PLANet:
An Active Network Testbed

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Overview of PLANet

- Network based on PLAN system
- Implementation detail
  - OCaml in user space
  - Linux 2.0.30 kernel
  - 300 MHz Pentium II with 256 MB mem
  - 100 Mbps Ethernet

PLANet performance

- Latency measurement
  - For IP, ICMP based ping
  - For PLANet
    - one which evaluates on the dest and source
    - one which evaluates on every hop
- Bandwidth measurement

Three experiments with active internetworking

- Adaptation to traffic condition on a path
  - Compress its payload for making fewer fragments
- Modification of a queueing strategy
  - Use fair queue rather than FCFS
- Selection of a better route
  - "Shop around" for a route with the best bandwidth