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A packet delivery cost analysis of a flow- enabled proxy NEMO scheme in a distributed mobility anchoring environment (Article) [\(Open Access\)](#)

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Abstract

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DMM (Distributed Mobility Management) is a present elective worldview for creating a mobility management scheme to discourse the centralized issues in present IP-based mobile environments. The main reason is to enable these schemes to adapt to the present increment in the number of mobile operators, as well as mobile information traffic size, just as the pattern in the mobile Internet towards Industry 4.0 in a flat architecture. Until this point, the advancement of schemes dependent on the DMM-based method is still at fundamental phases in the Internet Engineering Task Force (IETF), as well as there is no present standard set up. With the point of taking advantage of utilizing different interfaces all at once, this paper proposes an enhanced Flow-enabled Proxy NEMO scheme in a Distributed Mobility Anchoring (FPNEMO-DMA) environment. Besides, a mathematical approach is advanced to assess the performance of the proposed FPNEMO-DMA scheme and benchmark with the existing Nemo Basic Support Protocol (NBSP) and Proxy NEMO. © 2020 Kauno Technologijos Universitetas. All rights reserved.

SciVal Topic Prominence

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1 Al-Surmi, I., Othman, M., Mohd Ali, B.

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(2012) *Journal of Network and Computer Applications*, 35 (1), pp. 295-315. Cited 73 times.
doi: 10.1016/j.jnca.2011.09.001

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2 Chandavarkar, B.R., Reddy, G.R.M.

Survey paper: Mobility management in heterogeneous wireless networks [\(Open Access\)](#)

(2012) *Procedia Engineering*, 30, pp. 113-123. Cited 17 times.
doi: 10.1016/j.proeng.2012.01.841

[View at Publisher](#)

3 Jeong, J. P., Cespedes, S., Benamar, N., Haerri, J.

Survey on IP-based vehicular networking for intelligent transportation systems

(2016) *Internet Engineering Task Force (IETF)*. Cited 2 times.

[Online]. Available: Internet-Draft draft-jeong-its-vehicular-networking-survey
<https://datatracker.ietf.org/doc/draft-jeong-ipwave-vehicular-networking-survey/>

4 Wakikawa, R., Devarapalli, V., Tsirtsis, G., Ernst, T., Nagami, K.

Multiple care-of addresses registration

(2009) *RFC 5648*. Cited 165 times.

5 Lee, C.-W., Chen, M.C., Sun, Y.S.

A novel network mobility management scheme supporting seamless handover for high-speed trains

(2014) *Computer Communications*, 37, pp. 53-63. Cited 23 times.
doi: 10.1016/j.comcom.2013.09.009

[View at Publisher](#)

6 Lee, J.-H., Ernst, T., Chilamkurti, N.

Performance analysis of PMIPv6-based NEtwork mobility for intelligent transportation systems

(2012) *IEEE Transactions on Vehicular Technology*, 61 (1), art. no. 5776712, pp. 74-85. Cited 80 times.
doi: 10.1109/TVT.2011.2157949

[View at Publisher](#)

7 Ryu, S., Choi, J.-W., Park, K.-J.

Performance evaluation of improved fast PMIPv6-based network mobility for intelligent transportation systems

(2013) *Journal of Communications and Networks*, 15 (2), art. no. 6512238, pp. 142-152. Cited 21 times.
doi: 10.1109/JCN.2013.000027

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8 Lee, J.-H., Ernst, T.

Lightweight network mobility within PMIPv6 for transportation systems

(2011) *IEEE Systems Journal*, 5 (3), art. no. 5873168, pp. 352-361. Cited 36 times.
doi: 10.1109/JSYST.2011.2158681

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