Abstract

In the recent years, Bit Torrent has been emerged as a very popular and scalable peer-to-peer file sharing mechanism. The key point of its successfulness and popularity is its unique efficient design than other peer-to-peer file sharing system. It can distribute large files quickly and efficiently without overwhelming the capacity of the original server. Some of the early measurement studies verified that Bit Torrent is utilizing its upload bandwidth in well manner by using a Tit-for-Tat policy, but still there is a possibility of underutilization of the upload bandwidth. In this study, it is found that download rate based unchoking policy is not optimal for upload bandwidth utilization. The reason for not achieving the optimal upload bandwidth is that Bit Torrent is only focusing on the connection download speed, not on the upload data delivery. In this report, we tried to explore the reason of underutilization of the upload bandwidth of Bit Torrent protocol, as well as tried to propose a mechanism based on the interest factor to download, which leads to enhance the Bit Torrent protocol by eliminating the mentioned problem.