PlanetLab Introduction

- Shiv Kalyanaraman
- Yong Xia (TA)
- shivkuma@ecse.rpi.edu
- http://www.ecse.rpi.edu/Homepages/shivkuma
Motivation

- A new class of services & applications is emerging that spread over a sizable fraction of the web
  - CDNs as the first examples
  - Peer-to-peer, ...
- Architectural components are beginning to emerge
  - Distributable hash tables to provide scalable translation
  - Distributed storage, caching, instrumentation, mapping, ...
- The next internet will be created as an overlay on the current one
  - as did the last one
  - it will be defined by its services, not its transport
    - translation, storage, caching, event notification, management
- There is NO vehicle to try out the next $n$ great ideas in this area
Multipath Overlay

- Overlay: build network on top of existing networks (e.g., Internet)
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Toward a Multipath Overlay Architecture

- Implementing a multi-connection multipath overlay transport service
Current Status

- 220 machines at 100 sites worldwide
  - Linux PC boxes, kernel 2.4.19
  - RPI is part of it
For more info….

- PlanetLab website: http://www.planet-lab.org/