

## **Seamless Handoff Support for Real-Time Multimedia Applications in Nested Mobile Networks**

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### Abstract

In this paper, we extend our Hierarchical Care-of Prefix with the binding update tree, i.e., HCoP-B, to support route optimization and seamless handoff for real-time multimedia applications in the nested mobile network simultaneously, which is rare in the literature. As compared to the traditional ROTIO scheme with mathematical analyses and simulations, HCoP-B achieves shorter playback disruption time and buffering time for on-going real-time multimedia applications whenever the mobile subnet in the old nested mobile network hands over to a new one.