Analytical and Experimental Evaluation of a Novel Mechanism to Improve the Control Plane in Next-Generation Mobile Networks

With the continuous development of mobile communications and the Internet of Things technology, the enhanced network performance can be seen as one of the major challenges in the fourth industrial revolution context, where new services and applications with strict performance requirements have emerged, such as driverless vehicles, smart cities, factories, and manufacturing, among others. These new services and applications also drive growth of the data traffic, which is increasing exponentially. Thus, in mobile network environments, industry and academia are proposing new mechanisms to overcome the traffic bottlenecks and reduce the signaling overhead that affects current networks. Centralized Mobility Management solutions are prone to several problems such as the aforementioned signaling overhead or scalability issues. To overcome these limitations, Distributed Mobility Management approaches are being considered. In this paper, an analytical cost model and experimental evaluation will be developed for evaluating the performance of the Distributed Mobility Management implementations. Furthermore, a new approach will be proposed to improve network performance.

Fuente de la publicación:

- Calle-Cancho, J.; Cortés-Polo, D.; González-Sánchez, J.-L.; Jiménez, L.I.; Carmona-Murillo, J. Analytical and Experimental Evaluation of a Novel Mechanism to Improve the Control Plane in Next-Generation Mobile Networks. Electronics 2020, 9, 417. doi: 10.3390/electronics9030417 [1]

Noticias relacionadas:

- Investigadores de CénitS y la Universidad de Extremadura publican un artículo de impacto sobre redes móviles de próxima generación [CénitS [2]].

URL del envío:https://www.cenits.es/enlaces/publicaciones/analytical-and-experimental-evaluation-novel-mechanism-improve-control-plane

Enlaces
[1] https://doi.org/10.3390/electronics9030417 [2] http://www.cenits.es/noticias/12032020-investigadores-cenits-universidad-extremadura-publican-articulo-impacto-sobre