

Machines & datacenters

- Today:
 - 600 TB in 5 datacenters
- 2006 ask:
 - 3.6PB of GFS quota by end of 2006, distributed over at least 10 datacenters.
 - 720 machines (diskfull machines) across 10 datacenters
 - Make sure we have a good int'l playback user experience
- Google Video (store and uploads)
 - Est for end of 2006 is 2.5M source files
 - $(2.5M \text{ files}) * (10MB \text{ avg size}) * (5 \text{ formats}) * (3 \text{ shard copies}) * (3 \text{ R=3 GFS}) = 1.125 \text{ PB}$ Borg tax will push this to at least 1.4PB.
- Orkut & Lighthouse
 - Est for end of 2006 is ~10M source files (6M Orkut, 3M Lighthouse)
 - $(10M \text{ files}) * (10MB \text{ avg size}) * (2 \text{ formats}) * (3 \text{ shard copies}) * (3 \text{ R=3 GFS}) = 1.8 \text{ PB}$
 - Borg tax will push this to at least 2.2PB.



Google

Content acquisition strategy

- David/Jennifer insert slides here

A large, faint watermark of the Google logo is oriented vertically on the right side of the page.

How we win in video

- Build a comprehensive video index
 - Accept video from anyone in any format from anywhere
 - Index video that's already online and video that we host
 - Bring analog video online through digitization
 - Google product integration
- Build the best consumer experience for consuming video
 - Video.google.com destination site
 - Help users connect with interesting and relevant content
 - Search, browse, instant playback, personalized channels, My Videos
 - Tagging, ratings, reviews, comments, recommendations help users find useful content
 - Distribute video to the largest possible audience
 - Expose video to google.com traffic through onebox
 - Every AdSense site should have Google Video on it
 - Provide worldwide distribution for video through localized video.google.com properties
- Build the ability to monetize every video
 - Monetization will pull more video online
 - Monetize any type of content (user generated content through premium content; fiction and non fiction)

Key projects	Current schedule



Appendix starts here

Google

Asset Management

- Goal: To provide DSO advertisers distribution across the Google network
- Milestones:
 - DSO trained on Google Video on 4/7/06.
 - Actively pitching clients today.
 - Should start to see increase in amount of uploads soon.
- Current clients who have uploaded:
 - Orbitz, Ditech, American Express, Symantec, National Semi-Conductor, Saturn, Honda, ABC, Adidas, Saturn, Ford, Lactaid, Sony TV, IBM, Volkswagen
- Future clients:
 - Match.com, OfficeMax, Chrysler, Ralph Lauren, Walmart, Pontiac



Ops video review stats

- Video Review Stats for week ending 5/3
- Total number of videos reviewed: 29,260 (32,206 previous week)
- - 88.2% APPROVED: 26,163 videos (91.1%)
- - 11.8% DISAPPROVED: 3,097 videos (8.9%)

• Video Disapprovals:

Last wk	This wk	reason	Last wk	This wk
2097	2199	TV	72.80%	71.0%
486	523	Music Video	15.10%	15.9%
181	233	Film	6.30%	7.50%
95	85	Porn/Nudity	3.30%	2.70%
31	37	Bad Quality	1.20%	1.20%
9	4	Obscurity	0.30%	0.13%
24	11	Violence	0.83%	0.40%
6	4	Drug Use	0.20%	0.13%
0	1	Illegal Content	0%	0.03%

Google

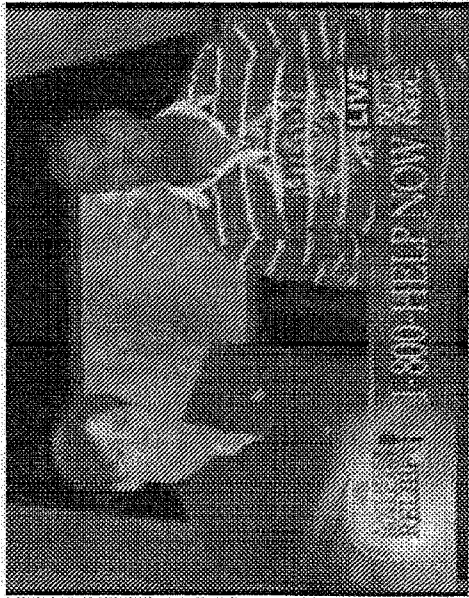
Upload experiment: Copyright, partial work

Google Video today Google Video 5/15 MySpace Video YouTube iTunes

Time to live 2 min 1 min n/a

Plays in one week n/a

Disapproval reason None None n/a



7mb, 1:30 sec, wmv file

MSNBC logo on screen

Recognizable talent

Google

Upload experiment: Porn

Google Video today	Google Video 5/15	MySpace Video	YouTube	iTunes
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Time to live

1 min
n/a
Video never went live

Plays in one week

205 plays in 5 minutes
n/a

Disapproval reason

They seem to be screening for porn
At 6 minutes; porn violation: 2 strikes and account disabled
n/a

1mb, 45 sec video, Divx file

Obvious from the video that it's porn



Upload experiment: User generated content

Google Video today	Google Video 5/15	MySpace Video	YouTube	iTunes
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Time to live	6 min	3 min	n/a
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Plays in one week	n/a	n/a	n/a
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Disapproval reason			n/a
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15mb, 1:00 sec, h.264 file
Eli Chane eating turkey bacon

Google

Copyright infringement, full work

Google