# CHILD PORNOGRAPHY OFFENDER USE OF TECHNOLOGY

Gerald R. Grant Jr. Investigator

United States Sentencing Commission February 15, 2012

# **Contraband Categories**





# **Evolution of an Image**





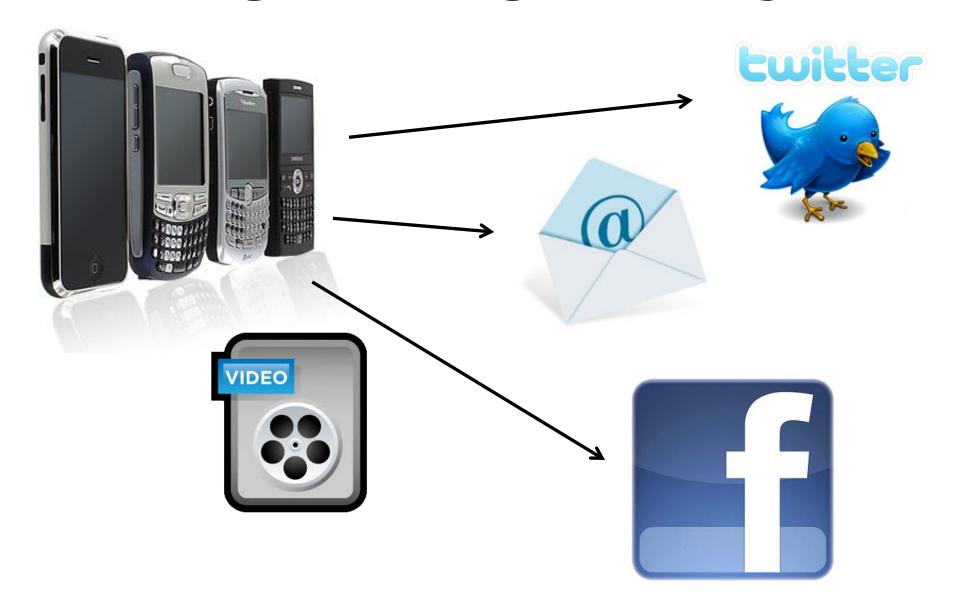


### **Instant Film**



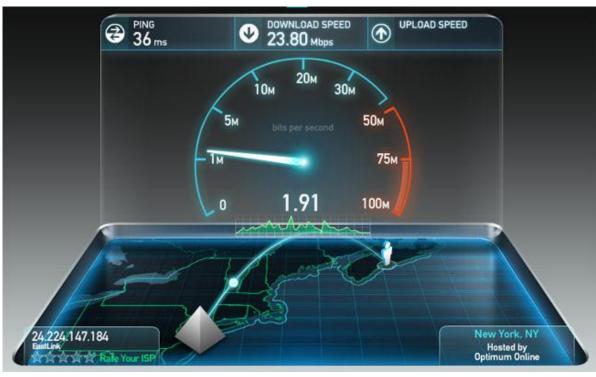


# **Digital Images Today**



# Smaller, Better, Faster



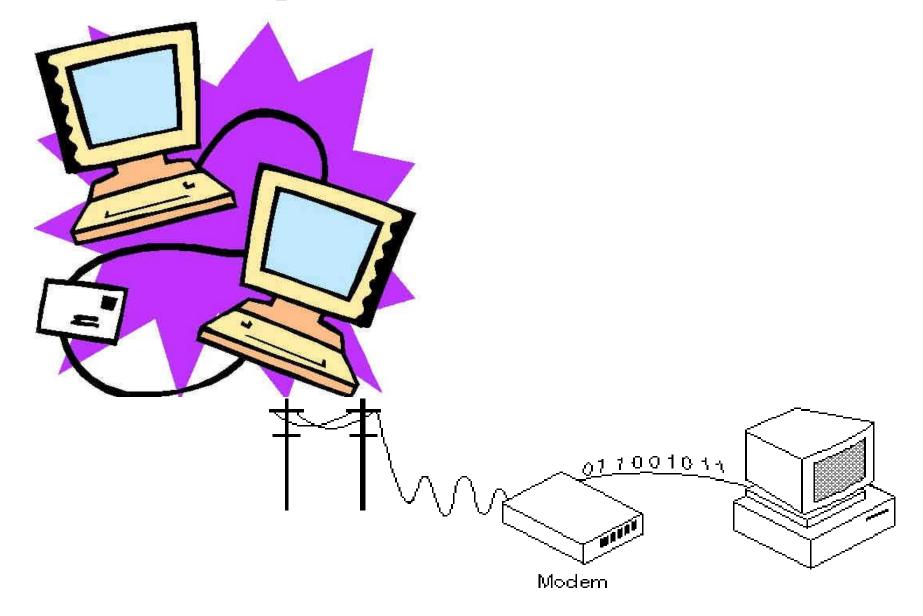


# **Before Digital**

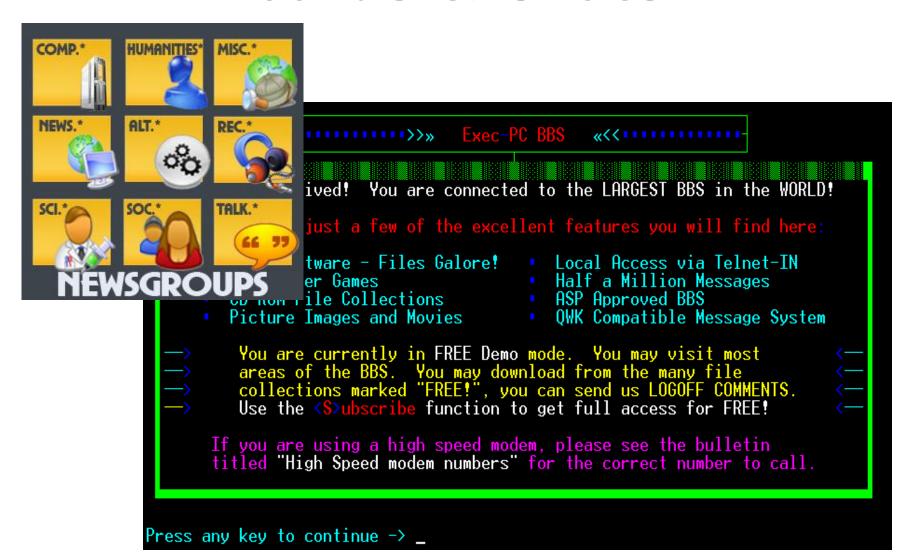




# **Computers & Internet**



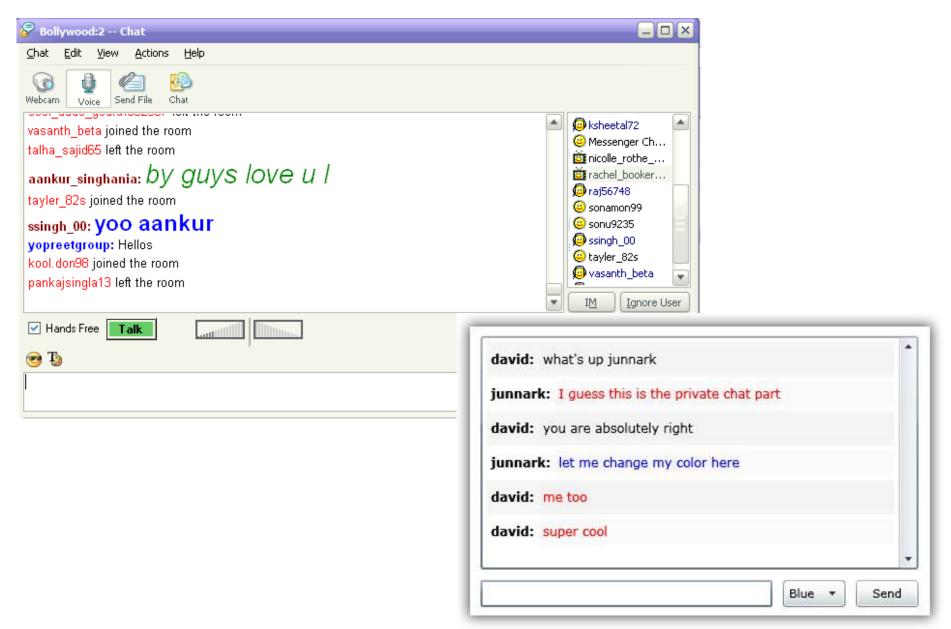
# Newsgroups, Bulletin Boards & Chats



# AIM, Yahoo & MSN

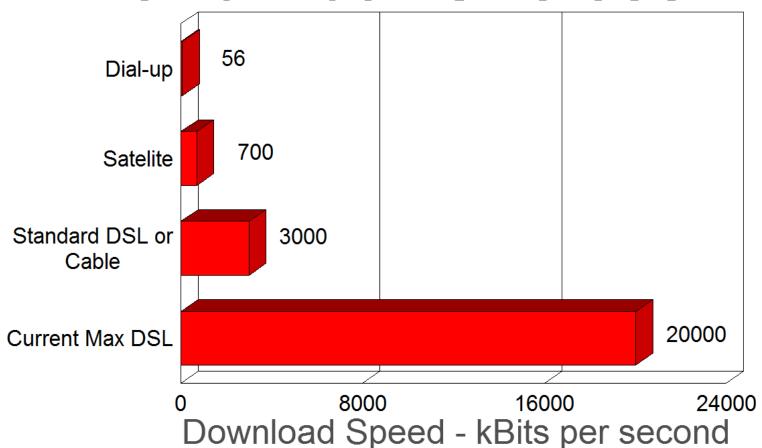


#### **Chat Rooms / Private Chat**



### Dial-Up vs. High Speed

# **Bandwidth Choices**



#### E-Mail Send & Receive

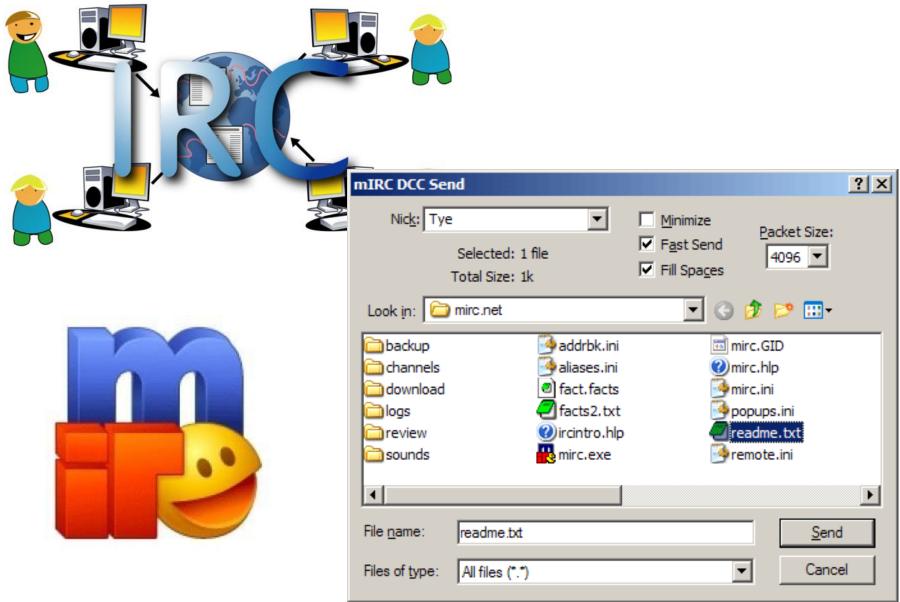




# Web Search Engines



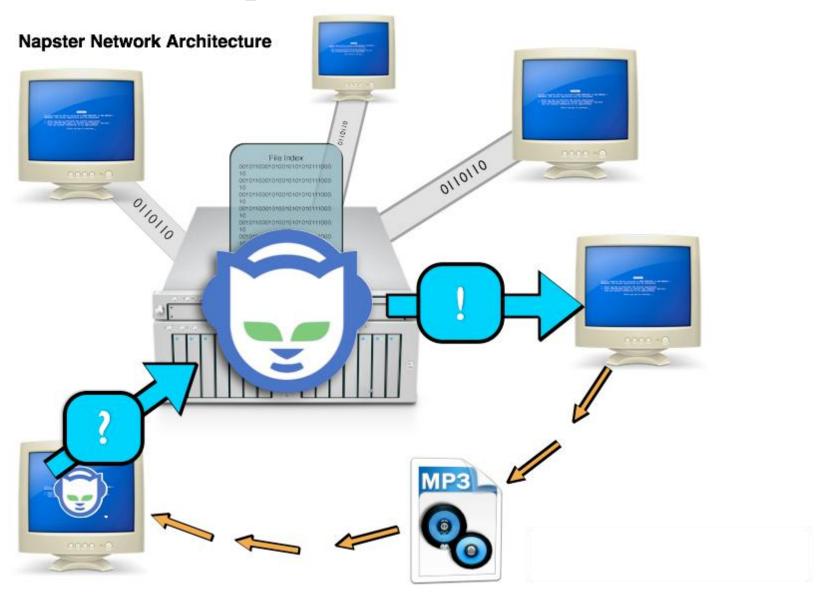
# **Internet Relay Chat (IRC)**



# **Original File Sharing**

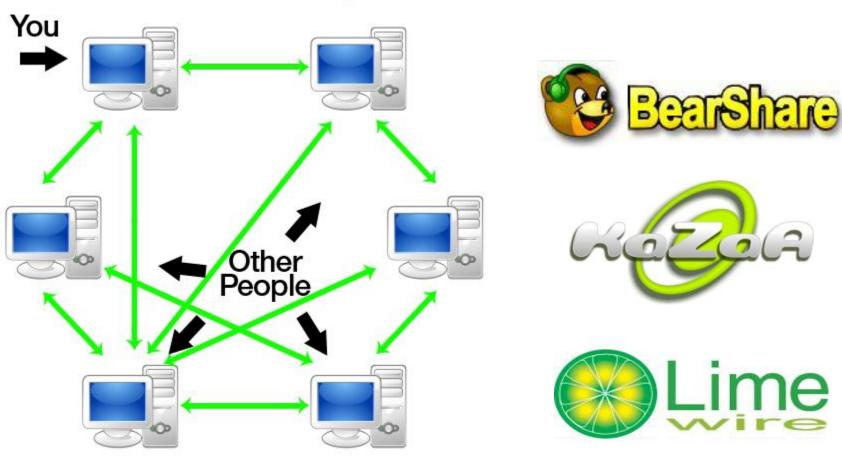
```
<Bellamy> End of list
(oneyear) cd 1981 CHANTE NOEL
<Bellanu> SysReset 2.53
<Bellamy> [\1981 chante noel]
<oneyear> dir
<Bellany> SysReset 2.53
<Bellany> [\1981 chante noel\*.*]
⟨Bellany⟩ ...
(Bellamy) celine dion - chante noel - 01 - glory alleluia.mp3 4.13 mb
(Bellany) celine dion - chante noel - 02 - le p'tit renne au nez rouge.mp3 2.48 mb
(Bellamy) celine dion - chante noel - 03 - petit papa noel.mp3 5.54 mb
<Bellany> celine dion - chante noel - 04 - sainte nuit.mp3 4.94 mb
<Bellamu> celine dion - chante noel - 05 - les enfants oublies.mp3 5.36 mb
<Bellamy> celine dion - chante noel - 06 - noel blanc.mp3 2.57 mb
<Bellamy> celine dion - chante noel - 07 - pere noel arrive ce soir.mp3 3.63 mb
<Bellamy> celine dion - chante noel - 08 - j'ai vu maman embrasser le pere noel.mp3 4.85 mb
<Bellamy> celine dion - chante noel - 09 - promenade en traineau.mp3 3.34 mb
<Bellamy> celine dion - chante noel - 10 - joyeaux noel.mp3 4.66 mb
(Bellamy) chante noel.m3u 1.03 kb
(Bellamy) End of list
<oneyear> get celine dion - chante noel - 01 - glory alleluia.mp3
(Bellamy) Adding your file to gueue slot 2. The file will send when the next send slot is open.
get celine dion - chante noel - 01 - glory alleluia.mp3
```

# **Napster Arrives**

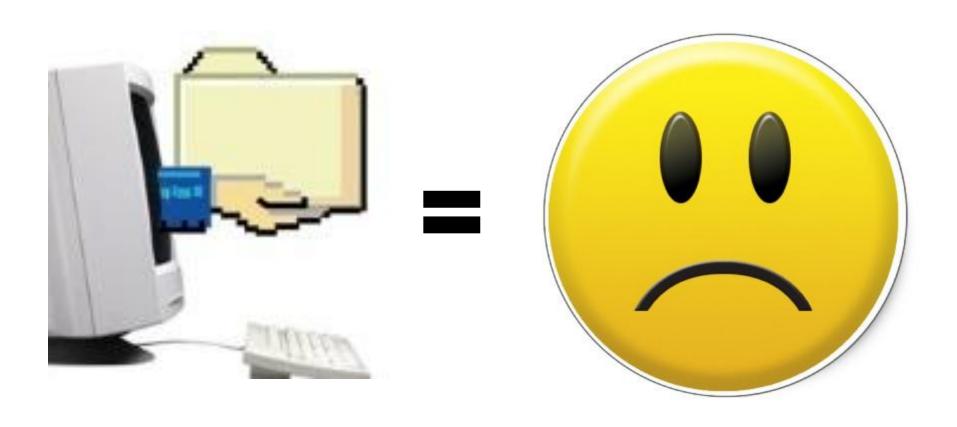


#### **Decentralized Peer-to-Peer**

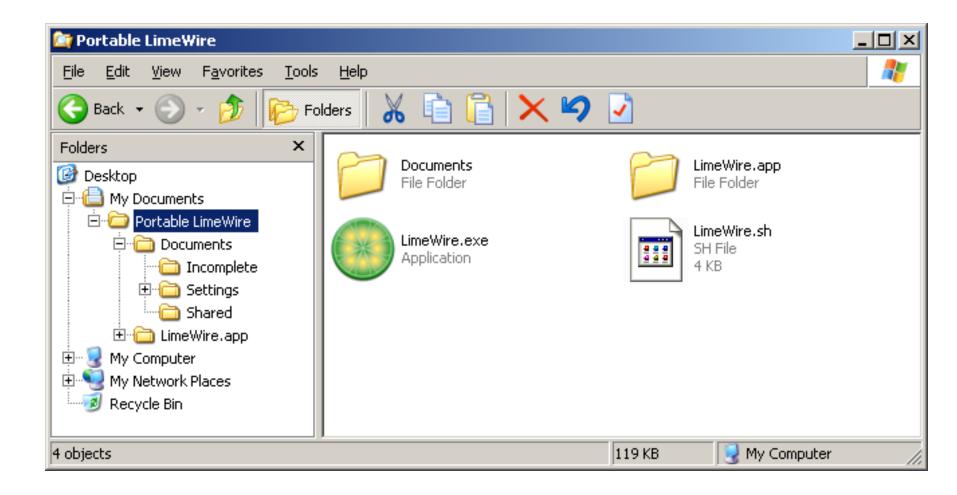
#### Peer-to-Peer Model



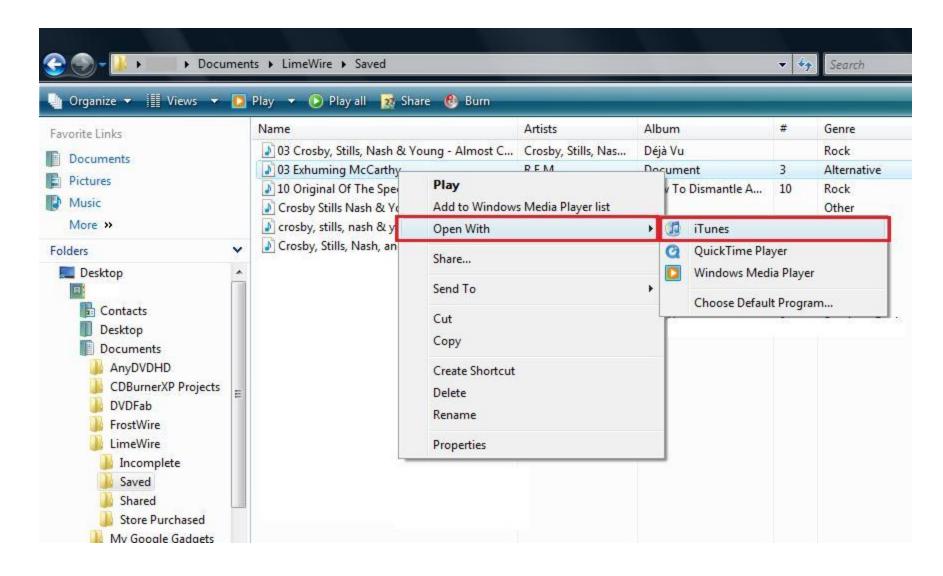
# **Automatic File Sharing**



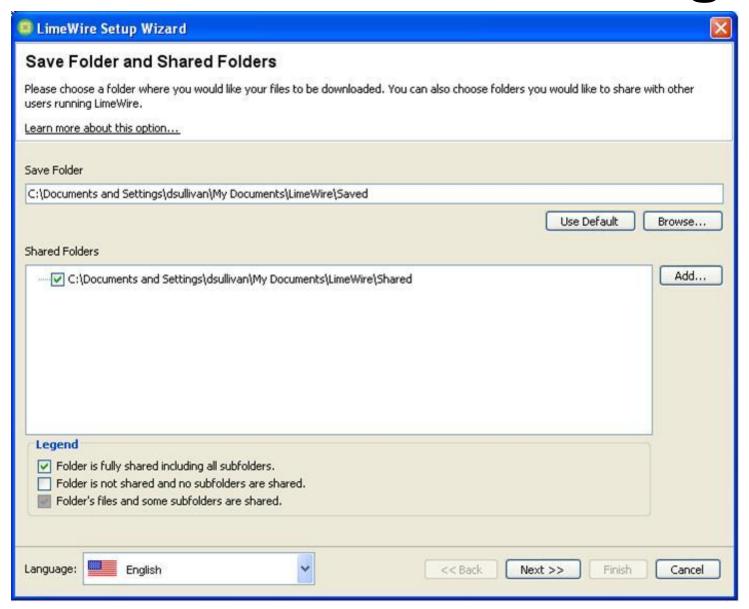
#### **Older Limewire Folders**



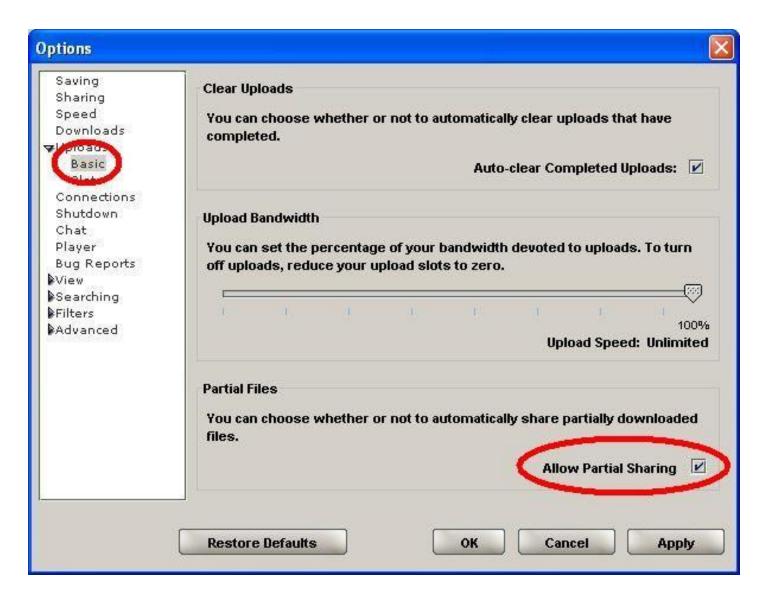
#### **Newer Limewire Folders**



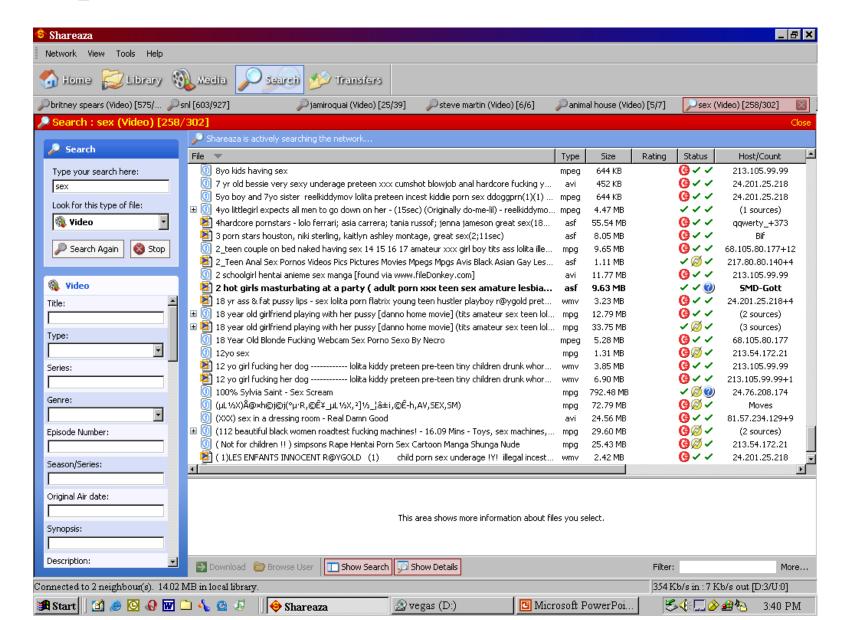
# **More Automatic Sharing**



# **Even More Automatic Sharing**



# Simple Search Term/Bad Result



# **High Speed / Many Files**

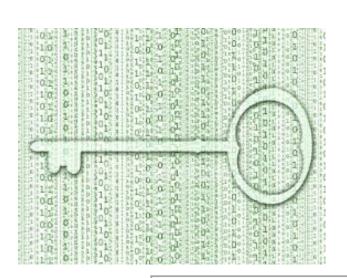




# A New Peer-to-Peer Client Arrives

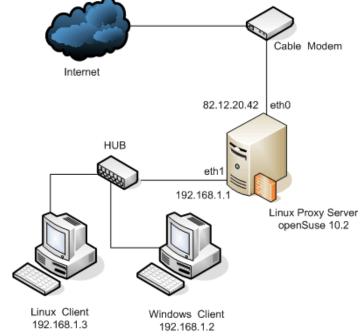


# **Identity Protection Tools**









# **Standard Encryption**







# **Stop Cybercriminals**

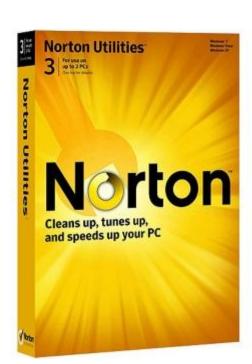




# Cleaning/Repair Utilities







# (DoD) 5220.22







# Solid State / Auto Cleaning

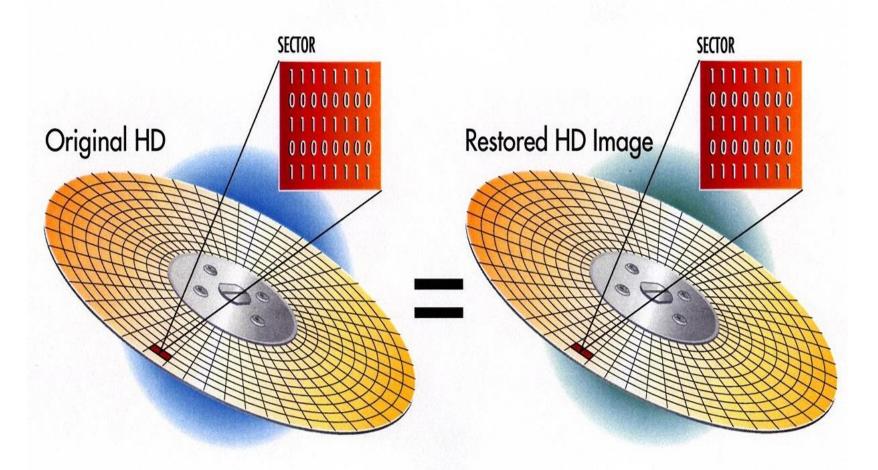


(1)	Α	В		С	D	Е	Free Space
(2)	Α			С	D	Е	Free Space
(3)	А	F		С	D	Е	Free Space
(4)	А	F	G	С	D	Е	Free Space
(5)	Α	F	G	С	D	Е	Free Space
F (Second extent, or allocation) $\Box$							

# **Forensic Analysis**

# Bit Stream Backup

IMAGING ONE DRIVE TO ANOTHER



# **Adam Walsh**



# Time, Access, Cost Issues



# **More Speed**



**Standard Options** 

#### **Thank You For Your Time**

