

September 19, 2011

Copyright Technology 101

U.S. Patent and Trademark Office (USPTO) Global Intellectual
Property Academy and U.S. Copyright Office

Conference on Copyright in the Digital Age

Presenter:

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Overview

How does the Internet work?

Who governs the Internet?

Who is part of the Internet ecosystem?

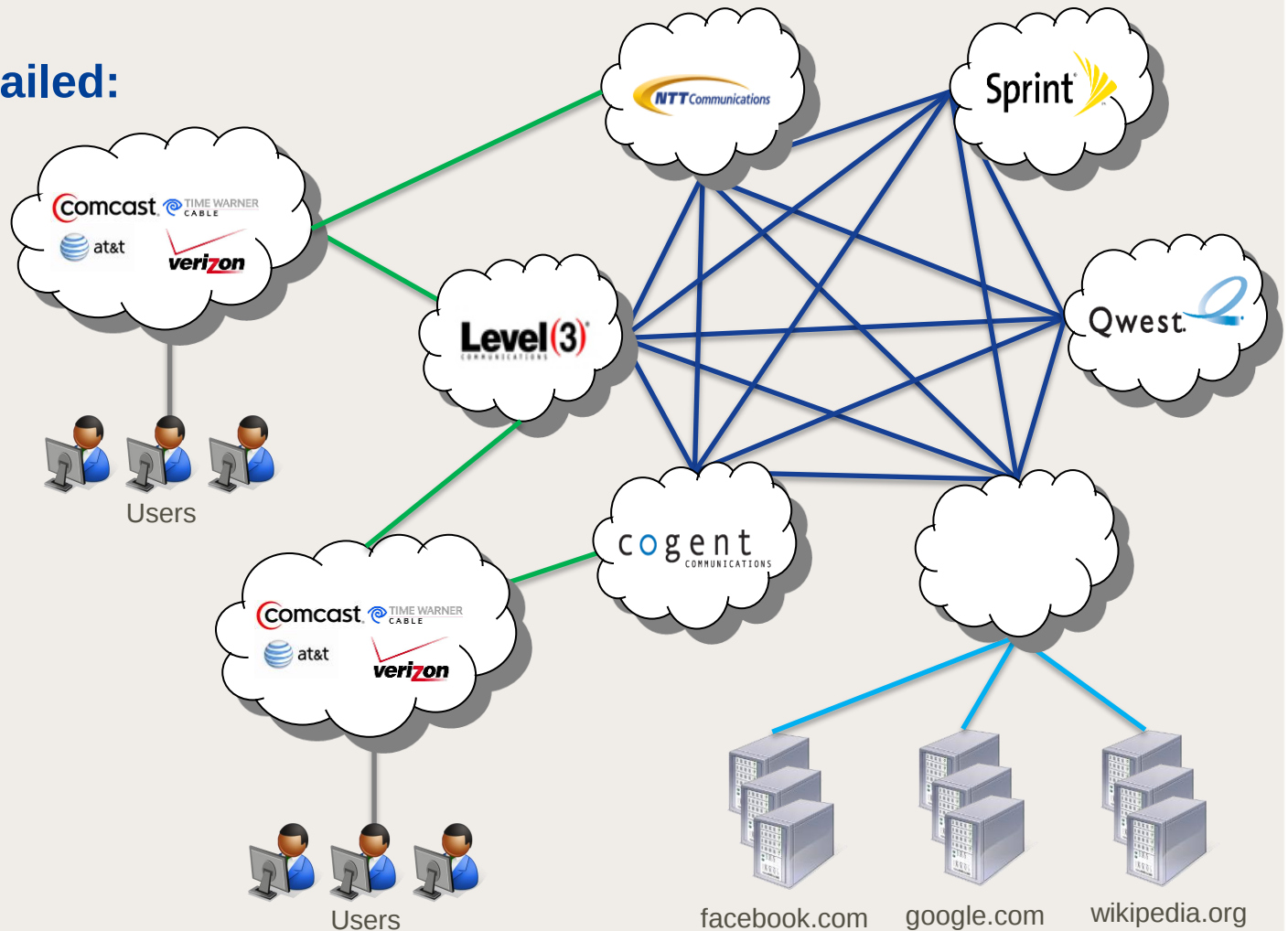
How does the Internet work?

Typical view of the Internet:



How does the Internet work?

More detailed:



How does the Internet work?

URLs:

http://www.nytimes.com/tech/index.html

application
transfer
protocol

host
name.

domain
name.
top-level
domain

path

file

case sensitive

Image credit: John Gallaugher, *Information Systems: A Manager's Guide to Harnessing Technology* (Flat World Knowledge).

How does the Internet work?

Domain names:

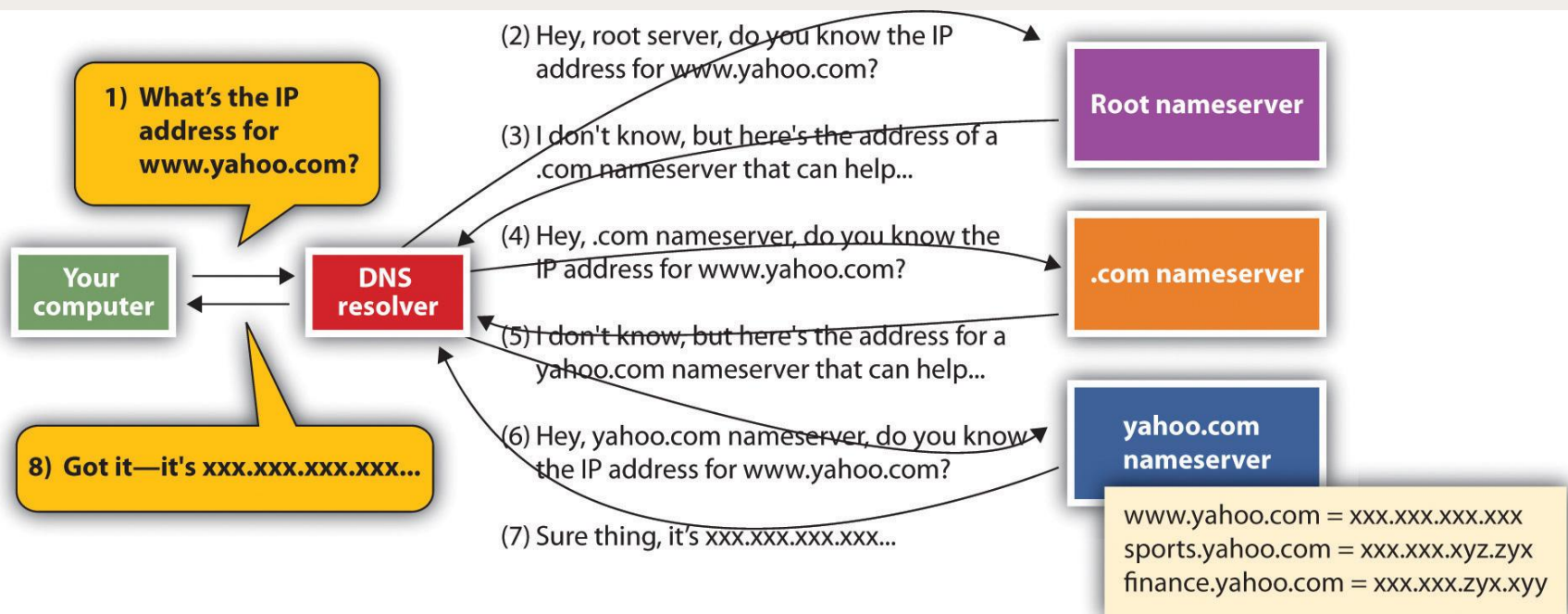


Image credit: John Gallaugher, *Information Systems: A Manager's Guide to Harnessing Technology* (Flat World Knowledge).

How does the Internet work?

Data Packets:

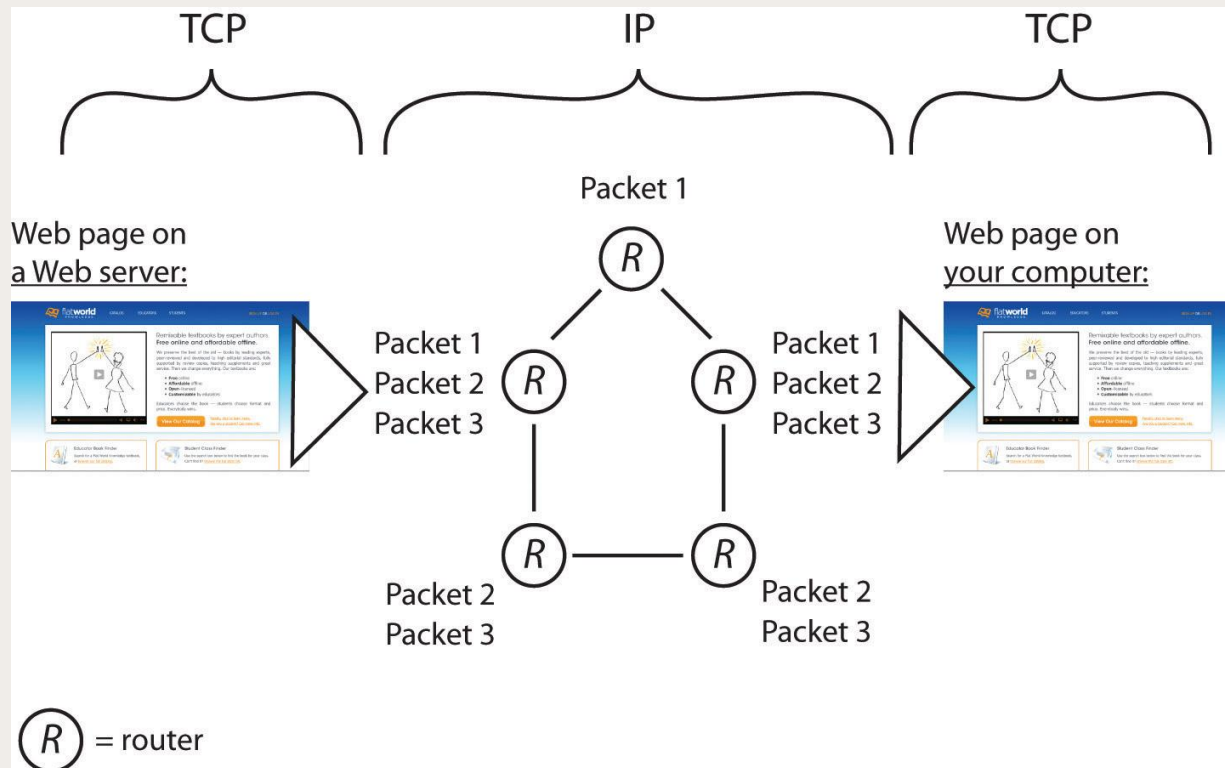


Image credit: John Gallaugher, *Information Systems: A Manager's Guide to Harnessing Technology* (Flat World Knowledge).

Who governs the Internet?

Nobody?

Who governs the Internet?

At the National Level (in the United States)

- Federal Communications Commission (FCC)
 - Net neutrality rules
- National Telecommunications and Information Administration (NTIA)
 - Broadband, spectrum, DNS, privacy/security/copyright issues
- Federal Trade Commission (FTC)
 - Anti-trust and consumer protection
- Department of Justice
 - Internet crime
- Congress
 - Legislative authority

Who governs the Internet?

At the International Level

- **Coordination and operations**
 - ICANN
- **Standards**
 - Internet Society (ISOC)
 - Internet Engineering Tasking Force (IETF)
 - Internet Architecture Board (IAB)
 - World Wide Web Consortium (W3C)
 - International Telecommunication Union (ITU)
- **The Market**
 - E.g. Mozilla Foundation, Verisign

Who is part of the Internet ecosystem?

- **Users**
- **Internet service providers**
- **Domain registrars**
- **Domain registries**
- **Hosting providers**
- **Governing bodies**
- **OTHERS?**
 - **Services:** search engines, file lockers, UGC sites, online advertisers, payment processors, shippers
 - **Applications:** operating systems, web browsers, software
 - **Devices:** mobile devices, computers, routers, etc.

Who is part of the Internet ecosystem?

Questions:

- **Where are the “control points” on the Internet?**
- **How can different methods be used to protect intellectual property at these different points?**
- **Who has a legal responsibility to protect intellectual property?**
- **Who would be most effective in protecting intellectual property? (and what incentives do they need, if any, to do so?)**

Further reading

**Castro, Bennett and Andes, “Steal these Polices: Strategies for Reducing Digital Piracy,” Information Technology and Innovation Foundation (December 2009),
<http://www.itif.org/files/2009-digital-piracy.pdf>.**

**Castro, “Better Enforcement of Online Copyright Would Help, Not Harm, Consumers,” Information Technology and Innovation Foundation (October 2010),
<http://www.itif.org/files/2010-copyright-coica.pdf>.**

**Price, “An Estimate of Infringing Use of the Internet,” Envisional (January 2011),
http://documents.envisional.com/docs/Envisional-Internet_Usage-Jan2011.pdf.**

Thank you!



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