



## COURSE OUTLINE

### Blue Planet DevOps Toolkit Software Skills

Instructor Led Training/Virtual Instructor Led Training (ILT/VILT)

C808, Revision 3

#### **Course Overview**

This course provides an introduction to key DevOps skills that are necessary for individuals who want to learn Blue Planet Orchestrate. Students will learn how to use a variety of software tools that are the basis of developing content within Blue Planet.

**Objectives**

Upon successful completion of this course, students should be able to:

- Describe and create data structures in JSON, HOCON and YAML
- Read and create simple and advanced Regular Expressions
- Have an understanding of Python, including being able to read simple Python scripts and manage Python software
- Create Jinja templates
- Manipulate data using TextFSM

**Conditions*****Classroom***

- The maximum number of students for this course is 12.
- Demonstrations and exercises will be conducted in the classroom and training lab.
- Students receive course material and product documentation via download.
- Reference documents are available on the Ciena portal, refer to <https://my.ciena.com>.
- Course methodology is lecture/discussion and performance/demonstration.

***Virtual Classroom***

- For technical requirements and support, please refer to <http://cienalearning.freshdesk.com/>

**Prerequisites*****Classroom and Virtual Classroom***

To be successful in this course, students should have these skills, knowledge, and equipment:

- Students must be familiar basic Linux commands and the command line interface.
- Student should be comfortable using the command prompt on their laptop and know how to navigate their local file system using the command prompt.
- Students need a laptop computer with:
  - 16GB of RAM
  - 20GB of disk space
- Students must have administrative rights to install software on their laptop.
  - The laptop should have the following software installed prior to class:
  - A text editor, IDE, or other application for editing JSON and HOCON files.  
Ciena recommends Sublime Text, NotePad++ or another similar tool.
  - Chrome or Firefox web browser

## **Duration**

The duration of this training course is typically 1 day for on-site classes. The duration may vary for students with prior Blue Planet training or extensive software development experience.

## Course Outline

### Introduction

#### Lesson 1. Overview of Software Tools used in Blue Planet

- Data Structures
- JSON
- JSON Schema
- HOCON
- YAML

#### Lesson 2. Module 3. Devops Toolkit

- Introduction to Virtual Machines
- Configuring the Devops Toolkit
- Docker

#### Lesson 3. Python Programming

- Introduction to Python
- Using Jinja
- TextFMS
- Regular Expressions

#### Lesson 4. Additional Tools

- Understanding Git
- Curl
- REST API
- Swagger