面向服务的云工作流模型与调度研究

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摘　要：　云工作流环境具有复杂性，针对如何在此背景下有效地响应用户的工作流请求和调度工作流在云中的执行，提出了一种面向服务的云工作流模型，利用云计算环境中的计算、存储等服务完成工作流实例的执行，进而满足用户的请求.基于该模型还设计了一种云工作流调度策略和调度算法，该算法利用 DAG(Directed Acyclic Grapg)进行建模，优化资源策略，保证在最晚期限内使整个工作流实例的执行花费尽可能小.实验结果表明该算法能有效提高工作流执行效率，降低成本.

关键词：　面向服务；云计算；云工作流；云工作流调度

Service-Oriented Cloud Workflow Model and Scheduling Method

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Abstract：　In the dynamic environment of cloud workflow,response to the workflow request of users and scheduling cloud workflow is a challenge problem.To solve this problem,a service-oriented cloud workflow model is proposed to satisfy the request of users by the computing and storage service.Then on the basis,the cloud workflow scheduling strategy and scheduling algorithm for workflow were proposed.DAG(Directed Acyclic Grapg) was used in the algorithm,and resource strategy was modified to meet the latest execution time under the premise of minimizing the entire workflow execution costs.The experimental results showed that the efficiency effectively improved and the cost was reduced with the proposed algorithm.

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