2023 IEEE AFRICON, Kenya, Nairobi, 20-23 September 2023

The latest developments in Software Defined Networking: Adoption rate and challenges

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Abstract
Software Defined Networking (SDN) is a computer network paradigm that has the potential to simplify network management and configuration by increasing network programmability and abstraction. In contrast to traditional networks, SDN separates the control plane, which decides how to route traffic, from the data plane, which delivers traffic to specific destinations. This makes the network control more programmable, dynamic, and centralized (through the SDN controller). SDN enables network managers to easily design network services and control traffic flows because of SDN's greater degree of abstraction, which eliminates the need to set up many individual network devices (switches and routers). The SDN technique cut costs, enables flexibility in configuration, decreases deployment time, provides automation, and simplifies network architecture without requiring knowledge of vendor-specific software/hardware. This paper seeks to review the current state of SDN adoption in South Africa, the factors impeding adoption, the potential application of SDN. Finally, the best migration strategy that operators can adopt to capitalize on the benefits offered by the SDN.