

Scopus

Document details

[< Back to results](#) | 1 of 1
[Export](#)
[Download](#)
[Print](#)
[E-mail](#)
[Save to PDF](#)
[Add to List](#)
[More...](#)
[Full Text](#)[View at Publisher](#)

ISTT 2014 - 2014 IEEE 2nd International Symposium on Telecommunication Technologies
 2 September 2015, Article number 7238235, Pages 357-361
 2nd IEEE International Symposium on Telecommunication Technologies, ISTT 2014; Langkawi; Malaysia; 24
 November 2014 through 26 November 2014; Category numberCFP14STT-ART; Code 115880

A multihoming-based mobility management scheme to reduce registration delay on proxy MIPv6 domain in NEMO (Conference Paper)

Islam, S.^a [✉](#), Hashim, A.-H.A.^a [✉](#), Habaebi, M.H.^a, Latif, S.A.^a, Ismail, A.F.^a, Hasan, M.K.^a, Hassan, W.H.^b

^aDepartment of Electrical and Computer Engineering, International Islamic University Malaysia, Malaysia

^bDepartment of Electrical and Computer Engineering, Malaysia-Japan International Institute of Technology, University Technology Malaysia (UTM), Malaysia

Abstract

[View references \(21\)](#)

Registration delay is a significant issue for mobile network due to increase traffic load with handoff latency at the time of frequent movement from one subnet to another of Mobile Router (MR) in NEMO Basic Support protocol (NEMO BSP). Hence, a network-based localized protocol (i.e. PMIPv6) is integrated with NEMO in order to solve these matters. Yet, combining this network-based localized protocol for inter mobility handoff (i.e. movement among different access technology) in NEMO environment is a challenging issue as both MR and its MNNs must be taken into consideration. Therefore, this paper proposes a multihoming-based Early Proxy Binding Update scheme in NEMO (EPBU-NEMO) which is based on FPMIPv6 with predictive mode to reduce registration delay during inter mobility handoff. Moreover, numerical framework is formulated to evaluate the outcomes of the EPBU-NEMO scheme. Lastly, it determines that EPBU-NEMO scheme outperforms the standard NEMO BSP related to signaling cost regardless of increasing the number of MRs as well as cell residence time. © 2014 IEEE.

Author keywords

EPBU-NEMO FPMIPv6 IPv6 MR NEMO BSP

Indexed keywords

Engineering controlled terms: Routers

EPBU-NEMO

Fpmipv6 IPv6

MR Nemo bsp

Engineering main heading: Cell signaling

ISBN: 978-147995982-2

Source Type: Conference Proceeding

Original language: English

DOI: 10.1109/ISTT.2014.7238235

Document Type: Conference Paper

Volume Editors: Ismail M., Ramli N.

Sponsors:

Publisher: Institute of Electrical and Electronics Engineers Inc.

Metrics

0 Citations in Scopus

0 Field-Weighted Citation Impact



PlumX Metrics

Usage, Captures, Mentions, Social Media and Citations beyond Scopus.

Cited by 0 documents

Inform me when this document is cited in Scopus:

[Set citation alert >](#)

[Set citation feed >](#)

Related documents

A numerical study on MM-NEMO scheme: Impact of rising number of mobile routers and cell residence time

Islam, S. , Hashim, A.H.A. , Habaebi, M.H. (2015) *Lecture Notes in Electrical Engineering*

Novel multihoming-based flow mobility scheme for proxy NEMO environment: A numerical approach to analyse handoff performance

Islam, S. , Abdalla, A.-H. , Hasan, M.K. (2017) *ScienceAsia*

Analytical evaluation of intra domain mobility approach in NEMO environment

Islam, S. , Hashim, A.-H.A. , Habaebi, M.H. (2014) *Research Journal of Applied Sciences, Engineering and Technology*