

LEARNING MADE EASY



# Windows Server® 2019 & PowerShell®

ALL-IN-ONE

for  
**dummies**®  
A Wiley Brand



**8**  
**Books**  
in one!

**Sara Perrott**





# Windows Server® 2019 & PowerShell®

ALL-IN-ONE

by Sara Perrott

for  
**dummies**®  
A Wiley Brand

# Windows Server® 2019 & PowerShell® All-in-One For Dummies®

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# Introduction

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**M**icrosoft continues to improve on its server operating system with its release of Windows Server 2019. Although Windows Server 2019 doesn't introduce any huge sweeping changes, it offers some great new features, simplifies some administrative tasks, and is, overall, a very polished version of Windows Server.

Security features have been improved upon that allow you to protect your user's accounts and your organization's devices, and staples like drive encryption with BitLocker Drive Encryption are still a tried-and-true part of the operating system. Shielded virtual machines (VMs) have also gotten some improvements, including the ability to run Linux!

Changes have also been made to make automation simpler. This includes improvements to Microsoft's virtualization software and capabilities, and support for orchestration and automation tools. This has made Windows Server 2019 a better operating system for system administrators who need to deploy systems quickly and for developers who need to test their workloads against stable, production-like systems.

## About This Book

---

*Windows Server 2019 & PowerShell All-in-One For Dummies* provides something for everyone — from the junior system administrator just getting his start, to the seasoned system administrator looking to improve her skills.

I try to cover as many of the everyday topics that you would need to know as a system administrator and explain things that are outside of your daily work. My goal with this book is to help you understand not just the what and the how, but also the why.

This isn't the kind of book that you pick up and read from start to finish, and it's probably not the kind of book you'll read on the beach. Instead, this book is a reference — the kind of book you can pick up, turn to just about any page, and start reading. It's divided into eight minibooks, each covering a specific aspect of working with Windows Server 2019 or PowerShell.

You don't have to memorize anything in this book. Pick it up when you need to know something. After you find what you're looking for, put it down and get on with your life.

Within this book, you may note that some web addresses break across two lines of text. If you're reading this book in print and want to visit one of these web pages, simply key in the web address exactly as it's noted in the text, pretending as though the line break doesn't exist. If you're reading this as an e-book, you've got it easy — just click the web address to be taken directly to the web page.

## Foolish Assumptions

I had to make some assumptions about you as I wrote this book:

- » I assume that you want to know more about Windows Server 2019 and PowerShell and you've worked with some version of Windows Server in the past.
- » I assume that you're a system administrator, and that you have the permissions to do the things mentioned in this book. Some of the procedures require you to have administrator access.

## Icons Used in This Book

As you read through the book, you'll see icons in the margin. I use those icons to grab your attention. Here's what each of these icons mean:



TIP

Anything marked with the Tip icon will save you time or frustration or just generally make your life easier — at least your system administrator life (I can't do anything about your relationship with your parents).



WARNING

If you see a Warning icon, take heed! Anything marked with this icon could be destructive or at the very least give you a major headache.



TECHNICAL  
STUFF

When you see the Technical Stuff icon, this is usually where I go full nerd and add some more in-depth technical information. If you want to let your inner geek flag fly, read these with gusto! But if you're in a hurry and just want to get the information you absolutely need, you can pass these by.



If something is really important — important enough for you to commit it to memory — I mark it with the Remember icon.

## Beyond the Book

In addition to what you're reading right now, this product also comes with a free access-anywhere Cheat Sheet that includes information on variables, aliases, conditionals, and loops, as creating and running a PowerShell script, and more. To get this Cheat Sheet, simply go to [www.dummies.com](http://www.dummies.com) and type **Windows Server 2019 & PowerShell All-in-One For Dummies Cheat Sheet** in the Search box.

## Where to Go from Here

I'm a traditionalist, so I recommend starting with Book 1, Chapter 1. This is where you find out about the new things that await you in Windows Server 2019. From there, it's entirely up to you! You can read the book in order, or skip around, letting your curiosity be your guide.

One last note: I highly recommend that you create a test environment as you go through this book and experiment with different components of the Windows Server operating system. I try to call attention to potentially destructive procedures, but it's your responsibility to ensure that you're practicing in a safe environment, ideally not your production environment.



# **1**

# **Installing and Setting Up Windows Server 2019**

# Contents at a Glance

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