

Handover Management based on the Number of Frame Retransmissions for VoWLANs

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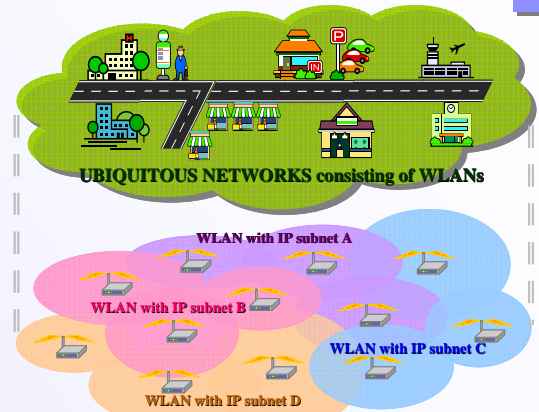
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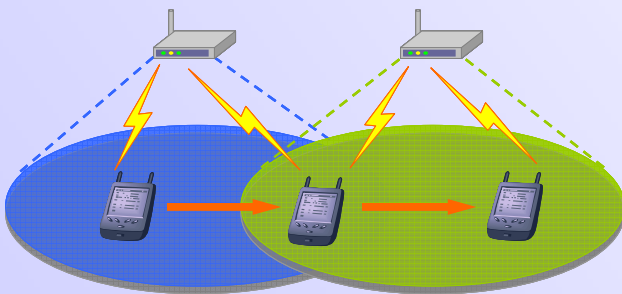
Introduction

- WLANs that are independently managed by different organizations will complementarily cover wide areas such as an entire city
- It is very difficult for MNs to maintain communication quality during handover between different IP subnets
- To achieve seamless handover, three requirements should be satisfied.
 - quick perception of a change in a wireless link condition
 - elimination of communication interruption due to handover process
 - selection of an optimal WLAN

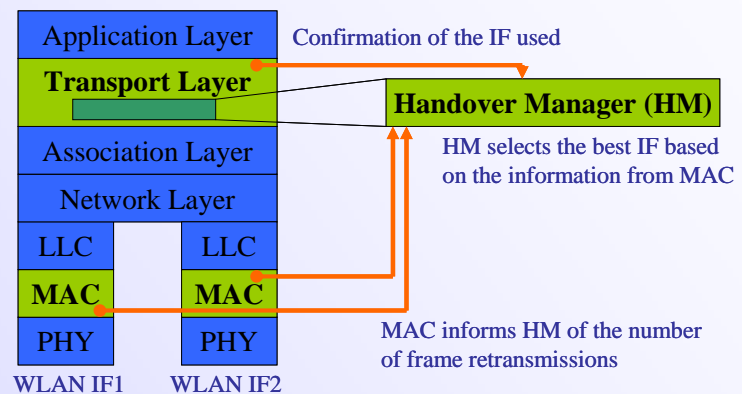


Features

- Support of continuous communication during handover between different IP subnets: **Employment of Media Optimization Network Architecture (MONA)**
- Simple heuristic handover trigger: **The number of frame retransmissions**
- Multi-homing** and **Cross-layer** architecture



MN with two IFs (i.e., multi-homing) never experiences communication interruption period due to handover process



Demonstration

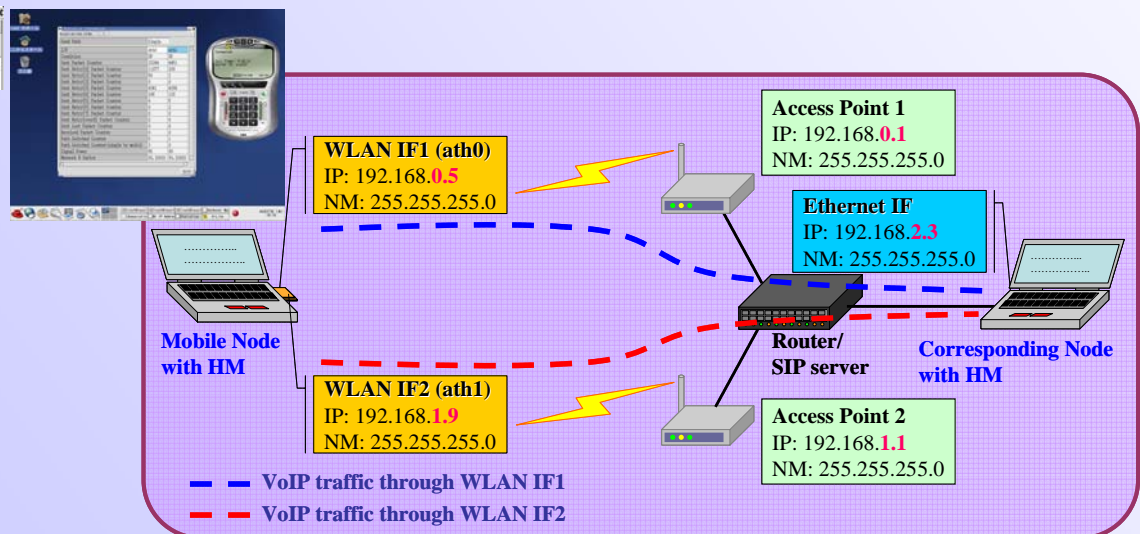
Single-path transmission using WLAN IF1

“When frame retransmissions increase on WLAN IF1...”

Multi-path transmission using both of WLAN IFs

“When wireless condition on WLAN IF2 is stable...”

Single-path transmission using WLAN IF2



Seamless handover between different IP subnets !

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