Evaluating Performance of Hierarchal Link-Sharing Mechanisms with Real-Time Variable Bit-Rates Traffics under Linux

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ABSTRACT

Because of the popularization of the internet network and development of the multimedia technology, there are a lot of the pronunciation and communication of media and control the protocol like RTP through the internet network, Session Initiation Protocol (SIP) [1] ,etc. are regarded as the protocol of linking up of the materials by development, these protocols are all for set up , revise , finish the control of conversation line , make internet network exchange by simple materials information, rise to real time video to transmit. Use internet network is substitute a traditional real time video to transmit , can save effectively not merely to come, and can use a lot of extra functions , such as interactive video and internet phone ,etc. But the real time video package is not like other use serving the package produced , can pass last time because network droped , wide getting enough package caused of the factor lose frequently again. Because the pronunciation package is instant materials, the package does not have any help to it to spread again, so it is the best method not to allow it and to lose as much as possible.Because the network application service appears like the mushrooms after rain, how be can frequently among the wide resource all kinds of package and frequently wide to it assigns to be a basic solution properly in a limited one. With the wide-band popularization that surfed the Net, the application of the network moves towards the diversification and develops too. Various kinds of network application, to serving the demand for quality differently, for instance: On-line to is it need instant interdynamic of to talk, multimedia bunch flow audio-visual to is it need a large amount of frequently wide to broadcast. If network user can distribute the frequently wide amount and frequently wide priority of use according to different characteristics that use , can make rational and effective application to resources of the network.
Link-Sharing structure based on classification has been attracted attention over these several years under Linux, with Class Based Queuing in Link-Sharing structure (CBQ) [4] [5] and Hierarchical Token Bucket (HTB) [6], in order to make comparisons in fact commonly. In Link-Sharing structure is done in fact , generally think that HTB deals with the package and wide managerial ability is all superior to CBQ frequently . But few documents serve the getting instant variable speed under the circumstances that HTB and CBQ are done in fact there can be intact test and analysis, so this text flow media and frequently wide to is it make systemic test and discussion to share stratum type to instant bunch, content visit HTB and CBQ flow test efficiency of media to instant bunch under testing environment to demand to include, HTB and CBQ happen frequently widely while sharing , can reach media Delay and request for Jitter that bunch real time video .

Keywords : Link-Sharing ; CBQ ; HTB ; Linux ; VBR

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