

Research on Evaluation Method of Virtual Machine Quantity in Cold and Hot Operation Mode Based on Reliability Guarantee

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Abstract—Traditional service reliability evaluation involves queuing, calculating overflow, time-out, and other problems. With the development of Cloud computing and the emergence of new applications, parallel computation, redundant backup, and other complex environments shall be taken into consideration when evaluating reliability. Therefore, it's very important to carry out accurate, comprehensive, efficient reliability evaluation under the background of large-scale and complex development of Cloud computing. In view of the above problems, this paper puts forward an evaluation method of virtual machine quantity in cold and hot operation mode based on reliability guarantee, that is, to evaluate the reliability of the system by using MDD algorithm and adjust the quantity in cold and hot backup mode when the number of the virtual machine in operation mode changes under the background of meeting the reliability requirement R.

Keywords— *Reliability evaluation; Reliability guarantee; Cold and hot operation mode; MDD algorithm;*



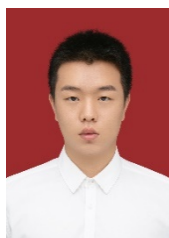
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