

# MuleSoft Certified Platform Architect – Level 1

## Certification Exam

### Summary

A *MuleSoft Certified Platform Architect* 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. S/he 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 creation of standards, reusable assets, and automation required for scale and multi-LOB adoption.

### Format

- Format: Multiple-choice, closed book, proctored online or in a testing center
- Length: 58 questions
- Duration: 120 minutes (2 hours)
- Pass score: 70%
- Language: English

The exam can be taken a maximum of 5 times, with a 24 hour wait between each attempt.

### Cost

The exam can be purchased with one of the following. Each includes a coupon for one free retake.

- \$375
- 1.5 Flexible Training Credits (FTC)
- A voucher obtained by attending the instructor-led *Anypoint Platform Architecture: Application Networks* course

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

### Validity

The certification expires two years from the date of passing.

## Preparation

The best preparation for the exam is to take 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.

## Topics

The exam validates that the candidate 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>Explain MuleSoft's proposal for closing the IT delivery gap</li> <li>Describe the role and characteristics of the "modern API"</li> <li>Define and describe the benefits of API-led connectivity and application networks</li> <li>Define outcome-based delivery (OBD)</li> <li>Correctly use the terms API, API implementation, API client, API consumer, and API invocation</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> </ul>
Establishing Organizational and Platform Foundations	
<ul style="list-style-type: none"> <li>Describe the purpose and roles of a C4E</li> <li>Identify KPIs to measure the success of a C4E</li> <li>Given specific organizational requirements, preferences, and constraints, identify all suitable Anypoint Platform deployment options</li> <li>Select Anypoint Platform identity management vs client management for the correct purpose</li> </ul>	<ul style="list-style-type: none"> <li>ARC:NET Module 2</li> <li>ARC:NET Module 3</li> </ul>
Designing APIs and API Interactions	
<ul style="list-style-type: none"> <li>Break down functional requirements into business-aligned APIs with effective granularity</li> <li>Given a set of APIs and specific preferences and organizational characteristics, recommend the use of an Enterprise Data Model or Bounded Context Data Models</li> <li>Identify changes to an API that would require or not require a major version increment</li> <li>When asynchronous execution of API invocations is needed, select when to appropriately use polling or callbacks</li> <li>Identify idempotent HTTP methods and HTTP-native support for optimistic concurrency</li> </ul>	<ul style="list-style-type: none"> <li>ARC:NET Module 4</li> <li>ARC:NET Module 6</li> <li><u><a href="#">Bounded Context</a></u></li> <li><u><a href="#">Why You Should Avoid a CDM</a></u></li> <li><u><a href="#">Canonical Data Models &amp; Microservices</a></u></li> <li><u><a href="#">HTTP/1.1: Semantics and Content</a></u></li> <li><u><a href="#">HTTP/1.1: Caching</a></u></li> <li><u><a href="#">Semantic Versioning 2.0.0</a></u></li> </ul>

<ul style="list-style-type: none"> <li>Describe the creation and publication of reusable API-related assets using RAML and Anypoint Platform components</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Semantic versioning of REST APIs?</a></li> </ul>
<b>Following API-Led Connectivity</b>	
<ul style="list-style-type: none"> <li>Identify appropriate 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>Given specific requirements and organizational characteristics, recommend the most appropriate approach relating the API data model of System APIs to that of their backend system</li> </ul>	<ul style="list-style-type: none"> <li>ARC:NET Module 2</li> <li>ARC:NET Module 4</li> <li>ARC:NET Module 6</li> </ul>
<b>Governing APIs on Anypoint Platform</b>	
<ul style="list-style-type: none"> <li>Given specific preferences and constraints, select API policy enforcement with or without API proxies</li> <li>Select appropriate API policies to enforce non-functional constraints on API invocations</li> <li>Given an API policy with specific characteristics, identify any change required in the corresponding RAML definition</li> <li>Given a layer of API-led connectivity, identify API policies that are typically applied to that layer and the scenarios needing custom policies</li> <li>Identify which types of APIs and other remote interfaces are or are not amenable to management by API Manager</li> </ul>	<ul style="list-style-type: none"> <li>ARC:NET Module 5</li> </ul>
<b>Controlling Access to APIs</b>	
<ul style="list-style-type: none"> <li>Describe when and how to pass client ID and secret to an API</li> <li>Explain how to register an API client for access to an API version</li> </ul>	<ul style="list-style-type: none"> <li>ARC:NET Module 5</li> </ul>
<b>Delivering APIs</b>	
<ul style="list-style-type: none"> <li>Describe the automation capabilities of Anypoint Platform for DevOps, CI/CD, and testing</li> <li>Compare unit and integration tests and specify where MUnit is best employed</li> <li>Explain how to use autodiscovery to link an API implementation to an API instance managed with API Manager</li> <li>Specify how and when to promote APIs with API Manager</li> <li>Identify when redeployment of API implementations is necessary</li> </ul>	<ul style="list-style-type: none"> <li>ARC:NET Module 7</li> <li>ARC:NET Module 9</li> <li><a href="#">Gatekeeper Enhanced Security Reference</a></li> </ul>

Deploying Mule Applications to CloudHub	
<ul style="list-style-type: none"> <li>Describe the fundamentals of deployments, networking, and routing on CloudHub</li> <li>Select CloudHub worker sizes and configuration as appropriate</li> <li>Describe the scenarios for which Object Store should be used with CloudHub</li> </ul>	<ul style="list-style-type: none"> <li>ARC:NET Module 7</li> </ul>
Architecting Performant and Resilient APIs	
<ul style="list-style-type: none"> <li>Identify the factors involved in scaling API performance</li> <li>Identify the differences between the CloudHub Shared and Dedicated Load Balancers</li> <li>Identify single points of failure in typical CloudHub usage</li> <li>Select strategies that help API clients guard against failures in API invocations</li> </ul>	<ul style="list-style-type: none"> <li>ARC:NET Module 7</li> <li>ARC:NET Module 9</li> <li><a href="#">HYSTRIX Defend Your App</a></li> <li><a href="#">Let's talk about Resilience</a></li> <li><a href="#">Eclipse MicroProfile Fault Tolerance</a></li> </ul>
Monitoring and Analyzing Application Networks	
<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 on the level of API invocations</li> <li>Describe and select between the options for performing API analytics within and outside of Anypoint Platform</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 API implementations</li> </ul>	<ul style="list-style-type: none"> <li>ARC:NET Module 10</li> </ul>

## Delivery methods

The exam is administered via the Kryterion Webassessor testing platform. The exam can be taken in-person at a testing center or online using a web camera.

In-person at a Kryterion Testing Center:

- [Over 1000 locations worldwide](#)
- [Onsite instructions](#)
- [Test-taker guide](#)

Online using the Kryterion Webassessor testing platform:

- Requires a webcam - a laptop webcam can be used, an external camera is not required
- Requires internet connectivity with 1 Mbps upload, 1 Mbps download, jitter <50ms, ping <200ms

- Check internet speed and reliability
  - Note: Some candidates are expelled from the exam for an unstable connection even after checking reliability with the tool. If you think your connection could potentially be unreliable, we **strongly** recommend scheduling your exam at a test center.
- Online instructions
- Test-taker guide

## Registration

To register for the exam:

- Go to <https://training.mulesoft.com/webassessor>.
- Create a user profile.
- Log in.
- Select Register for an Exam.
- Select the **MuleSoft Certified Platform Architect – Level 1** exam.
- Select either the Online Proctoring Option or the Kryterion Test Center option.
- On the payment screen, select to pay by credit card or enter a voucher/coupon code.

*Note: A fee applies if an exam is cancelled or rescheduled within 72 hours of its scheduled time, even if the exam was purchased with a voucher.*

## More information

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