### **RMCAT** requirements

#### draft-jesup-rmcat-01

**Randell Jesup** 

IETF 86 Orlando

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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 lowdelay 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**