



Usability and Privacy: Designing FileSharing with Privacy in Mind

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Organization of Talk



- Overview Previous Findings
- Overview of Present Findings
- Recommendations

Previous Study - KaZaA



- Performed a study on KaZaA P2P filesharing user interface
 - Demonstrated that users of P2P systems didn't always realize what they are sharing
 - This privacy problem is a usability issue (an OS patch, Encryption won't fix it)
 - “Configuration errors are a probable cause for more than 90% of all computer security failures.” 1996, Matt Bishop USENIX
 - “Since average citizens are now increasingly encouraged to make use of networked computers for private transactions, the need to make security manageable for even untrained users has become critical.” Whitten and Tygar

P2P file sharing is safe and usable if users:



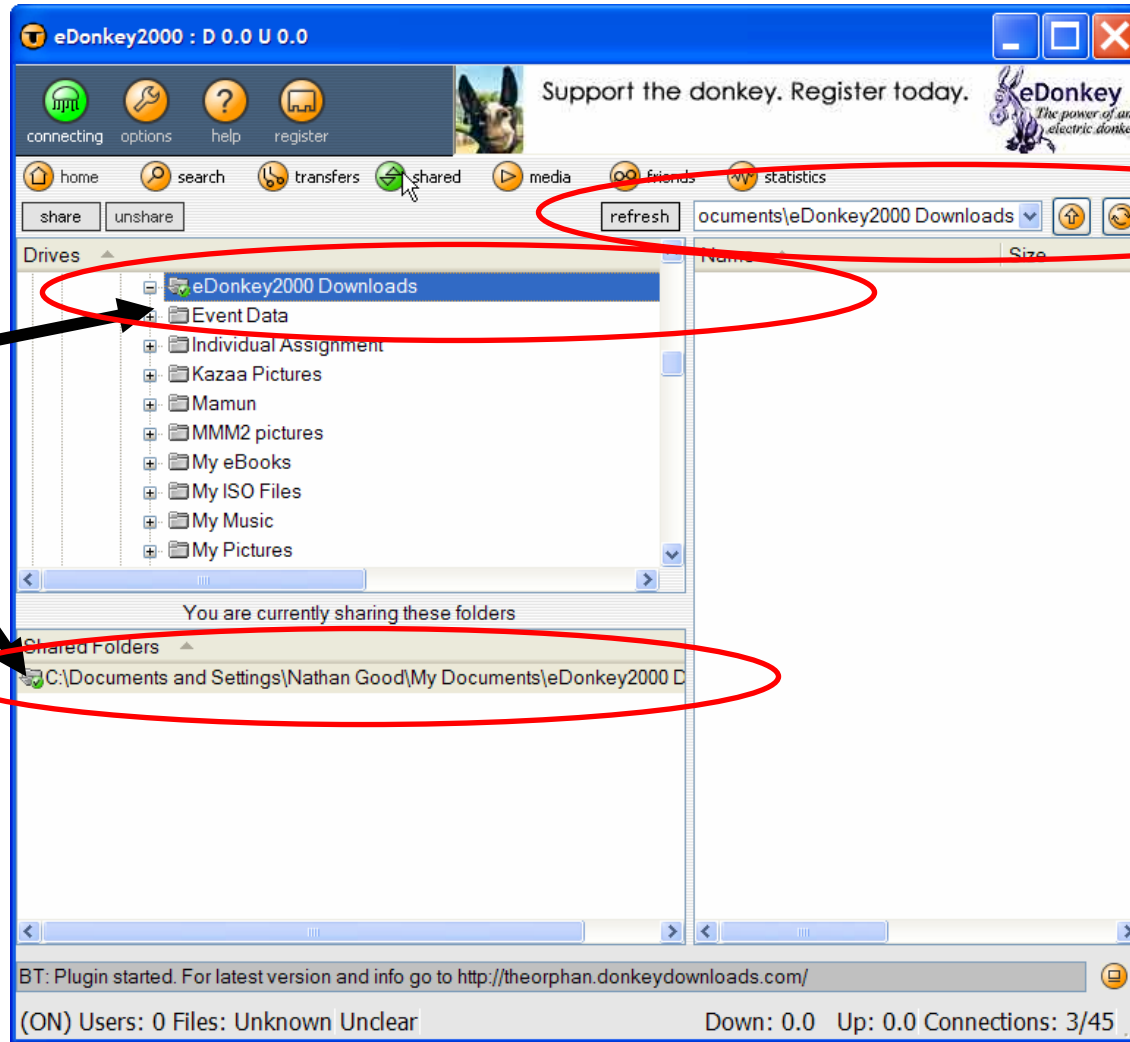
- Are made clearly aware of what files others can download
- Are able to determine how to share and stop sharing files
- Do not make dangerous errors that lead to unintentionally sharing private files
- Are comfortable with what is being shared, and confident the system is handling it correctly

Current Overview



- Cognitive Walkthrough of Current UI
 - KaZaA Now: Improved
 - Edonkey: Doesn't make many mistakes
 - Bit Torrent : Very easy to understand what is being shared
 - Others: Quality varies considerably

Edonkey 2000 (example)



Share Locations

Recommendations:



- Design Matters!
 - Improving design of user interfaces to provide better notice and consent can help users manage their private information better.
- Privacy/Usability Issues in Bundling Software
 - Strong need to make things clearer and simpler for users to manage and understand.