Abstract

Web sites are exposed to high rates of incoming requests. During temporary traffic peaks, web servers may become overloaded and their services deteriorate drastically. In this paper, we propose a method for admission control to prevent and control overloads in web servers by utilizing neural network (NN). The control decision is based on the desired web server
An Admission Control Mechanism for Web Servers using Neural Network

performance criteria: average response time, blocking probability and throughput of web server. 
We have designed and developed a NN model able to predict web server performance metrics 
based on the parameters of the Apache server, the core of the Linux system and arrival traffic.  
The model predictor captures the complex relationship between web server performance and its 
configuration. This avoids an ad-hoc web server configuration, which poses significant 
challenges to the server performance and quality of service (QoS).

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Index Terms

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Key words

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