

<<基于质量的互联网内容传输技术>>

图书基本信息

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内容概要

In this book, we try to illustrate the Internet content delivery mechanism. And based on this mechanism we propose an adaptive content delivery framework which can greatly help Internet Service Providers and Internet Content Providers to achieve quality-based content delivery service. This book can be used as an introduction for Internet content based technology researchers, and can also be used as a reference book for graduate students.

This book is the refined wisdom from the Institute of Information Security Engineering, Shanghai Jiao Tong University. We appreciate all of our colleagues for their great help in this book. And we would also express our sincere appreciation towards Shanghai Jiao Tong University Press. Without their help, we would never have this book published so smoothly.

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版权页：插图：In developing the transformation proxy, it is better to make the transformer modular. Hence, one should avoid modifying the working mechanism of the original proxy cache as much as possible. However, to further utilize the cache system provided by the proxy, we might need to make some modification to the cache related module. There are two kinds of such cache related modules, one for the cache control module and the other for the cache hit/miss check module. Each of these modules will be discussed below.

6.4.9.1 Cache Control Module

The cache control module is used by the proxy cache to determine whether the HTTP reply is cacheable. It is triggered between Stage 3 and Stage 4. As we discussed in the modification of HTTP header, the transformation proxy might sometimes need to overwrite the rules set by the original server for better caching. This can be done by modifying the HTTP reply header. But this solution might have undesirable side effects. With the cache control header modified, all the clients and the downstream proxies will get the revised cache control information. There is no way for them to differentiate whether this rule is set by the original server or by the transformation system. This might affect the caches of the clients and downstream proxies. An alternate solution is to modify the cache control module. By applying new rules to the cache control module, we can control the cache management of this working system and at the same time limit the effect to this system only. For this solution, we need to know the side effect of deploying new rules and make sure it will not malfunction.

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