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TELECOMMUNICATION
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SERIES F: NON-TELEPHONE TELECOMMUNICATION
SERVICES

Multimedia services

Service requirements for next generation content delivery networks

Recommendation ITU-T F.743.6

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Recommendation ITU-T F.743.6

Service requirements for next generation content delivery networks

Summary

Recommendation ITU-T F.743.6 describes use cases, service requirements and challenges of the next generation content delivery network (CDN). A reference architecture named access CDN for meeting these requirements and challenges, which decouples the common functions and customized services, is also defined.

History

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Introduction

With the popularity of video services such as 4K/8K television (TV), virtual reality/augmented reality (VR/AR) and live sports events, demands on network throughput are increasing by orders of magnitude along with the associated requirements for ultra-low latency. These bring new challenges for the current content delivery network (CDN), resulting in a trade-off between exponential increases in the network cost and the need for smooth growth in end-user access price. It will be difficult to cover the throughput magnitude gap by solely relying on a pure underlay network; thus the next generation CDN should solve backbone traffic convergence and improve end-user experience to resolve this gap, and accelerate the introduction of emerging services.