



NOMS

Distinguished Experts Panel

VoIP management

The Emperor Has No Clothes On

Henry Sinnreich/Pulver.com

Internet voice is better and at no extra cost as well

Vancouver, Thursday, 6 April 2006



Facts

- P2P traffic dominates the Internet (~80%)
- P2P Skype dominates VoIP (~80M users)
- Wideband IP-IP voice is better than PSTN
 - Skype, Google



Back to the e2e Internet

Fundamental technology shifts

- The p2p application is the communication network
 - P2P networks are self organizing
 - See SIP beyond VoIP: Presence, IM, multimedia, integration w. apps
- The application is trusted, not the admin
 - See Microsoft DRM
- Only PCs with trusted apps are admitted to the enterprise network
 - See Cisco network admission control



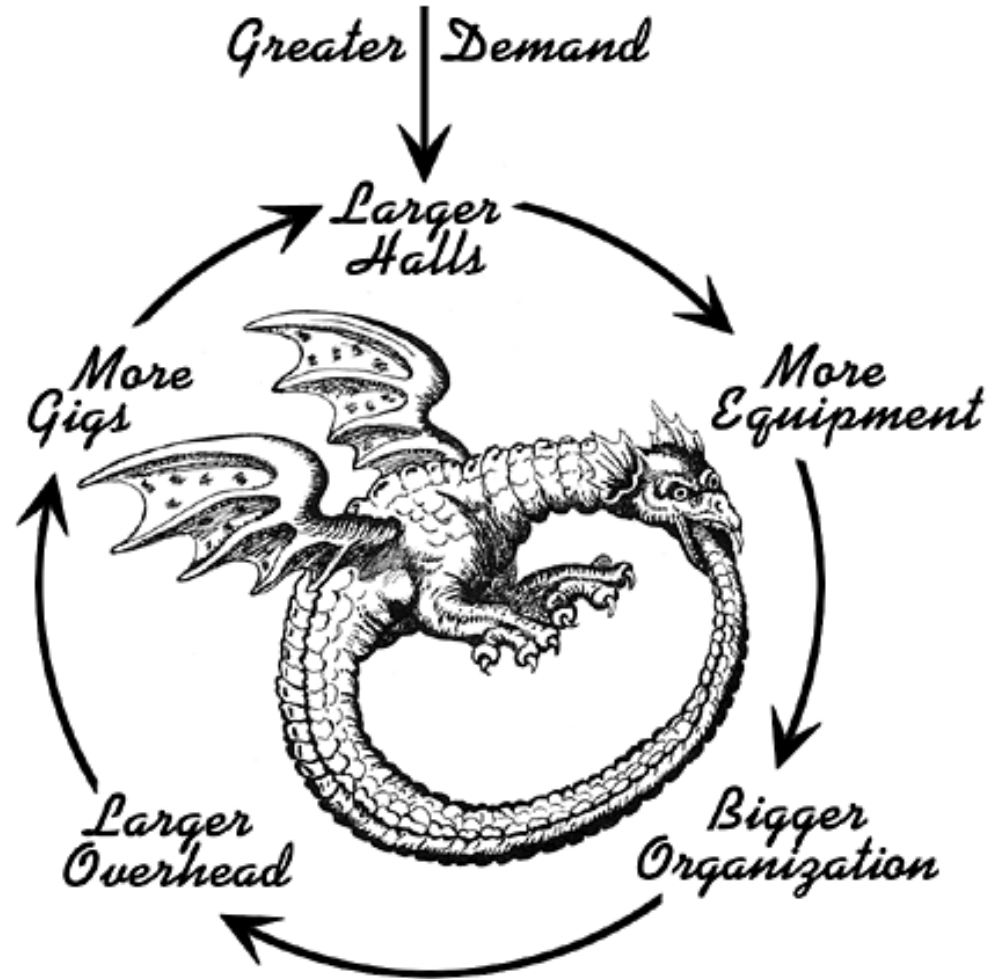
VoIP infrastructure made obsolete by P2P

- DNS, ENUM
- SIP registrar and proxy servers,
- Presence servers
- Component servers:
 - Announcements, voice mail, media servers, conference servers
- Session border controllers
- Softswitches: Local switch emulation, PBX
- Media servers
- Network elements for QoS
- Policy servers
- Network management
- Voice quality monitoring probes
- VoIP network IT (OSS) systems for all the above

The sum of all = IMS, TISPAN



Complexity Eating CS VoIP





Major P2P Projects

P2P SIP

New IETF WG

Several P2P SIP projects and Internet Drafts
(P2P IP PBX: Avaya and Peerio, prestandard)

<http://p2psip.org>

Open DHT

OpenDHT is a publicly accessible distributed hash table (DHT) *service*. Clients of OpenDHT do not need to run a DHT node in order to use the service. <http://www.opendht.org/index.html>



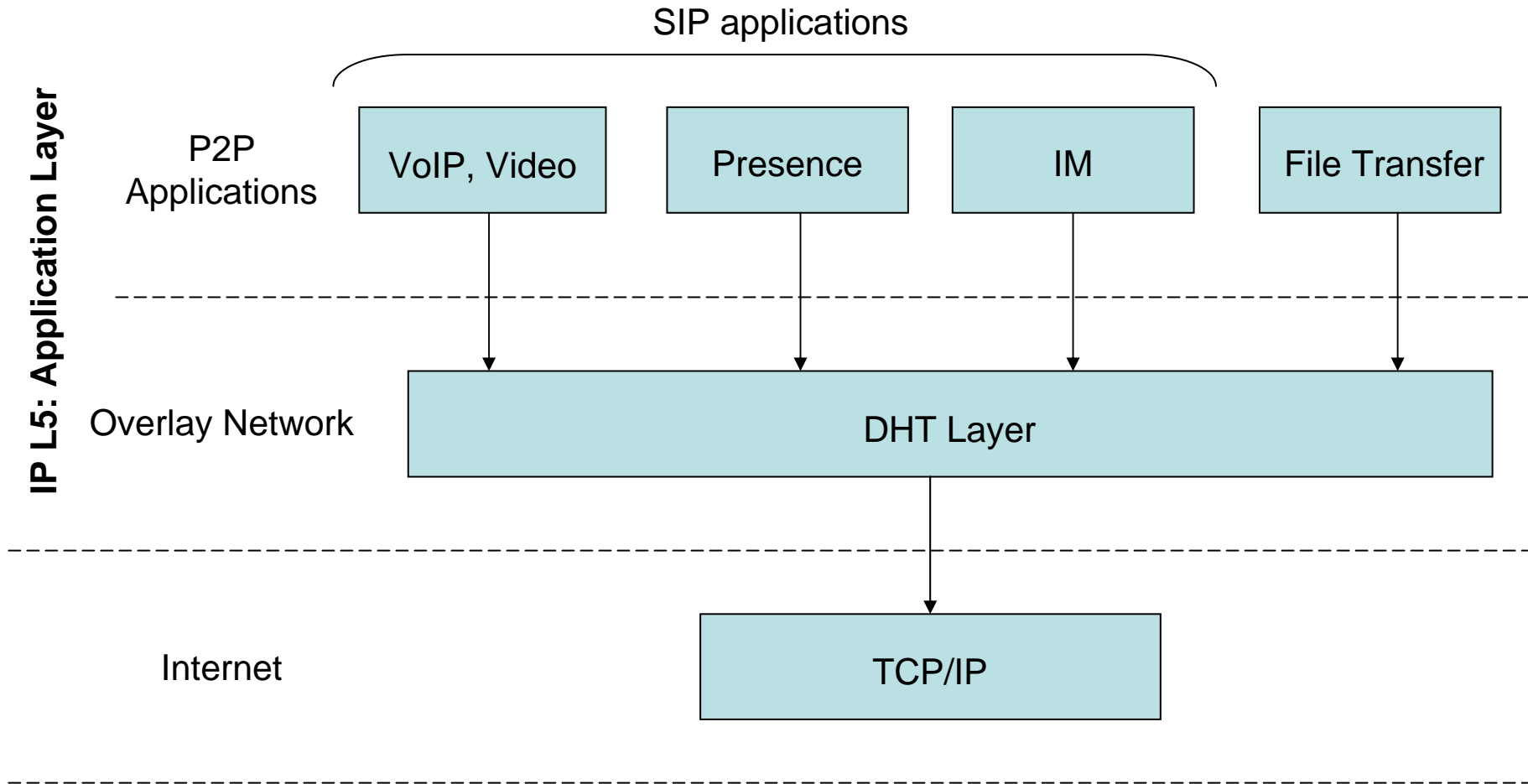
Planet Lab infrastructure

<http://www.planet-lab.org/>

645 nodes over 310 sites.
Academic, industrial, and
government institutions



P2P Communications





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The Economist

SEPTEMBER 17TH 23RD 2006 www.economist.com

A very Japanese revolution

PAGES 12 AND 22-24

After Katrina

PAGES 14, 29 AND 73

Tackling Latin American poverty

PAGES 13 AND 36

Steve Jobs, resurrection man

PAGE 48

How the internet killed the phone business



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The Internet Is The Service

Quote from Jon Peterson, IETF Area Director

Questions?