1. Record Nr. UNINA9910463208303321

Autore Sethi Adarshpal S.

Titolo The practical OPNET user guide for computer network simulation / /

Adarshpal S. Sethi, Vasil Y. Hnatyshin

Pubbl/distr/stampa Boca Raton, Fla.:,: CRC Press,, 2013

ISBN 0-429-13155-0

1-4398-1206-3

Descrizione fisica 1 online resource (507 p.)

Altri autori (Persone) HnatyshinVasil Y

Disciplina 004.601/1

004.6011 004.60113

Soggetti Computer networks - Computer simulation

Electronic books.

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Includes index.

Nota di bibliografia Includes bibliographical references and index.

Nota di contenuto Front Cover; Contents; Preface; Authors; OPNET Trademark

Information; Chapter 1 - Getting Started with OPNET; Chapter 2 - Creating Network Topology; Chapter 3 - Configuring Network

Topology; Chapter 4 - Configuring and Running a Simulation; Chapter 5 - Standard Applications; Chapter 6 - Advanced Traffic Generation

Features; Chapter 7 - Specifying User Profiles and Deploying

Applications: Chapter 8 - Transport Lever: TCP and LIDB Protections:

Applications; Chapter 8 - Transport Layer: TCP and UDP Protocols; Chapter 9 - Network Layer: Introduction to the IP Protocol; Chapter 10 - Advanced IP Protocol Features; Chapter 11 - Network Layer: Routing Chapter 12 - Data Link and Physical LayersLaboratory Assignment #1:

Introduction to OPNET; Laboratory Assignment #2: Simple Capacity Planning; Laboratory Assignment #3: Introduction to Standard

Applications; Laboratory Assignment #4: HTTP Performance; Laboratory Assignment #5: Modeling Custom Applications; Laboratory Assignment

#6: Influence of the Maximum Transmission Unit on Application
Performance; Laboratory Assignment #7: Transport Protocols: TCP
versus UDP; Laboratory Assignment #8: TCP Features; Laboratory
Assignment #9: IP Addressing and Network Address Translation

Laboratory Assignment #10: Providing Quality of Service

SupportLaboratory Assignment #11: Routing with RIP; Laboratory Assignment #12: Routing with OSPF; Laboratory Assignment #13: Ethernet; Laboratory Assignment #14: Wireless Communication; Back Cover

## Sommario/riassunto

This book provides a practical, hands-on reference for the most widely used computer network simulation software: OPNET. It explains how to use OPNET software packages for simulation and modeling of computer networks. The authors also provide a collection of laboratory projects, focusing on the most common simulation and modeling tasks performed by computer networking systems professionals and students who use OPNET software. The introductory labs demonstrate how to set up simulations, run them, and analyze results. More advanced labs address the simulation of networking protocols in various protocol layers and for wireless and mobile networks--