

# KUBERNETES ADMINISTRATION

## THE DEFINITIVE GUIDE

From Cluster Foundations to  
Production Operations at Scale



Architecture  
& Installation



Security  
& Compliance



Observability  
& Operations



GitOps  
& Automation



Multi-Cluster  
& Scale



Cost  
Optimization



Hands-on examples



Configuration samples



Operational checklists



Real-world patterns

STEVE T.

# Kubernetes Administration: The Definitive Guide

From Cluster Foundations to Production Operations at Scale

Steve T. Publications

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# From Cluster Foundations to Production Operations at Scale

**About this book:** This is a comprehensive guide to Kubernetes administration, written for practitioners who already understand the basics and are ready to take ownership of clusters in production. It covers architecture deep dives, installation methods, networking, storage, security, observability, GitOps, multi-cluster management, cost optimization, and emerging trends. Every chapter includes hands-on examples, configuration samples, operational checklists, and real-world patterns drawn from production environments. Whether you are running a handful of nodes or managing a fleet of hundreds of clusters, this book gives you the knowledge to design, deploy, secure, and operate Kubernetes at scale.

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## Review Questions

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# Chapter 13: Production Operations, Cost Optimization, and Emerging Trends

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## Cloud-Managed Platforms: EKS, GKE, AKS Compared

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## On-Premises Deployments: Rancher, OpenShift, Bare Metal

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## Production Runbooks and Operational Checklists

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## Cost Optimization: FinOps for Kubernetes

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# Conclusion: The Administrator's Journey

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# References

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