SIP 代理伺服器的負載平衡與容錯技術

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摘 要

SIP（Session Initiation Protocol）已經被公認為將來IP 網路 與傳統電信PSTN（Public Switched Telephone Network）網路整合 的關鍵技術，而且也被第三代行動通訊系統（3G）採用，成為未 來無線多媒體通訊的技術標準。在原本的RFC 3261 規定中，並 無詳細的定義出如何管理多個代理伺服器（Proxy Server）的方 式。因此我們在這篇論文裡提出了一些方法，讓原本的SIP 增加 了容錯以及流量分散的功能。我們讓原本的SIP 系統可以藉由多 個SIP 代理伺服器作流量分散。並使用優先權多重備援的方式， 將常被呼叫到的使用者優先權提高，然後搭配優先權多寡決定多 重備援數，將使用者資料備援到其他的伺服器上。這種方式不僅 可以分攤各個系統的負載，更可以避免單一伺服器出錯或當機 時，整個系統不能運作的困擾。最後由模擬可以得知如此之方式 可以讓原本單一的代理伺服器設計，增加了流量分散以及使用者 優先權多重備援的功能，達到我們要的目標。

關鍵詞 : SIP，第三代行動通訊系統，SIP 代理伺服器，流量分散、 容錯

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