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Telecommunications service accounting management based on TINA

Chen, Chen-Yu

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Telecommunications Service Accounting Management based on TINA

Chen-Yu Chen

A project report submitted to the Faculty of Engineering, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Science in Engineering.

Johannesburg, March 2002

Declaration

I declare that this project report is my own, unaided work, except where otherwise acknowledged. It is being submitted for the degree of Master of Science in Engineering in the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other university.

Signed this day of 20

Chen-Yu Chen.

Abstract

The next generation telecommunication networks offers traditional voice type services as well as advanced data services, typically of the multi-media based type, on top of an open resource,
heterogeneous network that delivers services with a specified level of quality of service (QoS). The need for a comprehensive telecommunications service accounting management system in the such Next Generation Network is envisaged as the traditional telecommunications billing system does not meet the accounting management requirements in such network. This report present the design and implementation of a service accounting management system based on the Telecommunications Information Networking Architecture (TINA). The service accounting management in TINA service environment, which allows the users to obtain multiple service with specified network connection QoS, is demonstrated on the South Africa TINA Trial platform, which provides a next generation service environment conceived by TINA. This work shows the generation and the flow of the service and network usage accounting information in the distributed processing environment.

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