

LOCAL AREA NETWORK  
(LAN) PARALLEL DOWNLOADING:  
AN EXPERIMENTAL STUDY IN UNIVERSITI  
UTARA MALAYSIA

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**LOCAL AREA NETWORK  
(LAN) PARALLEL DOWNLOADING:  
AN EXPERIMENTAL STUDY IN UNIVERSITI  
UTARA MALAYSIA**

**A Thesis submitted to the Faculty of Information Technology  
in partial fulfillment of the requirement for the degree  
Master of Science (Information Technology)  
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**by  
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## ABSTRAK

Projek ini mengkaji prestasi *Parallel Downloading* di rangkaian setempat Universiti Utara Malaysia. Kajian ini mengambil kira respon masa ketika memuat turun fail dari rangkaian setempat UUM ke rangkaian Internet. Bagi membolehkan prestasi kaedah *Parallel Downloading* diukur, kaedah muat turun yang lain akan digunakan sebagai perbandingan. Kaedah muat turun yang telah dipilih ialah *Single Connection (Internet Browser – Mozilla Firefox 1.0.7)* dan *Network Neighborhood (NetBIOS)*. *Parallel Downloading* akan menggunakan perisian *Download Accelerator Plus (DAP)* dalam implementasi muat turun itu. Respon masa untuk setiap kaedah muat turun akan direkodkan di setiap sesi yang berlainan iaitu sesi pagi, sesi petang dan sesi malam. Hasil akhir projek ini akan memberi garis panduan kepada pengguna-pengguna Internet di UUM tentang kaedah muat turun dan masa yang terbaik untuk memuat turunkan sesuatu jenis fail.

## **ABSTRACT**

This paper had study the performance of parallel downloading of UUM's Network. This research will consider the response time of the downloaded file from within UUM's Local Network to the Internet connection outside. In order to see the performance of parallel downloading method, other method will be used as a comparison. The other downloading methods that have been chosen are single connection (Internet Browser – Mozilla Firefox 1.0.7) and Network Neighborhood (NetBIOS). The parallel downloading method will be using the Download Accelerator Plus (DAP) version 5.3.0.0 software to implement the download. Response time of each method will be recorded from three different sessions which are morning, evening and night. The results of this paper will benefits all the Internet users within the UUM's Network to know and plans which downloading method is suitable for higher performance on which time of the day.

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## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Introduction**

Nowadays everything especially data and information or any other object on the Internet demands a fast and convenience ways of downloading from Internet users. Users' access to the Internet is varied either through a Local Area Network (LAN), Intranet and Extranet, Wireless Connection or direct line from anywhere. A lot of applications or software's to improve downloading time or download manager have been created. For example Download Manager Accelerator, GetRight, Gozilla, Internet Download Manager and many more exist because of the great demand and necessity from users.

There are advantages and disadvantages of using the downloading software to improve the downloading time. Obviously the advantages of using the downloading software are faster response time for information that had been request. A lot of other features come together with the downloading manager software such as automatic downloading which can be schedule easily, automatic resume function in case of connection failure happen and other features that helps in assisting user. The services provided by download manager will encourage Internet users to use this application because it is so much easy to use compared to the old method, whereby files will be downloaded directly using the Internet Browser application. Here are some of the example of Internet Browser that

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the thesis is for  
internal user  
only

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