River Publishers

5G Networks

An Overview of Architecture, Design, Use Case, and Deployment

Authors:

Atahar Khan, Cisco Systems, India

Satya Priyo Dhar, Cisco Systems, India

Ramakrishnan Shanmugasundaram, Cisco Systems, India

Joe Chemparathy, Cisco Systems, India

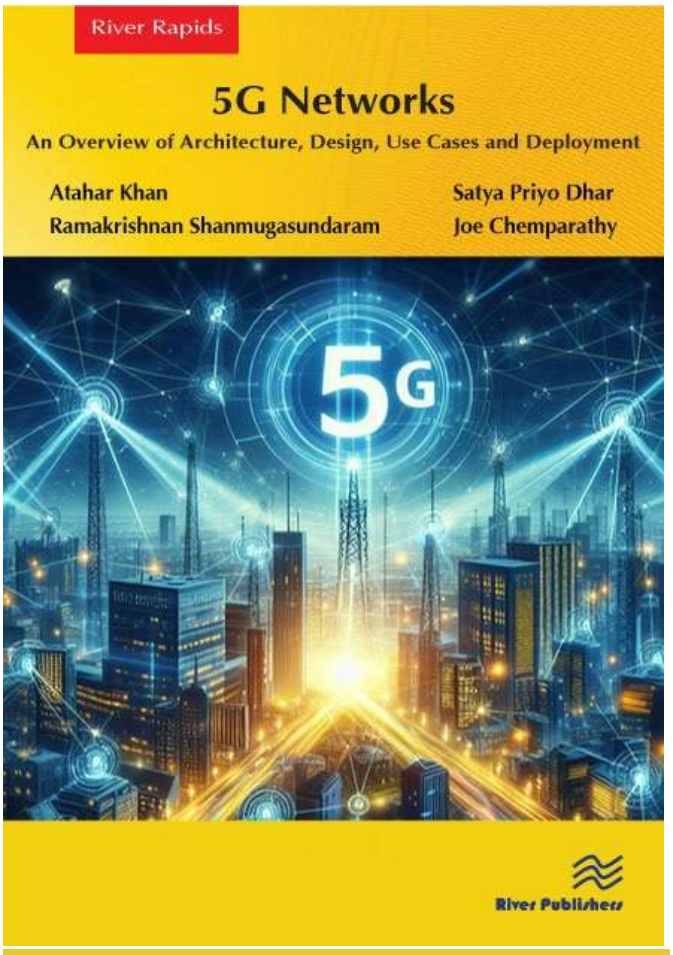
This book provides comprehensive coverage of building an end-to-end view on how to architect, design, and orchestrate a 5G capable network that will integrate with 5G RAN, IP transport, datacenters, Telco Cloud, and 5G packet networks. It contains real-world examples with challenges and success strategies for deploying 5G Transport with closed-loop automation. It also focuses on aspects like scale, performance, latency, security, and manageability while building 5G transport for some of the world's largest 5G networks as well as migration approaches from 4G to 5G transport and core network.

5G is an emerging technology that mobile service providers (MNO/MVNO) across the world are embracing. They are willing to invest in enabling their infrastructure for 5G and explore new business opportunities with their enterprise/mobile customers. As per the Gartner survey, the majority of communication service provider (CSP) revenue will come from 5G.

5G is going to open the door to new applications such as wireless virtual reality, low latency machine-to-machine communication, smart city infrastructure, autonomous vehicles, IoT deployment, artificial intelligence-based applications, industrial automation and so much more.

TABLE OF CONTENTS

1. 5G Introduction
2. Demands leading to Architecture Shift
3. 5G Use Cases
4. RAN Architecture Design
5. IP Transport - xHaul Architecture Design
6. Telco Cloud
7. Packet Core (5G NSA & SA) Design
8. Automation
9. Network Slicing
10. 5G Security
11. Migration from 4G to 5G



River Publishers Series in River Rapids

ISBN: 9788770041935
e-ISBN: 9788770041928
Available From: May 2024
Price: $ 130.00

KEYWORDS:
5G architecture design, planning and deployment, automation framework, network slicing, 5G RAN, transport, packet core, Telco Cloud and automation

www.riverpublishers.com
marketing@riverpublishers.com