

# IBM API Connect Certification Prep -C1000 138

The certification validates the candidate's ability to configure, develop, publish, and manage APIs using the IBM API Connect v10.0.3 platform. It focuses on the implementation role, covering the activities of the API Developer, API Product Manager, and Provider Organization Owner

## Audience

This certification and study plan are best suited for **intermediate-level developers, solution implementers, and API specialists** who are responsible for the hands-on configuration and management of APIs within an organization's API Connect environment.

- **Primary Roles:** API Developers, API Engineers, Solution Implementers, Technical Consultants, and API Architects focusing on implementation.

## Prerequisite

- **Conceptual knowledge of APIs and API Management principles.**
- **Basic understanding of web services and protocols (HTTP/HTTPS, REST, SOAP).**
- **Familiarity with data formats like JSON and XML.**

## Agenda

### Day 1: Platform Overview, Roles, and Catalog Management

- **Section 1: Overview & Lifecycle** (Theory and Foundation)
  - Describe the API Connect value chain (Create, Run, Manage, Secure, Test, Socialize, Analyze).
  - Define and distinguish all key roles (Developer, Product Manager, Provider Owner, Consumer).
  - Review the lifecycle stages of APIs and Products.
  - Identify typical industry use cases.
- **Section 2: Provider Organization Owner (Part 1)** (Hands-on Setup)
  - Manage Catalogs (create, configure, security settings).
  - Differentiate between Catalogs and Spaces (Syndication).
- **Certification Prep:** Review key terminology and the distinct responsibilities of each platform role.

### Day 2: API Developer - REST, Assembly Policies, and Properties

- **Section 3: API Developer Role (Part 1)** (API Creation and Core Assembly)
  - Create and configure a REST API (OpenAPI 2 & 3).
  - Review creation/configuration for SOAP and GraphQL APIs.
  - Leverage programming assembly policies (invoke, set-variable, map, switch).
  - Leverage other assembly policies (log, etc.).
  - Utilize API and Catalog properties for configuration.

- **Certification Prep:** Focus on the purpose and function of the common data transformation and flow control policies.

### Day 3: Security Implementation and Advanced Policies

- **Section 2: Provider Organization Owner (Part 2)** (Security Prerequisites)
  - Configure API Security related resources (OAuth2 Provider, User Registry, TLS profiles).
  - Manage user access to a provider organization.
- **Section 3: API Developer Role (Part 2)** (Security, Debugging, and Customization)
  - Apply a security definition to an API (e.g., client-id).
  - Manage OAuth2 Provider and leverage security assembly policies (e.g., oauth).
  - Use the testing, debug, and tracing capabilities.
  - Implement User-Defined Policies (UDP), Global Policies, and Gateway Extensions (focus on scope/application).
  - Manage error handling with explicit catch blocks.
- **Certification Prep:** Understand the flow and required policies for securing an API via OAuth2/JWT.

### Day 4: Product Management, Plans, and CLI Tools

- **Section 4: API Product Manager Role** (Productization and Governance)
  - Distinguish between the various lifecycle stages of APIs and Products.
  - Create Products and Plans (including rate limits/quotas).
  - Administer Consumer Access (consumer orgs).
  - Administer Applications and Subscriptions.
- **CLI & Management Interface** (Hands-on Command Line)
  - Use the IBM API Connect Command Line Interface (CLI) for administration (apic).
  - Use the IBM API Connect Developer Toolkit CLI for development.
  - Review the API Connect REST Management Interface (conceptual).
- **Certification Prep:** Master the Product Manager's functions and the hierarchy of API Product Plan Subscription.

### Day 5: Developer Portal and Analytics

- **Section 5: Developer Portal (Consumer & Admin)** (Consumption and Socialization)
  - Register and manage Application/subscribe to APIs as an API Consumer (hands-on).
  - Demonstrate understanding of API Discovery from a consumer's view.
  - Gain business insight for the Consumer Organization from analytics information.
  - Design API Documentation as an admin.
  - Administer portal customization and Consumer Access.
  - Demonstrate understanding of portal CLI capabilities.
- **Section 4: Analytics**
  - Gain business insight from analytics information (Provider/Product Manager view).

- **Certification Prep:** Focus on the different analytics views available to Consumers vs. Product Managers.

## **Day 6: Dedicated Review and Mock Exam 1**

- **Morning: Targeted Review**
  - Deep dive on weakest areas identified in Sections 2 and 3 (e.g., policy implementation, security resource setup).
  - Review the governance topics in Section 4 (lifecycle, consumer access).
- **Afternoon: Practice Assessment**
  - Take a full, timed **Mock Exam 1,2**.
  - Analyze results and conduct immediate remediation/review of incorrect answers.

## **Day 7: Final Preparation and Assessment**

- **Morning: Final Knowledge Sweep**
  - Quick review of all key definitions, CLI commands, and role-to-task mappings.
  - Final review of Sections 4 and 5 (Product Manager and Developer Portal admin tasks).
- **Afternoon: Final Assessment**
  - Take a second full, timed **Mock Exam 3,4**.
  - Review final strategies for the certification exam (time management, question interpretation).
  - **Goal:** Be ready to take the official certification exam.