1. Record Nr. UNINA9910483665303321 Autore Carthern Chris Titolo Cisco networks: engineers' handbook of routing, switching, and security with IOS, NX-OS, and ASA / / Chris Carthern, William Wilson, Noel Rivera [Place of publication not identified]:,: Apress,, [2021] Pubbl/distr/stampa ©2021 **ISBN** 1-4842-6672-2 Edizione [Second edition.] Descrizione fisica 1 online resource (XXXI, 1073 p. 589 illus.) Disciplina 005.44769 Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto Chapter 1. Practical Networking Intro -- Chapter 2. The Physical Medium -- Chapter 3. Protocols and the data link layer -- Chapter 4. The Network Layer -- Chapter 5. Intermediate LAN Switching --Chapter 6. Routing -- Chapter 7. Introduction to Tools and Automation -- Chapter 8. Switch and Router Troubleshooting -- Chapter 9. NAT/DHCP -- Chapter 10. Management Plane -- Chapter 11. Data Plane -- Chapter 12. Control Plane -- Chapter 13. Introduction to Availability -- Chapter 14. Advanced Routing -- Chapter 15. QoS --Chapter 16. Advanced Security -- Chapter 17. Advanced Troubleshooting -- Chapter 18. Effective Network Management --Chapter 19. Data Center -- Chapter 20. Wireless LAN -- Chapter 21. Firepower -- Chapter 22. Network Penetration Testing -- Chapter 23. MPLS -- Chapter 24. DMVPN -- Chapter 25. Network Automation. Sommario/riassunto Cisco Networks, 2nd Edition is a practical guide and desk reference for Cisco engineers. For beginning and experienced network engineers tasked with building LAN, WAN, and data center connections, this book lays out clear directions for installing, configuring, and troubleshooting networks with Cisco devices. This new edition will discuss tools that can be used to automate and troubleshoot networks. A new chapter on quality of service has been added to teach managing network resources by prioritizing specific types of network traffic. The new edition has an

updated wireless section which focuses on an updated controller and

integration with Cisco Identity Services Engine (ISE) and Cisco Prime Infrastructure. This practical desk companion doubles as a comprehensive overview of the basic knowledge and skills needed by CCNA and CCNP exam takers. Prior familiarity with Cisco routing and switching is desirable but not necessary, as Chris Carthern, Dr. Will Wilson, and Noel Rivera start their book with a review of network basics. Further they explain practical considerations and troubleshooting when establishing a physical medium for network communications. Later they explain the concept of network layers, intermediate LAN switching, and routing. Next they introduce you to the tools and automation used with Cisco networks. Moving forward they explain management planes, data planes, and control planes. Next they describe advanced security, trouble shooting, and network management. They conclude the book with a section which focuses on using network automation to automate Cisco IOS networks. You will: Configure Cisco switches, routers, and data center devices in typical corporate network architectures Use black-hat tools to conduct penetration testing on the security of your network Configure and secure virtual private networks (VPNs) Enable identity management in your network with the Cisco Identity Services Engine (ISE) to. .