Naming & Discovery
(on DNS)

Why name?

- google.com
- 172.217.11.14
- Indirection?
- Security/Safety concerns?
Challenges

- Scaling
  - # of domains
  - # of clients

- Organizational
  - .com
  - .io
  - .bit.ly
  - .uk
Scaling for many clients.

- Caching

Google.com

Edna

Hierarchy

pil.cims.nyu.edu

cims.nyu.edu

Scaling for many organizations?

- Hierarchy

Panda-pc

1.1.1.2

Panda-pc
Recursive vs Iterative Resolution

Where is cims.nyu.edu

Resolver

Iterative
Recursive

Iterative: Return what you know

Recursive: Only return address