

CWNA[®]

Certified Wireless

Network Administrator[™]

Study Guide



David D. Coleman
David A. Westcott



Wiley Publishing, Inc.

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The authors and editors have worked hard to ensure that this edition of the *CWNA: Certified Wireless Network Administrator Study Guide* you hold in your hands is comprehensive, in-depth, and pedagogically sound. We're confident that this book will exceed the demanding standards of the certification marketplace and help you, the CWNA certification candidate, succeed in your endeavors.

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Good luck in pursuit of your CWNA certification!

Neil Edde
Vice President & Publisher
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We would like to dedicate this book to our parents, teachers, instructors, and mentors, who have helped us throughout our lives. We hope that through this book and through our teaching and mentoring we can help others achieve their goals.

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Foreword

Wireless LANs seem to be everywhere these days. The technology is advancing so rapidly that it seems almost impossible to stay abreast of all of the changes. The small office/home office (SOHO) sector is adopting new WLAN technologies well before there are ratified amendments or interoperability certifications in place for each technology. The small/medium business (SMB) sector is slightly more cautious but often serves as a test bed for many leading-edge technologies. The enterprise has adopted 802.11 technology slowly over the last five years, and adoption has often been due to driving factors such as saving money, as with VoWiFi and device tracking technologies, or being able to accomplish new business goals that could not be achieved without wireless technology.

Wireless has recently become wildly popular in the enterprise, and vendors are frantically releasing new products into the market. With a relentless stream of new technologies and products comes an increased demand for education and certification. The CWNP Program is dedicated strictly to staying abreast of all facets of 802.11 technology—with both standards and products. The CWNA certification is the first step in the CWNP line of certifications and is focused on administering an enterprise 802.11 WLAN. CWNA includes topics such as 802.11 standards, security, management, protocol analysis, QoS, site surveying, and radio frequency. Additional certifications focus more intensely on security, protocol analysis, QoS, and RF spectrum management.

David Coleman and David Westcott have worked as Certified Wireless Network Trainers (CWNTs) for as long as the CWNT certification has been available, and each was quick to pursue all CWNP certifications as they were released. Each has years of experience with a breadth of WLAN technologies and leading-edge products, which is obvious to their students and anyone working alongside them in the field. Having worked with each of these gentlemen for years, I can confidently say there could be no finer pair of seasoned trainers collaborating on a CWNA book. These WLAN veterans have devoted hundreds of hours to pouring their experience into this book, and the reader is assured to acquire a plethora of 802.11 knowledge. Mr. Coleman and Mr. Westcott have participated in the shaping of the CWNP Program as a whole since its earliest days and have each added tremendous value to the CWNA certification specifically. I would like to thank each of these fine gentlemen for their unwavering support of the CWNP Program, and I would like to congratulate them on their diverse accomplishments as engineers, trainers, and now authors.

Devin Akin
Chief Technology Officer
The CWNP Program

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