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Research on Load Balancing Technology for Web Service Mobile Host

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Abstract : In this paper, Load Balancing idea is used in the Web service mobile host. The main idea of Load Balancing is to establish a one-to-many mapping mechanism: An entrance-mapping request to plurality of processing node in order to realize the dividing and assignment processing. Because the mobile host is a resource constrained environment, there are some Web services which cannot be completed on the mobile host. When the mobile host resource is not enough to complete the request, Load Balancing scheduler will divide the request into a plurality of sub-requests and transfer them to different auxiliary mobile hosts. Auxiliary mobile host executes sub-requests, and then, the results will be returned to the mobile host. Service request integrator receives results of sub-requests from the auxiliary mobile host, and integrates the sub-requests. In the end, the complete request is returned to the client. Experimental results show that this technology adopted in this paper can complete requests and have a higher efficiency.

Keywords: Dinic, load balancing, mobile host, web service

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