Specifying New Congestion Control Algorithms

draft-ietf-tsvwg-cc-alt-00.txt

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What is the problem?

- There are many proposed congestion control mechanisms.

- Some TCP implementations use congestion control that has not been through IETF process.

- E.g., Linux and BIC TCP.

- Goals:

  ▶ Encourage new congestion control mechanisms to go through IETF review.

  ▶ Give guidelines for considering congestion control mechanisms for Experimental status.

Since last time ...

- Numerous changes based on feedback from Microsoft's High-Speed TCP workshop and within the WG

- Added a section giving guidelines for requirements necessary for approval for deployment in the global Internet:

  ▶ Guideline #1: impact to flows using standard congestion control

  ▶ Guideline #3: investigating across a range of scenarios

  ▶ Guideline #4: protection against congestion collapse

  ▶ Guideline #8: consider deployability

Since last time ... (cont.)

- New congestion controllers should be robustness to:
  - ▲ various queuing strategies
  - ▲ middleboxes

- Changed the fairness guideline
  - ▲ new congestion controllers are expected to assess the impact on standard congestion controlled flows
  - ▲ do not comment on how this assessment should be conducted
  - ▲ removed some examples
    - ■ which could be viewed as blessing one way to conduct the assessment

Since last time ... (cont.)

- Various minor changes for clarity

- Various editorial changes

Next Step

- Authors are not aware of remaining unaddressed items

- Additional comments?

- Ready for WGLC?