

Next Generation Network (NGN) IP Multimedia Subsystem (IMS) Quality-of-Service (QoS)



Fachhochschule Köln
Cologne University of Applied Sciences

The Computer Networks research group with the Institute of Communications Engineering, Cologne University of Applied Sciences (CUAS), develops and evaluates network designs, measurement tools and accounting tools for Next Generation Networks (NGN) and IP Multimedia Subsystems (IMS).

QoS SIP

Heterogeneous IP-based services often run on interconnected access, core and transit networks, sometimes engineered and managed by different providers. Particularly time-critical services like Voice-over-IP (VoIP) and Triple-Play services including IPTV are affected by QoS management in these networks. One single congested link may decrease the Quality-of-Experience (QoE) of IP video streams at the end users site. To evaluate and control NGN and IMS services several solutions have been developed:

NetBox

Virtualized QoS-enabled network, IMS-testbed

NetAccount

QoS-Accounting for NGN and IP Multimedia Subsystem (IMS)

IMS ShowCase

IMS Application Server

NetGage

Traffic generation and MOS-calculation (E-Model, PESQ), echo analysis

NetGen

Control of network parameters (Delay, Jitter, Packetloss, CRC-Error)
DiffServ DSCP-classes

In cooperation with the following partners:



At CeBIT 2008 we present several tools and outcomes of the research project QoSSIP (www.qossip.de) funded by the German Federal Ministry of Education and Research (BMBF). This includes IMS value added services (Application Server Show Case), virtualized IMS testbed and IP QoS measurement tools to test and/or simulate the functionality and QoE of multimedia services (VoIP, IP-TV, Online Games, etc.) in different network technologies (ADSL, WLAN, managed IP networks, Internet, and satellite links).

Just construct your IMS service testbed within seconds by click-and-drop!

See QoS and QoE manipulated and demonstrated!

Contact:

Prof. Dr.-Ing. Andreas Grebe
Fachhochschule Köln
Institut für Nachrichtentechnik
Forschungsgruppe Datennetze

Cologne University of Applied Sciences
Institute of Communications Engineering
Computer Networks

Betzdorfer Str. 2
50679 Köln

Tel.: +49 (0)221 / 8275 – 2507
Fax.: +49 (0)221 / 8275 -72507
andreas.grebe@fh-koeln.de
www.qossip.de

CeBIT

04.-09. März 2008
Halle 9, Stand C / 16