Policy and Charging in 5G

TPR1058x | Expert-Led Live | 5G Core | Expert
Course Duration: 4 hours

This training provides a high-level technical overview of the Policy and Charging Control (PCC) role in 5G. The training explains the PCC architecture for roaming and non-roaming and the role of the Policy Control Function (PCF) network function in the PCC rules. In addition, the training describes the interactions of the PCF with other 5G network functions and application functions for PCC and QoS purposes. The training also outlines the role of the Network Data Analytics Function (NWDAF) input to the PCC rules. Finally, the training summarize important 3GPP release 16 and 17 enhancements to the PCC and Quality of Service (QoS).

Intended Audience

A high-level technical overview to personnel involved in product management, marketing, planning, design, engineering, and operations

Objectives

After completing this course, the learner will be able to:

- Outline the role of the Policy and Charging Control in 5G
- Illustrate the PCC roaming and non-roaming architecture
- Describe the 5G network functions interactions for PCC and QoS
- List and describe the different types of policies in 5G
- Describe the impact of PCC on session- and non-session-related policy
- List PCC and QoS enhancements in 3GPP release 16 and 17

Course Prerequisites

Welcome to 5G

Outline

1. What is Policy, Charging and QoS?
1.1 What is Policy and Charging Control (PCC)?
1.2 What are policy rules?
1.3 What are charging rules in PCC?

2. Policy Control and Charging Architecture
2.1 Non-Roaming Policy and Charging architecture
2.2 Roaming Policy and Charging architecture
2.3 Types of PCC rules (Dynamic and Pre-Defined)
2.4 Example: PCC for PDU session at the UPF
Exercise: Build PCC-Related 5G Network

3. Types of Policy in 5G
3.1 Non-session management policy
3.2 Session management policy

4. Policy Control Operations
Exercise: PCC Call Flows Signaling

5. 5G PCC and QoS Enhancements 3GPP Rel 16-17
5.1 PCC and QoS features in release 16 highlights
5.2 PCC and QoS features in release 17 highlights

Putting it all together

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