keywords

Cloud  Fog  Billboard Manager  Citrix  Internet of Things