

Exam Questions MCPA-Level-1

MuleSoft Certified Platform Architect - Level 1

<https://www.2passeasy.com/dumps/MCPA-Level-1/>



NEW QUESTION 1

What best explains the use of auto-discovery in API implementations?

- A. It makes API Manager aware of API implementations and hence enables it to enforce policies
- B. It enables Anypoint Studio to discover API definitions configured in Anypoint Platform
- C. It enables Anypoint Exchange to discover assets and makes them available for reuse
- D. It enables Anypoint Analytics to gain insight into the usage of APIs

Answer: A

Explanation:

Correct Answer

It makes API Manager aware of API implementations and hence enables it to enforce policies.

>> API Autodiscovery is a mechanism that manages an API from API Manager by pairing the deployed application to an API created on the platform.

>> API Management includes tracking, enforcing policies if you apply any, and reporting API analytics.

>> Critical to the Autodiscovery process is identifying the API by providing the API name and version. References:

<https://docs.mulesoft.com/api-manager/2.x/api-auto-discovery-new-concept> <https://docs.mulesoft.com/api-manager/1.x/api-auto-discovery>

<https://docs.mulesoft.com/api-manager/2.x/api-auto-discovery-new-concept>

NEW QUESTION 2

A company has created a successful enterprise data model (EDM). The company is committed to building an application network by adopting modern APIs as a core enabler of the company's IT operating model. At what API tiers (experience, process, system) should the company require reusing the EDM when designing modern API data models?

- A. At the experience and process tiers
- B. At the experience and system tiers
- C. At the process and system tiers
- D. At the experience, process, and system tiers

Answer: C

Explanation:

Correct Answer

At the process and system tiers

>> Experience Layer APIs are modeled and designed exclusively for the end user's experience. So, the data models of experience layer vary based on the nature and type of such API consumer. For example, Mobile consumers will need light-weight data models to transfer with ease on the wire, where as web-based consumers will need detailed data models to render most of the info on web pages, so on. So, enterprise data models fit for the purpose of canonical models but not of good use for experience APIs.

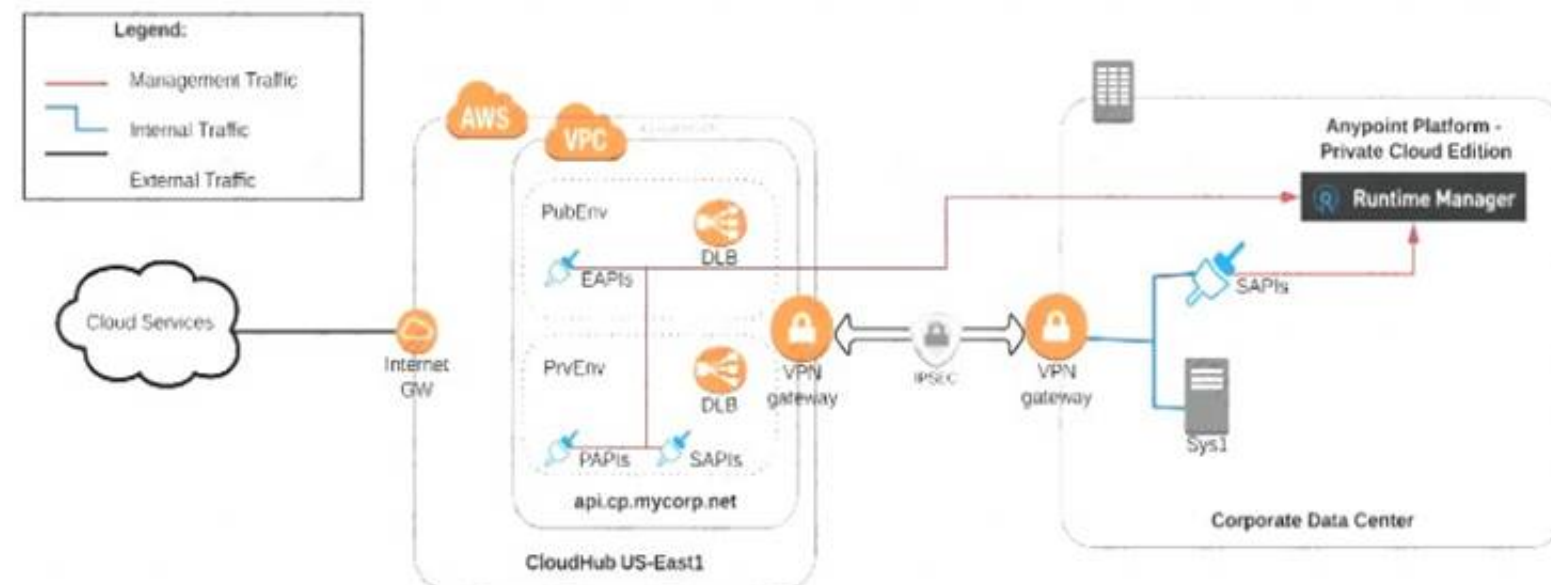
>> That is why, EDMs should be used extensively in process and system tiers but NOT in experience tier.

NEW QUESTION 3

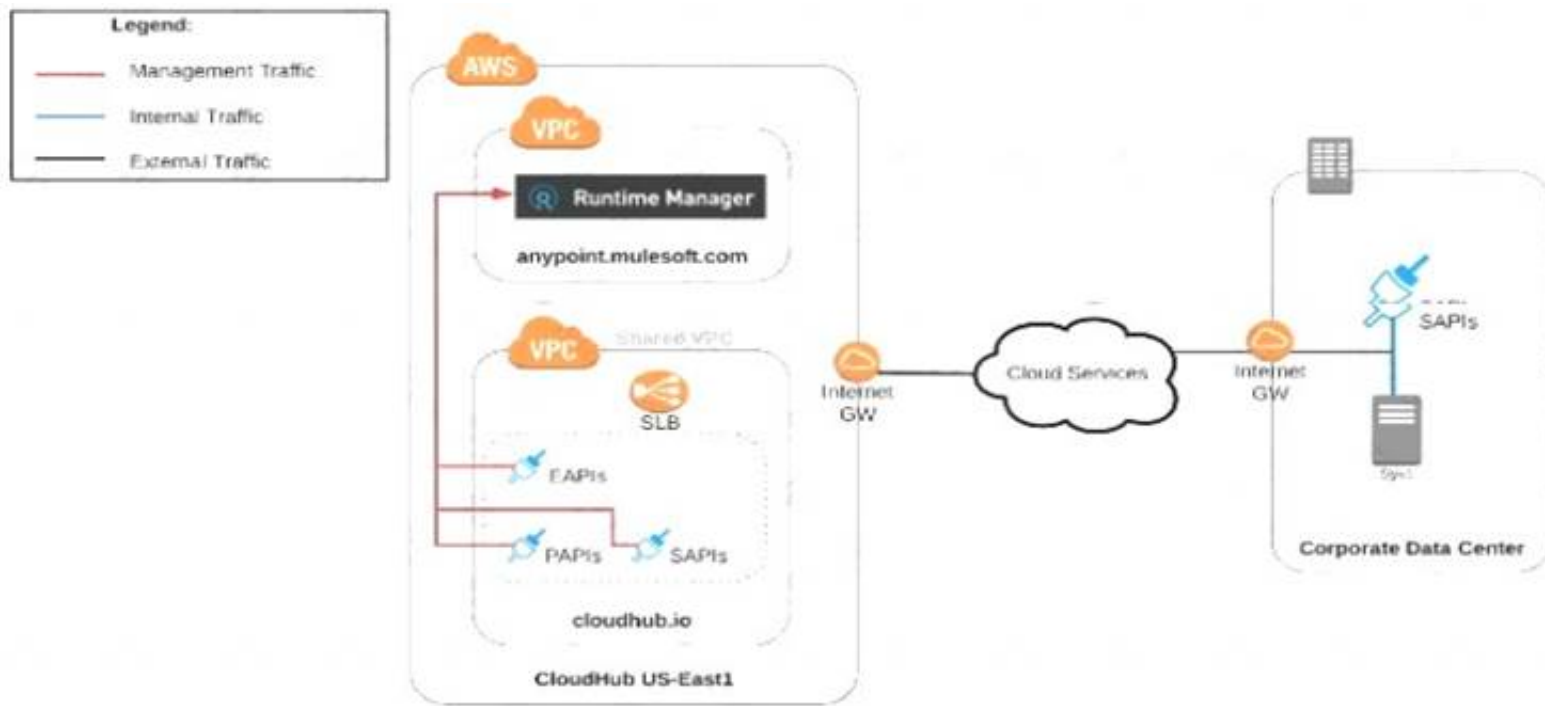
An organization uses various cloud-based SaaS systems and multiple on-premises systems. The on-premises systems are an important part of the organization's application network and can only be accessed from within the organization's intranet.

What is the best way to configure and use Anypoint Platform to support integrations with both the cloud-based SaaS systems and on-premises systems?

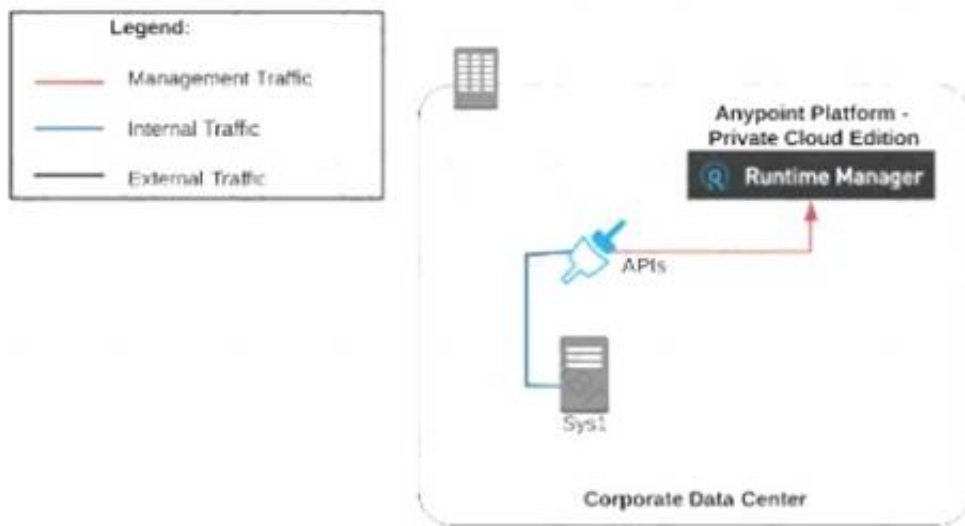
A) Use CloudHub-deployed Mule runtimes in an Anypoint VPC managed by Anypoint Platform Private Cloud Edition control plane



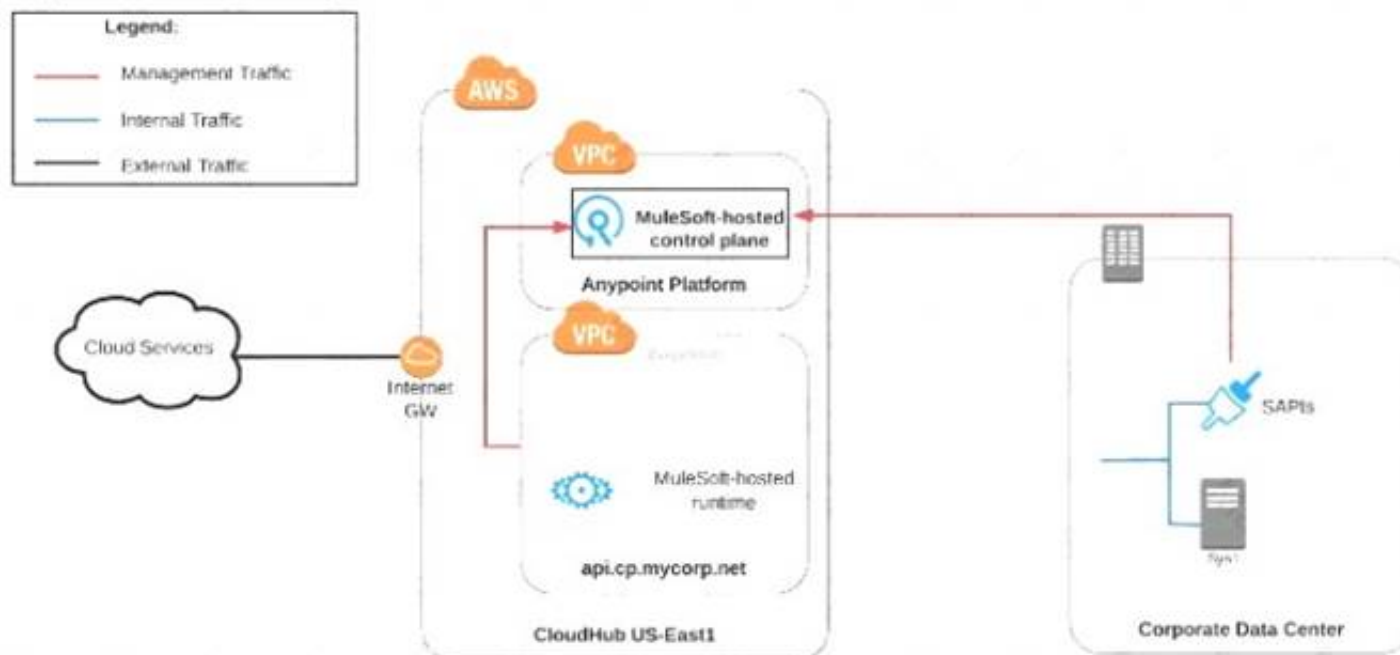
B) Use CloudHub-deployed Mule runtimes in the shared worker cloud managed by the MuleSoft-hosted Anypoint Platform control plane



C) Use an on-premises installation of Mule runtimes that are completely isolated with NO external network access, managed by the Anypoint Platform Private Cloud Edition control plane



D) Use a combination of Cloud Hub-deployed and manually provisioned on-premises Mule runtimes managed by the MuleSoft-hosted Anypoint Platform control plane



- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: B

Explanation:

Correct Answer

Use a combination of CloudHub-deployed and manually provisioned on-premises Mule runtimes managed by the MuleSoft-hosted Platform control plane.

***** Key details to be taken from the given scenario:

>> Organization uses BOTH cloud-based and on-premises systems

>> On-premises systems can only be accessed from within the organization's intranet Let us evaluate the given choices based on above key details:

>> CloudHub-deployed Mule runtimes can ONLY be controlled using MuleSoft-hosted control plane. We CANNOT use Private Cloud Edition's control plane to control CloudHub Mule Runtimes. So, option suggesting this is INVALID

>> Using CloudHub-deployed Mule runtimes in the shared worker cloud managed by the MuleSoft-hosted Anypoint Platform is completely IRRELEVANT to given scenario and silly choice. So, option suggesting this is INVALID

>> Using an on-premises installation of Mule runtimes that are completely isolated with NO external network access, managed by the Anypoint Platform Private Cloud Edition control plane would work for On-premises integrations. However, with NO external access, integrations cannot be done to SaaS-based apps.

Moreover CloudHub-hosted apps are best-fit for integrating with SaaS-based applications. So, option suggesting this is BEST WAY.
The best way to configure and use Anypoint Platform to support these mixed/hybrid integrations is to use a combination of CloudHub-deployed and manually provisioned on-premises Mule runtimes managed by the MuleSoft-hosted Platform control plane.

NEW QUESTION 4

An organization is implementing a Quote of the Day API that caches today's quote.
What scenario can use the GoudHub Object Store via the Object Store connector to persist the cache's state?

- A. When there are three CloudHub deployments of the API implementation to three separate CloudHub regions that must share the cache state
- B. When there are two CloudHub deployments of the API implementation by two Anypoint Platform business groups to the same CloudHub region that must share the cache state
- C. When there is one deployment of the API implementation to CloudHub and anottV deployment to a customer-hosted Mule runtime that must share the cache state
- D. When there is one CloudHub deployment of the API implementation to three CloudHub workers that must share the cache state

Answer: D

Explanation:

Correct Answer

When there is one CloudHub deployment of the API implementation to three CloudHub workers that must share the cache state.

***** Key details in the scenario:

>> Use the CloudHub Object Store via the Object Store connector Considering above details:
>> CloudHub Object Stores have one-to-one relationship with CloudHub Mule Applications.
>> We CANNOT use an application's CloudHub Object Store to be shared among multiple Mule applications running in different Regions or Business Groups or Customer-hosted Mule Runtimes by using Object Store connector.
>> If it is really necessary and very badly needed, then Anypoint Platform supports a way by allowing access to CloudHub Object Store of another application using Object Store REST API. But NOT using Object Store connector.
So, the only scenario where we can use the CloudHub Object Store via the Object Store connector to persist the cache's state is when there is one CloudHub deployment of the API implementation to multiple CloudHub workers that must share the cache state.

NEW QUESTION 5

A set of tests must be performed prior to deploying API implementations to a staging environment. Due to data security and access restrictions, untested APIs cannot be granted access to the backend systems, so instead mocked data must be used for these tests. The amount of available mocked data and its contents is sufficient to entirely test the API implementations with no active connections to the backend systems. What type of tests should be used to incorporate this mocked data?

- A. Integration tests
- B. Performance tests
- C. Functional tests (Blackbox)
- D. Unit tests (Whitebox)

Answer: D

Explanation:

Correct Answer

Unit tests (Whitebox)

NEW QUESTION 6

An Order API must be designed that contains significant amounts of integration logic and involves the invocation of the Product API.
The power relationship between Order API and Product API is one of "Customer/Supplier", because the Product API is used heavily throughout the organization and is developed by a dedicated development team located in the office of the CTO.
What strategy should be used to deal with the API data model of the Product API within the Order API?

- A. Convince the development team of the Product API to adopt the API data model of the Order API such that the integration logic of the Order API can work with one consistent internal data model
- B. Work with the API data types of the Product API directly when implementing the integration logic of the Order API such that the Order API uses the same (unchanged) data types as the Product API
- C. Implement an anti-corruption layer in the Order API that transforms the Product API data model into internal data types of the Order API
- D. Start an organization-wide data modeling initiative that will result in an Enterprise Data Model that will then be used in both the Product API and the Order API

Answer: C

Explanation:

Correct Answer

Convince the development team of the product API to adopt the API data model of the Order API such that integration logic of the Order API can work with one consistent internal data model

***** Key details to note from the given scenario:

>> Power relationship between Order API and Product API is customer/supplier
So, as per below rules of "Power Relationships", the caller (in this case Order API) would request for features to the called (Product API team) and the Product API team would need to accomodate those requests.

NEW QUESTION 7

What do the API invocation metrics provided by Anypoint Platform provide?

- A. ROI metrics from APIs that can be directly shared with business users

- B. Measurements of the effectiveness of the application network based on the level of reuse
- C. Data on past API invocations to help identify anomalies and usage patterns across various APIs
- D. Proactive identification of likely future policy violations that exceed a given threat threshold

Answer: C

Explanation:

Correct Answer

Data on past API invocations to help identify anomalies and usage patterns across various APIs

API Invocation metrics provided by Anypoint Platform:

>> Does NOT provide any Return Of Investment (ROI) related information. So the option suggesting it is OUT.

>> Does NOT provide any information w.r.t how APIs are reused, whether there is effective usage of APIs or not etc...

>> Does NOT provide any prediction information as such to help us proactively identify any future policy violations.

So, the kind of data/information we can get from such metrics is on past API invocations to help identify anomalies and usage patterns across various APIs.

NEW QUESTION 8

What CANNOT be effectively enforced using an API policy in Anypoint Platform?

- A. Guarding against Denial of Service attacks
- B. Maintaining tamper-proof credentials between APIs
- C. Logging HTTP requests and responses
- D. Backend system overloading

Answer: A

Explanation:

Correct Answer

Guarding against Denial of Service attacks

>> Backend system overloading can be handled by enforcing "Spike Control Policy"

>> Logging HTTP requests and responses can be done by enforcing "Message Logging Policy"

>> Credentials can be tamper-proofed using "Security" and "Compliance" Policies

However, unfortunately, there is no proper way currently on Anypoint Platform to guard against DOS attacks.

NEW QUESTION 9

What API policy would be LEAST LIKELY used when designing an Experience API that is intended to work with a consumer mobile phone or tablet application?

- A. OAuth 2.0 access token enforcement
- B. Client ID enforcement
- C. JSON threat protection
- D. IPwhitelist

Answer: D

Explanation:

Correct Answer

IP whitelist

>> OAuth 2.0 access token and Client ID enforcement policies are VERY common to apply on Experience APIs as API consumers need to register and access the APIs using one of these mechanisms

>> JSON threat protection is also VERY common policy to apply on Experience APIs to prevent bad or suspicious payloads hitting the API implementations.

>> IP whitelisting policy is usually very common in Process and System APIs to only whitelist the IP range inside the local VPC. But also applied occasionally on some experience APIs where the End User/ API Consumers are FIXED.

>> When we know the API consumers upfront who are going to access certain Experience APIs, then we can request for static IPs from such consumers and whitelist them to prevent anyone else hitting the API.

However, the experience API given in the question/ scenario is intended to work with a consumer mobile phone or tablet application. Which means, there is no way we can know all possible IPs that are to be whitelisted as mobile phones and tablets can so many in number and any device in the city/state/country/globe.

So, It is very LEAST LIKELY to apply IP Whitelisting on such Experience APIs whose consumers are typically Mobile Phones or Tablets.

NEW QUESTION 10

The responses to some HTTP requests can be cached depending on the HTTP verb used in the request. According to the HTTP specification, for what HTTP verbs is this safe to do?

- A. PUT, POST, DELETE
- B. GET, HEAD, POST
- C. GET, PUT, OPTIONS
- D. GET, OPTIONS, HEAD

Answer: D

Explanation:

Correct Answer

GET, OPTIONS, HEAD

APIs use HTTP-based protocols: cached HTTP responses from previous HTTP requests may potentially be returned if the same HTTP request is seen again.

Safe HTTP methods are ones that do not alter the state of the underlying resource. That is, the *HTTP responses to requests using safe HTTP methods may be cached.*

The HTTP standard requires the following HTTP methods on any resource to be safe:

- GET
- HEAD
- OPTIONS

Safety must be honored by REST APIs (but not by non-REST APIs like SOAP APIs): It is the *responsibility of every API implementation* to implement **GET, HEAD or OPTIONS** methods such that they never change the state of a resource.

<http://restcookbook.com/HTTP%20Methods/idempotency/>

NEW QUESTION 10

A new upstream API is being designed to offer an SLA of 500 ms median and 800 ms maximum (99th percentile) response time. The corresponding API implementation needs to sequentially invoke 3 downstream APIs of very similar complexity.

The first of these downstream APIs offers the following SLA for its response time: median: 100 ms, 80th percentile: 500 ms, 95th percentile: 1000 ms. If possible, how can a timeout be set in the upstream API for the invocation of the first downstream API to meet the new upstream API's desired SLA?

- A. Set a timeout of 50 ms; this times out more invocations of that API but gives additional room for retries
- B. Set a timeout of 100 ms; that leaves 400 ms for the other two downstream APIs to complete
- C. No timeout is possible to meet the upstream API's desired SLA; a different SLA must be negotiated with the first downstream API or invoke an alternative API
- D. Do not set a timeout; the invocation of this API is mandatory and so we must wait until it responds

Answer: B

Explanation:

Correct Answer

Set a timeout of 100ms; that leaves 400ms for other two downstream APIs to complete

***** Key details to take from the given scenario:

>> Upstream API's designed SLA is 500ms (median). Lets ignore maximum SLA response times.

>> This API calls 3 downstream APIs sequentially and all these are of similar complexity.

>> The first downstream API is offering median SLA of 100ms, 80th percentile: 500ms; 95th percentile: 1000ms.

Based on the above details:

>> We can rule out the option which is suggesting to set 50ms timeout. Because, if the median SLA itself being offered is 100ms then most of the calls are going to timeout and time gets wasted in retried them and eventually gets exhausted with all retries. Even if some retries gets successful, the remaining time wont leave enough room for 2nd and 3rd downstream APIs to respond within time.

>> The option suggesting to NOT set a timeout as the invocation of this API is mandatory and so we must wait until it responds is silly. As not setting time out would go against the good implementation pattern and moreover if the first API is not responding within its offered median SLA 100ms then most probably it would either respond in 500ms (80th percentile) or 1000ms (95th percentile). In BOTH cases, getting a successful response from 1st downstream API does NO GOOD because already by this time the Upstream API SLA of 500 ms is breached. There is no time left to call 2nd and 3rd downstream APIs.

>> It is NOT true that no timeout is possible to meet the upstream APIs desired SLA.

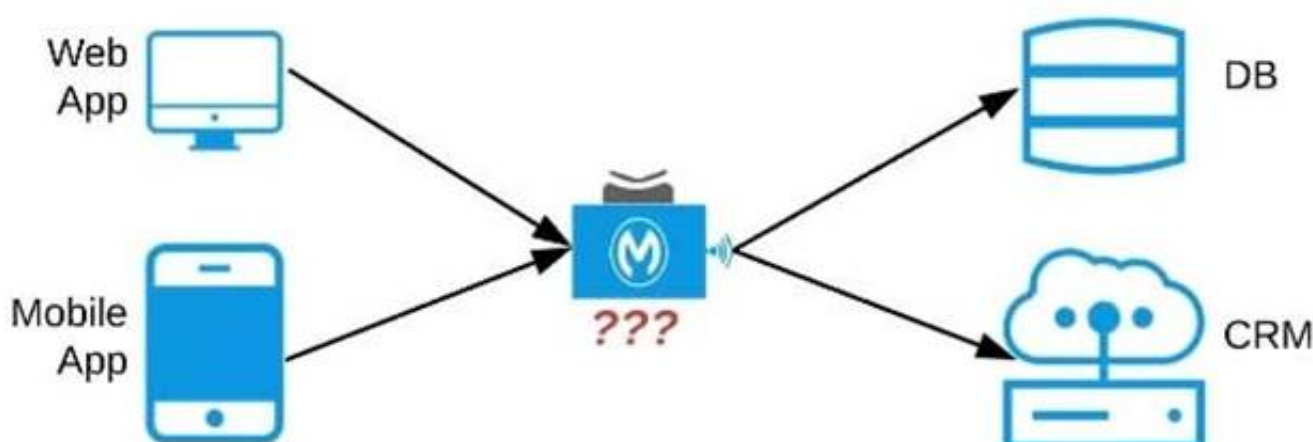
As 1st downstream API is offering its median SLA of 100ms, it means MOST of the time we would get the responses within that time. So, setting a timeout of 100ms would be ideal for MOST calls as it leaves enough room of 400ms for remaining 2 downstream API calls.

NEW QUESTION 15

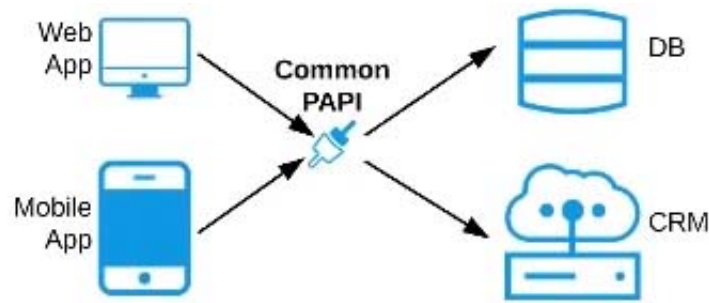
Refer to the exhibit. An organization needs to enable access to their customer data from both a mobile app and a web application, which each need access to common fields as well as certain unique fields.

The data is available partially in a database and partially in a 3rd-party CRM system.

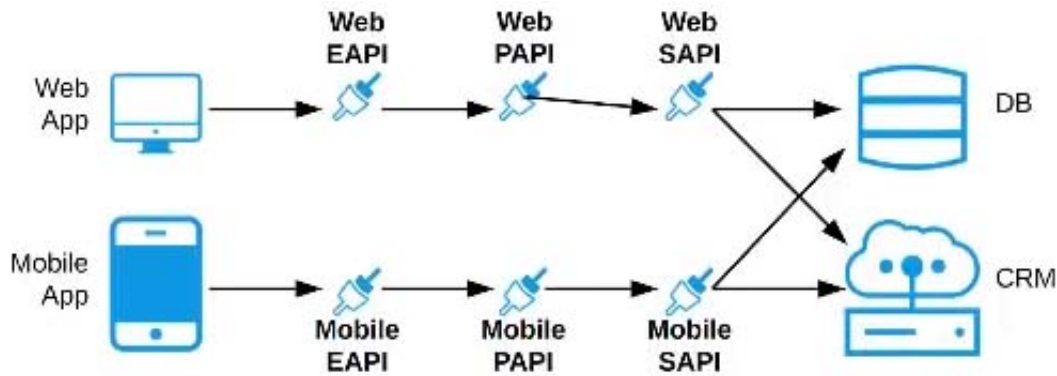
What APIs should be created to best fit these design requirements?



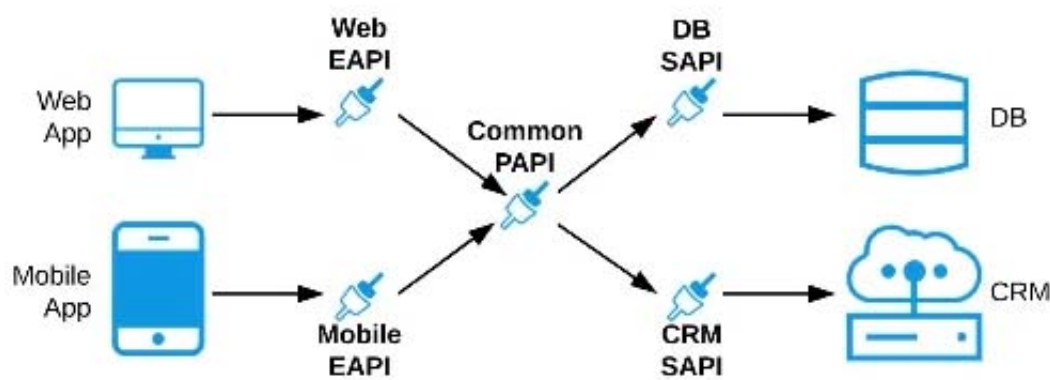
A) A Process API that contains the data required by both the web and mobile apps, allowing these applications to invoke it directly and access the data they need thereby providing the flexibility to add more fields in the future without needing API changes



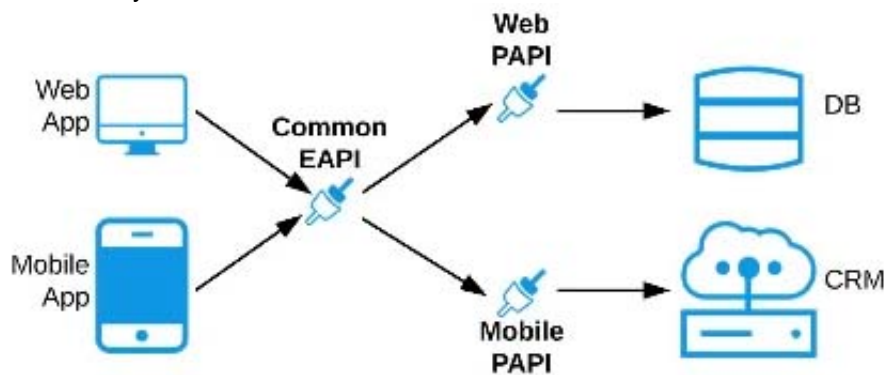
B) One set of APIs (Experience API, Process API, and System API) for the web app, and another set for the mobile app



C) Separate Experience APIs for the mobile and web app, but a common Process API that invokes separate System APIs created for the database and CRM system



D) A common Experience API used by both the web and mobile apps, but separate Process APIs for the web and mobile apps that interact with the database and the CRM System



- A. Option A
- B. Option B
- C. Option C
- D. Option D

Answer: C

Explanation:

Correct Answer

Separate Experience APIs for the mobile and web app, but a common Process API that invokes separate System APIs created for the database and CRM system

***** As per MuleSoft's API-led connectivity:

- >> Experience APIs should be built as per each consumer needs and their experience.
- >> Process APIs should contain all the orchestration logic to achieve the business functionality.
- >> System APIs should be built for each backend system to unlock their data.

NEW QUESTION 19

What is a key requirement when using an external Identity Provider for Client Management in Anypoint Platform?

- A. Single sign-on is required to sign in to Anypoint Platform
- B. The application network must include System APIs that interact with the Identity Provider
- C. To invoke OAuth 2.0-protected APIs managed by Anypoint Platform, API clients must submit access tokens issued by that same Identity Provider
- D. APIs managed by Anypoint Platform must be protected by SAML 2.0 policies

Answer: C

Explanation:

<https://www.folkstalk.com/2019/11/mulesoft-integration-and-platform.html>

Correct Answer

To invoke OAuth 2.0-protected APIs managed by Anypoint Platform, API clients must submit access tokens issued by that same Identity Provider

>> It is NOT necessary that single sign-on is required to sign in to Anypoint Platform because we are using an external Identity Provider for Client Management
 >> It is NOT necessary that all APIs managed by Anypoint Platform must be protected by SAML 2.0 policies because we are using an external Identity Provider for Client Management
 >> Not TRUE that the application network must include System APIs that interact with the Identity Provider because we are using an external Identity Provider for Client Management
 Only TRUE statement in the given options is - "To invoke OAuth 2.0-protected APIs managed by Anypoint Platform, API clients must submit access tokens issued by that same Identity Provider"
 References:
<https://docs.mulesoft.com/api-manager/2.x/external-oauth-2.0-token-validation-policy> <https://blogs.mulesoft.com/dev/api-dev/api-security-ways-to-authenticate-and-authorize/>

NEW QUESTION 20

What should be ensured before sharing an API through a public Anypoint Exchange portal?

- A. The visibility level of the API instances of that API that need to be publicly accessible should be set to public visibility
- B. The users needing access to the API should be added to the appropriate role in Anypoint Platform
- C. The API should be functional with at least an initial implementation deployed and accessible for users to interact with
- D. The API should be secured using one of the supported authentication/authorization mechanisms to ensure that data is not compromised

Answer: A

Explanation:



Correct Answer

The visibility level of the API instances of that API that need to be publicly accessible should be set to public visibility.

NEW QUESTION 23

A System API is designed to retrieve data from a backend system that has scalability challenges. What API policy can best safeguard the backend system?

- A. IPwhitelist
- B. SLA-based rate limiting
- C. Auth 2 token enforcement
- D. Client ID enforcement

Answer: B

Explanation:

Correct Answer

SLA-based rate limiting

>> Client Id enforcement policy is a "Compliance" related NFR and does not help in maintaining the "Quality of Service (QoS)". It CANNOT and NOT meant for protecting the backend systems from scalability challenges.
 >> IP Whitelisting and OAuth 2.0 token enforcement are "Security" related NFRs and again does not help in maintaining the "Quality of Service (QoS)". They CANNOT and are NOT meant for protecting the backend systems from scalability challenges.
 Rate Limiting, Rate Limiting-SLA, Throttling, Spike Control are the policies that are "Quality of Service (QOS)" related NFRs and are meant to help in protecting the backend systems from getting overloaded.
<https://dzone.com/articles/how-to-secure-apis>

NEW QUESTION 27

An Anypoint Platform organization has been configured with an external identity provider (IdP) for identity management and client management. What credentials or token must be provided to Anypoint CLI to execute commands against the Anypoint Platform APIs?

- A. The credentials provided by the IdP for identity management
- B. The credentials provided by the IdP for client management
- C. An OAuth 2.0 token generated using the credentials provided by the IdP for client management
- D. An OAuth 2.0 token generated using the credentials provided by the IdP for identity management

Answer: A

Explanation:

Correct Answer

The credentials provided by the IdP for identity management

NEW QUESTION 30

An organization makes a strategic decision to move towards an IT operating model that emphasizes consumption of reusable IT assets using modern APIs (as defined by MuleSoft).

What best describes each modern API in relation to this new IT operating model?

- A. Each modern API has its own software development lifecycle, which reduces the need for documentation and automation
- B. Each modern API must be treated like a product and designed for a particular target audience (for instance, mobile app developers)
- C. Each modern API must be easy to consume, so should avoid complex authentication mechanisms such as SAML or JWT
- D. Each modern API must be REST and HTTP based

Answer: B

Explanation:

Correct Answers

* 1. Each modern API must be treated like a product and designed for a particular target audience (for instance mobile app developers)

Bottom of Form Top of Form

NEW QUESTION 35

A retail company with thousands of stores has an API to receive data about purchases and insert it into a single database. Each individual store sends a batch of purchase data to the API about every 30 minutes. The API implementation uses a database bulk insert command to submit all the purchase data to a database using a custom JDBC driver provided by a data analytics solution provider. The API implementation is deployed to a single CloudHub worker. The JDBC driver processes the data into a set of several temporary disk files on the CloudHub worker, and then the data is sent to an analytics engine using a proprietary protocol. This process usually takes less than a few minutes. Sometimes a request fails. In this case, the logs show a message from the JDBC driver indicating an out-of-file-space message. When the request is resubmitted, it is successful. What is the best way to try to resolve this throughput issue?

- A. set a CloudHub autoscaling policy to add CloudHub workers
- B. Use a CloudHub autoscaling policy to increase the size of the CloudHub worker
- C. Increase the size of the CloudHub worker(s)
- D. Increase the number of CloudHub workers

Answer: D

Explanation:

Correct Answer

Increase the size of the CloudHub worker(s)

The key details that we can take out from the given scenario are:

>> API implementation uses a database bulk insert command to submit all the purchase data to a database

>> JDBC driver processes the data into a set of several temporary disk files on the CloudHub worker

>> Sometimes a request fails and the logs show a message indicating an out-of-file-space message Based on above details:

>> Both auto-scaling options does NOT help because we cannot set auto-scaling rules based on error messages. Auto-scaling rules are kicked-off based on CPU/Memory usages and not due to some given error or disk space issues.

>> Increasing the number of CloudHub workers also does NOT help here because the reason for the failure is not due to performance aspects w.r.t CPU or Memory. It is due to disk-space.

>> Moreover, the API is doing bulk insert to submit the received batch data. Which means, all data is handled by ONE worker only at a time. So, the disk space issue should be tackled on "per worker" basis. Having multiple workers does not help as the batch may still fail on any worker when disk is out of space on that particular worker.

Therefore, the right way to deal this issue and resolve this is to increase the vCore size of the worker so that a new worker with more disk space will be provisioned.

NEW QUESTION 39

What is a typical result of using a fine-grained rather than a coarse-grained API deployment model to implement a given business process?

- A. A decrease in the number of connections within the application network supporting the business process
- B. A higher number of discoverable API-related assets in the application network
- C. A better response time for the end user as a result of the APIs being smaller in scope and complexity
- D. An overall lower usage of resources because each fine-grained API consumes less resources

Answer: B

Explanation:

Correct Answer

A higher number of discoverable API-related assets in the application network.

>> We do NOT get faster response times in fine-grained approach when compared to coarse-grained approach.

>> In fact, we get faster response times from a network having coarse-grained APIs compared to a network having fine-grained APIs model. The reasons are below.

Fine-grained approach:

* 1. will have more APIs compared to coarse-grained

* 2. So, more orchestration needs to be done to achieve a functionality in business process.

* 3. Which means, lots of API calls to be made. So, more connections will need to be established. So, obviously more hops, more network i/o, more number of

integration points compared to coarse-grained approach where fewer APIs with bulk functionality embedded in them.

* 4. That is why, because of all these extra hops and added latencies, fine-grained approach will have bit more response times compared to coarse-grained.

* 5. Not only added latencies and connections, there will be more resources used up in fine-grained approach due to more number of APIs.

That's why, fine-grained APIs are good in a way to expose more number of reusable assets in your network and make them discoverable. However, needs more maintenance, taking care of integration points, connections, resources with a little compromise w.r.t network hops and response times.

NEW QUESTION 44

.....

THANKS FOR TRYING THE DEMO OF OUR PRODUCT

Visit Our Site to Purchase the Full Set of Actual MCPA-Level-1 Exam Questions With Answers.

We Also Provide Practice Exam Software That Simulates Real Exam Environment And Has Many Self-Assessment Features. Order the MCPA-Level-1 Product From:

<https://www.2passeasy.com/dumps/MCPA-Level-1/>

Money Back Guarantee

MCPA-Level-1 Practice Exam Features:

- * MCPA-Level-1 Questions and Answers Updated Frequently
- * MCPA-Level-1 Practice Questions Verified by Expert Senior Certified Staff
- * MCPA-Level-1 Most Realistic Questions that Guarantee you a Pass on Your FirstTry
- * MCPA-Level-1 Practice Test Questions in Multiple Choice Formats and Updatesfor 1 Year