ATM BASED LAN

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ABSTRACT

It is the pressure on LAN equipment to provide higher and higher speed solution that we turn to ATM. The attraction of ATM is as a "next generation" LAN implementation.

One of the distinguishing features of ATM is that it employs exactly the same hardware, software and protocols whether the network extends down the hall or around the world.

Before ATM fulfills its promise as a cost effective technology for supporting future broadband multimedia services, the huge legacy of existing LAN application needs to be readily migrated to the ATM environment. ATM needs to provide adequate interworking with legacy LANs.

ATM which is a gigabit network will be the future technology transfer. Many ATM network have already emerged despite the fact that ATM technology standardization process is still not finalized yet. Many of the networks are either Lab test beds or ATM based LAN network.

This paper will discuss an approach towards an ATM based LAN. Currently there are a few methods that we can approach the interworking between existing LANs and ATM LANs but for this project I am to concentrate on

CHAPTER 1

ATM NETWORKING

1.1 INTRODUCTION

Asynchronous Transfer Mode (ATM) has emerged as the most promising technology in supporting future broadband multimedia communication services. To accelerate the deployment of ATM technology, the ATM forum which is a consortium of service providers and equipment vendors in the communication industries, has been created to develop implementation and specification agreements.

Future applications are expected to require increasingly higher bandwidth and generate a heterogeneous mix of network traffic. Existing networks cannot provide the transport facilities to efficiently support a diversity of traffic with various service requirements. ATM is potentially capable of supporting all classes of traffic (e.g. voice, video, data) in one transmission and switching fabric technology. It promises to provide greater integration of