

# MuleSoft Certified Platform Architect – Level 1

## Certification Exam

### Summary

A *MuleSoft Certified Platform Architect – Level 1* should be able to define and be responsible for an organization's Anypoint Platform strategy. The *MCPA – Level 1* exam validates that an architect has the required knowledge and skills to direct the emergence of an effective application network out of individual integration solutions following API-led connectivity across an organization using Anypoint Platform. Certified candidates should be able to:

- Optimize and shape the Anypoint Platform deployment in the specific organizational context — working with business, infrastructure, InfoSec, and other teams.
- Define how Anypoint Platform is used in conjunction with other tools and applications in the organization.
- Define the usage of Anypoint Platform and the corresponding organizational and process changes needed to help the platform be sustainable.
- Provide guidance and drive the creation of standards, reusable assets, and automation required for scale and multi-LoB adoption.

### Format

- Format: Multiple-choice, closed book, proctored
- Length: 60 questions
- Duration: 120 minutes (2 hours)
- Pass score: 70%
- Language: English

You can take the exam a maximum of 5 times, with a 24-hour wait between each attempt.

### Cost

You can purchase the exam with one of the following. Each includes one free retake.

- \$375
- 1.5 MuleSoft Training Credits (MTC)

Additional retakes (i.e. attempts 3 to 5) are \$250 or 1 MTC and do not come with a free retake.

Two free exam attempts are also included with the purchase of the instructor-led *Anypoint Platform Architecture: Application Networks* course.

## Validity

The certification expires two years from the date you pass the exam. To extend the certification validity after this date, you can take the MuleSoft Certified Platform Architect – Level 1 MAINTENANCE exam.

## Preparation

You can best prepare for the exam by taking the instructor-led Anypoint Platform Architecture: Application Networks course. Candidates should be familiar with all of the content in the course and be able to apply the concepts.

The following resources are available to help you prepare:

- **Instructor-led training: Anypoint Platform Architecture: Application Networks**
  - Recommended as the most effective and efficient method of preparation
  - 3-day class
  - Private, public, onsite, and online classes available
  - Includes two free attempts for this exam
- **Practice exam**
  - Same format, length, and duration as the certification exam
  - Questions are the same style and degree of difficulty as the exam

## Topics

The exam validates that you can perform the following tasks.

*Note: ARC: NET is the acronym for the Anypoint Platform Architecture: Application Networks course.*

Explaining application network basics	Resources
<ul style="list-style-type: none"><li>• Identify and differentiate between technologies typically used to implement API-led connectivity.</li><li>• Describe the role and characteristics of web APIs.</li><li>• Correctly assign APIs to tiers according to ownership, functional focus, and rate of change.</li><li>• Describe the capabilities and high-level components of Anypoint Platform.</li></ul>	<ul style="list-style-type: none"><li>• ARC: NET Module 1</li><li>• ARC: NET Module 2</li><li>• <u>What is API-led Connectivity?</u></li><li>• <u>What is Full Lifecycle API Management?</u></li><li>• <u>Anypoint Monitoring Overview</u></li></ul>
Establishing organizational and platform foundations	
<ul style="list-style-type: none"><li>• Advise on establishing a Center for Enablement (C4E) and identify KPIs to measure its success.</li><li>• Describe the high-level structure and benefits of MuleSoft Catalyst.</li></ul>	<ul style="list-style-type: none"><li>• ARC: NET Module 1</li><li>• ARC: NET Module 3</li><li>• <u>Catalyst</u></li></ul>

<ul style="list-style-type: none"> <li>Choose between options for hosting and managing Anypoint Platform control and runtime planes.</li> <li>Compare and contrast Identity Management and Client Management options on Anypoint Platform.</li> <li>Identify data residency of different kinds of data (e.g. payload, metrics, and others)</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Accelerating innovation through a new API operating model</a></li> <li><a href="#">Introduction to Catalyst</a></li> <li><a href="#">MuleSoft C4E Overview Webinar - Part 1</a></li> <li><a href="#">Tokenization</a></li> </ul>
<b>Designing and sharing APIs</b>	
<ul style="list-style-type: none"> <li>Identify dependencies between an API, its API specification, its implementation, and its clients.</li> <li>Identify changes to an API that would require or not require changing the major/minor/patch component of its semantic version.</li> <li>Given a specific power relationship between two Bounded Contexts, choose the most appropriate strategy for mapping between the API data models of these Bounded Contexts.</li> <li>Identify idempotent HTTP methods and HTTP-native support for optimistic concurrency.</li> <li>Recognize the important features and functionality of API designer to design API specifications.</li> </ul>	<ul style="list-style-type: none"> <li>ARC: NET Module 1</li> <li>ARC: NET Module 4</li> <li>ARC: NET Module 6</li> <li><a href="#">Rest Connect Connector Generation</a></li> <li><a href="#">Common API Mistakes</a></li> <li><a href="#">What are idempotent and/or safe methods?</a></li> </ul>
<b>Designing APIs using system, process, and experience layers</b>	
<ul style="list-style-type: none"> <li>Identify appropriate web APIs to implement a business process and assign them to layers of API-led connectivity.</li> <li>Assign APIs to layers according to ownership, functional focus, and rate of change.</li> <li>Recommend the most appropriate approach relating the API data model of System APIs to that of their backend system based on specific requirements and organizational characteristics.</li> </ul>	<ul style="list-style-type: none"> <li>ARC: NET Module 4</li> <li>ARC: NET Module 6</li> <li><a href="#">API-led Connectivity</a></li> </ul>
<b>Governing web APIs on Anypoint Platform</b>	
<ul style="list-style-type: none"> <li>Make appropriate use of API instances and environments in API manager taking into account the nature of the API and the underlying data and system.</li> <li>Select appropriate API policies and other components of the AP to support specific non-functional requirements (NFRs).</li> <li>Identify any change(s) required to an API specification to reflect the application of an API policy with specific characteristics.</li> <li>Select an approach to API policy enforcement based on specific preferences and constraints, including, but not</li> </ul>	<ul style="list-style-type: none"> <li>ARC: NET Module 3</li> <li>ARC: NET Module 5</li> <li><a href="#">Create an API Instance</a></li> <li><a href="#">JSON Threat Protection</a></li> <li><a href="#">Client ID Enforcement Policy</a></li> <li><a href="#">Configuring API Specifications</a></li> <li><a href="#">Message Logging</a></li> <li><a href="#">Policies</a></li> </ul>

<p>limited to, API proxies/API gateways and Anypoint Service Mesh.</p> <ul style="list-style-type: none"> <li>Secure web APIs using API policies appropriately chosen for the API's tier (System, Process, Experience).</li> <li>Describe in what circumstances and how to pass client ID and secret to a web API.</li> <li>Explain how to request access to an API version for an API client, and how that access is approved and revoked.</li> <li>Select appropriate API policies to enforce non-functional security constraints on web API invocations.</li> <li>Explain the relationships of Anypoint Platform, external Identity Providers, AP Business Groups, and API clients in the context of OAuth 2.0.</li> <li>Identify scenarios needing custom API policies.</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">About Identity Management</a></li> </ul>
<b>Architecting &amp; deploying API implementations</b>	
<ul style="list-style-type: none"> <li>Explain how to use auto-discovery to link a web API implementation to an API instance managed with API Manager.</li> <li>Identify requirements that call for the use of an Anypoint VPC.</li> <li>Compare and contrast options for hosting and managing Anypoint Platform runtime planes.</li> <li>Compare unit and integration tests and specify where MUnit is best employed.</li> <li>Explain options for automated build, test, and deploy of API implementations and related artifacts in a DevOps setting.</li> </ul>	<ul style="list-style-type: none"> <li>ARC: NET Module 3</li> <li>ARC: NET Module 7</li> <li>ARC: NET Module 9</li> <li><a href="#">Dedicated Load Balancer Architecture</a></li> <li><a href="#">Configuring Public and Private Mule Applications Behind DLB</a></li> <li><a href="#">Build an HTTP Service</a></li> <li><a href="#">VPC Firewall Rules</a></li> <li><a href="#">Command Line Tools</a></li> <li><a href="#">Deploy On Premises</a></li> <li><a href="#">Getting started with MuleSoft Platform APIs and Postman automation</a></li> <li><a href="#">Deploy Mule Applications</a></li> <li><a href="#">Mule Maven Plugin</a></li> </ul>
<b>Deploying API implementations to CloudHub</b>	
<ul style="list-style-type: none"> <li>Describe the scenarios for which the Object Store should be used with CloudHub.</li> <li>Select CloudHub worker sizes and configuration as appropriate.</li> <li>Given an app deployed to the CloudHub shared worker cloud in one or more regions, describe and predict its reliability and performance characteristics.</li> </ul>	<ul style="list-style-type: none"> <li>ARC: NET Module 7</li> <li><a href="#">About Object Store v2</a></li> <li><a href="#">Autoscaling in CloudHub</a></li> <li><a href="#">CloudHub High Availability</a></li> <li><a href="#">Dedicated Load Balancers</a></li> </ul>

<ul style="list-style-type: none"> <li>• Identify the defining differences between the CloudHub Shared and Dedicated Load Balancers.</li> <li>• Compare and contrast the options for CloudHub networking in the presence of customer-owned Amazon VPCs and on-premises data centers.</li> <li>• Identify and avoid single points of failure in CloudHub deployments of API implementations.</li> </ul>	<ul style="list-style-type: none"> <li>• <a href="#">Transit Gateway Attachments</a></li> <li>• <a href="#">Provision a VPC</a></li> <li>• <a href="#">How to choose the CIDR block for your VPC</a></li> </ul>
<b>Meeting API quality goals</b>	
<ul style="list-style-type: none"> <li>• Design, describe, and differentiate between scenarios that use the Object Store or caching.</li> <li>• Select resilience strategies that help web API clients guard against failures when invoking APIs.</li> <li>• Describe when horizontal scaling of an API implantation is or is not likely to benefit response time and throughput as seen by API clients.</li> </ul>	<ul style="list-style-type: none"> <li>• ARC: NET Module 6</li> <li>• ARC: NET Module 7</li> <li>• ARC: NET Module 9</li> <li>• <a href="#">Cache Scope and Object Store in Mule 4</a></li> <li>• <a href="#">Effectively Using Caching While Developing APIs in Mule: Part 1</a></li> <li>• <a href="#">Cache Scope</a></li> <li>• <a href="#">Horizontal Scaling vs Vertical Scaling of Mule Workers</a></li> <li>• <a href="#">Reasons to Scale Horizontally</a></li> </ul>
<b>Monitoring and analyzing application networks</b>	
<ul style="list-style-type: none"> <li>• Identify the components of Anypoint Platform that generate data for monitoring and alerting.</li> <li>• Describe the metrics collected by Anypoint Platform for API invocations.</li> <li>• Specify alerts to define for key metrics of API invocations for all layers of API-led connectivity.</li> <li>• Specify alerts to define for Mule applications.</li> </ul>	<ul style="list-style-type: none"> <li>• ARC: NET Module 10</li> <li>• <a href="#">Configure and Enable Anypoint Monitoring for Mule Apps (CloudHub)</a></li> <li>• <a href="#">Log Tokenization</a></li> <li>• <a href="#">API Functional Monitoring in Anypoint Monitoring</a></li> <li>• <a href="#">Custom Application Alerts</a></li> </ul>

## More information

For more information, visit <http://help.learn.mulesoft.com>.