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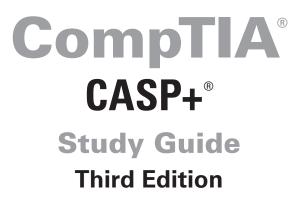
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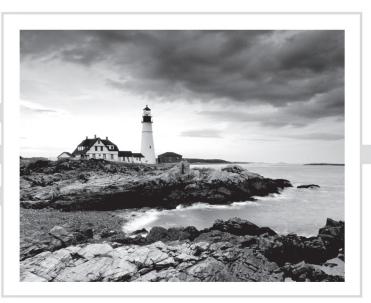
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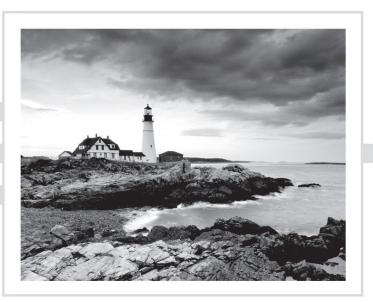






## **CompTIA**<sup>®</sup> CASP+<sup>®</sup> Advanced Security Practitioner

#### Study Guide Exam CAS-003 Third Edition



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To my wife, Maylia:

#### Acknowledgments

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Exercise	8.5	Identifying XSS Vulnerabilities
Exercise	9.1	Reviewing Your Company's Acceptable Use Policy
Exercise	10.1	Eavesdropping on Web Conferences
Exercise	10.2	Sniffing Email with Wireshark
Exercise	10.3	Sniffing VoIP with Cain & Abel

#### Introduction

The CASP+ certification was developed by the Computer Technology Industry Association (CompTIA) to provide an industry-wide means of certifying the competency of security professionals who have 10 years' experience in IT administration and at least 5 years' hands-on technical experience. The security professional's job is to protect the confidentiality, integrity, and availability of an organization's valuable information assets. As such, these individuals need to have the ability to apply critical thinking and judgment.



According to CompTIA, the CASP+ certification "is a vendor-neutral credential." CASP+ validates "advanced-level security skills and knowl-edge" internationally. There is no prerequisite, but "CASP+ certification is intended to follow CompTIA Security+ or equivalent experience and has a technical, 'hands-on' focus at the enterprise level."

Many certification books present material for you to memorize before the exam, but this book goes a step further in that it offers best practices, tips, and hands-on exercises that help those in the field of security better protect critical assets, build defense in depth, and accurately assess risk.

If you're preparing to take the CASP+ exam, it is a good idea to find out as much information as possible about computer security practices and techniques. Because this test is designed for those with years of experience, you will be better prepared by having the most hands-on experience possible; this study guide was written with this in mind. We have included hands-on exercises, real-world scenarios, and review questions at the end of each chapter to give you some idea as to what the exam is like. You should be able to answer at least 90 percent of the test questions in this book correctly before attempting the exam; if you're unable to do so, reread the problematic chapters and try the questions again. Your score should improve.

#### Before You Begin the CompTIA CASP+ Certification Exam

Before you begin studying for the exam, it's good for you to know that the CASP+ exam is offered by CompTIA (an industry association responsible for many certifications) and is granted to those who obtain a passing score on a single exam. Before you begin studying for the exam, learn all you can about the certification.



A detailed list of the CASP+ CAS-003 (2018 Edition) exam objectives is presented in this Introduction. See the section "The CASP+ (2018 Edition) Exam Objective Map."

Obtaining CASP+ certification demonstrates that you can help your organization design and maintain system and network security services designed to secure the organization's assets. By obtaining CASP+ certification, you show that you have the technical knowledge and skills required to conceptualize, design, and engineer secure solutions across complex enterprise environments.

#### Who Should Read This Book

The CASP+ CompTIA Advanced Security Practitioner Study Guide: Exam CAS-003, 3rd Edition, is designed to give you the insight into the working world of IT security, and it describes the types of tasks and activities that a security professional with 5–10 years of experience carries out. Organized classes and study groups are the ideal structures for obtaining and practicing with the recommended equipment.



College classes, training classes, and boot camps are recommended ways to gain proficiency with the tools and techniques discussed in the book. However, nothing delivers hands-on learning like experiencing your own attempts, successes, and mistakes—on a home lab. More on home labs later.

#### What You Will Learn

This CASP+ CompTIA Advanced Security Practitioner Study Guide covers all you need to know in order to pass the CASP+ exam. The exam is based on exam objectives, and this study guide is based on the current iteration of the CASP+ exam, version CAS-003.

The latest exam version was first released in April 2018 and, if the CASP+ exam version life cycle follows the same pattern as most CompTIA exams, the CAS-003 version will remain current for about three years.

Per the CASP+ CompTIA objectives for exam version CAS-003, the five domains include the following:

- Risk Management
- Enterprise Security Architecture
- Enterprise Security Operations
- Technical Integration of Enterprise Security
- Research, Development, and Collaboration