

## Developing Applications using Oracle IoT Cloud Service Ed 1

**Duration:** 2 Days

### What you will learn

Developing Applications using Oracle IoT Cloud Service course, is intended for IoT device software developers, applications developers who plan to use Oracle IoT Cloud Service to manage, and develop for their IoT network. This will help you make business decisions and strategies by allowing you to connect your devices to the cloud, analyze data and alert messages from those devices in real time, and integrate your data with enterprise applications. You will also learn to connect different types of devices and register their resources and metadata. You can also deploy software applications to your registered devices.

### Benefits to You

When you walk away from this training, you will have learned what Oracle IoT Cloud Service really means, what it involves, and how it affects enterprises and their strategies. Finally, taking this course empowers you to find solutions to fix your customers' business problems.

### Audience

Cloud Application Developer  
IoT Cloud Developer

### Related Training

#### *Required Prerequisites*

Basic knowledge on JavaScript

Worked on any programming language

Java SE 8 Programming

#### *Suggested Prerequisites*

Basic knowledge on JSON

Basic knowledge on Node.js

Basic knowledge on REST API

### Course Objectives

Understand Client Software Libraries

Manage IoT Data Flow and Application

Understand Internet of Things

Setting up Oracle Cloud Service Instance

Creating Devices and Device Models in IoT Cloud Services Application

Creating Oracle IoT Cloud Service Applications

## Course Topics

### **Understanding Internet of Things**

Class Introduction

Describe the brief history of IoT

Explain IoT(Internet of Things)

Explain definition of “Things”

Describe the attributes of Things

Explain WoT Terminology

Describe Technology Road map of Internet of things

### **Understanding Cloud Computing**

Cloud computing

Characteristics of Cloud Computing.

Oracle Cloud Products Overview

### **Getting Started with Oracle Cloud**

Types of Oracle Cloud accounts

Subscribing to an Oracle Cloud Service Trial

Adding Users and Assigning Roles

Creating Cloud Service Instance

Generating Key Pair

### **Creating Cloud Service Instance**

Steps for Creating IoT Cloud Service Instance

Creating Database Instance

Creating Java Cloud Instance

Understanding Container and storage Instance

Components of Dashboard

### **Creating Oracle IoT Cloud Service Applications**

Workflow for Implementing the Oracle Internet of Things Cloud Service

Accessing the Management Console

Creating Oracle Internet of Things Cloud Service Applications

### **Devices in IoT Cloud Services**

Device Types in Oracle IoT Cloud Service

Device Life Cycle in Oracle IoT Cloud Service

Creating a New Device Model

Managing Your Device Models

Device Resources in Oracle IoT Cloud Service

Device Metadata in Oracle IoT Cloud Service

Registering , Activating, Deactivating, Decommissioning of Devices

### **Managing IoT Cloud service Application**

Creating a New Application, Configuring device model, Adding message Exploration

Deploying an IoT Application

Importing an IoT Application

Exporting an IoT Application

### **Overview of Client Software Libraries**

Data Simulator Overview

Setting Up and Using Data Simulator

Client Software libraries overview and architecture

Available Client software libraries

IoT Cloud Service Client Software Library Application Model

Locating and Downloading Client Software libraries

REST API libraries Overviews

Oracle Internet of Things Cloud Service Using a JavaScript Application

### **Understanding End to End Data Flow from Registered Device to IoT Cloud Service**

Start point and End point of Data/message

Message Formats in Oracle IoT Cloud Service

Overview of Oracle IoT Cloud Service Stream Exploration

End to End Dataflow Demo Using JavaScript Client libraries