

CS 640: Introduction to Computer Networks

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Lecture 18 -
Peer-to-Peer

The Road Ahead

- p2p file sharing techniques
 - Downloading: Whole-file vs. chunks
 - Searching
 - Centralized index (Napster, etc.)
 - Flooding (Gnutella, etc.)
 - Smarter flooding (KaZaA, ...)
 - Routing (Freenet, etc.)
- Challenges
 - Fairness, freeloading, security, ...

P2p file-sharing

- Quickly grown in popularity
 - Dozens or hundreds of file sharing applications
 - 35 million American adults use P2P networks -- 29% of all Internet users in US!
 - Audio/Video transfer now dominates traffic on the Internet