Comments on the Usefulness of Simple Best-Effort Traffic

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draft-floyd-tsvwg-besteffort-00.txt

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On simple best-effort traffic:

• “Simple best-effort traffic serves a useful role in the Internet, and is worth keeping.”

• “While traffic with Quality of Service mechanisms, congestion-based pricing, or the like can also be useful, we believe that they are useful as **adjuncts** to simple best-effort traffic, not as **replacements** of simple best-effort traffic.”
On flow-based fairness for simple best-effort traffic:

• “For simple best-effort traffic, some form of rough flow rate fairness is a useful goal for resource allocation.”
The Usefulness of Simple Best-Effort Traffic

- **Minimal technical demands** on the network infrastructure.
- **Minimal demands** in terms of economic infrastructure.
- **Usefulness** in the real world.
The Limitations of Simple Best-Effort Traffic

- QoS
- The enforcement of fairness.
The Usefulness of Flow-Based Fairness for Simple Best-Effort Traffic

- **Minimal technical demands** on the network infrastructure.

- **Minimal demands** in terms of economic infrastructure.

- **Usefulness** in the real world.

- **Getting a share** of the available bandwidth.
The Limitations of Flow-based Fairness for Simple Best-Effort Traffic

• The difficulties of enforcement.

• How is flow-based fairness defined?
  – Granularity?
  – RTT-fairness?
  – Multiple congested routers?
  – Bursty vs. smooth traffic?
  – Packets vs. bytes?
  – Unicast vs. multicast?
  – ...

• Fairness over time?