



# Policy Charging and Rules Function (PCRF) using Sandvine's PCEF

This course provides instruction on deployment, configuration, and management of Sandvine's PCRF and Sandvine's service creation graphical user interface, ServiceDesigner, where the PCRF is used to make decisions that are enforced by Sandvine's PCEF (PTS). This course consists of a combination of lecture and hands-on lab exercises covering in-depth configuration of the PCRF server, using ServiceDesigner.

## COURSE OVERVIEW

Intended for operations and maintenance, support, design and planning, and engineering personnel, the objective of Network Policy Control Essentials Essentials is to convey a high-level understanding of Sandvine solutions.

### Objectives

In addition to ensuring that you understand Sandvine's PCRF solution, this course ensures that you:

- Understand the power and flexibility of ServiceDesigner
- Learn the interaction between Sandvine's PCEF (PTS) and Sandvine's PCRF (Maestro/Service Delivery Engine (SDE))
- Review use cases, deployment models, and the ServiceDesigner interface
- Examine and have hands-on experience with the Gx server

### Prerequisites

- Network Policy Control Essentials
- Basic knowledge of networking principles

### Course Duration

Three Days

### Course Outline

Introduction and Overview

- High-level understanding of PCRF
- Overview of use cases, deployment models, and ServiceDesigner

PCRF Session Management

- Session flows, dictionaries, and attributes
- PCRF session functions, events, and lookup
- CLI commands and alarms

## Subscriber – Session and Usage Management

- Subscriber profile deployment models
- Subscriber attribute view
- Attribute definition types and customization functions
- CLI commands and alarms

## Usage Management

- Configuring the usage server and Quota Manager
- Interaction with the PCRF
- Usage and provisioning
- Troubleshooting and reports
- Special use cases

## Gx Server

- Gx workflows and actions
- Gx server and diameter configuration
- Gx server SandScript expressions

## ServiceDesigner

- Overview and nomenclature
- Using ServiceDesigner
- ServiceDesigner rule engine and rules

## SDE and PCRF High Availability

## Next Steps

We have a comprehensive collection of courses designed to help you get the most out of your Sandvine solution. Contact us and sign up for your next course!

- Network Analytics Operator
- Fairshare Traffic Management
- Policy Enforcement and Online Charging
- Quota Manager
- Record Generator

## Advanced Courses

- Advanced SandScript Writing
- Troubleshooting Sandvine

If you have any questions about Sandvine's Education Services or courses, contact [learning@sandvine.com](mailto:learning@sandvine.com)

## ABOUT SANDVINE

Sandvine helps organizations run world-class networks with Active Network Intelligence, leveraging machine learning analytics and closed-loop automation to identify and adapt to network behavior in real-time. With Sandvine, organizations have the power of a highly automated platform from a single vendor that delivers a deep understanding of their network data to drive faster, better decisions. For more information, visit [sandvine.com](http://sandvine.com) or follow Sandvine on Twitter at [@Sandvine](https://twitter.com/Sandvine).



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