Qualitative Service

draft-moore-qualservice-00.txt

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Disclaimer

- This really isn't about 'qualitative' vs. 'quantitative'

- More on this later...

Why Qualitative Service?

- Many applications do not have quantifiable resource requirements
  - e.g. SAP
  - customers tell us that QoS for these is extremely important
- Isn't this what diffserv is for?
  - Yes, but...

Challenges

- Classification
  - how does the net admin configure a device to recognize traffic entitled to diffserv prioritization?
  - volatile ports, DHCP, encryption
- Provisioning
  - how much traffic will claim the PHB?
  - increase allocation of resources to the PHB, compromise the service offered or control the volume of traffic claiming the PHB

Signaling Helps

- Offers the network a binding of classification information to user and application
- Offers the network a hint as to relative volume of traffic which can be expected
  - at key locations in the network
- Enables network to tell sender to use a specific DSCP
  - comes from PDP

Signal What?

- Use RSVP
  - specify qualitative service
  - include classification information (filterspec)
  - include policy information (user, app id)
  - omit most quantitative information
- "I'm not sure exactly what I want, but this is who/what I am"
- Network returns a DCLASS

Affected Objects/Messages

- Adspec to include qualitative service fragment
- SENDER_TSPEC
  - qualitative service
  - MTU
- Flowspec to include qualitative service
- Network to append DCLASS to RESV

Issues

- 'Null Service' might be more appropriate than 'Qualitative Service'
    - applicability beyond qualitative
    - enables purely policy based handling of request
- Intserv service process?
    - service number?
- Does the app get to ask for *anything*?
- Can an ADSPEC offer the 'Null Service' *and* another service?