RMCAT requirements

draft-jesup-rmcat-01

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Changes since Atlanta

- Incorporated feedback
- Removed assumptions that imply a particular solution
- General cleanup
Areas of interest

• What is “Fair”?
  - We can change the term, but that doesn't change the requirement
• No definition is “correct”
• Not necessarily the same as 1xTCP flow
• Matters more when measured against longer flows
• Matters most when measured against other low-delay flows
  - Being mildly unfair to long-term, non-realtime flows is probably ok, but...
• Avoid pushing competing flows into collapse
• Avoid new flows taking too long to get a “usable” share
Where do we go with “fairness”?

- Try to define it
  - We won't succeed, but we may be able to bound it, and describe pieces of it
  - Needs to be defined for both “local” fairness and “aggregate” at nodes deeper in the network
What goes into fairness?

- Startup vs. steady-state
- Long-lived vs short competition
- Bursty competition (browsing)
- Low-delay/self competition vs TCP-like
- Affect on newcomer flows – time until “usable” (another vague term!)
- “Local” vs “aggregate” - where are we measuring?
- Others?
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Other issues

• Minimum bandwidth
  • Application-defined (or application input)
    - Don't assume minimum is a static number
    - Implies requirement that applications can change parameters dynamically
  • Other parameters?
    - Oscillation importance?
• Mode-switch point (nice kitty to nasty kitty)
  - Implies switch to longer delays/loss-based
Questions/Discussion