How a Home Network Works.

Published by Camboard Publishing

Camboard Publishing Cambridge. Great Britain.

www.camboard-publishing.com

Age range 11+



How a Home Network Works is a full color illustrated guide to the key technologies around a small home network.

We start with how the network is physically connected to the internet. The main connection types are illustrated in colorful graphics. Connections made through the cable, telephone line, FTTC (Fibre to the Cabinet), FTTH (Fibre to the Home) and Mobile internet.

We move onto WiFi technology and illustrate how different types of devices use WiFi to access the internet.

The IP Address use is explained through color illustrations. The DNS (Domain Name Server) is illustrated. The Firewall on your home network is illustrated. Data Packets That move around the internet and LAN are explained and illustrated in full color graphics. Protocols that move data around your network and the internet are illustrated in colorful graphics.

The Local Area Network (LAN) which forms the basis of most home networks is explained and illustrated.

This book will be useful to students and anyone else wishing to learn how the technologies around a small home network function. A colorful resource for beginners to computer science.

ALL RIGHTS RESERVED.

No part of this Book may be reproduced, duplicated, given away, transmitted or resold in any form without written prior permission from the publisher.

Limit of Liability and Disclaimer of Warranty: The publisher has used its best efforts in preparing this book, and the information provided herein is provided "as is." Camboard Publishing makes no representation or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaims any implied warranties of merchantability or fitness for any particular purpose and shall in no event be liable for any loss of profit or any other commercial damage, including but not limited to special, incidental, consequential, or other damages. Trademarks: This book identifies product names and services known to be trademarks, registered trademarks, or service marks of their respective holders. They are used throughout this book in an editorial fashion only. In addition, terms suspected of being trademarks, registered trademarks, or service marks have been appropriately capitalized, although Camboard Publishing cannot attest to the accuracy of this information. Use of a term in this book should not be regarded as affecting the validity of any trademark, registered trademark, or service mark. Camboard Publishing is not associated with any product or vendor mentioned in this book.

All trademarks acknowledged.

Copyright © 2020 Camboard Publishing

How a Home Network Works

Contents

Chapter 1.	Connections.	6
Chapter 2.	WiFi.	22
Chapter 3.	IP Address .	32
Chapter 4.	Domain Name Server (DNS).	46
Chapter 5.	FireWall.	54
Chapter 6.	Data Packets.	68
Chapter 7.	Protocols.	80
Chapter 8.	Local Area Network .	86

Copyright © 2020 Camboard Publishing

Chapter 1

CARE .

6

Connections

Wireless Router

8

Chapter 1. Connections

Inside your home you receive the internet through a wireless router.

A cable connects the router to a wall socket.

wall socket cable

in the second second

200

wireless router

The internet comes from your internet service provider (ISP).

You pay a fee to access the internet through your ISP.

Your ISP will usually supply a wireless router for you to use with your devices.



15-2

10

The internet reaches your wall socket by a variety of connection types.

Most homes are connected to the internet by one of several different connection types.

Elle

Router

11

Wall Socket