TECHNICAL UNIVERSITY OF MOLDOVA

FACULTY OF COMPUTERS, INFORMATICS AND MICROELECTRONICS

SOFTWARE ENGINEERING DEPARTMENT AND AUTOMATICS

COMPUTER NETWORKS

Practical examples solved to be introduced in computer networks

Chișinău
Publisher „Tehnica-UTM”
2022

CZU 004.7
P 48

The paper was discussed and approved for editing at the meeting of the council of the Faculty of Computers, Informatics and Microelectronics, process_no. 6 of 19.05.2022

The practical guide is intended for students from FCIM (Faculty of Computers, Informatics and Microelectronics) and FET (Faculty of Electronics and Telecommunications) where they study the Computer Networks course and aims to deepen their knowledge at seminars and for laboratory work.

The guide addresses the important aspects of computer networks to solve the specific problems of designing and managing network topologies, analyzing performance and implementing them on computer network structures. Examples are given in response to the design, analysis, configuration, and administration of equipment in simple or complex topologies. The guide contains the set of the most important and used commands to systematize the work for the design of the topology to be designed and configured.

The guide includes 37 examples of problems and tasks solved, the set of commands with description, 30 variants of topologies for checking comprehension.

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DESCRIEREA CIP A CAMEREI NAŢIONALE A CĂRŢII DIN RM

Peca, Ludmila.

Computer networks: Practical examples solved to be introduced in computer networks / Ludmila Peca, Dinu Țurcanu; Technical University of Moldova, Faculty of Computers, Informatics and Microelectronics, Software Engineering Department and Automatics.
– Chişinău: Tehnica-UTM, 2022. – 188 p.: fig., tab.
Aut. indicaţi pe vs. f. de tit. – Bibliogr.: p. 187 (10 tit.). – 50 ex.
ISBN 978-9975-45-812-2.
004.7
P 48

ISBN 978-9975-45-812-2

About:

Welcome to the Switching, Routing, and Wireless Essentials (SRWE), Practical examples solved to be introduced in Computer Networks. It focuses on switching technologies and router operations that support small-to-medium business networks and includes wireless local area networks (WLAN) and security concepts.
In addition to learning, key switching and routing concepts, learners will be able to perform basic network configuration and troubleshooting, identify and mitigate LAN security threats, and configure and secure a basic WLAN.

Creation and administration of databases and information networks is the formation of an integral personality and the development of professional skills, in order to face the current and perspective requirements of the local and international labor market by:

- accumulation of a body of knowledge in the field of ICT for the purpose of professional and personal development;
- training and development of skills necessary for the activity in the respective field.

The guide of solved practical exercises is made according to the study program in the course Computer Networks for the Technical University.

Each paper concludes with comprehension verification questions, which include the minimum knowledge required to perform the laboratory work that will be presented to students by the teacher.

The guide is intended for students in specialties where the Computer Networks course can be found in the curriculum, full-time or part-time education .

The support that contains solved practical examples is as an Appendix for the lessons recorded for the Computer Networks university course on the eLearning platform of the Technical University, access link:
https://lectii.utm.md/courses/retele-de-calculatoare-computer-networks/

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