Multi mode Multimedia Messaging System for Cross Campus Development

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Abstract: This paper proposed the application of the multi mode multimedia messaging system which demonstrated the availability and usage of immediate messaging passing via cell phone as a fast and easy approach. The study included the architecture of the mobile telecommunication network environment. It enables the school with cross campus passing the messaging and respond at ones earliest convenience. It serves the administration staff, teachers as well as the students. This project has also been piloted with the computer center staff that often has the urgent need to respond to immediate needs caused by system emergency. The result for the study was implemented for staff who maintain for National Broadband Experimental Network.

Introduction

This paper discusses the development of a multimedia multi-mode messaging system that will be using the integrated environment of the mobile telecommunication network and wireless LAN. It tried to use this possible technology to passing immediate attention message to a closed group of staff. The result was demonstrated in real cases that will be present in details in this paper. The targeted case was implemented for network staff that holds the responsibility to maintain a national project network. The National Broadband Experiment Network is an isolated network that serves the national universities who has the need to experiment network trials, the demands changes constantly and it is very challenge, hence the network operation has to be very vital, the multi mode multimedia messaging system has proved its value to support this always-ready test network for long distance trails.

With the architectures of the multi-mode multimedia messaging system (refer as M4 system), the main idea is to combine text-based or text like services to use the wireless LAN to transfer multimedia objects and use the mobile telecommunication to deliver short message to not only can work with SMS system. Moreover, M4 system was design to divided to more parts on WLAN/GPRS network access module to hold system management module and M4 message editor, with the additional multimedia server and object storage module, we made the M4 system fully complete and easy to operate.

Some of the function included in this M4 system are: account management, the ability of providing the transfer between email address and mobile phone number, system pride to transit document, pictures, voices and videos and also the download these objects, the ability of group delivery function and the guaranteed and confirmed message delivery, provide delivery summary and manage by mail client.

Application on M4 system

The use of the M4 system was implemented on National Broadband Experimental Network whose network operator maintain a closed group lists that if emergency occurred such notice will be sent easily. Due to the popularity of cell phone usages, the content can be sent out to staff immediately, the pilot was conducted
with major target for any computer facility failure. Any information needs to be pass to the staff will be easily entered from the system. The operator will enter the problem message and by utilizing the user interface for M4 system, multimedia message will be pass out and notify the group list. The result was very successful since the message can be received without any delay, message contain multimedia can be download and review as well. We were pleased for the message delivery for its ease of use and effective. The message object in this scenario contains text as well as image, we have a few cases that can demonstrate the additional usage for M4 system, for this discussion we have achieve the real-time, guaranteed, and confirmed approach.