

# Technology Primer: DevOps

Instructor Led Live Virtual Class | Duration: 0.5 Day | Course Number: TPR1014

This half day Technology Primer introduces the concepts of DevOps, its process, challenges, benefits and skill requirements. The course provides an overall view of the transition from traditional process to a DevOps based process. We then provide examples of DevOps applications and discuss the lifecycle of a DevOps application. As networks transform to a virtualized platform, we will discuss the intersect of Network Functions Virtualization (NFV), and Orchestration.

### Intended Audience

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

### Learning Objectives

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

- Enumerate the DevOps principles
- Discuss the importance of DevOps
- List DevOps benefits and challenges
- Discuss the Intersect of DevOps and NFV
- Explain areas of where DevOps can be applied
- Describe the lifecycle of an application using DevOps

### Suggested Prerequisites

- [NWV\_116] Welcome to SDN and NFV Introduction (eLearning)
- [NWV\_117] Welcome to SDN and NFV Foundations (eLearning)
- [NWV\_118] Welcome to SDN and NFV Technologies (eLearning)

### Course Outline

#### 1. Introduction to Agile and DevOps

- 1.1. Challenges with Non-Agile Processes
- 1.2. Agile and DevOps - what and why?
- 1.3. Life of an application

#### 2. Agile and DevOps Methodology

- 2.1. Principles of Agile development
- 2.2. Benefits of Agile principles
- 2.3. DevOps methodology

#### 3. DevOps Process & Tools

- 3.1. Cloud and DevOps
- 3.2. DevOps processes
- 3.3. DevOps tool chain
- 3.4. Key DevOps tools

#### 4. Applications of DevOps

- 4.1. DevOps in a virtualized network
- 4.2. DevOps in deploying VNFs
- 4.3. DevOps and Orchestration

#### 5. Considerations and Take-aways