Exam Questions MCPA-Level-1

MuleSoft Certified Platform Architect - Level 1

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

NEW QUESTION 1
True or False. We should always make sure that the APIs being designed and developed are self-servable even if it needs more man-day effort and resources.

A. FALSE
B. TRUE

Answer: B

Explanation:

Correct Answer
TRUE
****
>> As per MuleSoft proposed IT Operating Model, designing APIs and making sure that they are discoverable and self-servable is VERY VERY IMPORTANT and decides the success of an API and its application network.

NEW QUESTION 2
A retail company is using an Order API to accept new orders. The Order API uses a JMS queue to submit orders to a backend order management service. The normal load for orders is being handled using two (2) CloudHub workers, each configured with 0.2 vCore. The CPU load of each CloudHub worker normally runs well below 70%. However, several times during the year the Order API gets four times (4x) the average number of orders. This causes the CloudHub worker CPU load to exceed 90% and the order submission time to exceed 30 seconds. The cause, however, is NOT the backend order management service, which still responds fast enough to meet the response SLA for the Order API. What is the MOST resource-efficient way to configure the Mule application's CloudHub deployment to help the company cope with this performance challenge?

A. Permanently increase the size of each of the two (2) CloudHub workers by at least four times (4x) to one(1) vCore
B. Use a vertical CloudHub autoscaling policy that triggers on CPU utilization greater than 70%
C. Permanently increase the number of CloudHub workers by four times (4x) to eight (8) CloudHub workers
D. Use a horizontal CloudHub autoscaling policy that triggers on CPU utilization greater than 70%

Answer: D

Explanation:

Correct Answer
Use a horizontal CloudHub autoscaling policy that triggers on CPU utilization greater than 70%
****
The scenario in the question is very clearly stating that the usual traffic in the year is pretty well handled by the existing worker configuration with CPU running well below 70%. The problem occurs only "sometimes" occasionally when there is spike in the number of orders coming in.
So, based on above, We neither need to permanently increase the size of each worker nor need to permanently increase the number of workers. This is unnecessary as other than those "occasional" times the resources are idle and wasted.
We have two options left now. Either to use horizontal Cloudhub autoscaling policy to automatically increase the number of workers or to use vertical Cloudhub autoscaling policy to automatically increase the vCore size of each worker.
Here, we need to take two things into consideration:
* 1. CPU
* 2. Order Submission Rate to JMS Queue
>> From CPU perspective, both the options (horizontal and vertical scaling) solves the issue. Both helps to bring down the usage below 90%.
>> However, If we go with Vertical Scaling, then from Order Submission Rate perspective, as the application is still being load balanced with two workers only, there may not be much improvement in the incoming request processing rate and order submission rate to JMS queue. The throughput would be same as before. Only CPU utilization comes down.
>> But, if we go with Horizontal Scaling, it will spawn new workers and adds extra hand to increase the throughput as more workers are being load balanced now. This way we can address both CPU and Order Submission rate.
Hence, Horizontal CloudHub Autoscaling policy is the right and best answer.

NEW QUESTION 3
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

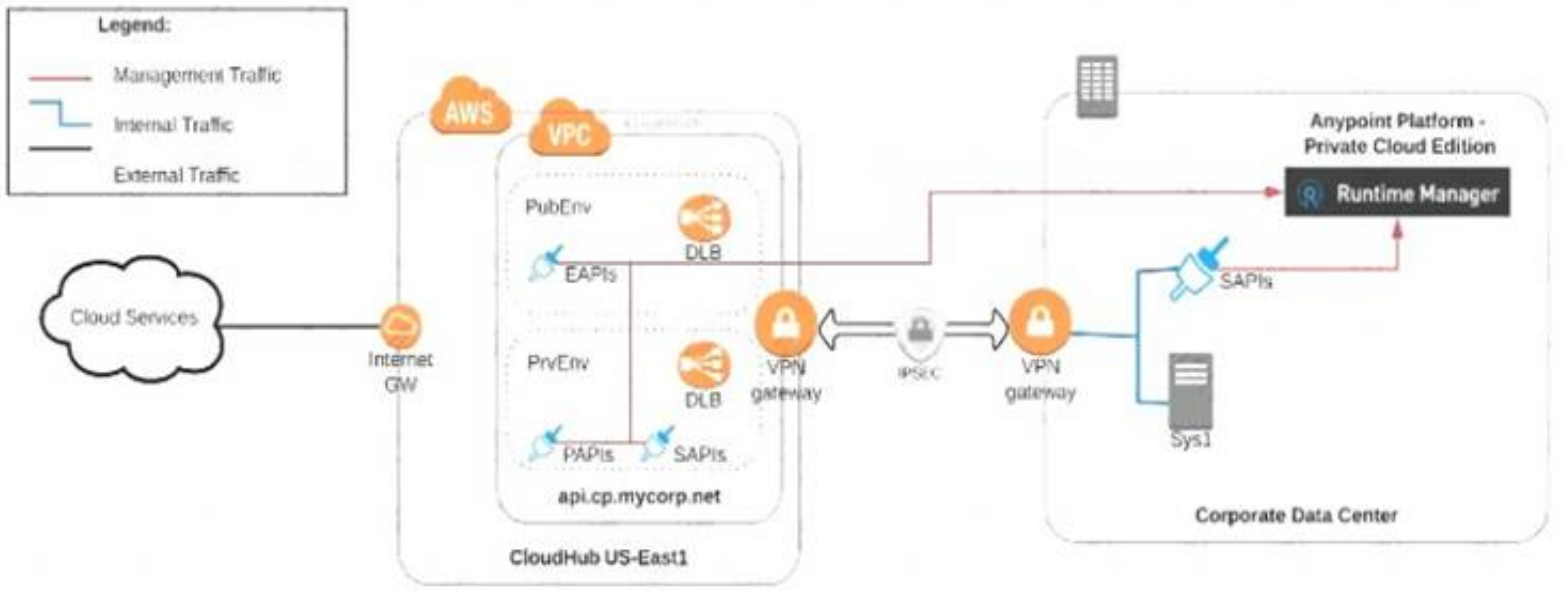
Answer: A

Explanation:

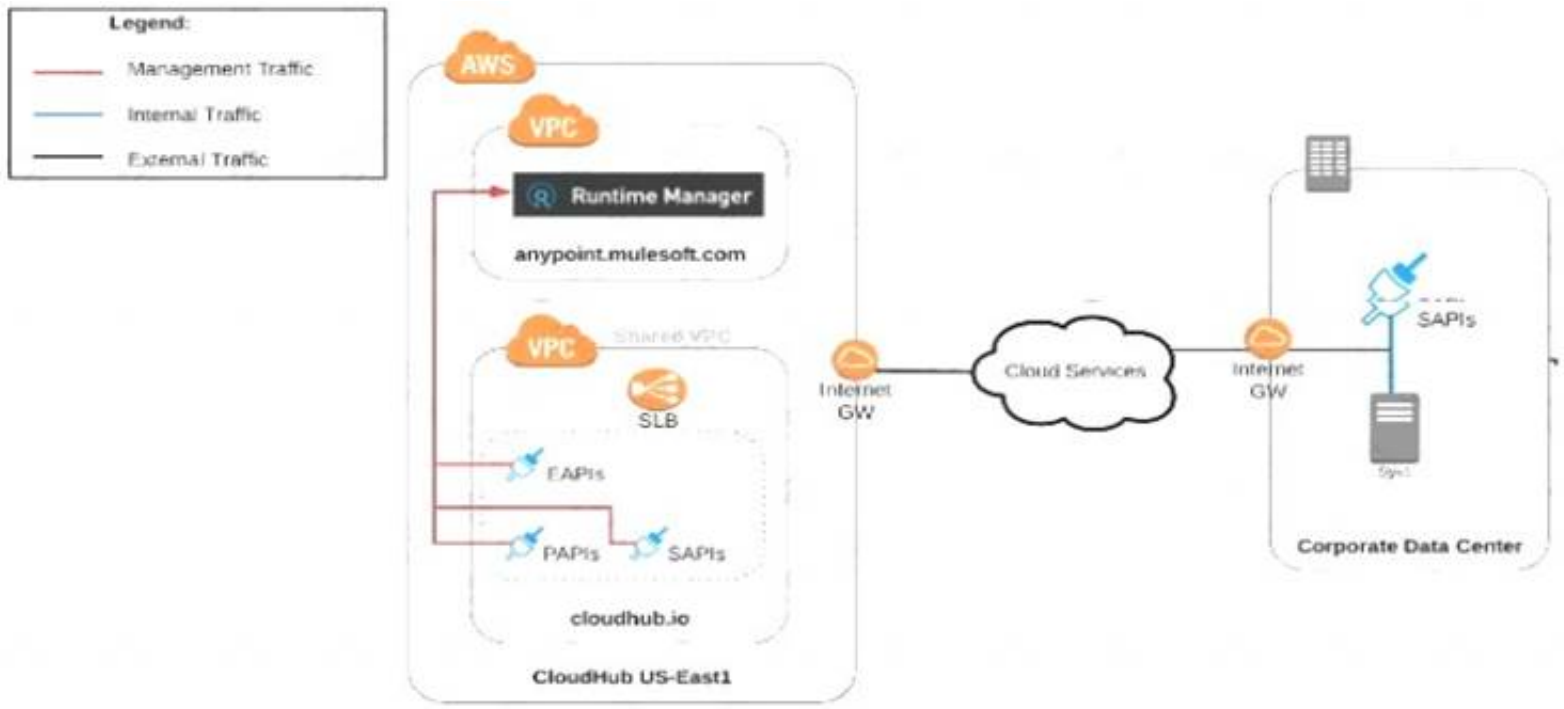
Correct Answer
It makes API Manager aware of API implementations and hence enables it to enforce policies.
****
>> API Autodiscovery is a mechanism that manages an API from API Manager by pairing the deployed application to an API created on the platform.
>> API Management includes tracking, enforcing 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 4
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?

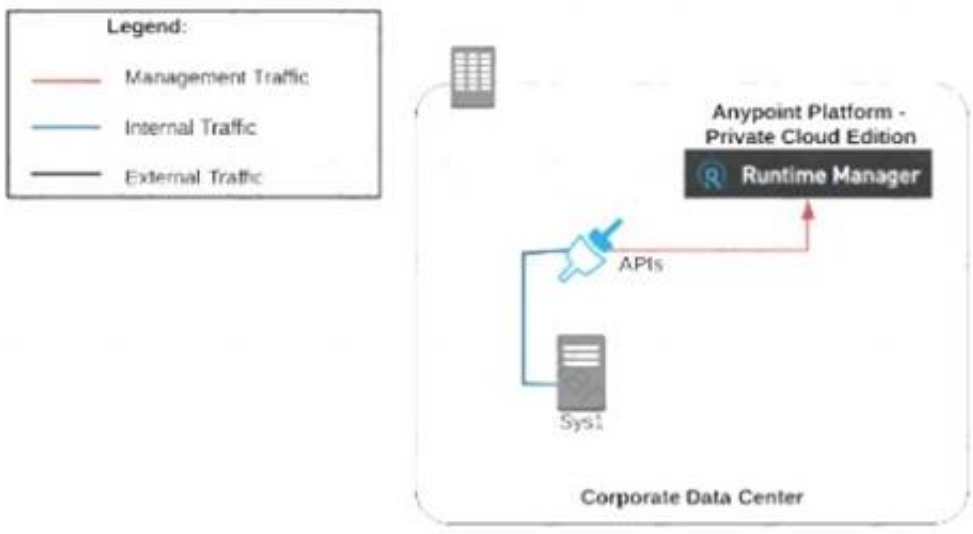
A) Use CloudHub-deployed Mule runtimes in an Anypoint VPC managed by Anypoint Platform Private Cloud Edition control plane



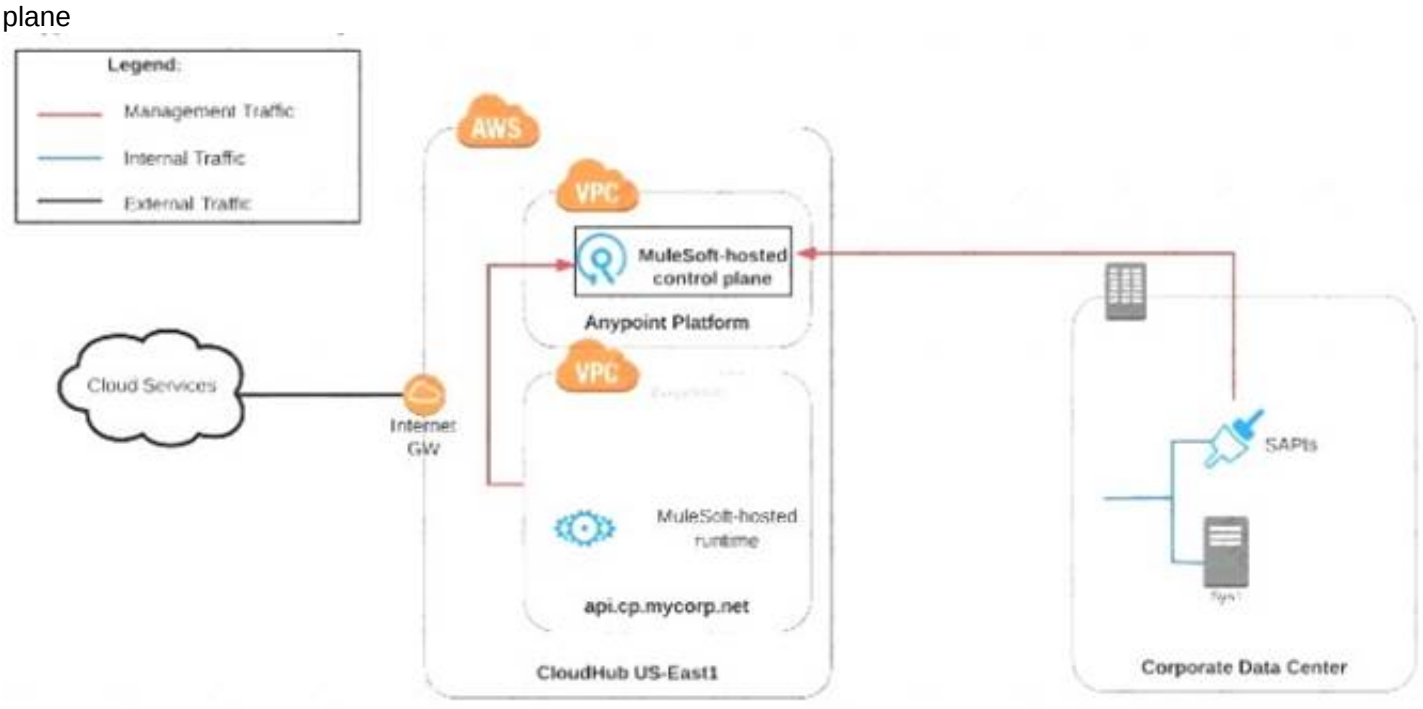
B) Use CloudHub-deployed Mule runtimes in the shared worker cloud managed by the MuleSoft-hosted Anypoint Platform control plane



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

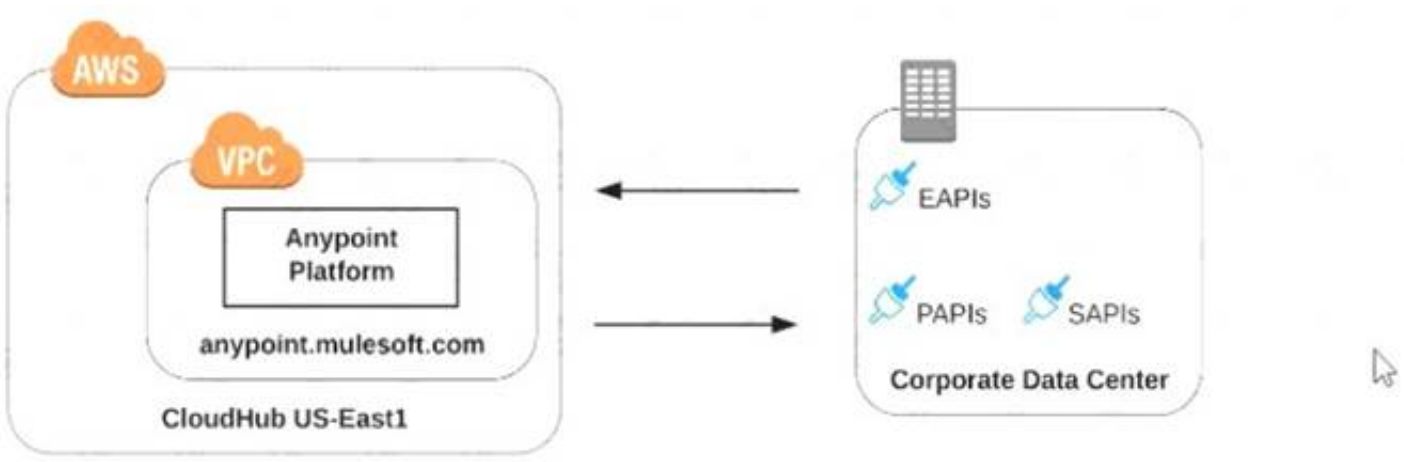


A. Option A
B. Option B
C. Option C
D. Option D

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 5
Refer to the exhibit.



what is true when using customer-hosted Mule runtimes with the MuleSoft-hosted Anypoint Platform control plane (hybrid deployment)?

A. Anypoint Runtime Manager initiates a network connection to a Mule runtime in order to deploy Mule applications
B. The MuleSoft-hosted Shared Load Balancer can be used to load balance API invocations to the Mule runtimes
C. API implementations can run successfully in customer-hosted Mule runtimes, even when they are unable to communicate with the control plane
D. Anypoint Runtime Manager automatically ensures HA in the control plane by creating a new Mule runtime instance in case of a node failure

Answer: C

Explanation:

Correct Answer
API implementations can run successfully in customer-hosted Mule runtimes, even when they are unable to communicate with the control plane.
****
>> We CANNOT use Shared Load balancer to load balance APIs on customer hosted runtimes


- Load balancing

Load balancing is not provided for hybrid deployments. You can manage load balancing with the tools connected to your on-premises resources.

>> For Hybrid deployment models, the on-premises are first connected to Runtime Manager usingRuntime Manager agent. So, the connection is initiated first from On-premises to Runtime Manager. Then all control can be done from Runtime Manager.
>> Anypoint Runtime Manager CANNOT ensure automatic HA. Clusters/Server Groups etc should be configured before hand.
Only TRUE statement in the given choices is, API implementations can run successfully in customer-hosted Mule runtimes, even when they are unable to communicate with the control plane. There are several references below to justify this statement.
References:
https://docs.mulesoft.com/runtime-manager/deployment-strategies#hybrid-deployments https://help.mulesoft.com/s/article/On-Premise-Runtimes-Disconnected-From-US-Control-Plane-June-18th-201 https://help.mulesoft.com/s/article/Runtime-Manager-cannot-manage-On-Prem-Applications-and-Servers-from-https://help.mulesoft.com/s/article/On-premise-Runtimes-Appear-Disconnected-in-Runtime-Manager-May-29th

On-Premise Runtimes Disconnected From US Control Plane - June 18th 2018

Jun 19, 2018 - RCA

Content

Impacted Platforms	Impacted Duration
Anypoint Runtime Manager / On-Prem Runtimes	During this time frame, on-prem runtimes appeared disconnected from the US Anypoint Control Plane: June 18, 2018 10:35 AM PST to June 18, 2018 11:12 AM PST

Incident Description

On-premises applications weren't able to connect to Anypoint Runtime Manager during the length of the incident, which made on-premises runtimes to threw errors in their logs because they received network disconnect messages from the control plane. Other than generating the log as mentioned above entries, on-premises runtimes and applications were not impacted.

==========

Runtime Manager cannot manage On-Prem Applications and Servers from US Control Plane - June 25th 2019

Jul 3, 2019 - RCA

Content

Incident Summary

Between 2:51 p.m. PT June 25th and 12:41 a.m. PT June 26th, customers were not able to manage their On-Prem applications and servers. The availability of running applications and runtimes were not impacted.

Impacted Platforms	Impact Duration
US-Prod	9 hours and 50 minutes

==========

On-premise Runtimes Appear Disconnected in Runtime Manager - May 29th 2018

Jun 2, 2018 - RCA

Content

Impacted Platforms	Impacted Duration
Anypoint Runtime Manager / On-Prem Runtimes	During this time frame, on-prem runtimes appeared disconnected from the US Anypoint Control Plane: Tuesday, May 29, 2018, 3:35 AM PDT to 4:27 AM PDT

Incident Description

During the incident time frame, managed Runtimes running on-premises disconnected from the US Anypoint Platform Control Plane and may have encountered recurrent re-connection errors. Customers were unable to manage applications running on those runtimes or register new ones during this time. Runtimes and Applications continued to operate without impact.

NEW QUESTION 6
What is most likely NOT a characteristic of an integration test for a REST API implementation?

A. The test needs all source and/or target systems configured and accessible
B. The test runs immediately after the Mule application has been compiled and packaged
C. The test is triggered by an external HTTP request
D. The test prepares a known request payload and validates the response payload

Answer: B

Explanation:

Correct Answer
The test runs immediately after the Mule application has been compiled and packaged
****
>> Integration tests are the last layer of tests we need to add to be fully covered.
>> These tests actually run against Mule running with your full configuration in place and are tested from external source as they work in PROD.
>> These tests exercise the application as a whole with actual transports enabled. So, external systems are affected when these tests run.
So, these tests do NOT run immediately after the Mule application has been compiled and packaged.
FYI... Unit Tests are the one that run immediately after the Mule application has been compiled and packaged.

NEW QUESTION 7
Say, there is a legacy CRM system called CRM-Z which is offering below functions:
* 1. Customer creation
* 2. Amend details of an existing customer
* 3. Retrieve details of a customer
* 4. Suspend a customer

A. Implement a system API named customerManagement which has all the functionalities wrapped in it asvarious operations/resources
B. Implement different system APIs named createCustomer, amendCustomer, retrieveCustomer and suspendCustomer as they are modular and has seperation of concerns
C. Implement different system APIs named createCustomerInCRMZ, amendCustomerInCRMZ, retrieveCustomerFromCRMZ and suspendCustomerInCRMZ as they are modular and has seperation of concerns

Answer: B

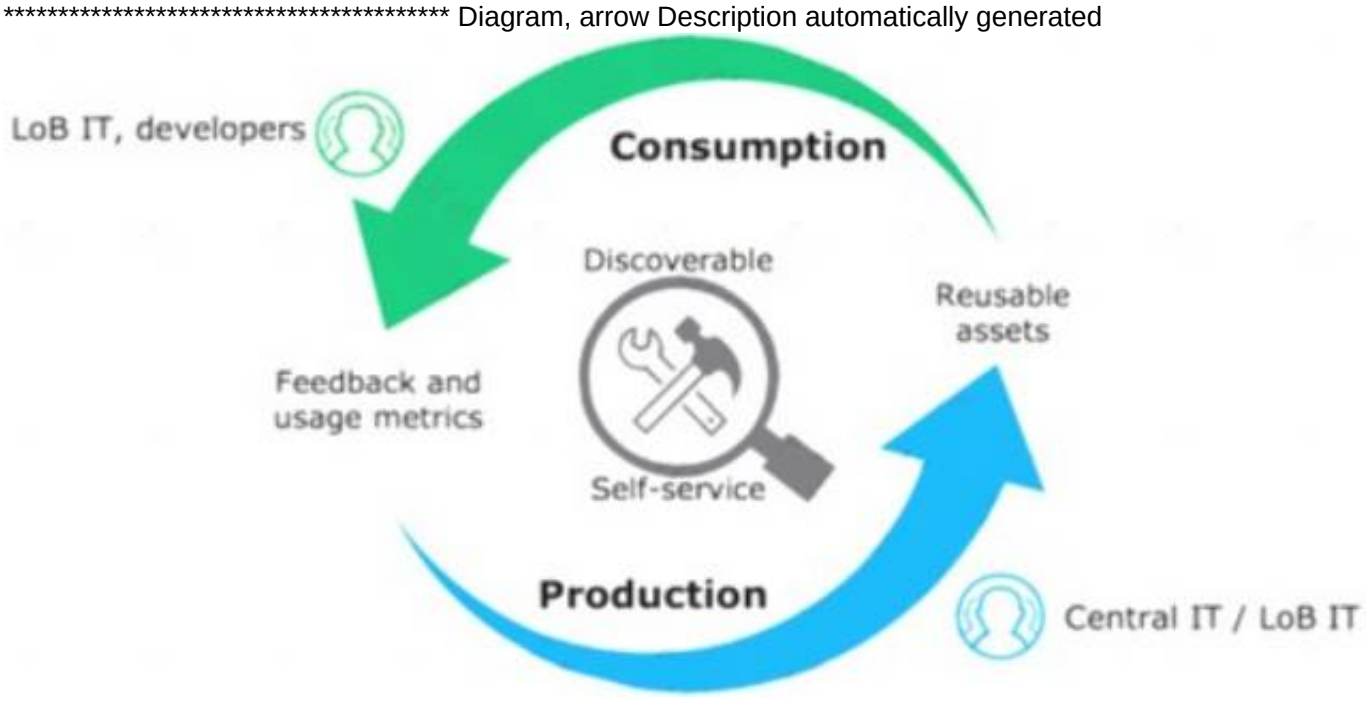
Explanation:
Correct Answer
Implement different system APIs named createCustomer, amendCustomer, retrieveCustomer and suspendCustomer as they are modular and has seperation of concerns
****
>> It is quite normal to have a single API and different Verb + Resource combinations. However, this fits well for an Experience API or a Process API but not a best architecture style for System APIs. So, option with just one customerManagement API is not the best choice here.
>> The option with APIs in createCustomerInCRMZ format is next close choice w.r.t modularization and less maintenance but the naming of APIs is directly coupled with the legacy system. A better foreseen approach would be to name your APIs by abstracting the backend system names as it allows seamless replacement/migration of any backend system anytime. So, this is not the correct choice too.
>> createCustomer, amendCustomer, retrieveCustomer and suspendCustomer is the right approach and is the best fit compared to other options as they are both modular and same time got the names decoupled from backend system and it has covered all requirements a System API needs.

NEW QUESTION 8
Which of the below, when used together, makes the IT Operational Model effective?

A. Create reusable assets, Do marketing on the created assets across organization, Arrange time to time LOB reviews to ensure assets are being consumed or not
B. Create reusable assets, Make them discoverable so that LOB teams can self-serve and browse the APIs, Get active feedback and usage metrics
C. Create resuable assets, make them discoverable so that LOB teams can self-serve and browse the APIs

Answer: C

Explanation:
Correct Answer
Create reusable assets, Make them discoverable so that LOB teams can self-serve and browse the APIs, Get active feedback and usage metrics.
********** Diagram, arrow Description automatically generated



NEW QUESTION 9
What is a best practice when building System APIs?

A. Document the API using an easily consumable asset like a RAML definition

B. Model all API resources and methods to closely mimic the operations of the backend system
C. Build an Enterprise Data Model (Canonical Data Model) for each backend system and apply it to System APIs
D. Expose to API clients all technical details of the API implementation's interaction wifch the backend system

Answer: B

Explanation:

Correct Answer
Model all API resources and methods to closely mimic the operations of the backend system.
****
>> There are NO fixed and straight best practices while opting data models for APIs. They are completly contextual and depends on number of factors. Based upon those factors, an enterprise can choose if they have to go with Enterprise Canonical Data Model or Bounded Context Model etc.
>> One should NEVER expose the technical details of API implementation to their API clients. Only the API interface/ RAML is exposed to API clients.
>> It is true that the RAML definitions of APIs should be as detailed as possible and should reflect most of the documentation. However, just that is NOT enough to call your API as best documented API. There should be even more documentation on Anypoint Exchange with API Notebooks etc. to make and create a developer friendly API and repository..
>> The best practice always when creating System APIs is to create their API interfaces by modeling their resources and methods to closely reflect the operations and functionalities of that backend system.

NEW QUESTION 10
In an organization, the InfoSec team is investigating Anypoint Platform related data traffic.
From where does most of the data available to Anypoint Platform for monitoring and alerting originate?

A. From the Mule runtime or the API implementation, depending on the deployment model
B. From various components of Anypoint Platform, such as the Shared Load Balancer, VPC, and Mule runtimes
C. From the Mule runtime or the API Manager, depending on the type of data
D. From the Mule runtime irrespective of the deployment model

Answer: D

Explanation:

Correct Answer
From the Mule runtime irrespective of the deployment model
****
>> Monitoring and Alerting metrics are always originated from Mule Runtimes irrespective of the deployment model.
>> It may seems that some metrics (Runtime Manager) are originated from Mule Runtime and some are (API Invocations/ API Analytics) from API Manager. However, this is realistically NOT TRUE. The reason is, API manager is just a management tool for API instances but all policies upon applying on APIs eventually gets executed on Mule Runtimes only (Either Embedded or API Proxy).
>> Similarly all API Implementations also run on Mule Runtimes.
So, most of the day required for monitoring and alerts are originated fron Mule Runtimes only irrespective of whether the deployment model is MuleSoft-hosted or Customer-hosted or Hybrid.

NEW QUESTION 10
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 15
An API implementation is updated. When must the RAML definition of the API also be updated?

A. When the API implementation changes the structure of the request or response messages
B. When the API implementation changes from interacting with a legacy backend system deployedon-premises to a modern, cloud-based (SaaS) system
C. When the API implementation is migrated from an older to a newer version of the Mule runtime
D. When the API implementation is optimized to improve its average response time

Answer: A

Explanation:
Correct Answer
When the API implementation changes the structure of the request or response messages
****
>> RAML definition usually needs to be touched only when there are changes in the request/response schemas or in any traits on API.
>> It need not be modified for any internal changes in API implementation like performance tuning, backend system migrations etc..

NEW QUESTION 18
When must an API implementation be deployed to an Anypoint VPC?

A. When the API Implementation must invoke publicly exposed services that are deployed outside of CloudHub in a customer- managed AWS instance
B. When the API implementation must be accessible within a subnet of a restricted customer-hosted network that does not allow public access
C. When the API implementation must be deployed to a production AWS VPC using the Mule Maven plugin
D. When the API Implementation must write to a persistent Object Store

Answer: A

NEW QUESTION 20
An API experiences a high rate of client requests (TPS) vwth small message paytoads. How can usage limits be imposed on the API based on the type of client application?

A. Use an SLA-based rate limiting policy and assign a client application to a matching SLA tier based on its type
B. Use a spike control policy that limits the number of requests for each client application type
C. Use a cross-origin resource sharing (CORS) policy to limit resource sharing between client applications, configured by the client application type
D. Use a rate limiting policy and a client ID enforcement policy, each configured by the client application type

Answer: A

Explanation:
Correct Answer
Use an SLA-based rate limiting policy and assign a client application to a matching SLA tier based on its type.
****
>> SLA tiers will come into play whenever any limits to be imposed on APIs based on client type

NEW QUESTION 21
What Mule application deployment scenario requires using Anypoint Platform Private Cloud Edition or Anypoint Platform for Pivotal Cloud Foundry?

A. When it Is required to make ALL applications highly available across multiple data centers
B. When it is required that ALL APIs are private and NOT exposed to the public cloud
C. When regulatory requirements mandate on-premises processing of EVERY data item, including meta-data
D. When ALL backend systems in the application network are deployed in the organization's intranet

Answer: C

Explanation:
Correct Answer
When regulatory requirements mandate on-premises processing of EVERY data item, including meta-data.
****
We need NOT require to use Anypoint Platform PCE or PCF for the below. So these options are OUT.
>> We can make ALL applications highly available across multiple data centers using CloudHub too.
>> We can use Anypoint VPN and tunneling from CloudHub to connect to ALL backend systems in the application network that are deployed in the organization's intranet.
>> We can use Anypoint VPC and Firewall Rules to make ALL APIs private and NOT exposed to the public cloud.
Only valid reason in the given options that requires to use Anypoint Platform PCE/ PCF is - When regulatory requirements mandate on-premises processing of EVERY data item, including meta-data.

NEW QUESTION 25
Due to a limitation in the backend system, a system API can only handle up to 500 requests per second. What is the best type of API policy to apply to the system API to avoid overloading the backend system?

A. Rate limiting
B. HTTP caching
C. Rate limiting - SLA based
D. Spike control

Answer: D

Explanation:
Correct Answer
Spike control
****
>> First things first, HTTP Caching policy is for purposes different than avoiding the backend system from overloading. So this is OUT.
>> Rate Limiting and Throttling/ Spike Control policies are designed to limit API access, but have different intentions.
>> Rate limiting protects an API by applying a hard limit on its access.
>> Throttling/ Spike Control shapes API access by smoothing spikes in traffic. That is why, Spike Control is the right option.

NEW QUESTION 30
When could the API data model of a System API reasonably mimic the data model exposed by the corresponding backend system, with minimal improvements

over the backend system's data model?

A. When there is an existing Enterprise Data Model widely used across the organization
B. When the System API can be assigned to a bounded context with a corresponding data model
C. When a pragmatic approach with only limited isolation from the backend system is deemed appropriate
D. When the corresponding backend system is expected to be replaced in the near future

Answer: C

Explanation:

Correct Answer
When a pragmatic approach with only limited isolation from the backend system is deemed appropriate.
********** General guidance w.r.t choosing Data Models:
>> If an Enterprise Data Model is in use then the API data model of System APIs should make use of data types from that Enterprise Data Model and the corresponding API implementation should translate between these data types from the Enterprise Data Model and the native data model of the backend system.
>> If no Enterprise Data Model is in use then each System API should be assigned to a Bounded Context, the API data model of System APIs should make use of data types from the corresponding Bounded Context Data Model and the corresponding API implementation should translate between these data types from the Bounded Context Data Model and the native data model of the backend system. In this scenario, the data types in the Bounded Context Data Model are defined purely in terms of their business characteristics and are typically not related to the native data model of the backend system. In other words, the translation effort may be significant.
>> If no Enterprise Data Model is in use, and the definition of a clean Bounded Context Data Model is considered too much effort, then the API data model of System APIs should make use of data types that approximately mirror those from the backend system, same semantics and naming as backend system, lightly sanitized, expose all fields needed for the given System API's functionality, but not significantly more and making good use of REST conventions.
The latter approach, i.e., exposing in System APIs an API data model that basically mirrors that of the backend system, does not provide satisfactory isolation from backend systems through the System API tier on its own. In particular, it will typically not be possible to "swap out" a backend system without significantly changing all System APIs in front of that backend system and therefore the API implementations of all Process APIs that depend on those System APIs! This is so because it is not desirable to prolong the life of a previous backend system's data model in the form of the API data model of System APIs that now front a new backend system. The API data models of System APIs following this approach must therefore change when the backend system is replaced.
On the other hand:
>> It is a very pragmatic approach that adds comparatively little overhead over accessing the backend system directly
>> Isolates API clients from intricacies of the backend system outside the data model (protocol, authentication, connection pooling, network address, …)
>> Allows the usual API policies to be applied to System APIs
>> Makes the API data model for interacting with the backend system explicit and visible, by exposing it in the RAML definitions of the System APIs
>> Further isolation from the backend system data model does occur in the API implementations of the Process API tier

NEW QUESTION 33
Question 10: Skipped
An API implementation returns three X-RateLimit-* HTTP response headers to a requesting API client. What type of information do these response headers indicate to the API client?

A. The error codes that result from throttling
B. A correlation ID that should be sent in the next request
C. The HTTP response size
D. The remaining capacity allowed by the API implementation

Answer: D

Explanation:

Correct Answer
The remaining capacity allowed by the API implementation.
****
>> Reference:
https://docs.mulesoft.com/api-manager/2.x/rate-limiting-and-throttling-sla-based-policies#response-headers

Response Headers

Three headers are included in request responses that inform users about the SLA restrictions and inform them when nearing the threshold. When the SLA enforces multiple policies that limit request throughput, a single set of headers pertaining to the most restrictive of the policies provides this information.

For example, a user of your API may receive a response that includes these headers:

```
X-RateLimit-Limit: 20
X-RateLimit-Remaining: 14
X-RateLimit-Reset: 19100
```

Within the next 19100 milliseconds, only 14 more requests are allowed by the SLA, which is set to allow 20 within this time-window.

NEW QUESTION 35
What correctly characterizes unit tests of Mule applications?

A. They test the validity of input and output of source and target systems
B. They must be run in a unit testing environment with dedicated Mule runtimes for the environment
C. They must be triggered by an external client tool or event source
D. They are typically written using MUnit to run in an embedded Mule runtime that does not require external connectivity

Answer: D

Explanation:
Correct Answer
They are typically written using MUnit to run in an embedded Mule runtime that does not require external connectivity.
****
Below TWO are characteristics of Integration Tests but NOT unit tests:
>> They test the validity of input and output of source and target systems.
>> They must be triggered by an external client tool or event source.
It is NOT TRUE that Unit Tests must be run in a unit testing environment with dedicated Mule runtimes for the environment.
MuleSoft offers MUnit for writing Unit Tests and they run in an embedded Mule Runtime without needing any separate/ dedicated Runtimes to execute them. They also do NOT need any external connectivity as MUnit supports mocking via stubs.
https://dzone.com/articles/munit-framework

NEW QUESTION 38
What API policy would LEAST likely be applied to a Process API?

A. Custom circuit breaker
B. Client ID enforcement
C. Rate limiting
D. JSON threat protection

Answer: D

Explanation:
Correct Answer
JSON threat protection
****
Fact: Technically, there are no restrictions on what policy can be applied in what layer. Any policy can be applied on any layer API. However, context should also be considered properly before blindly applying the policies on APIs.
That is why, this question asked for a policy that would LEAST likely be applied to a Process API. From the given options:
>> All policies except "JSON threat protection" can be applied without hesitation to the APIs in Process tier.
>> JSON threat protection policy ideally fits for experience APIs to prevent suspicious JSON payload coming from external API clients. This covers more of a security aspect by trying to avoid possibly malicious and harmful JSON payloads from external clients calling experience APIs.
As external API clients are NEVER allowed to call Process APIs directly and also these kind of malicious and harmful JSON payloads are always stopped at experience API layer only using this policy, it is LEAST LIKELY that this same policy is again applied on Process Layer API.

NEW QUESTION 42
Mule applications that implement a number of REST APIs are deployed to their own subnet that is inaccessible from outside the organization.
External business-partners need to access these APIs, which are only allowed to be invoked from a separate subnet dedicated to partners - called Partner-subnet.
This subnet is accessible from the public internet, which allows these external partners to reach it.
Anypoint Platform and Mule runtimes are already deployed in Partner-subnet. These Mule runtimes can already access the APIs.
What is the most resource-efficient solution to comply with these requirements, while having the least impact on other applications that are currently using the APIs?

A. Implement (or generate) an API proxy Mule application for each of the APIs, then deploy the API proxies to the Mule runtimes
B. Redeploy the API implementations to the same servers running the Mule runtimes
C. Add an additional endpoint to each API for partner-enablement consumption
D. Duplicate the APIs as Mule applications, then deploy them to the Mule runtimes

Answer: A

NEW QUESTION 47
What is a key performance indicator (KPI) that measures the success of a typical C4E that is immediately apparent in responses from the Anypoint Platform APIs?

A. The number of production outage incidents reported in the last 24 hours
B. The number of API implementations that have a publicly accessible HTTP endpoint and are being managed by Anypoint Platform
C. The fraction of API implementations deployed manually relative to those deployed using a CI/CD tool
D. The number of API specifications in RAML or OAS format published to Anypoint Exchange

Answer: D

Explanation:
Correct Answer
The number of API specifications in RAML or OAS format published to Anypoint Exchange
****
>> The success of C4E always depends on their contribution to the number of reusable assets that they have helped to build and publish to Anypoint Exchange.
>> It is NOT due to any factors w.r.t # of outages, Manual vs CI/CD deployments or Publicly accessible HTTP endpoints
>> Anypoint Platform APIs helps us to quickly run and get the number of published RAML/OAS assets to Anypoint Exchange. This clearly depicts how successful a C4E team is based on number of returned assets in the response.

NEW QUESTION 48
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 50
What is typically NOT a function of the APIs created within the framework called API-led connectivity?

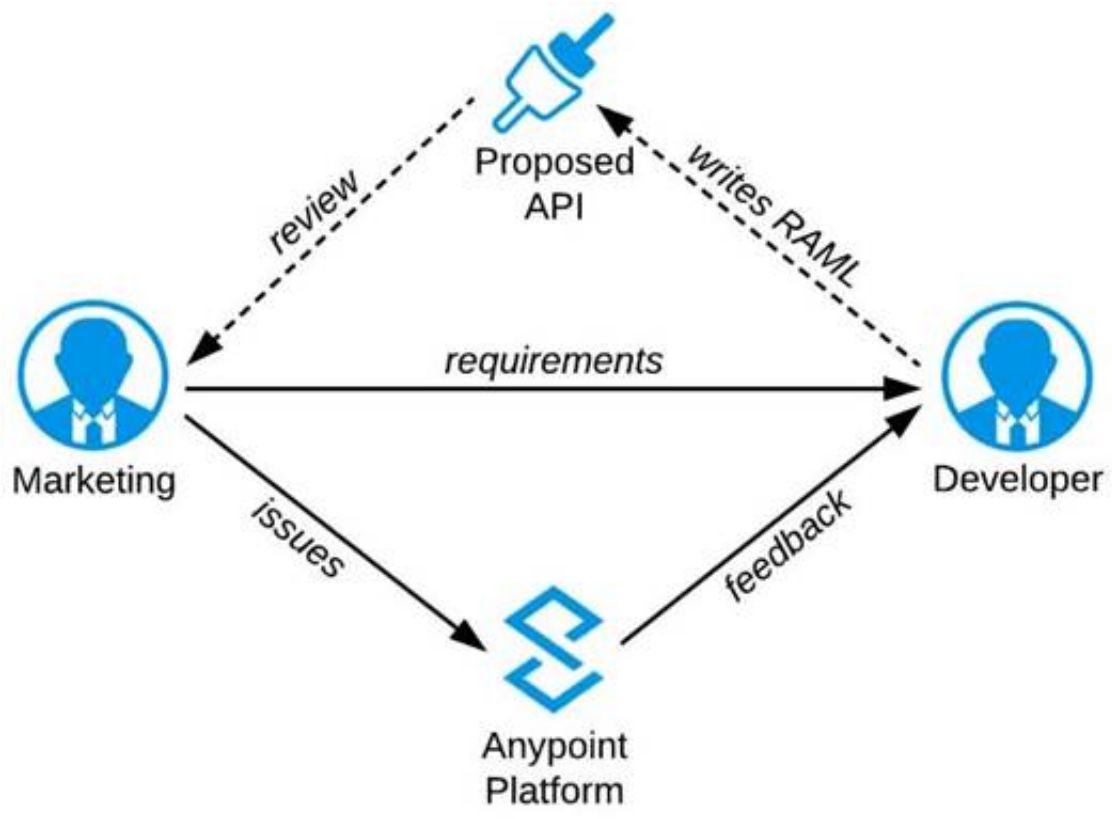
A. They provide an additional layer of resilience on top of the underlying backend system, thereby insulating clients from extended failure of these systems.
B. They allow for innovation at the user Interface level by consuming the underlying assets without being aware of how data Is being extracted from backend systems.
C. They reduce the dependency on the underlying backend systems by helping unlock data from backend systems In a reusable and consumable way.
D. They can compose data from various sources and combine them with orchestration logic to create higher level value.

Answer: A

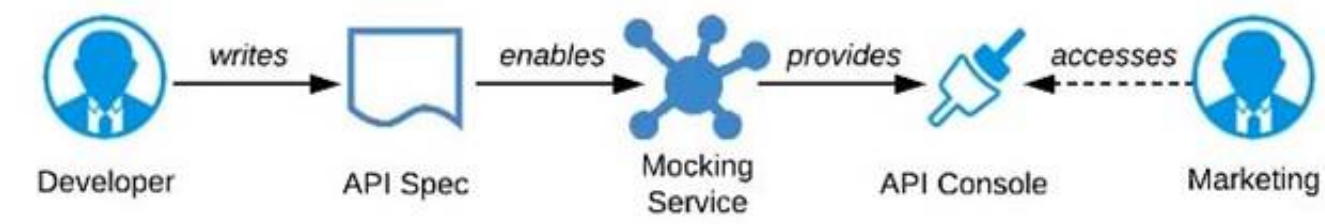
Explanation:

Correct Answer
They provide an additional layer of resilience on top of the underlying backend system, thereby insulating clients from extended failure of these systems.
********** In API-led connectivity,
>> Experience APIs - allow for innovation at the user interface level by consuming the underlying assets without being aware of how data is being extracted from backend systems.
>> Process APIs - compose data from various sources and combine them with orchestration logic to create higher level value
>> System APIs - reduce the dependency on the underlying backend systems by helping unlock data from backend systems in a reusable and consumable way.
However, they NEVER promise that they provide an additional layer of resilience on top of the underlying backend system, thereby insulating clients from extended failure of these systems.
https://dzone.com/articles/api-led-connectivity-with-mule

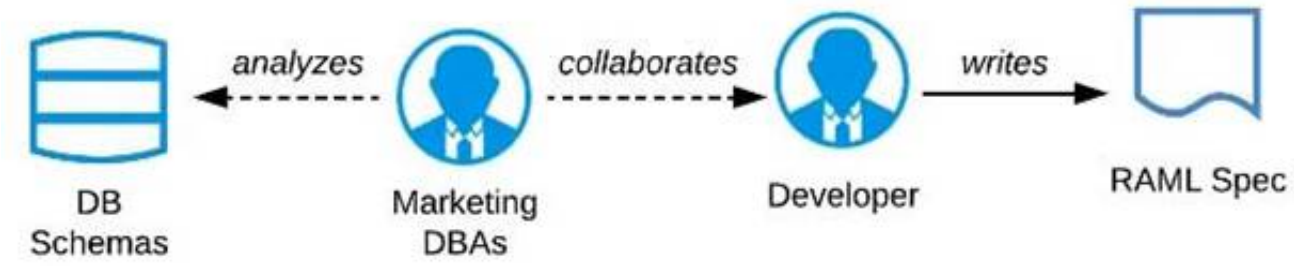
NEW QUESTION 55
Refer to the exhibit.



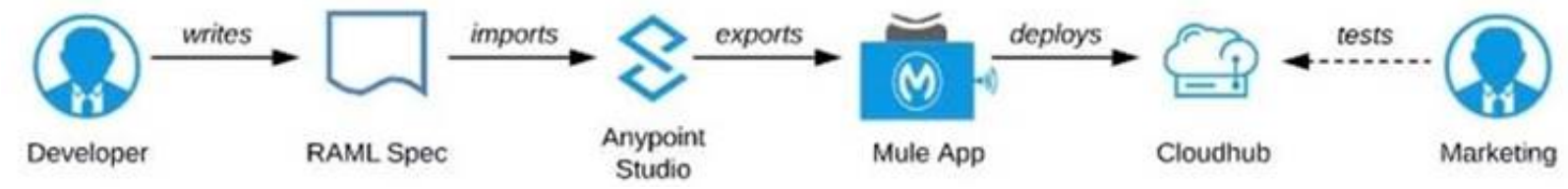
A RAML definition has been proposed for a new Promotions Process API, and has been published to Anypoint Exchange.
The Marketing Department, who will be an important consumer of the Promotions API, has important requirements and expectations that must be met.
What is the most effective way to use Anypoint Platform features to involve the Marketing Department in this early API design phase?
A) Ask the Marketing Department to interact with a mocking implementation of the API using the automatically generated API Console



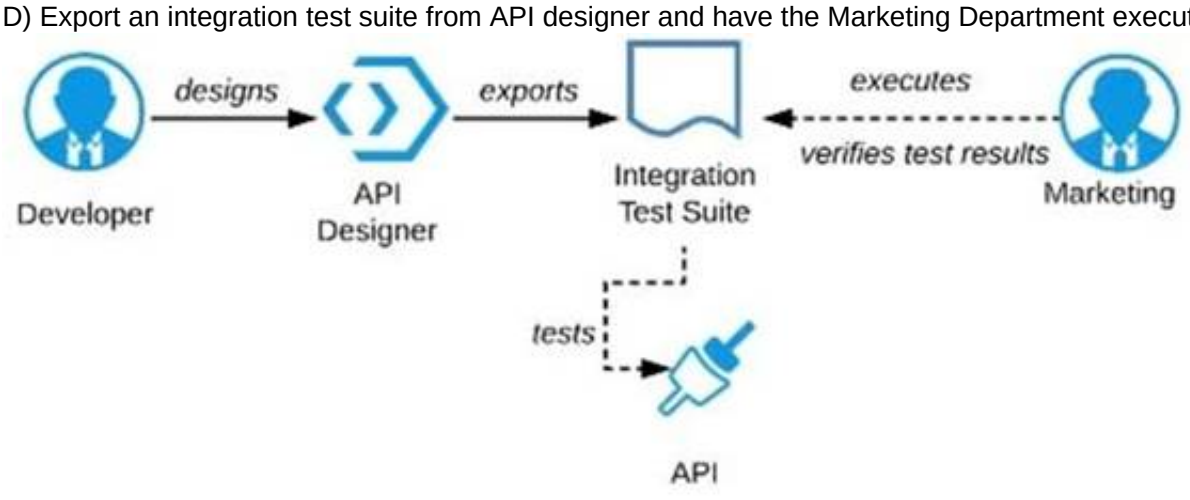
B) Organize a design workshop with the DBAs of the Marketing Department in which the database schema of the Marketing IT systems is translated into RAML



C) Use Anypoint Studio to Implement the API as a Mule application, then deploy that API implementation to CloudHub and ask the Marketing Department to interact with it



D) Export an integration test suite from API designer and have the Marketing Department execute the tests In that suite to ensure they pass



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

Answer: A

Explanation:
Correct Answer
Ask the Marketing Department to interact with a mocking implementation of the API using the automatically generated API Console.
********** As per MuleSoft's IT Operating Model:
>> API consumers need NOT wait until the full API implementation is ready.
>> NO technical test-suites needs to be shared with end users to interact with APIs.

>> Anypoint Platform offers a mocking capability on all the published API specifications to Anypoint Exchange which also will be rich in documentation covering all details of API functionalities and working nature.
>> No needs of arranging days of workshops with end users for feedback.
API consumers can use Anypoint Exchange features on the platform and interact with the API using its mocking feature. The feedback can be shared quickly on the same to incorporate any changes.

NEW QUESTION 57
What is true about API implementations when dealing with legal regulations that require all data processing to be performed within a certain jurisdiction (such as in the USA or the EU)?

A. They must avoid using the Object Store as it depends on services deployed ONLY to the US East region
B. They must use a Jurisdiction-local external messaging system such as Active MQ rather than Anypoint MQ
C. They must te deployed to Anypoint Platform runtime planes that are managed by Anypoint Platform control planes, with both planes in the same Jurisdiction
D. They must ensure ALL data is encrypted both in transit and at rest

Answer: C

Explanation:

Correct Answer
They must be deployed to Anypoint Platform runtime planes that are managed by Anypoint Platform control planes, with both planes in the same Jurisdiction.
****
>> As per legal regulations, all data processing to be performed within a certain jurisdiction. Meaning, the data in USA should reside within USA and should not go out. Same way, the data in EU should reside within EU and should not go out.
>> So, just encrypting the data in transit and at rest does not help to be compliant with the rules. We need to make sure that data does not go out too.
>> The data that we are talking here is not just about the messages that are published to Anypoint MQ. It
includes the apps running, transaction states, application logs, events, metric info and any other metadata. So, just replacing Anypoint MQ with a locally hosted ActiveMQ does NOT help.
>> The data that we are talking here is not just about the key/value pairs that are stored in Object Store. It includes the messages published, apps running, transaction states, application logs, events, metric info and any other metadata. So, just avoiding using Object Store does NOT help.
>> The only option left and also the right option in the given choices is to deploy application on runtime and control planes that are both within the jurisdiction.

NEW QUESTION 62
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 63
Version 3.0.1 of a REST API implementation represents time values in PST time using ISO 8601 hh:mm:ss format. The API implementation needs to be changed to instead represent time values in CEST time using ISO 8601 hh:mm:ss format. When following the semver.org semantic versioning specification, what version should be assigned to the updated API implementation?

A. 3.0.2
B. 4.0.0
C. 3.1.0
D. 3.0.1

Answer: B

Explanation:

Correct Answer 4.0.0
********** As per semver.org semantic versioning specification:
Given a version number MAJOR.MINOR.PATCH, increment the:
- MAJOR version when you make incompatible API changes.
- MINOR version when you add functionality in a backwards compatible manner.
- PATCH version when you make backwards compatible bug fixes.
As per the scenario given in the question, the API implementation is completely changing its behavior. Although the format of the time is still being maintained as hh:mm:ss and there is no change in schema w.r.t format, the API will start functioning different after this change as the times are going to come completely different.
Example: Before the change, say, time is going as 09:00:00 representing the PST. Now on, after the change, the same time will go as 18:00:00 as Central European Summer Time is 9 hours ahead of Pacific Time.
>> This may lead to some uncertain behavior on API clients depending on how they are handling the times in the API response. All the API clients need to be informed that the API functionality is going to change and will return in CEST format. So, this considered as a MAJOR change and the version of API for this new change would be 4.0.0

NEW QUESTION 65

Select the correct Owner-Layer combinations from below options

A. * 1. App Developers owns and focuses on Experience Layer APIs* 2. Central IT owns and focuses on Process Layer APIs* 3. LOB IT owns and focuses on System Layer APIs
B. * 1. Central IT owns and focuses on Experience Layer APIs* 2. LOB IT owns and focuses on Process Layer APIs* 3. App Developers owns and focuses on System Layer APIs
C. * 1. App Developers owns and focuses on Experience Layer APIs* 2. LOB IT owns and focuses on Process Layer APIs* 3. Central IT owns and focuses on System Layer APIs

Answer: C

Explanation:

Correct Answer
* 1. App Developers owns and focuses on Experience Layer APIs
* 2. LOB IT owns and focuses on Process Layer APIs
* 3. Central IT owns and focuses on System Layer APIs
References:
https://blogs.mulesoft.com/biz/api/experience-api-ownership/ https://blogs.mulesoft.com/biz/api/process-api-ownership/ https://blogs.mulesoft.com/biz/api/system-api-ownership/

NEW QUESTION 66
What is the main change to the IT operating model that MuleSoft recommends to organizations to improve innovation and clock speed?

A. Drive consumption as much as production of assets; this enables developers to discover and reuse assets from other projects and encourages standardization
B. Expose assets using a Master Data Management (MDM) system; this standardizes projects and enables developers to quickly discover and reuse assets from other projects
C. Implement SOA for reusable APIs to focus on production over consumption; this standardizes on XML and WSDL formats to speed up decision making
D. Create a lean and agile organization that makes many small decisions everyday; this speeds up decision making and enables each line of business to take ownership of its projects

Answer: A

Explanation:

Correct Answer
Drive consumption as much as production of assets; this enables developers to discover and reuse assets from other projects and encourages standardization
****
>> The main motto of the new IT Operating Model that MuleSoft recommends and made popular is to change the way that they are delivered from a production model to a production + consumption model, which is done through an API strategy called API-led connectivity.
>> The assets built should also be discoverable and self-serveable for reusablity across LOBs and organization.
>> MuleSoft's IT operating model does not talk about SDLC model (Agile/ Lean etc) or MDM at all. So, options suggesting these are not valid.
References:
https://blogs.mulesoft.com/biz/connectivity/what-is-a-center-for-enablement-c4e/ https://www.mulesoft.com/resources/api/secret-to-managing-it-projects

NEW QUESTION 69
What Anypoint Connectors support transactions?

A. Database, JMS, VM
B. Database, 3MS, HTTP
C. Database, JMS, VM, SFTP
D. Database, VM, File

Answer: A

NEW QUESTION 71
A company has started to create an application network and is now planning to implement a Center for Enablement (C4E) organizational model. What key factor would lead the company to decide upon a federated rather than a centralized C4E?

A. When there are a large number of existing common assets shared by development teams
B. When various teams responsible for creating APIs are new to integration and hence need extensive training
C. When development is already organized into several independent initiatives or groups
D. When the majority of the applications in the application network are cloud based

Answer: C

Explanation:
Correct Answer
When development is already organized into several independent initiatives or groups
****
>> It would require lot of process effort in an organization to have a single C4E team coordinating with multiple already organized development teams which are into several independent initiatives. A single C4E works well with different teams having at least a common initiative. So, in this scenario, federated C4E works well instead of centralized C4E.

NEW QUESTION 75
The application network is recomposable: it is built for change because it "bends but does not break"

A. TRUE
B. FALSE

Answer: A

Explanation:
****
>> Application Network is a disposable architecture.
>> Which means, it can be altered without disturbing entire architecture and its components.
>> It bends as per requirements or design changes but does not break

NEW QUESTION 79
A company wants to move its Mule API implementations into production as quickly as possible. To protect access to all Mule application data and metadata, the company requires that all Mule applications be deployed to the company's customer-hosted infrastructure within the corporate firewall. What combination of runtime plane and control plane options meets these project lifecycle goals?

A. Manually provisioned customer-hosted runtime plane and customer-hosted control plane
B. MuleSoft-hosted runtime plane and customer-hosted control plane
C. Manually provisioned customer-hosted runtime plane and MuleSoft-hosted control plane
D. iPaaS provisioned customer-hosted runtime plane and MuleSoft-hosted control plane

Answer: A

Explanation:
Correct Answer
Manually provisioned customer-hosted runtime plane and customer-hosted control plane
****
There are two key factors that are to be taken into consideration from the scenario given in the question.
>> Company requires both data and metadata to be resided within the corporate firewall
>> Company would like to go with customer-hosted infrastructure.
Any deployment model that is to deal with the cloud directly or indirectly (Mulesoft-hosted or Customer's own cloud like Azure, AWS) will have to share atleast the metadata.
Application data can be controlled inside firewall by having Mule Runtimes on customer hosted runtime plane. But if we go with Mulsoft-hosted/ Cloud-based control plane, the control plane required atleast some minimum level of metadata to be sent outside the corporate firewall.
As the customer requirement is pretty clear about the data and metadata both to be within the corporate firewall, even though customer wants to move to production as quickly as possible, unfortunately due to the nature of their security requirements, they have no other option but to go with manually provisioned customer-hosted runtime plane and customer-hosted control plane.

NEW QUESTION 82
What Anypoint Platform Capabilities listed below fall under APIs and API Invocations/Consumers category? Select TWO.

A. API Operations and Management
B. API Runtime Execution and Hosting
C. API Consumer Engagement
D. API Design and Development

Answer: D

Explanation:
Correct Answers: API Operations and Management and API Consumer Engagement
****
>> API Design and Development
-
Anypoint Studio, Anypoint Design Center, Anypoint Connectors
>> API Runtime Execution and Hosting
-
Mule Runtimes, CloudHub, Runtime Services
>> API Operations and Management
-
Anypoint API Manager, Anypoint Exchange
>> API Consumer Management
-
API Contracts, Public Portals, Anypoint Exchange, API Notebooks
Bottom of Form Top of Form

NEW QUESTION 87
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 tower 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 needs 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 resuable 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 92
An organization has created an API-led architecture that uses various API layers to integrate mobile clients with a backend system. The backend system consists of a number of specialized components and can be accessed via a REST API. The process and experience APIs share the same bounded-context model that is different from the backend data model. What additional canonical models, bounded-context models, or anti-corruption layers are best added to this architecture to help process data consumed from the backend system?

A. Create a bounded-context model for every layer and overlap them when the boundary contexts overlap, letting API developers know about the differences between upstream and downstream data models
B. Create a canonical model that combines the backend and API-led models to simplify and unify data models, and minimize data transformations.
C. Create a bounded-context model for the system layer to closely match the backend data model, and add an anti-corruption layer to let the different bounded contexts cooperate across the system and process layers
D. Create an anti-corruption layer for every API to perform transformation for every data model to match each other, and let data simply travel between APIs to avoid the complexity and overhead of building canonical models

Answer: C

Explanation:
Correct Answer
Create a bounded-context model for the system layer to closely match the backend data model, and add an anti-corruption layer to let the different bounded contexts cooperate across the system and process layers
****
>> Canonical models are not an option here as the organization has already put in efforts and created bounded-context models for Experience and Process APIs.
>> Anti-corruption layers for ALL APIs is unnecessary and invalid because it is mentioned that experience and process APIs share same bounded-context model. It is just the System layer APIs that need to choose their approach now.
>> So, having an anti-corruption layer just between the process and system layers will work well. Also to speed up the approach, system APIs can mimic the backend system data model.

NEW QUESTION 96
.....

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