has smaller amount of handoff latency than TBR scheme. FDND can also save content download time and 20% of network resources compared to the original TBR.

Category	FDND mechanism	TBR Scheme
Amount of lost interest packets	Low	High
Content download time	Short	Long
Network resource consumption	Low	High
Handoff latency	Comparatively short	Long
Amount of retransmitted interests	Low	High

Table 1. Compare of FDND vs. TBR scheme

4 Conclusion and Future works

This paper presents the fast DND mechanism to reduce the side effect due to long handoff latency of mobile content sources' movement. When detecting the network change, the mobile content source initiates the uniqueness verification of the new tentative name prefix. For fast DND procedure, the proposed mechanism utilizes shorter timeout value and utilizes interest-type message format to provide backward compatibility. From that, it can save network resource consumption of network devices and reduce content retrieval latency by decreasing the checking time of duplicate name prefix. Future works are required for the performance evaluations of DND mechanism in the real CCN network environment.

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References

1. Jihoon, L. Sungrae, C., and Daeyoub, K.: Device Mobility Management in Content-Centric Network. IEEE Communications Magazine, vol. 50, pp.24--34 (2012)
2. Jacobson, V., Diana K. S., Thornton, J., Plass, M., Briggs, N., and Braynard, R.: Networking Named Content. ACM CoNEXT, pp.1--12 (2009)
3. Dohyung, K., Jong-hwan, K., Yu-sung, K., Hyun-soo, Y., and Ikjun, Y.: Mobility Support in Content Centric Networks. ACM ICN, pp.13--18 (2012)
4. Hermans, F., Ngai, E., and Gunningberg, P.: Global Source Mobility in the Content-Centric Networking Architecture. ACM Name-Oriented Mobile Networking Design, pp.13--18 (2012)

