FIREWALLS AND NETWORK SECURITY

Learn to perform the duties of a **Network security engineer** through **expert-level** knowledge of Cisco firewalls.

From Beginner to Advanced

- No previous security experience necessary



DR JONAS BIRCH

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Prerequisetes:

- You need to know the basics of IP networks

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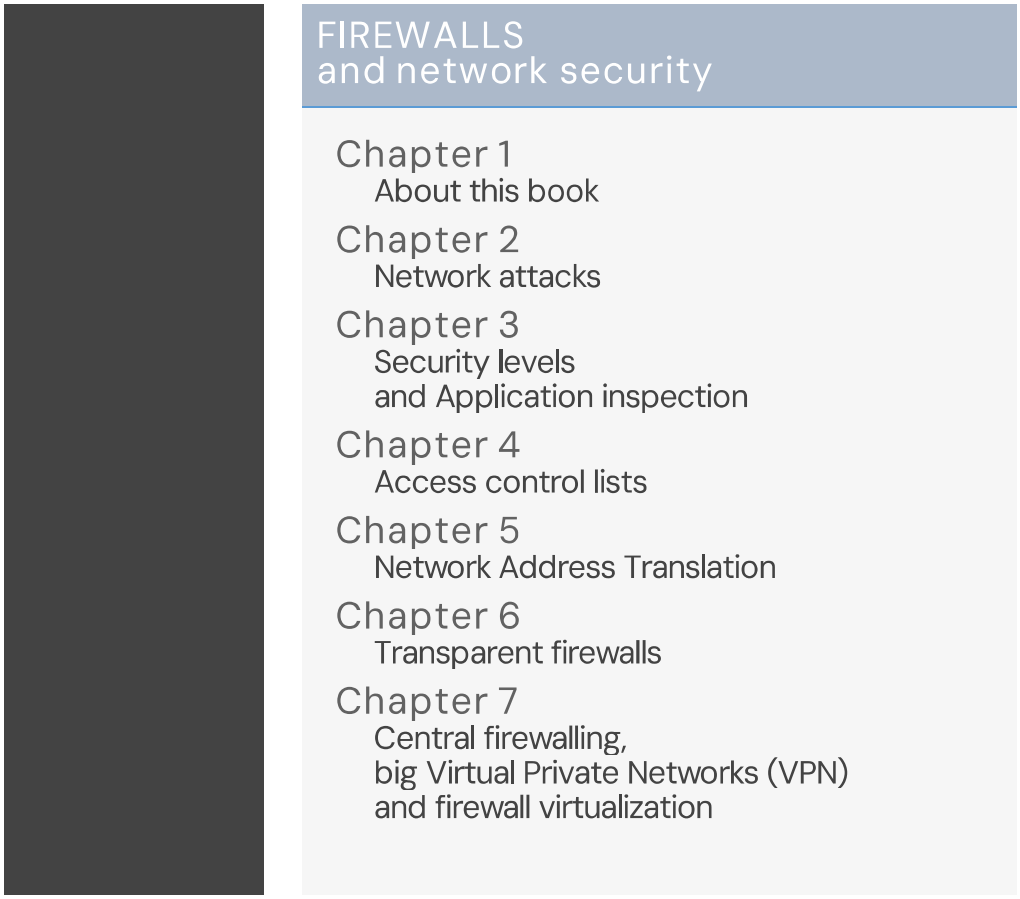
Firewalls and Network Security

DR JONAS BIRCH, 2026

Contents at a glance



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Chapter 1: About this book

DURING a time where more and more tech jobs are being taken over by the machine, many are migrating towards a job as Network security engineer. This will be the last job to ever be taken over by AI – if it even happens at all.

–Why? The reason is not technological, but social. In case of a major security incident in a computer network, there must be somebody responsible. Imagine a bank telling its customer who lost all their savings to hackers, that "well, we put a machine in charge of our cyber security, and the machine got hacked…"

1.1 Foreword

If you already have a basic understanding of IPv4-based networks (perhaps from my other book, *Foundation of network technology, 2024*), and you manage to learn every single thing of this book...

...then you will be able to perform 80% of the duties of a network security engineer.

This includes setting up a secure computer network from scratch and configuring the firewalls according to the best practices of the industry. And also, by "perform" I am not talking about just theoretical knowledge, this book will teach you how to type in the actual commands to the firewall, in addition to learning all the relevant technologies.

This book will give you all knowledge necessary for the first half of CCIE Security ver. 6.0, the most prestigious network security certification in the world, and its holders earn hundreds of thousands of US dollars per year on average.

– dr Jonas Birch, Nov 2026