

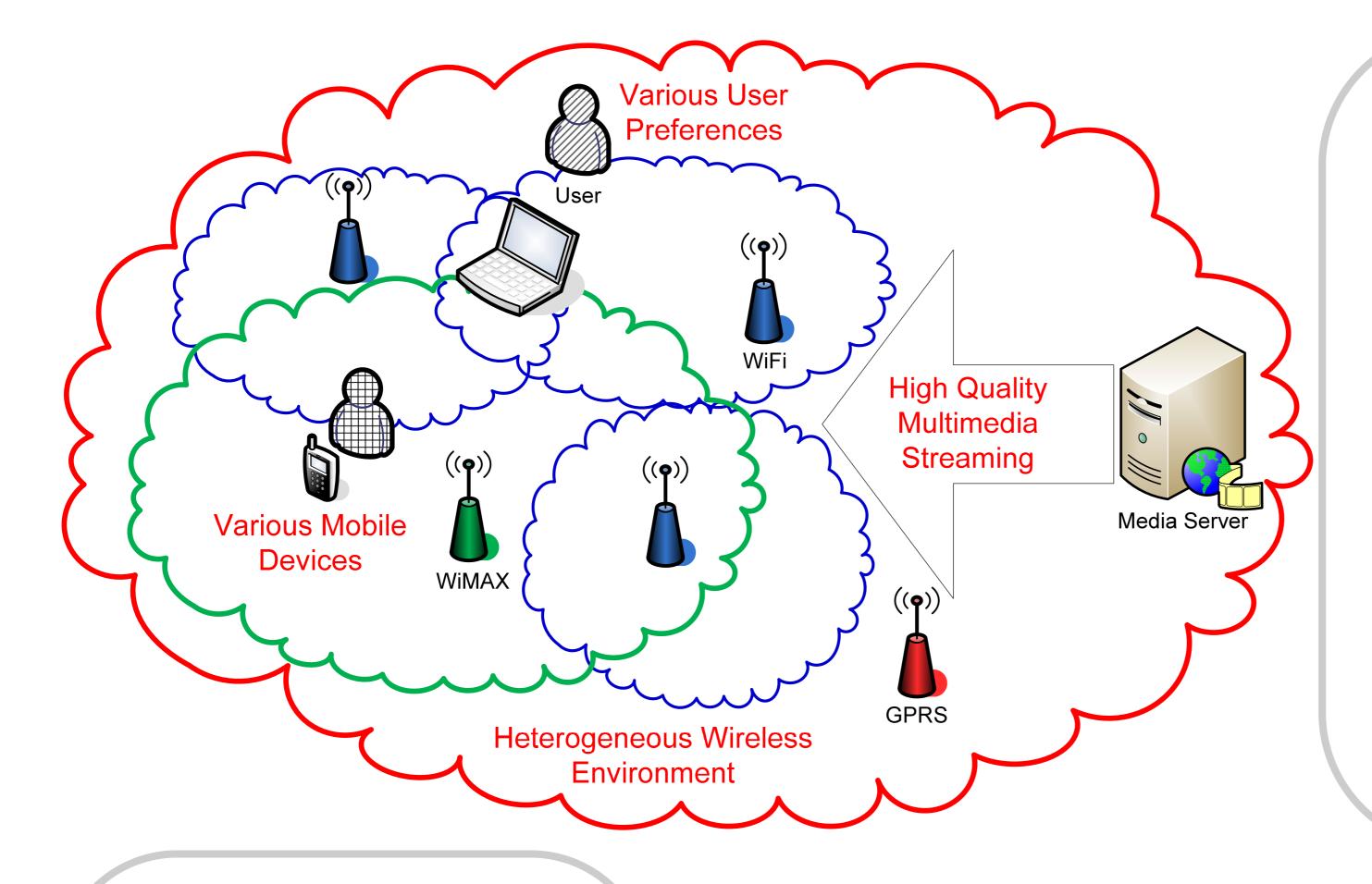
Quality-Oriented Handover Scheme for Adaptive Multimedia Streaming in Heterogeneous Wireless Network Environment



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Goal:

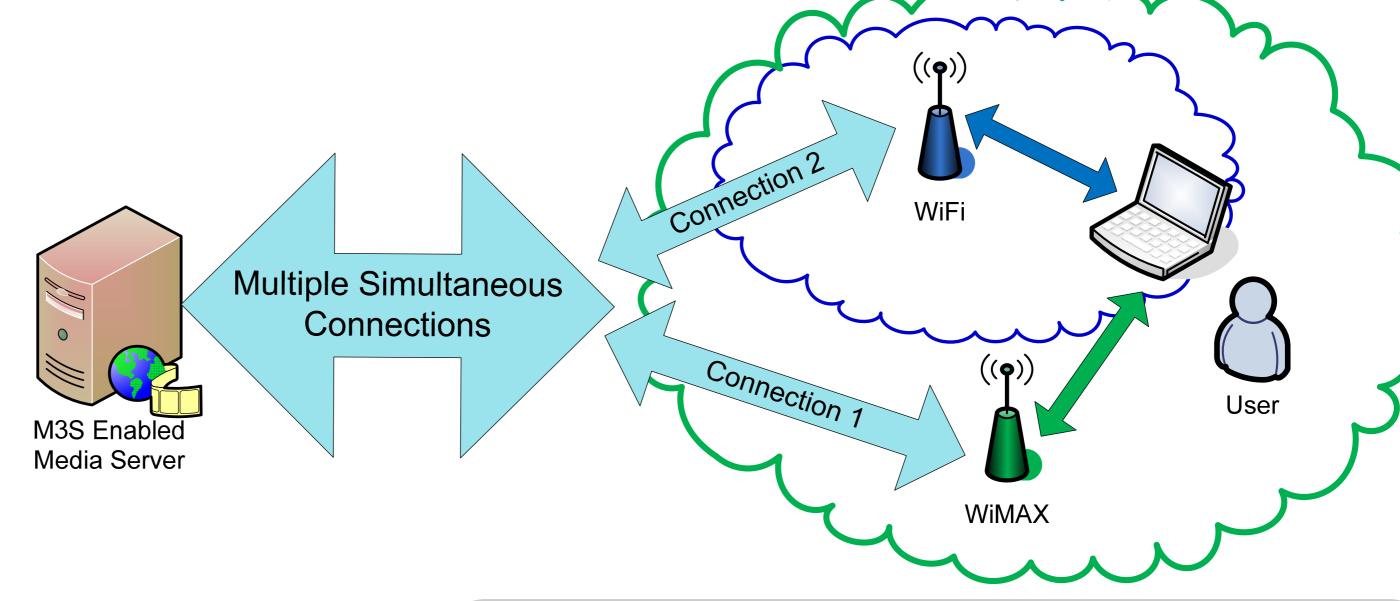
Maximize mobile user perceived multimedia quality in a heterogeneous networking environment.

Challenges:

- . Various Mobile Devices
- . Diverse User Preferences
- . User Mobility
- . Heterogeneous Wireless Environment
- . Resource-constrained Wireless Access Technologies

Solution:

- . Multimedia Mobility Management System (M3S)
- . Smooth Adaptive Soft-Handover Algorithm (SASHA)
- . Quality of Multimedia Streaming metric (QMS)



Application **Multimedia Application** M3S QMS1 QMS2 QMS3 **Transport DCCP DCCP DCCP** or or or **UDP UDP UDP** Network 802.21 802.21 WiFi **GPRS WiMax**

M3S – Multimedia Mobility Management System QMS – Quality of Multimedia Streaming

Preliminary Results:

SASHA presents good performance improvement in terms of throughput, loss and quality (PSNR) compared with other solutions: Mobile IP and Mobile DCCP.

