Towards Mitigating Sustainability Challenges through Fog Computing Architecture

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ABSTRACT

With the advent of Fog Computing frameworks in the year 2015, local logical units were formed to enhance the performance of Cloud Computing applications. Security is one of the key parameters that is improvised due to the computations that are distributed. Through Fog Networking, it is envisioned that cloud and IoT applications tend to operate with reduced computational delays emphasizing on efficacy of the system. This paper examines the current advances in fog networked computers from the point of view of their structures, global attention and support. With the advancement of technology, the working of Fog based computations have been simplified where each computer's resources are distributed, and the resources are shared with every other node in the system. The major resources that are considered to be vital in the fog computing platform are the processing speed of data, memory and data upload. These are treated as distributed resources rather than as centralized resources and thus promoting efficiency for all the authorized users. This provision helps to perform on-demand services over the Internet and supports a wide variety of applications that requires huge data processing and heavy storage for data. One of the challenges due to this distributed platform that provides services on adhoc basis is to maintain sustainability. The main goal of this paper is that discuss a model that is at the conceptual level and directing it for further research.

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