

Measurement and Rating of Computer Systems Performance and of Software Efficiency

An Introduction to the ISO / IEC 14756 Method and a Guide to its Application

Dirlewanger, Werner

kassel university press, ISBN: 978-3-89958-233-8, 2006, 206 Pages

Content: ISO has developed a new method to describe and measure performance for a wide range of data processing system types and applications. This solves the problems arising from the great variety of incompatible methods and performance terms which have been proposed and are used. The method is presented in the International Standard ISO/IEC 14756. This textbook is written both for performance experts and beginners, and academic users. On the one hand it introduces the latest techniques of performance measurement, and on the other hand it is a guide on how to apply the standard.

The standard also includes additionally two advanced aspects. Firstly, it introduces a rating method to compute those performance values which are actually required by the user entirety (reference values) and a process which compares the reference values with the actual measured ones. This answers the question whether the measured performance satisfies the user entirety requirements. Secondly, the standard extends its method to assess the run-time efficiency of software. It introduces a method for quantifying and measuring this property both for application and system software.


Each chapter focuses on a particular aspect of performance measurement which is further illustrated with exercises. Solutions are given for each exercise. As measurement cannot be performed manually, software tools are needed. All needed software is included on a CD supplied with this book and published by the author under GNU license. This software is not intended to be a tool for performing professional measurements, but enables the reader to realize all steps of a performance or software efficiency measurement.


About the author

After receiving his doctorate at Erlangen University, Werner Dirlewanger became familiar with computer performance problems when he was head of various computer centres. Later, as Professor at Kassel University, his fields were software technology and computer architecture. This included active participation in computer performance measurement, evaluation and assessment. He became involved from the outset in the development of ISO/IEC 14756. In this book the author not only gives an introduction to the method but also shares with the reader his experiences of measurement projects of all types and sizes of data processing systems which he planned and performed as a consultant or which were performed under his leadership in his laboratories at the Department of Mathematics and Computer Science of Kassel University.

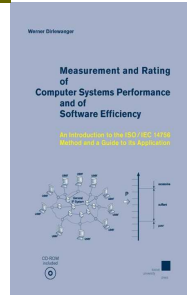
CD-ROM included

Publication is available in following forms:

 Full text (*printable* - 1.60 MB) 20.00 Euro
download PDF

 35.00 Euro

Book [Put in shopping cart](#)



Zu diesem Buch gehört eine CD (s. S. 185-186 im Link exemplary excerpt), die wir Ihnen nach dem Download per Post zusenden.

A CD-ROM belongs to this book (see Link exemplary excerpt pp. 185-186), which we'll send you by mail after download the file.