Abstract

The cooperation of the geographical distributed resources for solving the great problems is called the computing grid. An efficiency scheduling system is necessary to reach the aim. In the proposed method, RMS divides every task into several subtasks. Then, the appropriate resources which can create the more reliability and lower execution time for the task were chosen in the system. It means the reliability and execution time parameters were optimized in the proposed model. In the method, the operator can distinguish the Importance of the parameters in the system for choosing the resources until the choosing is conducted considering the significance degree. Multiple attribute decision making (MADM) were used to choose the resources optimumly. In this paper, the task scheduling by RMS and the task execution within grid resources are modeled using coloured Petri nets. In addition, an example of proposed model for a sample grid environment is constructed and analysed using CPN Tools. The results demonstrated reliability improvement compared to the previous model.

References

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Index Terms

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Keywords

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