

论文

IMS网络中一种基于组的业务触发算法

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摘要

该文研究了IMS(IP Multimedia Subsystem)中的呼叫建立流程,以确定可以优化的信令流量,研究结果显示:S-CSCF(Serving Call Session Control Function)是IMS中的瓶颈点。为了降低会话建立时延,提高系统性能,提出了一种基于组的业务触发算法(Group based Service Triggering Algorithm, GSTA),然后对现有3GPP(3rd Generation Partnership Project)提出的业务触发算法(3GPP STA, 3GPP Service Triggering Algorithm)和GSTA进行了性能建模,理论分析和仿真结果表明GSTA可以有效地降低S-CSCF的信令流量,增加了整个系统的吞吐量,同时显著减少了会话建立时延,提高了IMS网络的服务质量。

关键词 [无线通信](#); [信令性能](#); [会话建立时延](#); [过滤准则](#); [业务触发算法](#); [SIP](#); [IP多媒体子系统](#)

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A Group Based Service Triggering Algorithm for IMS Network

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Abstract

To determine the potential signaling traffic reductions, the session establishment procedures in IMS (IP Multimedia Subsystem) are investigated. The investigation shows that, the S-CSCF (Serving Call Session Control Function) is the major bottleneck in IMS network. To reduce the session setup delay and improve the system performance, a new Group based Service Triggering Algorithm (GSTA) is proposed. And then the modeling of 3GPP (3rd Generation Partnership Project) Service Triggering Algorithm (3GPP STA) and GSTA are presented. Theoretical analysis and simulation results show that, GSTA efficiently reduces the signaling traffic load at the S-CSCF, increases the throughput of the system and significantly reduces the session setup delay, improves IMS network quality of service.

Key words [Wireless communication](#) [Signaling performance](#) [Session setup delay](#) [Filter criteria](#) [Service triggering algorithm](#) [SIP \(Session Initiation Protocol\)](#) [IMS \(IP Multimedia Subsystem\)](#)

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