

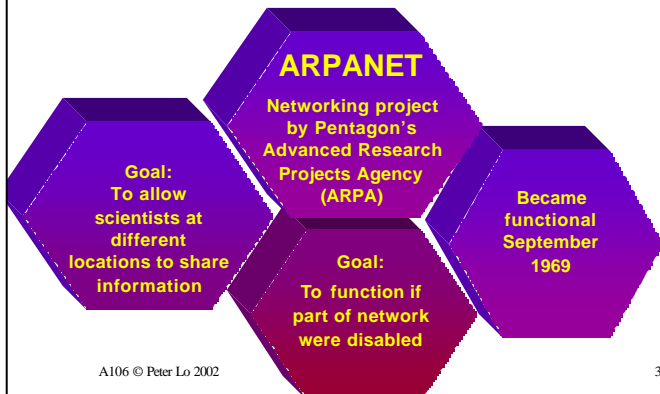
# The Internet

Peter Lo

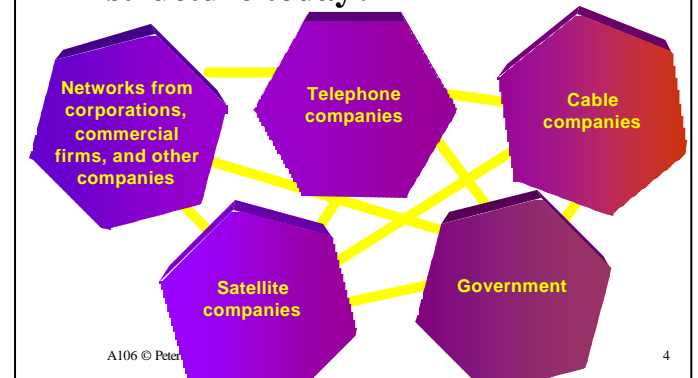
## Some services found on the Internet

- e-mail (1)
- Web (2)
- file transfer (3)
- chat (4)
- message board (5)
- instant messaging (6)

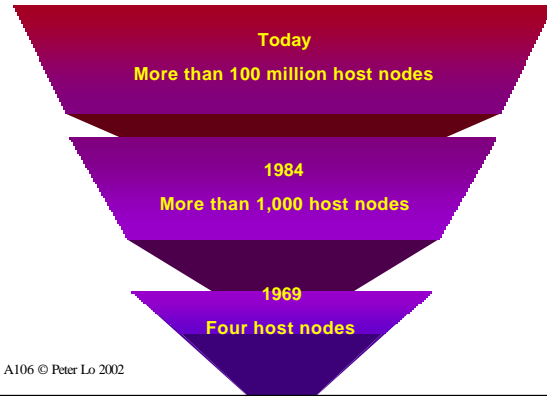
## How did the Internet originate?



## Who provides the Internet's structure today?



## How has the Internet grown?



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## Who controls the Internet?

- Nobody; it is public, cooperative, and an independent network
- Several organizations set standards

### World Wide Web Consortium (W3C)

- Oversees research, sets standards and guidelines
- Tim Berners-Lee, director

### Internet2 (I2)

- Internet-related research and development project
- Develops and tests advanced Internet technologies

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## What are ways to access the Internet?

- 1 Regional ISP
- 2 National ISP
- 3 OSP (Ex. AOL)
- 4 Wireless Internet Service Provider



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## How can you connect to the Internet?

Very high-speed connection

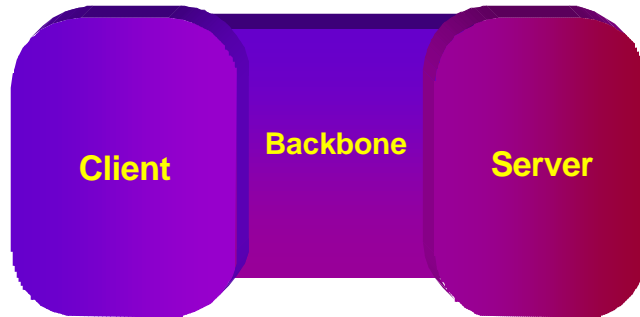
Digital subscriber line (DSL) and cable modem

Dial-up access

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## What are three parts of an Internet connection?

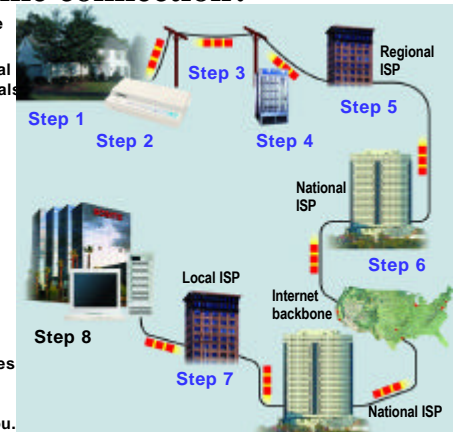


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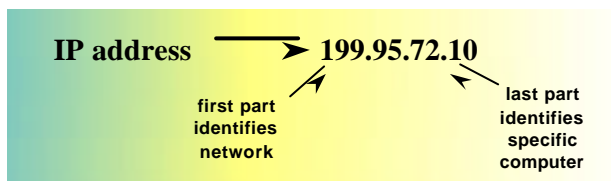
## How might data travel the Internet using a telephone line connection?

- 1: Request data from the a server on Internet.
- 2: Modem converts digital signals to analog signals.
- 3: Data travels through telephone lines to a local ISP.
- 4: Data passes through routers.
- 5: Regional ISP uses leased lines to send data to a national ISP.
- 6: National ISP routes data across the country.
- 7: National ISP passes data to local ISP.
- 8: Server sends data back to you.



## Internet protocol (IP) address

- Number that uniquely identifies each computer or device connected to Internet



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## Domain name

- Text version of IP address

IP address → 199.95.72.10  
 Domain name → scs.site.com

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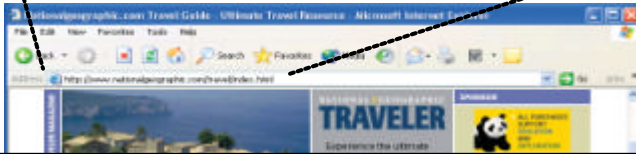
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## What is a URL?

- Unique address for Web page located on Web server

protocol                      domain name                      path

http://www.nationalgeographic.com/travel/index.html



## References

- Computers in Your Future (Ch. 7)
- Introduction to Computing (Ch. 2, 8)
- The Better Way (Ch. 13, 15)
- Discovering Computers World 2003 (Ch. 2)