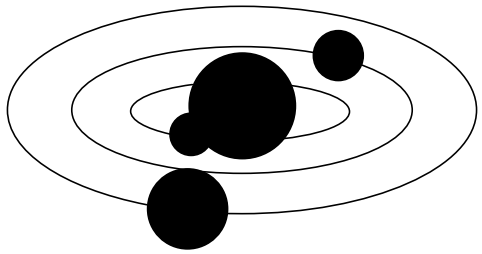
. . . and it is not only for e-mail

What is out there?

- Astronomy
- Biology
- Computers
- Dictionaries
- Environment
- Finance
- Geology
- History
- Internet
- Journals
- K-12
- Legal
- Medical
- New York Times

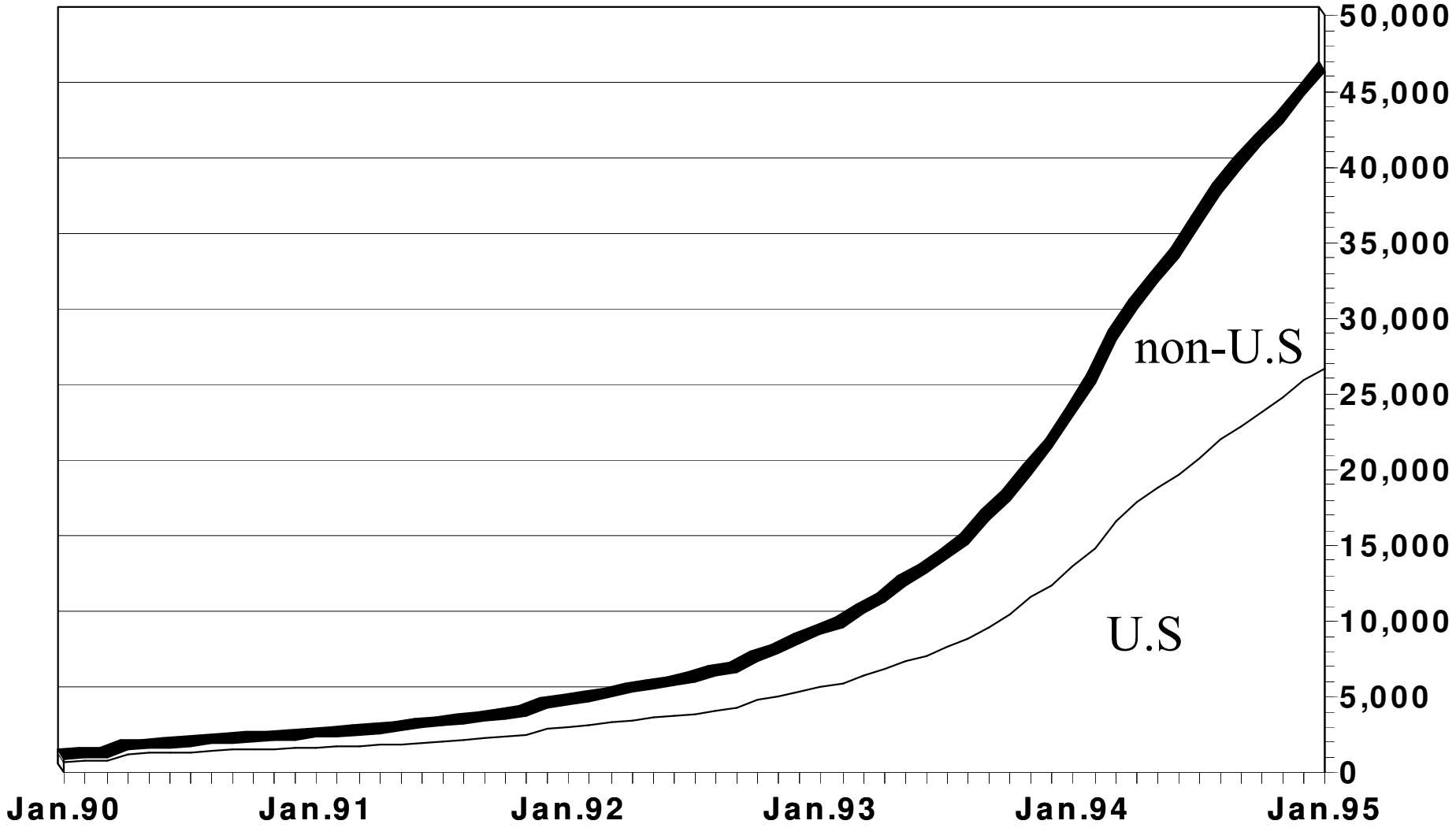
What is out there?

- Oxford University
- Physics
- Quebec
- Religion
- Science
- Travel
- U.S. Government
- Weather
- X-Windows
- Yeast
- Zoology



Internet Networks Worldwide

© Internet Society



Top U.S. Domains

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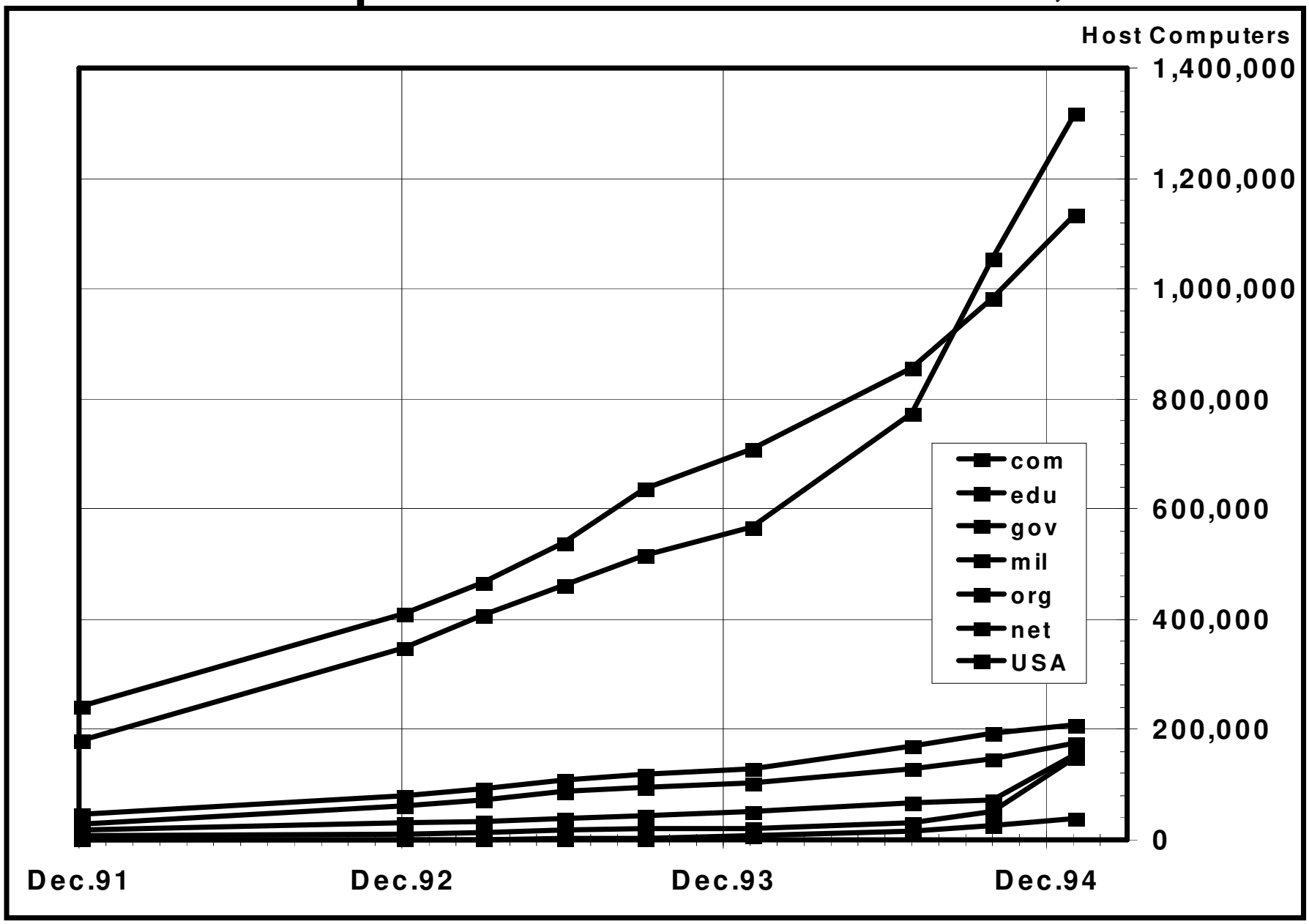
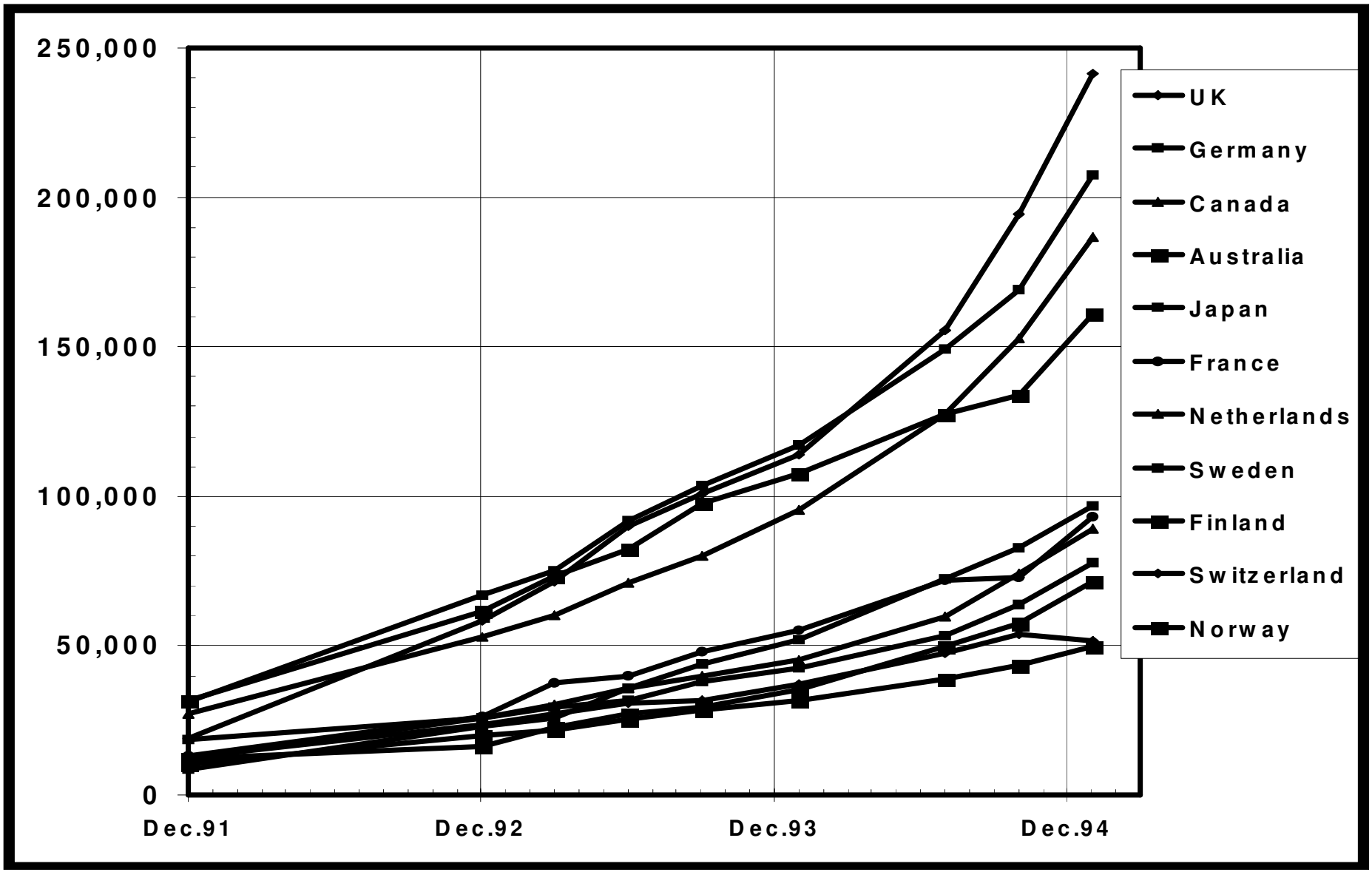


Internet Hosts non-U.S.

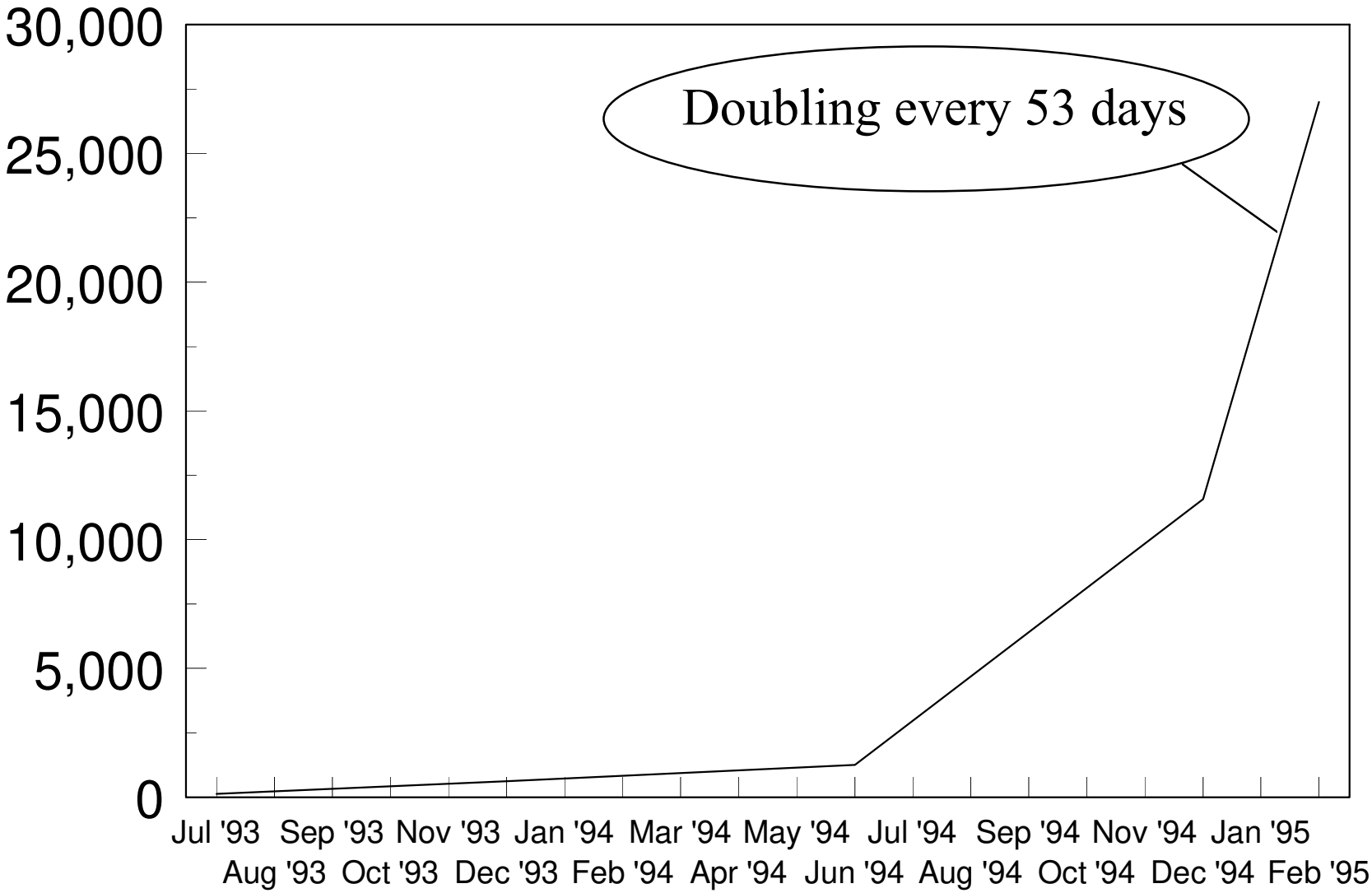
© Internet Society



Online Services

- Information Services
  - America Online
    - gopher client
    - Acquired ANS
    - Worldwide Web browser in the next few months
  - Compuserve
    - e-mail, ftp
    - Worldwide Web browser
  - Delphi
    - Telnet, ftp mail server, gopher client
  - GEnie
    - limited e-mail
  - Prodigy
    - Worldwide Web browser

World Wide Web Server Growth



Currently doubling every 53 days

WorldWide Web Sites

Africa
South Africa

Asia
China
Hong Kong
India
Japan
Korea
Malaysia
Singapore
Taiwan

Australia & Oceania
Australia
New Zealand

Central America
Costa Rica

Europe
Austria
Belgium
Croatia
Czech Republic
Denmark
Estonia

Europe
Finland
France
Germany
Greece
Hungary
Iceland
Italy
Latvia
Lithuania
Luxembourg
Netherlands
Norway
Poland

WorldWide Web Sites

Europe
Russia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
United Kingdom
Yugoslavia

Middle East
Israel

North America
Canada
Mexico
Puerto Rico
United States

South America
Argentina
Brazil
Chile
Colombia
Ecuador
Peru

The Internet and Your Business

In the high-tech world, if you're not on the net, you're not in the know.

–The Economist

The Internet and Your Business

... This is where we get our ideas for new programs and products—by communicating with customers over the Internet.

–Victor Rosenberg, President of Personal Bibilographic Software, Inc.

Security

- Passwords
  - "The Cuckoo's Egg"
  - Practice "safe hex"
- Personnel
  - *Sed quis custodiet ipsos custodes*?

  (But who will guard the guards themselves?)

  Satires, VI, line 347; Juvenal

Security

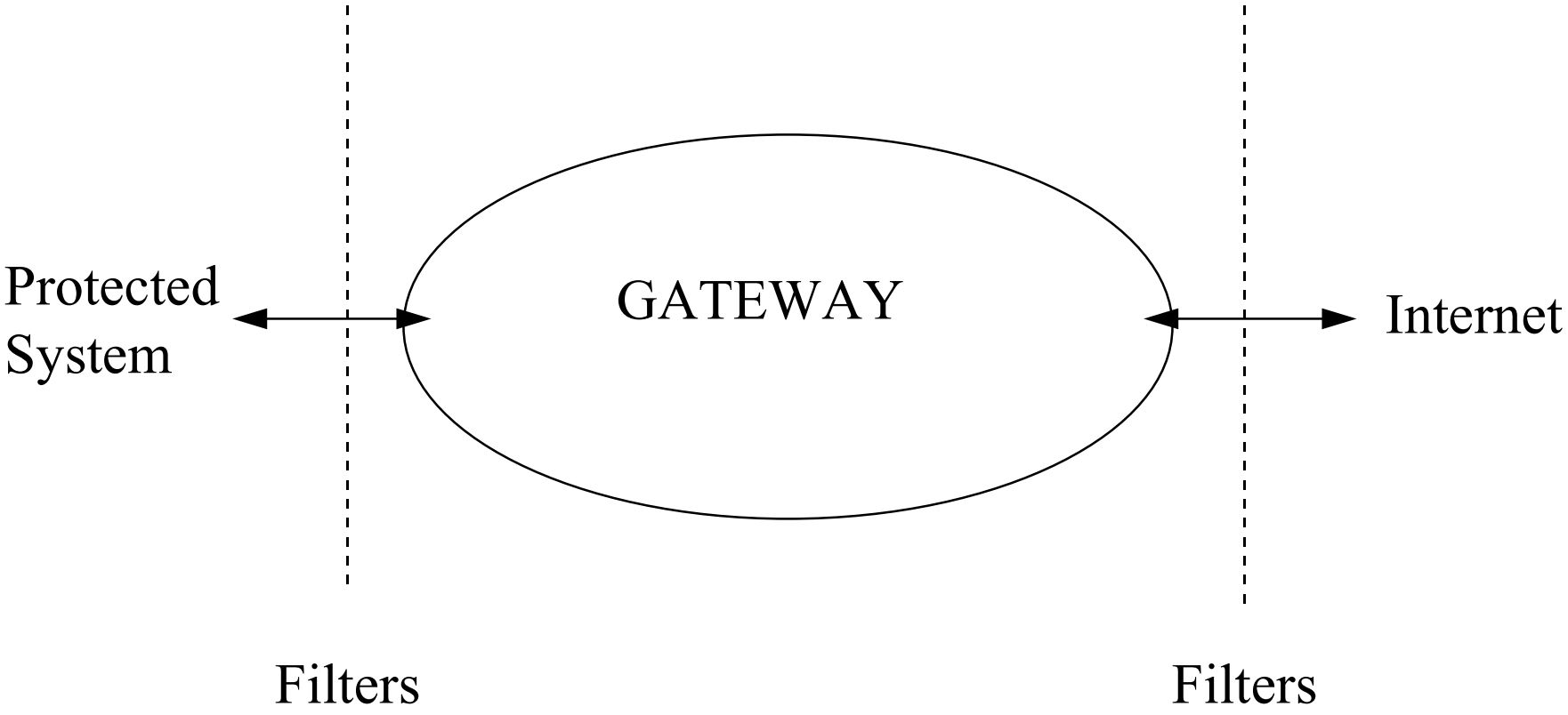
- Intrusion
  - Data
    - Firewalls & packet filters
  - Viruses
- Transactions
  - Privacy and authentication
  - Secure sockets
  - Secure httpd

Data Security
Firewalls & Packet Filters

- Firewall
  - A fireproof wall used as a barrier to prevent the spread of a fire

    American Heritage Dictionary
- Packet filters
  - Included with routers
  - Low-cost security but error-prone

Firewalls



Packet Filters

- By site
- By port
- Low-cost but difficult to implement properly
- Not “spoof-proof”