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Network Function Virtualization (NFV) based architecture to address connectivity, interoperability and manageability challenges in Internet of Things (IoT) (Conference Paper)

Haseeb, S., Hashim, A.H.A., Khalifa, O.O., Faris Ismail, A.

Kulliyah of Engineering, International Islamic University Malaysia, Jalan Gombak, Kuala Lumpur, Selangor, Malaysia

Abstract

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IoT aims to interconnect sensors and actuators built into devices (also known as Things) in order for them to share data and control each other to improve existing processes for making people's life better. IoT aims to connect between all physical devices like fridges, cars, utilities, buildings and cities so that they can take advantage of small pieces of information collected by each one of these devices and derive more complex decisions. However, these devices are heterogeneous in nature because of various vendor support, connectivity options and protocol suit. Heterogeneity of such devices makes it difficult for them to leverage on each other's capabilities in the traditional IoT architecture. This paper highlights the effects of heterogeneity challenges on connectivity, interoperability, management in greater details. It also surveys some of the existing solutions adopted in the core network to solve the challenges of massive IoT deployments. Finally, the paper proposes a new architecture based on NFV to address the problems. © Published under licence by IOP Publishing Ltd.

Indexed keywords

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[Virtualization](#)

Compendex keywords

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[Complex decision](#)
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