Modified HLR-VLR Location management scheme in PCS network

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10.5120/1072-1401

Abstract

This paper proposes a modified version of conventional HLR/VLR scheme for improving the location management in PCS network. The conventional HLR/VLR scheme suggests that when a mobile terminal (MT) moves from one LA to another LA which is served by different VLR, it registers itself with new VLR along with HLR, at the same time HLR deregisters the mobile terminal from the old VLR and acknowledges the receipt of the message to new VLR. The modified version proposes that there is no requirement of deregistering of mobile terminal from old VLR at the same time when MT registers at new VLR and so message transmission cost and database overload can be reduced. Numerical analysis is done for both conventional and modified version and compared together. The numerical results are promising and a significant total cost reduction is obtained with proposed scheme.
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Reference

- Vijay Kumar, Mobile Databases, JOHN WILEY & SONS, INC., PUBLICATION
- Bong-sue, Suh, Jin-seek Choi, Jae-kyoon Kim, “Design and performance of hierarchical location management strategies for wireless mobile communication system”, Computer
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Index Terms

Computer Science Cellular

Communication

Key words

Location Management

Mobility Management

PCS

HLR/VLR approach
deregistration