

QOS Support for Wireless (a personal opinion)

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Existing effort in wireless QoS area

as much as I know

- signaling protocols
 - predict where mobiles moving to, set up reservation in time
 - multiple wireless hops
- channel scheduling algorithms
 - realtime support
 - fairness assurance

The real challenge

- not wireless
 - just a poor quality link
- but mobility: the end of your data flow moving around
- Per flow RSVP for wireless scales much worse than per flow RSVP on wireland
 - highly dynamic changes

Being Pragmatic (or being real)

Diffserv approach to wireless QOS

- allocate for QOS traffic class
 - one more (in addition to datagram) would do
- control the *amount* of QOS traffic injected into the system
- someway to adjust the allocated amount *gradually* over time

A two-tier resource control framework

- bilateral QOS agreement between neighboring domains (adjusted over time)
- each domain responsible for its internal resource management & usage

- ◆ Payload type independent
- ◆ Packets carry right DS bits
- ◆ authorizing the QOS usage: not a new issue

