

Datenverkehrsanalyse

Seminar:

Gesellschaftliche, technische und juristische Perspektiven von Filesharing-Netzen

Sebastian Müller



06. Januar 2006

- 1 Quellen
- 2 Allgemeines zum Netzwerkverkehr
- 3 Cachelogic
- 4 Statistik
- 5 Dateitypen
- 6 Top Ten Musik
- 7 Zusammenfassung

Quellen

- <http://www.cachelogic.com>
(Grafiken)
- <http://www.npd.com>
- <http://www.bigchampagne.com>

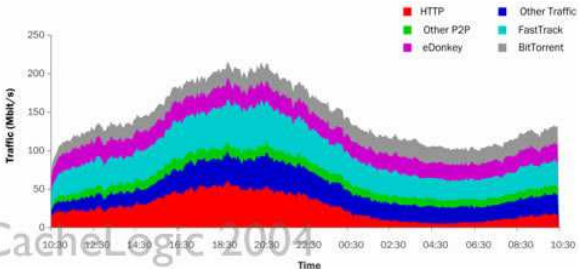
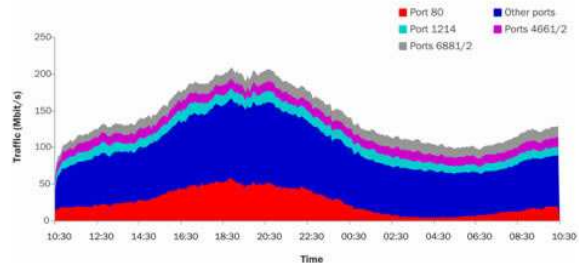
Allgemeines zum Netzwerkverkehr

Warum sind die Messungen für einen Provider wichtig?

- Provider hat Kosten durch Netzwerkverkehr (100M€ Europa; 500M€ Weltweit)
- P2P wächst
- Symmetrie von P2P (upload download)
- P2P konstant über 24h
- Poweruser werden gekündigt

Allgemeines zum Netzwerkverkehr

Wie wird gemessen?



© CacheLogic 2004

Cachelogic

CacheLogic™
Advanced Solutions for P2P Networks

Company | Products | Partners | Support | Peer-to-Peer | Research | Contact

Restore the Balance

CacheLogic products enable Service Providers to intelligently deal with the burden of Peer to Peer traffic

In the News

- 29 August 2005
Reuters: Privacy crackdown spurs shift in online file sharing - eDonkey is now roughly on par with BitTorrent...[more](#)
- 29 August 2005
BBC: File-sharers move from BitTorrent - move away from the popular BitTorrent system following legal action, say experts...[more](#)
- 29 August 2005
CacheLogic - invites ISPs to apply to join the expansion of the StreamSight Analysis Network...[more](#)

StreamSight Analysis Network

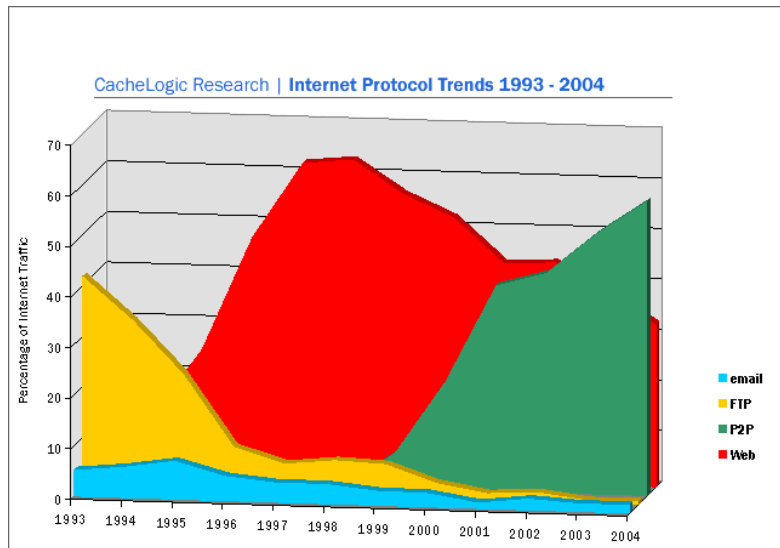
CacheLogic offers Service Providers a zero cost option to join the StreamSight Analysis Network programme

[Find out more](#)

© CacheLogic 2005 | All Rights Reserved | [Terms Of Use](#)

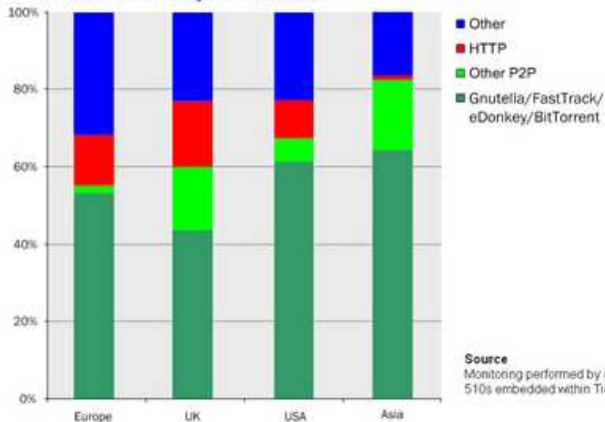


allgemeiner Netzwerkverkehr



allgemeiner Netzwerkverkehr

Global Traffic Analysis – June 2004

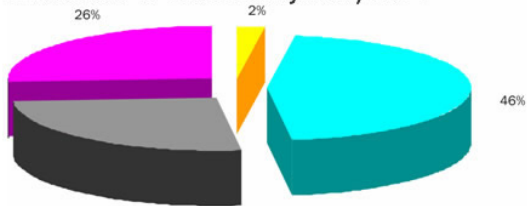


Source

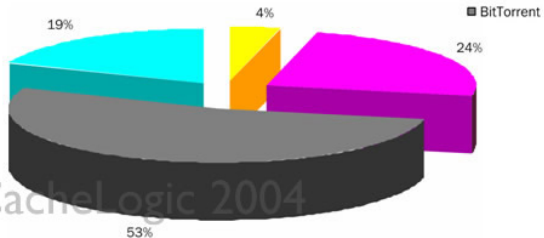
Monitoring performed by CacheLogic Streamsight.
510s embedded within Tier 1 and 2 ISPs – June 2004

P2P Netzwerkprotokolle 2004

Mix of Peer-to-Peer Traffic: January 2004



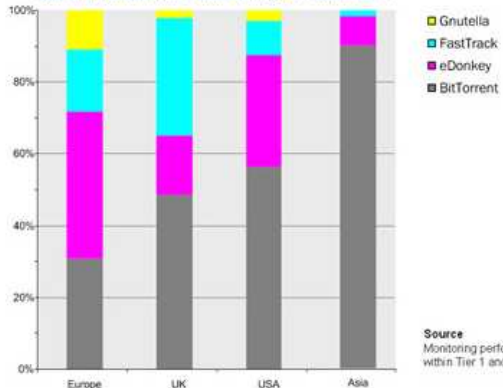
Mix of Peer-to-Peer Traffic: June 2004



© Cachelogic 2004

P2P Netzwerkprotokolle 2004

Global Peer-to-Peer Traffic Analysis – June 2004

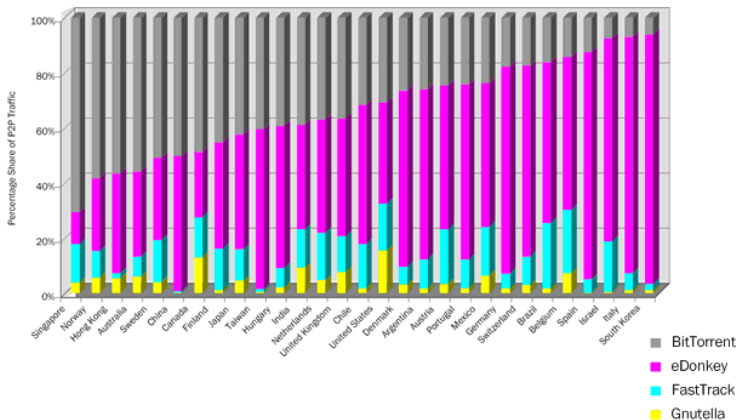


Source

Monitoring performed by CacheLogic StreamSight 510s embedded within Tier 1 and 2 ISPs – June 2004

P2P Netzwerkprotokolle 2005

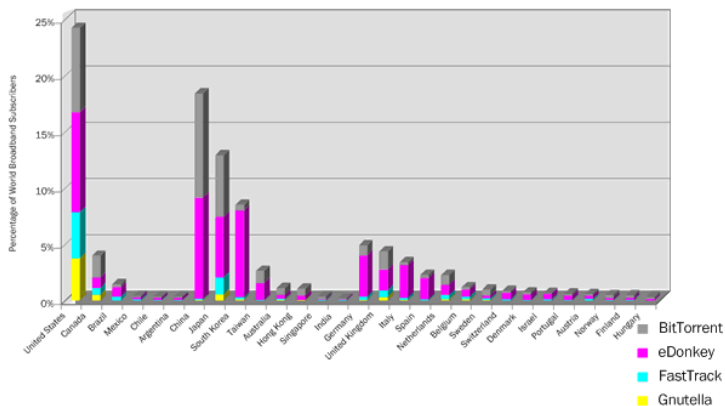
CacheLogic Research | P2P Market Share by Country



P2P Netzwerkprotokolle 2005

CacheLogic Research | Mix of P2P Traffic Volume by Region

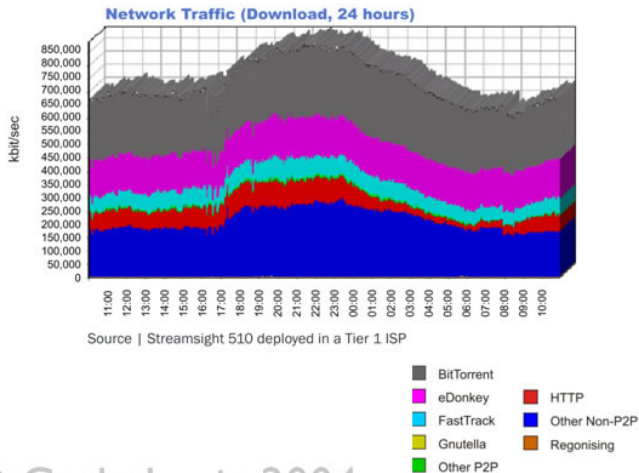
Weighted by number of Broadband Subscribers per region



P2P-Programme März 2005 (npd.com)

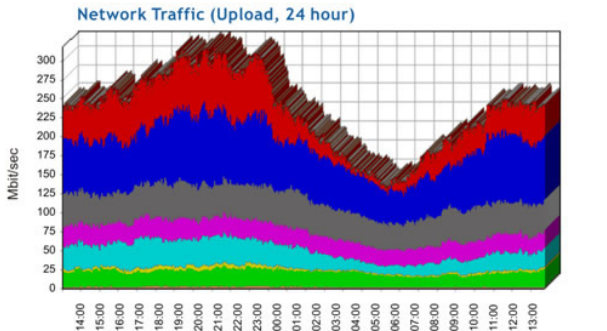
1. WinMX (2.1 million)
2. iTunes (1.7 million)
3. LimeWire (1.7 million)
4. Kazaa
5. BearShare
6. Ares Galaxy
7. Napster
8. Morpheus
9. Real Player Store
10. iMesh

Netzwerkverkehr 2004 (24h Download)

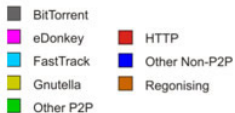


© CacheLogic 2004

Netzwerkverkehr 2004 (24h Upload)



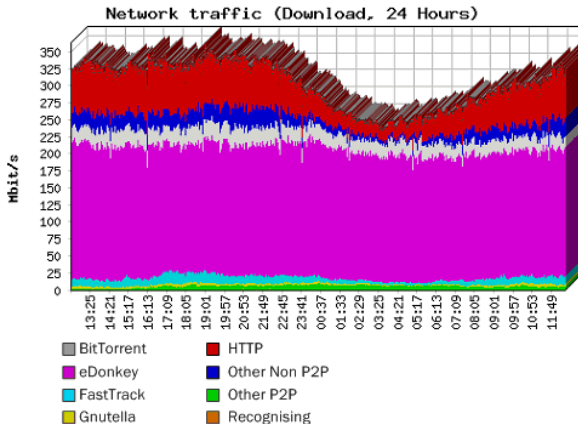
Source | CacheLogic Streamsight 510 deployed in a Tier 1 ISP



© CacheLogic 2004

Netzwerkverkehr 2005 (24h Download)

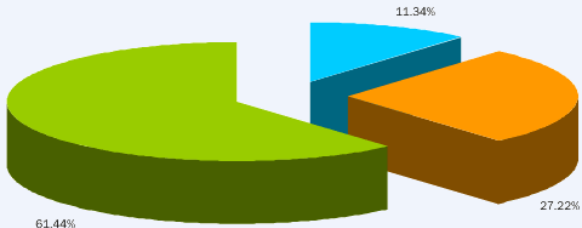
CacheLogic Research | Download Traffic Volume in a Tier 1 PoP



Dateitypen 2005

Art

CacheLogic Research | Global Mix of Peer-to-Peer Traffic



Key

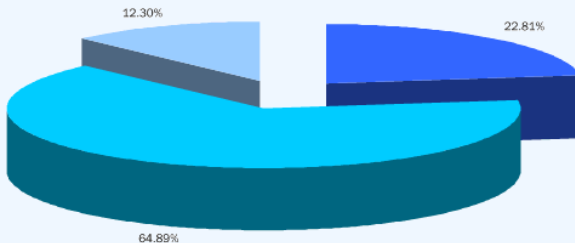
File Formats

- Audio
- Other
- Video

Dateitypen 2005

Audioformate

CacheLogic Research | Mix of Audio Formats



Key

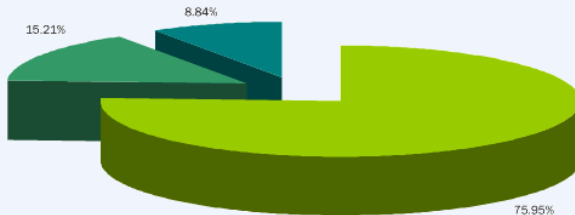
Audio File Formats

- Audio: Microsoft
- Audio: MP3
- Audio: OGG

Dateitypen 2005

Videoformate

CacheLogic Research | Mix of Video Formats



Key

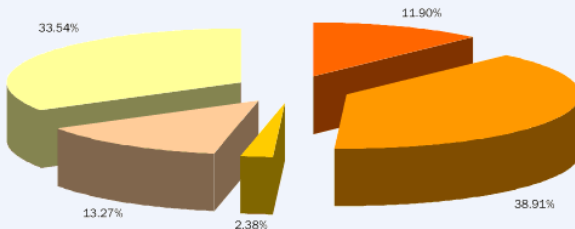
Video File Formats

- Video: Microsoft
- Video: MPEG
- Video: Real Media

Dateitypen 2005

Andere Formate

CacheLogic Research | Mix of Other Formats



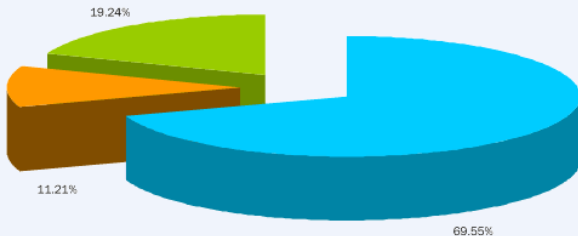
Key

Other File Formats

- Other: CDImage
- Other: Image
- Other: Compressed
- Other: Other File Types
- Other: Executable

Gnutella

CacheLogic Research | Mix of Gnutella Formats



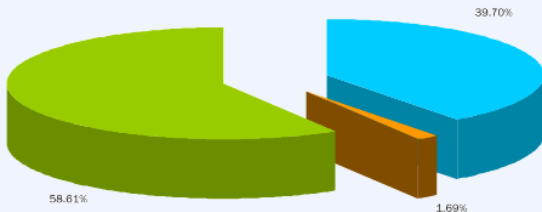
Key

File Formats

- Audio
- Other
- Video

FastTrack

CacheLogic Research | Mix of FastTrack Formats



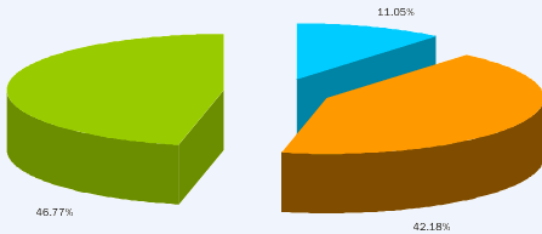
Key

File Formats

- Audio
- Other
- Video

BitTorrent

CacheLogic Research | Mix of BitTorrent Formats



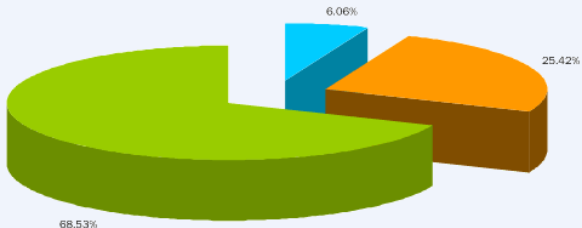
Key

File Formats

- Audio
- Other
- Video

eDonkey

CacheLogic Research | Mix of eDonkey Formats

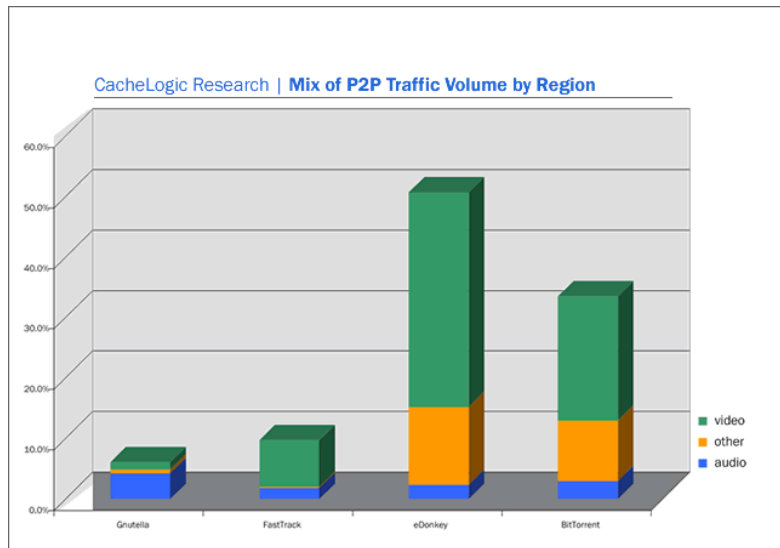


Key

File Formats

- Audio
- Other
- Video

Dateitypen 2005 (nach Protokoll)



Top Ten Musik (<http://www.bigchampagne.com>)

BLW	LW	TW	Name	Title
03	03	01	Chris Brown	Run It
04	04	02	Nelly	Grillz
02	02	03	D4L	Laffy Taffy
01	01	04	Black Eyed Peas	My Humps
08	05	05	Ray J	One Wish
–	12	06	Beyonce Knowles	Check On It
07	10	07	Ludacris	Georgia
–	17	08	Jamie Foxx	Unpredictable
–	13	09	Eminem	When I'm Gone
09	06	10	Fall Out Boy	dance, dance
11	07		T-pain	I'm Sprung
10	08		Nickelback	Photograph
25	09		Trina	Here We Go

Zusammenfassung

- P2P wächst: 35Mill Europäer zogen schon mp3s
- Veränderung von Musik nach Video
- Klagewellen verändern das P2P Verhalten nicht
ausser Nutzer wechseln die Netze
- 80-20 Regel
- P2P verursacht mehr Verkehr als andere Daten
- Den Providern wird geraten, Dateien, die oft angefragt werden zu cachen. So dass für bestimmte Dateien nur noch intern die Daten verschickt werden.
- Idee: Provider geben Pauschale an MI ab

Fragen?