

## عنوان مقاله:

Reliability Evaluation of Tree-Structured Grid Services

## محل انتشار:

دومین کنفرانس بین المللی مهندسی دانش بنیان و نوآوری (سال: 1394)

تعداد صفحات اصل مقاله: 5

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## خلاصه مقاله:

Computational grid is a new technology aimed to large-scale resource sharing and wide area collaboration. The main goal of computational grid is to solve complex and time-consuming problems. Optimal quality of service is an important aspect of grid services. Quality of service has different Parameters. One of the most important parameters is reliability that is critical in grid concepts. Because of large scale and complexity of the grid system, its reliability is difficult to analyse and evaluate. The definition of reliability is very broad. Reliability is not one type of analysis. Instead, reliability is often evaluated by a number of different types of analysis. Some of the techniques include fault tree analysis (FTA), Markov analysis, failure mode and effects analysis (FMEA) and Reliability Block Diagram (RBD) Analysis. In this paper, first we consider a virtual tree model for a sample grid environment, and then RBD analysis technique is used for reliability evaluation in grid system. This technique is used for reliability evaluation in systems with complex configuration. Furthermore analytical and simulated results are obtained by a comprehensive and fully .integrated suite of QLM (quality life cycle management) modules named PTC Windchill Quality Solutions

## کلمات کلیدی:

grid computing; reliability evaluation; RBD analysis

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/553302>

