

QoS AND MOBILE TECHNOLOGIES

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CHAPTER 31

MOBILITY SUPPORT IN DIFFSERV AND MPLS NETWORK

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omer@iium.edu.my **Introduction**

31.1 INTRODUCTION

Internet has become one of main mean for communication and interaction between different people and communities. Internet started with limited numbers of users and applications however, as time progresses more and more users join in and number of application increased dramatically. Therefore, the initial algorithms and protocol has been revised and further developed from time to time in order to meet the new requirement and challenges that became available due to the rapped changes in usage and infrastructure. One of the main challenges in is to maintain and mange the quality of service of the variety of applications with divers requirements. although internet started with as best effort services,

which mean the network make no commitment of any type as such the experience of a the network flows in terms of delay , jitter and losses could vary depending on the network condition and congestion level. Best effort service could meet the requirement of some application such as web and email., however it fall short to meet the requirement of range of new emerging applications that require strict delay and delay vibration. Internet Engineering Task Forces (IETF) proposes a number of quality architectures to provide more robust and better level of QoS . the architectures and are integrated (Inserv) [1], Differentiated Services (Diffserv) [2]and Multiprotocol Label Switching (MPLS)[3]. These architectures represent the foundation of QoS . However, many researchers are working to further enhance and tune the performance and QoS provided by network under various conditions and situation [4,5]

This chapter present a review mobility support in Diffserv and MPLS architectures it mainly focus on handover situation and present a review of numbers of studies done on this area.

31.2 DIFFERENTIATED SERVICES

A Differentiated Service[2] is QoS architecture that provide scalable means of service differentiation in the Internet framework within which service providers can offer each customer a range of network services, which are differentiated on the basis of performance .Diffserv nodes, operate with a common service provisioning policy and set of PHB groups