Applications

COS 460 / 540

1

Applications

- DNS - Doman Name Service
- HTTP - Hyper Text Transfer Protocol

2

DNS

usm.maine.edu

3

Expand…

4

usm.maine.edu

http://usm.maine.edu

http://usm.maine.edu:80

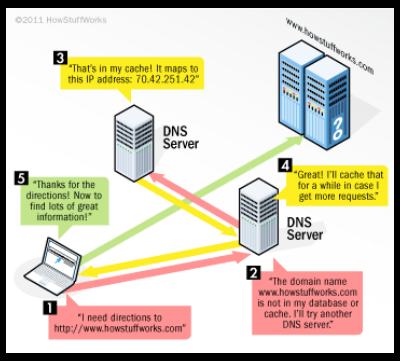
http://usm.maine.edu:80/index.html

http://130.111.135.26:80/index.html

… 130.111.135.26

DNS in Action

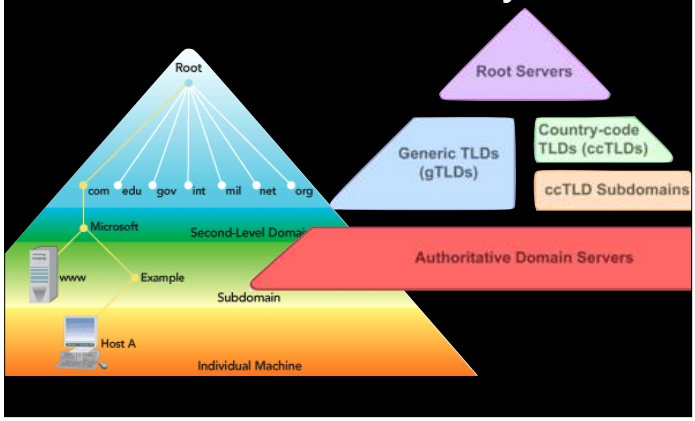
5



http://computer.howstuffworks.com/dns.htm

DNS Hierarchy

6



Example: HTTP

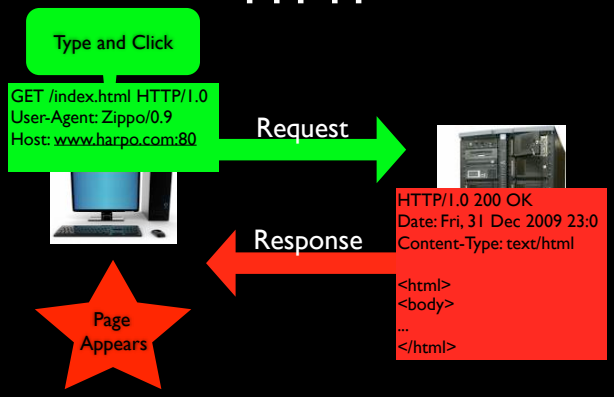
- HyperText Transfer Protocol
- HTTPS is "secure" HTTP
- Request for Comment (RFC) 2616, 2068, and1954
- Utilizes TCP/IP (Internet Architecture)

7

How does this work?

8

HTTP



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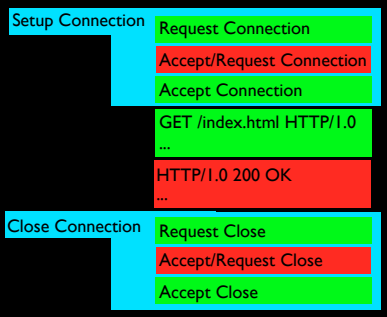
HTTP, TCP



11

HTTP

- HTTP is essentially **file transfer**
- Every bit is important
- Similar to Email, Printing, File Servers...

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The Internet Under Crisis

Learning from September 11

http://www.nap.edu/read/10569/chapter/1

Anatomy: A Look Inside Network Address Translators

http://www.cisco.com/web/about/ac123/ac147/archived_issues/ipj_7-3/anatomy.html