

CSP Network Performance Overview

eLearning (H5v) | Average Duration: 1 Hour | Course Number: NWV_114



Communication Service Providers (CSPs) are on the cusp of a multitude of network and business transformation choices. Those transformation choices will have an impact on the performance of the CSP. This course provides a high level view of how a CSP currently manages the performance of the network. The course describes the key elements of the OA&M network, the key concepts related to Key Performance Indicators, and the key procedures related to Fault, Configuration, Accounting, Performance, and Security (FCAPS).

Intended Audience

The course is intended for all that are interested in understanding how CSPs manage the performance of their network today.

Learning Objectives

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

- List the key elements of the CSP network
- Illustrate the CSP OA&M network
- Describe KPIs and their use
- List the performance requirements of the key services used by a CSP
- Describe FCAPS
- Illustrate the various redundancy schemes used within the CSP
- Describe how the CSP will detect, isolate, and correct faults

Course Outline

1. CSP Network Architecture

- 1.1. A conceptual Mobile CSP network

2. OA&M Architecture

- 2.1. OSS/BSS network
- 2.2. Element management system

3. Key Performance Indicator (KPI)

- 3.1. Counters
- 3.2. Primary use of KPI
- 3.3. Example KPIs

4. Key Services and Performance

Requirements

- 4.1. Voice services
- 4.2. VoIP call
- 4.3. Data session
- 4.4. Video session

5. FCAPS

- 5.1. What is FCAPS?
 - 5.1.1. Fault
 - 5.1.2. Configuration
 - 5.1.3. Accounting
 - 5.1.4. Performance
 - 5.1.5. Security

6. Redundancy Schemes

- 6.1. What is 5 9's availability?
- 6.2. Types of redundancy

7. Fault Management

- 7.1. Fault detection
- 7.2. Fault isolation
- 7.3. Fault correction

8. The Road Ahead

9. End of Course Assessment