**Creating, Publishing, and Securing APIs with IBM API Connect**

Course Code: WD508G

Course Duration: 4 Days

**Overview**

This course is also available as self-paced virtual (e-learning) course *Creating, Publishing, and Securing APIs with IBM API Connect* ([ZD508G](https://www-03.ibm.com/services/learning/ites.wss/zz-en?pageType=course_description&courseCode=ZD508G)). This option does not require any travel.

This course teaches you how to create, publish, and secure APIs with IBM API Connect V5.0.8. You learn how to use the Developer Toolkit to define an API interface according to the OpenAPI specification. You assemble message processing policies in the API Designer web application and define client authorization schemes, such as OAuth 2.0, in the API definition. You build a Node.js API application with the LoopBack framework. You also package, stage, and publish an API with product and plan.

For information about other related courses, see the IBM Training website:

**ibm.com**/training

**Audience**

This course is designed for API developers: software developers who define and implement API operations.

Prerequisites

Before taking this course, you should successfully complete *Developing REST APIs with Node.js for IBM Bluemix* ([VY102G](https://www-03.ibm.com/services/learning/ites.wss/zz-en?pageType=course_description&courseCode=VY102G)).

**Key topics**

Course introduction  
IBM API Connect V5 overview  
API Connect Developer Toolkit  
Creating an API definition  
Exercise: Creating and publishing an API in API Designer  
Defining APIs that call REST and SOAP services  
Exercise: Defining an API that calls an existing SOAP service  
Implementing APIs with the LoopBack framework  
Exercise: Creating a LoopBack application  
LoopBack models, properties, and relationships  
Defining data sources with connectors  
Exercise: Defining LoopBack data sources  
Implementing remote methods and event hooks  
Exercise: Implementing event-driven functions with remote and operation hooks  
Assembling message processing policies  
Exercise: Assembling message processing policies  
Declaring client authorization requirements  
Creating an OAuth 2.0 provider  
Exercise: Declaring an OAuth 2.0 provider and security requirement  
Deploying an API to a Docker container  
Exercise: Deploying an API implementation to a container runtime  
Staging, publishing, and deploying an API product  
Exercise: Defining and publishing an API product  
Subscribing and testing APIs  
Exercise: Subscribing and testing APIs  
Troubleshooting  
Exercise: Troubleshooting the case study  
Course summary

**Objectives**

* Create APIs with the API Connect toolkit
* Implement APIs with the LoopBack Node.js framework
* Validate, filter, and transform API requests and responses with message processing policies
* Authorize client API requests with security definitions
* Enforce an OAuth flow with an OAuth 2.0 Provider API
* Stage, publish, and test APIs on the API Connect cloud