# 在無線區域網路改善QoS的允許進入控制演算法 = QoS enhancement with admission control adjustment algorithm in WLAN


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**摘 要**

隨著資訊科技的進步，社會大眾在使用網路的慾望與需求與日俱增，與以往單純文字傳輸或是檔案上傳下載相比較，已不可同日而語。如今是一個強調語音、影像等多媒體服務的網路社會，相對的在有限的頻寬下，我們要維護使用者滿意度顯得格外的重要。在2005年IEEE 802.11 Task Group提出802.11e[1]的無線區域網路標準導入QoS(Quality of Service)概念，針對不同的存取類別(Access Category ; AC)提供優先權的參數設定。然而802.11e在沒有適當參數調整或進行連線數量控管的情況下，對於即時訊務無法提供嚴格的服務品質保證[2]。因此本論文利用通數與QoS有效區間圖的角度衡量系統繁忙度，定義Bth為允許進入控制演算法的門檻值參數，並觀察通數轉移機率P(i , j)，以此作為接受新連線與否的依據。系統在高負載時允許進入控制演算法會根據門檻值與轉移機率的比較，限制新連線持續進入，以維持已連線的即時訊務的延遲(Delay)、抖動率(Jitter)等QoS的要求。 本論文使用NS-2來進行模擬實驗，模擬固定時間週期與指數分布產生訊務兩種場景。由實驗數據顯示使用本論文提出的允許進入控制演算法在任何場景都較加強行分散式控制機制(Enhanced distributed coordination function; EDCF)佳，在高負載的情況下較Andreadis佳，本論文演算法能夠在不犧牲系統連線數量的情況下讓延遲與系統容納通數這兩項QoS指標得到很大的改善。



關鍵詞 : 無線區域網路,802.11e,QoS


**目錄**



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