

Ethical issues of Peer-to-Peer file sharing of BitTorrent in Vietnam

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Abstract—BitTorrent is a content distribution protocol that enable efficiency of Peer-to-Peer (P2P) file sharing which is the process of transferring and sharing digital files between computers. It is legal to use peer-to-peer file sharing clients such as BitTorrent or Torrent. However, sharing and downloading copyright material is illegal. Bittorrent have been known as an efficient way to share and get copyrighted material. In some countries, there are methods applied in order to deal with this problem such as the cooperation between the internet provider and the copyright owners. However, in Vietnam this phenomenon seems to be a usual activity to everyone. Hence, we would like to discuss about the ethics of using this type of protocol in this country.

Keywords—BitTorrent, Peer-to-Peer, file sharing, ethics, Vietnam

I. INTRODUCTION

A. Introduction

II. BACKGROUND AND RELATED WORK

A. Background

Peer-to-Peer (P2P) network consist of 2 or more PCs, which are called "peers". Peers share their resource such as bandwidth, processing power, disk space with the network, without need a centralized server. [1]

Peer-to-Peer file sharing is the distribution and sharing file using Peer-to-peer network. To download, you will need a software rather than a traditional web browser [2]. In peer-to-peer file sharing, you download from peers who has the file, or part of its, rather from centralized server. Then when you has the file, you upload it to other peers who need the file. [3]

In 1999, peer-to-peer file sharing is popular with Napster. Napster use central servers that link user who has the files with who has the file. Then two users would transfer the file privately, but only music file. [4]. Later, Napster was shutdown due to copyright infringement in July 2001 [5].

After Napster, the second generation peer-to-peer file sharing, like Kazaa, that do not use central server. [6]

BitTorrent is a Peer-to-Peer sharing protocol which was release on July 2, 2001 [7]. Similar to Napster, Bittorent use central server called tracker[3]. To upload, uploader will create a .torrent file which contain information about the file, tracker will store these infomation. Downloader will download

.torrent file, and use these information find peers with the helps of tracker which can be hosted by anyone [3]. Althoght BitTorrent need tracker as central server, multiple tracker can exist, as any .torrent can be register with multiple trackers, make BitTorrent less central vulnerability [3]. Bittorent also has DHT, Local Peer Discovery, Peer exchange reduce the dependency on central server.

B. Related work

III. METHODOLOGY

IV. CONCLUSION

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