

THE ANALYSIS AND APPLICATIONS OF ASYMMETRIC DIGITAL SUBSCRIBER LINE ON BROADBAND NETWORKS

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ABSTRACT

IN RECENT YEARS, ACCOMPANIED BY PREVALENCE OF ELECTRONIC COMMERCE AND POPULARIZATION OF THE INTERNET, THE GIGANTIC MULTIMEDIA INFORMATION HAS ALMOST TAKEN UP THE NETWORKS. IT IS DIFFICULT TO USE TRADITIONAL MODEM TO TRANSMIT THE DATA. THE DSL TECHNOLOGY IS PROPOSED TO ACHIEVE BROADBAND ACCESS BY TRANSMITTING DATA ON EXISTING TELEPHONE NETWORK INSTEAD OF USING FIBER ALL THE WAY TO THE RESIDENCE, WHICH IS MORE COSTLY. THE THREE MAIN KINDS OF BROADBAND ACCESS NETWORK TECHNOLOGIES ARE CABLE MODEM AND DIGITAL SUBSCRIBER LINE AND DIRECTPC. IN THIS THESIS, FIRST, WE INTRODUCE THE ARCHITECTURE OF ADSL-BASED ACCESS NETWORKS. IT IS CONVENIENT AND ECONOMICAL TO BUILD BROADBAND ACCESS SERVICE ON COPPER WIRE. THE ADSL-BASED BROADBAND NETWORKING PUTS INTO PRACTICE APPLYING MULTIMEDIA IN INTERNET, SUCH AS VIDEO CONFERENCE, VOD (VIDEO ON DEMAND), MOD (MULTIMEDIA ON DEMAND), AND SO ON. FINALLY, THE APPLYING ANALYSIS OF THE ENTERPRISE NETWORK AND MOD INTERACTIVE MULTIMEDIA BUILT IN ADSL-BASED ACCESS TO ESTABLISH FIRMLY THAT ADSL-BASED ACCESS NETWORKS IS THE MAIN STREAM OF THE BROADBAND NETWORK SERVICE IN TAIWAN.

Keywords : ELECTRONIC COMMERCE, INTERNET, ASYMMETRIC DIGITAL SUBSCRIBER LINE.

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