Record Nr. Autore	UNINA9910451399603321 Finneran Michael F
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Nota di contenuto	Front cover; Voice Over WLANs: The Complete Guide; Copyright page; Table of contents; About the Author; Preface; Acknowledgments; CHAPTER 1: The Convergence of Wireless LANs and VoIP; 1.1 The WLAN Voice Market; 1.2 Development of Wireless LANs; 1.3 Wireless LAN Applications; 1.4 Health Issues with Wireless Devices; 1.5 Wireless LAN Organizations; 1.6 WLAN Configurations; 1.7 Wireless LAN Design Issues; 1.8 The Packet Telephony Revolution; 1.9 Local Area IP Telephony: IP PBX; 1.10 Wide Area VoIP; 1.11 Enterprise VoIP Networks; 1.12 Consumer Packet Telephony Services; 1.13 Conclusion CHAPTER 2: Radio Transmission Fundamentals2.1 Defining Transmission Capacity and Throughput; 2.2 Bandwidth, Radios, and Shannon's Law; 2.3 Bandwidth Efficiency; 2.4 Forward Error Correction (FEC); 2.5 Radio Regulation; 2.6 Licensed Versus Unlicensed Radio Spectrum; 2.7 Unlicensed Spectrum in the Rest of the World; 2.8 General Difficulties in Wireless; 2.9 Basic Characteristics of 802.11 Wireless LANs; 2.10 Conclusion; CHAPTER 3: Wireless LAN Components/WLAN Switches; 3.1 Elements in a Wireless LAN; 3.2 Wireless LAN NICs; 3.3 Access Points (APs); 3.4 Antennas; 3.5 Distributed Antenna Systems

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	 3.6 WLAN Repeaters3.7 Mesh Extension; 3.8 Wireless LAN Switches; 3.9 Wireless LAN Switch Features; 3.10 Selecting WLAN Switches; 3.11 WLAN Switch Architectures; 3.12 Conclusion; CHAPTER 4: Media Access Control Protocol; 4.1 Basic Characteristics and Peculiarities of Wireless LANs; 4.2 Media Access Control Protocol-CSMA/CA; 4.4 Physical Layer Convergence Protocol (PLCP); 4.5 MAC Frame Header; 4.6 MAC Addresses (Address 1-4); 4.7 Authentication and Association; 4.8 Beacon Message; 4.9 Authentication Process; 4.10 Association Options; 4.11 Reassociation/Handoff 4.12 CSMA/CA Distributed Control Function (DCF)4.13 Request-To-Send/Clear-To-Send (RTS/CTS) Operation; 4.14 Point Control Function (PCF); 4.15 PCF Basic Concept; 4.16 Other Protocol Features; 4.17 Power Save Features; 4.18 Throughput Considerations; 5.1 Defined Radio Link Interfaces; 5.2 Signal Modulation; 5.3 Spread Spectrum Transmission; 5.4 Frequency Hopping Spread Spectrum (FHSS); 5.5 Direct Sequence Spread Spectrum (DSSS); 5.6 Orthogonal Frequency Division Multiplexing (OFDM); 5.7 Forward Error Correction (FEC) 5.8 The 2.4 GHz Radio Links 5.9 802.11 Radio Link Options: 1 and 2 Mbps; 5.10 Frequency Hopping Spread Spectrum; 5.11 B02.111 DSSS Radio Link; 5.12 802.11b Radio Link Interface: DSSS; 5.13 IEEE 802.11g Radio Link Interface; OFDM; 5.14 802.11a 5 GHz Radio Link Interface; 5.15 Additional 5 MHz Spectrum: 11 Additional Channels; 5.16 Tradeoffs with 802.11a; 5.17 The Developing IEEE 802.11n Radio Link; 5.18 The IEEE 802.11n Draft Specification; 5.19 Non-Standard Radio Links: Pre-n and Super G; 5.20 Conclusion; CHAPTER 6: Privacy and Security Issues in WLANs 6.1 Security Requirements: Authentication, Privacy, and Availability
Sommario/riassunto	For networking and RF/wireless engineers, and graduate students who want a solid overview of voice over WLANs/VoIP technology (wireless local area networks / voice over internet protocol), this book covers voice coding, packet loss, delay and 'jitter', and 'echo' control, and shows how to combine both WLAN and VoIP technology to create effective voice over WLAN systems. Finneran also describes how to integrate voice over WLAN systems with cellular networks. This is not just another WLAN-only book nor a VoIP-only book; instead, it integrates both topics into a coherent whole.*