Abstract

In order to optimize and make network resources more useful, many studies are conducted. However, WiMAX technology researches don't take enough consideration regarding mobility user management.

This paper tackles mobility management of VoIP users over WiMaX. In another way, we propose a new idea to decide the best location of base stations in an enterprise domain according to a daily approximate trajectory of VoIP users. Our research is than organized as follows: Firstly, we watch the users’ trajectories on a daily basis then we consider an approximation of users’ trajectories.

Secondly, this fictive trajectory is subdivided into small segments. The perpendicular bisectors of the latter segments are used to give a cloud of intersecting points. The same procedure is applied to the obtained cloud until we find a set of points where distances between these points are small enough to be considered as negligible.
Finally, the base station location will be where the points are concentrated.

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Index Terms

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Keywords

VoIP, WiMAX, Mobility, localization.