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Multiple Access Management Services

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Abstract

In multiconnectivity scenarios, the end-user devices can simultaneously connect to multiple networks based on different access technologies and network architectures like WiFi, LTE, DSL. Both the quality of experience of the users and the overall network utilization and efficiency may be improved through the smart selection and combination of access and core network paths that can dynamically adapt to changing network conditions. This document presents a unified problem statement and introduces a solution for managing multiconnectivity. The solution has been developed by the authors based on their experiences in multiple standards bodies including the IETF and 3GPP, but is not an Internet Standard and does not represent the consensus opinion of the IETF. This document describes the requirements, solution principles, and an architectural framework that aims to provide best performance while being easy to implement in a wide variety of multiconnectivity deployments. It specifies the protocol multi-access management to: 1) flexibly select the best combination of access and core network paths for uplink and downlink; as well as 2) determine the user plane treatment and traffic distribution over the selected links ensuring network efficiency and application performance.

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Multi Access Management Services (MAMS) is a programm