

MuleSoft

Exam Questions MCPA-Level-1

MuleSoft Certified Platform Architect - 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

What best describes the Fully Qualified Domain Names (FQDNs), also known as DNS entries, created when a Mule application is deployed to the CloudHub Shared Worker Cloud?

- A. A fixed number of FQDNs are created, IRRESPECTIVE of the environment and VPC design
- B. The FQDNs are determined by the application name chosen, IRRESPECTIVE of the region
- C. The FQDNs are determined by the application name, but can be modified by an administrator after deployment
- D. The FQDNs are determined by both the application name and the Anypoint Platform organization

Answer: B

Explanation:

Correct Answer

The FQDNs are determined by the application name chosen, IRRESPECTIVE of the region

>> When deploying applications to Shared Worker Cloud, the FQDN are always determined by application name chosen.

>> It does NOT matter what region the app is being deployed to.

>> Although it is fact and true that the generated FQDN will have the region included in it (Ex:

exp-salesorder-api.au-s1.cloudhub.io), it does NOT mean that the same name can be used when deploying to another CloudHub region.

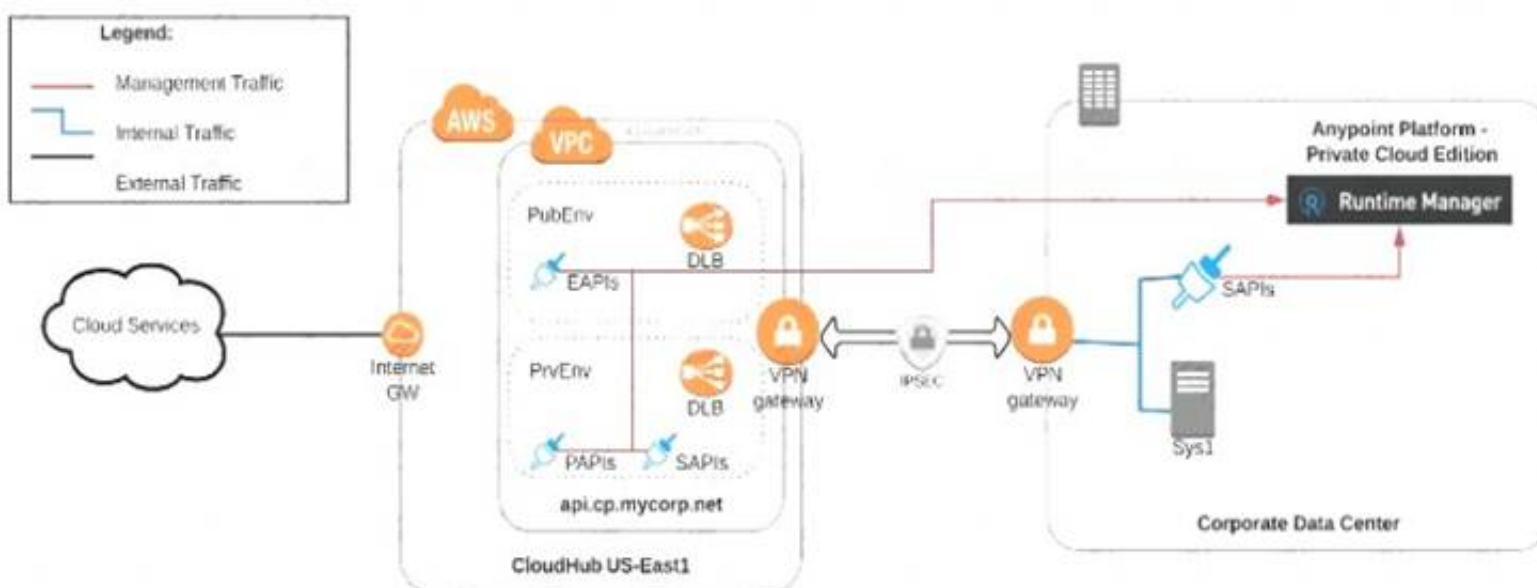
>> Application name should be universally unique irrespective of Region and Organization and solely determines the FQDN for Shared Load Balancers.

NEW QUESTION 3

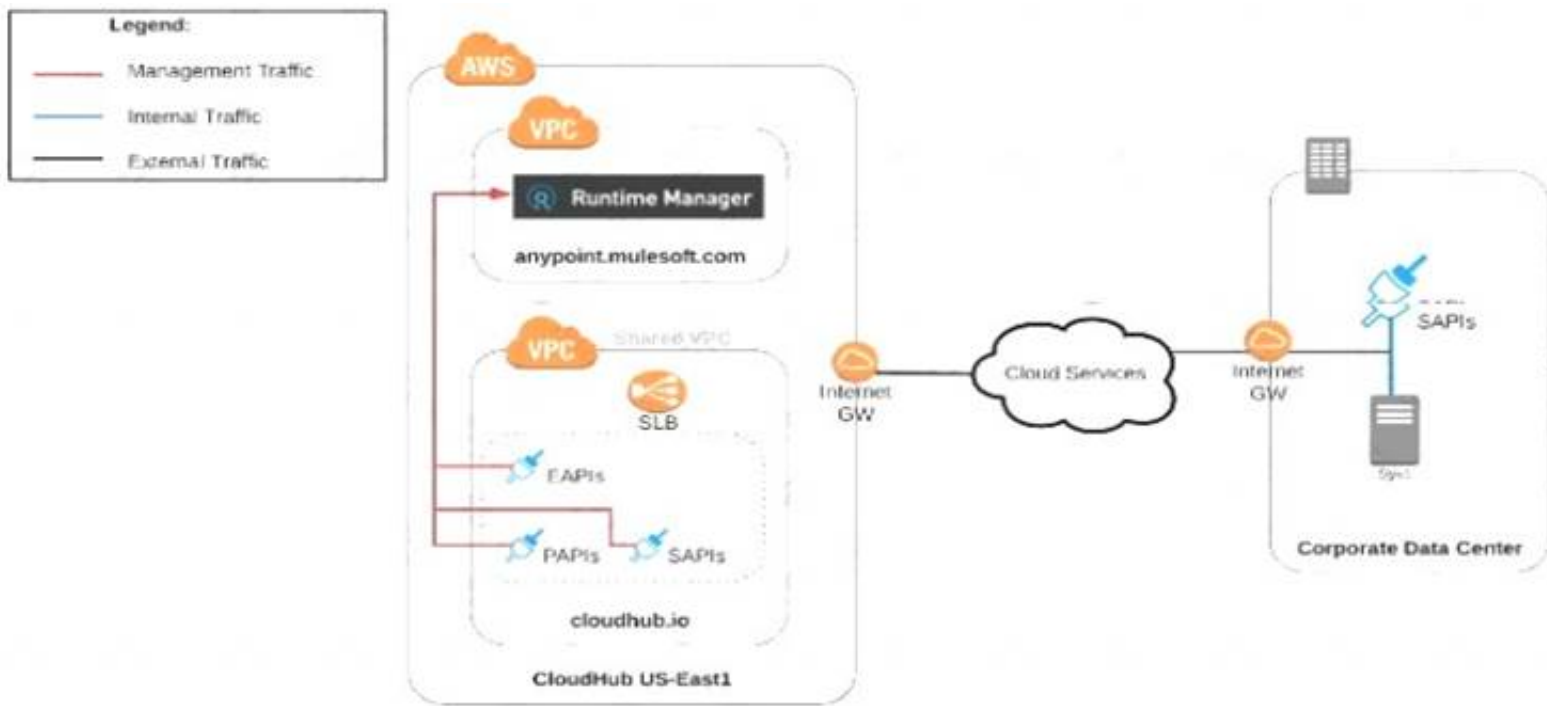
An organization uses various cloud-based SaaS systems and multiple on-premises systems. The on-premises systems are an important part of the organization's application network and can only be accessed from within the organization's intranet.

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?

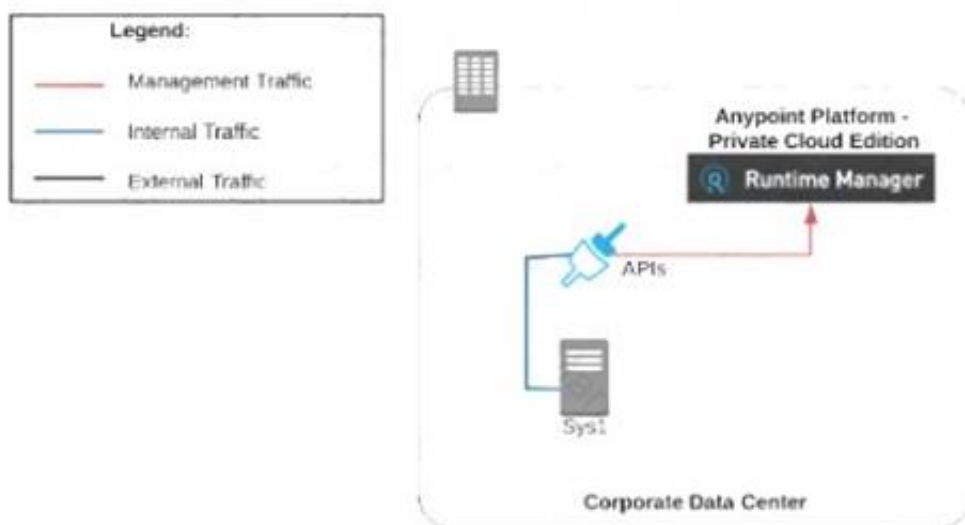
- A) Use CloudHub-deployed Mule runtimes in an Anypoint VPC managed by Anypoint Platform Private Cloud Edition control plane



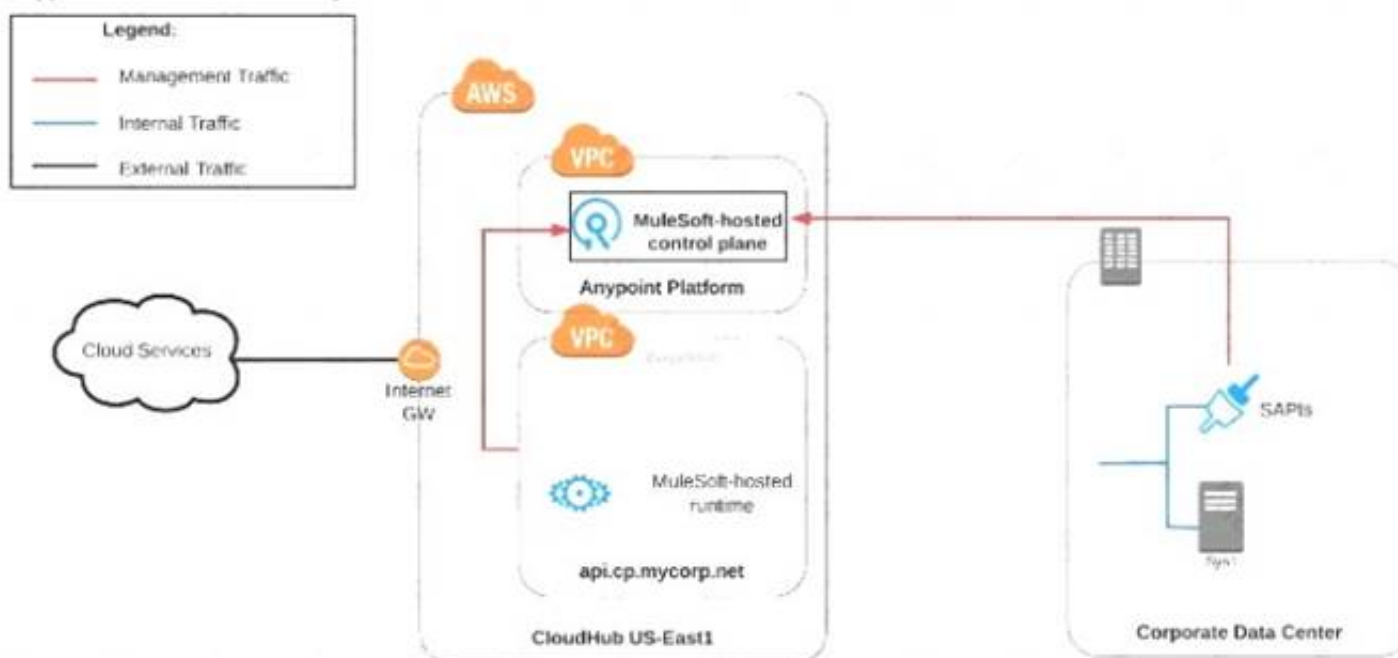
- B) Use CloudHub-deployed Mule runtimes in the shared worker cloud managed by the MuleSoft-hosted Anypoint Platform control plane



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

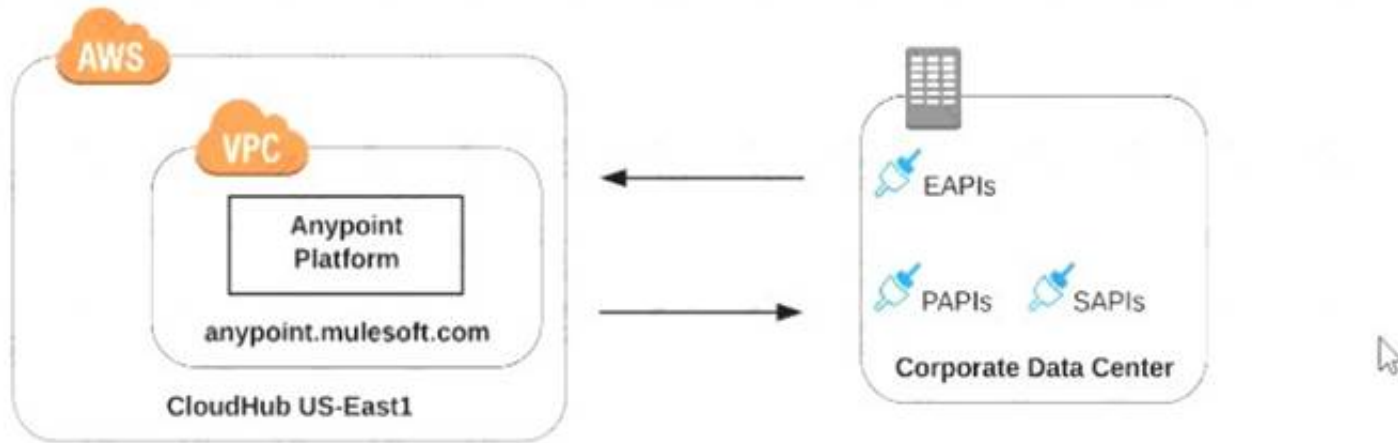
>> Using CloudHub-deployed Mule runtimes in the shared worker cloud managed by the MuleSoft-hosted Anypoint Platform is completely IRRELEVANT to given scenario and silly choice. So, option suggesting this is INVALID

>> 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

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 using Runtime 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-2018> <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 throw 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

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

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 5

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 6

Which of the following best fits the definition of API-led connectivity?

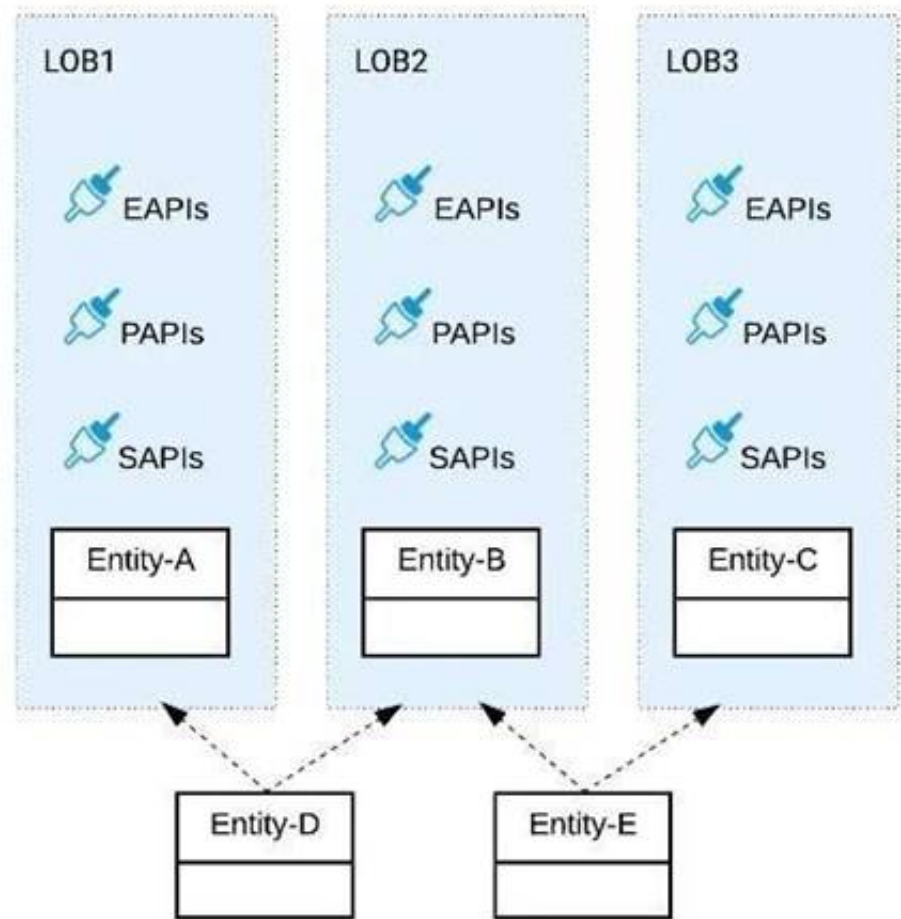
- A. API-led connectivity is not just an architecture or technology but also a way to organize people and processes for efficient IT delivery in the organization
- B. API-led connectivity is a 3-layered architecture covering Experience, Process and System layers
- C. API-led connectivity is a technology which enabled us to implement Experience, Process and System layer based APIs

Answer: A

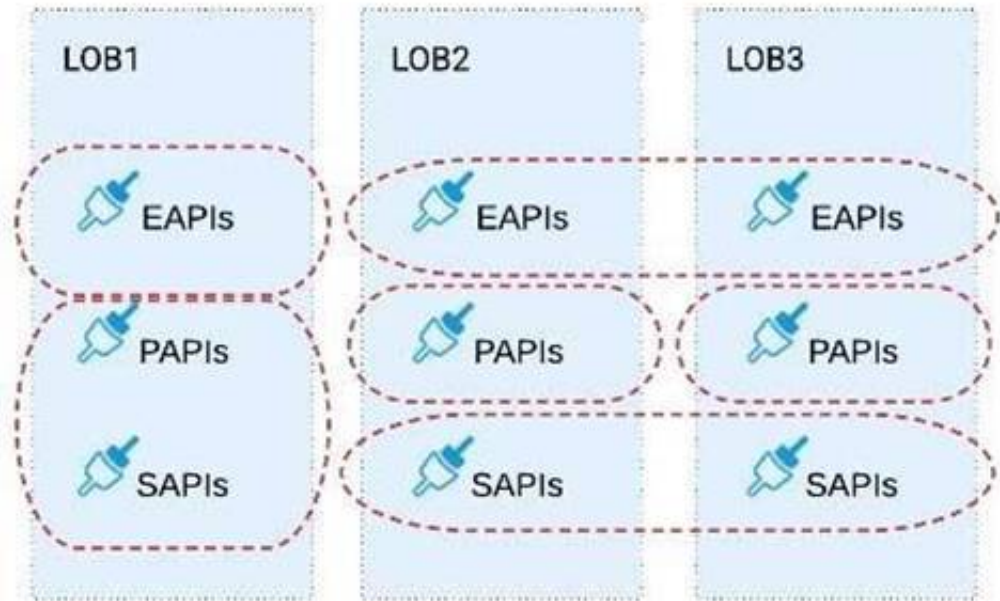
Explanation:

Correct Answer
 API-led connectivity is not just an architecture or technology but also a way to organize people and processes for efficient IT delivery in the organization.

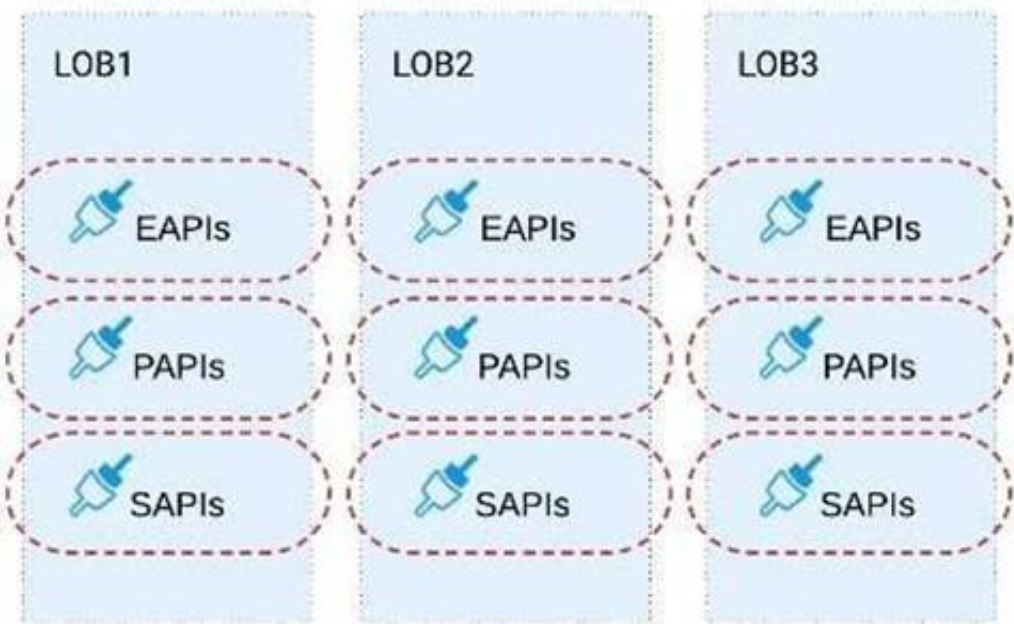
NEW QUESTION 7
 Refer to the exhibit.



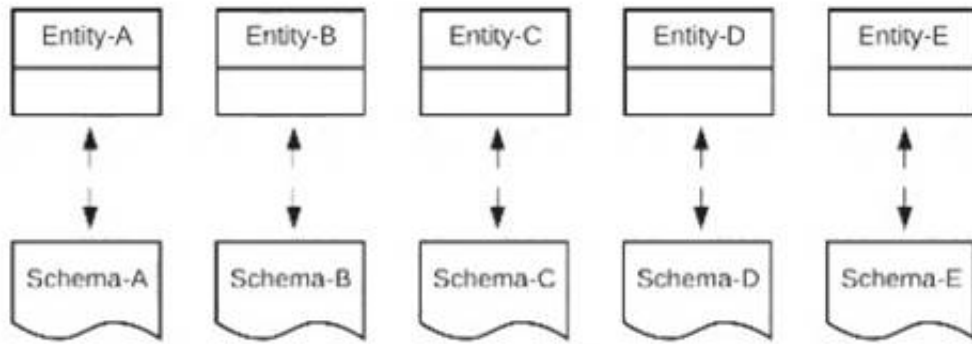
Three business processes need to be implemented, and the implementations need to communicate with several different SaaS applications. These processes are owned by separate (silos) LOBs and are mainly independent of each other, but do share a few business entities. Each LOB has one development team and their own budget
 In this organizational context, what is the most effective approach to choose the API data models for the APIs that will implement these business processes with minimal redundancy of the data models?
 A) Build several Bounded Context Data Models that align with coherent parts of the business processes and the definitions of associated business entities



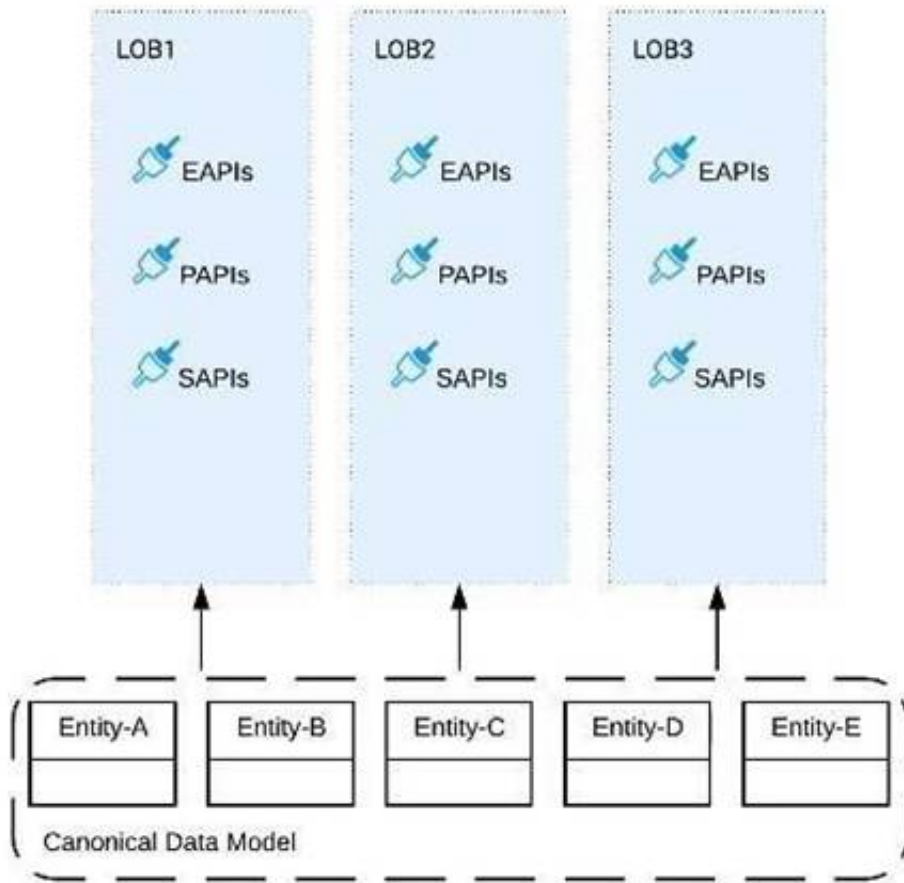
B) Build distinct data models for each API to follow established micro-services and Agile API-centric practices



C) Build all API data models using XML schema to drive consistency and reuse across the organization



D) Build one centralized Canonical Data Model (Enterprise Data Model) that unifies all the data types from all three business processes, ensuring the data model is consistent and non-redundant



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

Answer: A

Explanation:

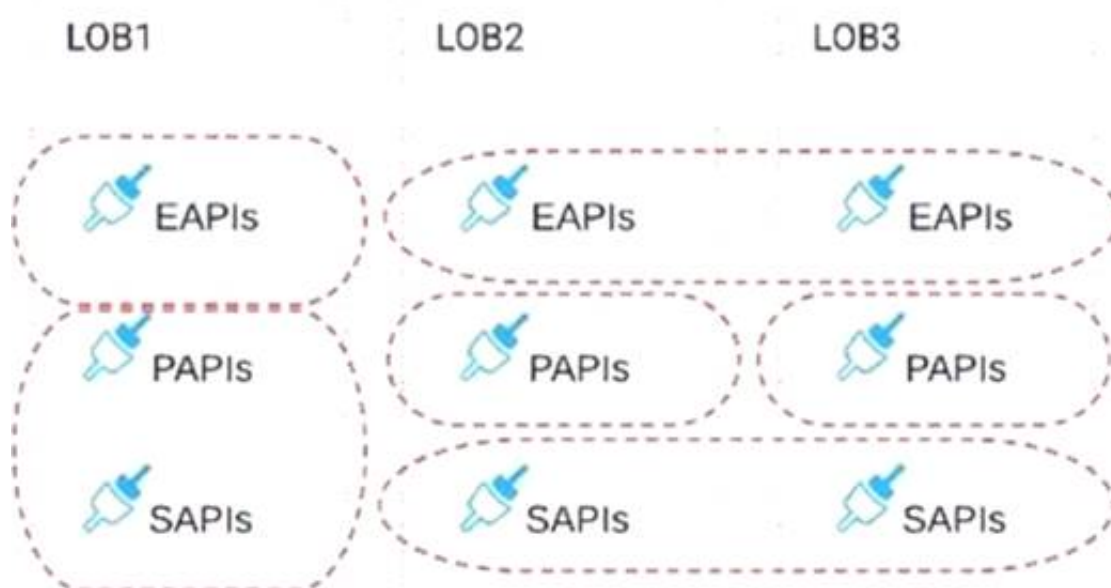
Correct Answer

Build several Bounded Context Data Models that align with coherent parts of the business processes and the definitions of associated business entities.

>> The options w.r.t building API data models using XML schema/ Agile API-centric practices are irrelevant to the scenario given in the question. So these two are INVALID.

>> Building EDM (Enterprise Data Model) is not feasible or right fit for this scenario as the teams and LOBs work in silo and they all have different initiatives, budget etc.. Building EDM needs intensive coordination among all the team which evidently seems not possible in this scenario.

So, the right fit for this scenario is to build several Bounded Context Data Models that align with coherent parts of the business processes and the definitions of associated business entities.



NEW QUESTION 8

A company uses a hybrid Anypoint Platform deployment model that combines the EU control plane with customer-hosted Mule runtimes. After successfully testing a Mule API implementation in the Staging environment, the Mule API implementation is set with environment-specific properties and must be promoted to the

Production environment. What is a way that MuleSoft recommends to configure the Mule API implementation and automate its promotion to the Production environment?

- A. Bundle properties files for each environment into the Mule API implementation's deployable archive, then promote the Mule API implementation to the Production environment using Anypoint CLI or the Anypoint Platform REST APIs.
- B. Modify the Mule API implementation's properties in the API Manager Properties tab, then promote the Mule API implementation to the Production environment using API Manager
- C. Modify the Mule API implementation's properties in Anypoint Exchange, then promote the Mule API implementation to the Production environment using Runtime Manager
- D. Use an API policy to change properties in the Mule API implementation deployed to the Staging environment and another API policy to deploy the Mule API implementation to the Production environment

Answer: A

Explanation:

Correct Answer

Bundle properties files for each environment into the Mule API implementation's deployable archive, then promote the Mule API implementation to the Production environment using Anypoint CLI or the Anypoint Platform REST APIs

>> Anypoint Exchange is for asset discovery and documentation. It has got no provision to modify the properties of Mule API implementations at all.

>> API Manager is for managing API instances, their contracts, policies and SLAs. It has also got no provision to modify the properties of API implementations.

>> API policies are to address Non-functional requirements of APIs and has again got no provision to modify the properties of API implementations.

So, the right way and recommended way to do this as part of development practice is to bundle properties files for each environment into the Mule API implementation and just point and refer to respective file per environment.

NEW QUESTION 9

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 reusable assets, make them discoverable so that LOB teams can self-serve and browse the APIs

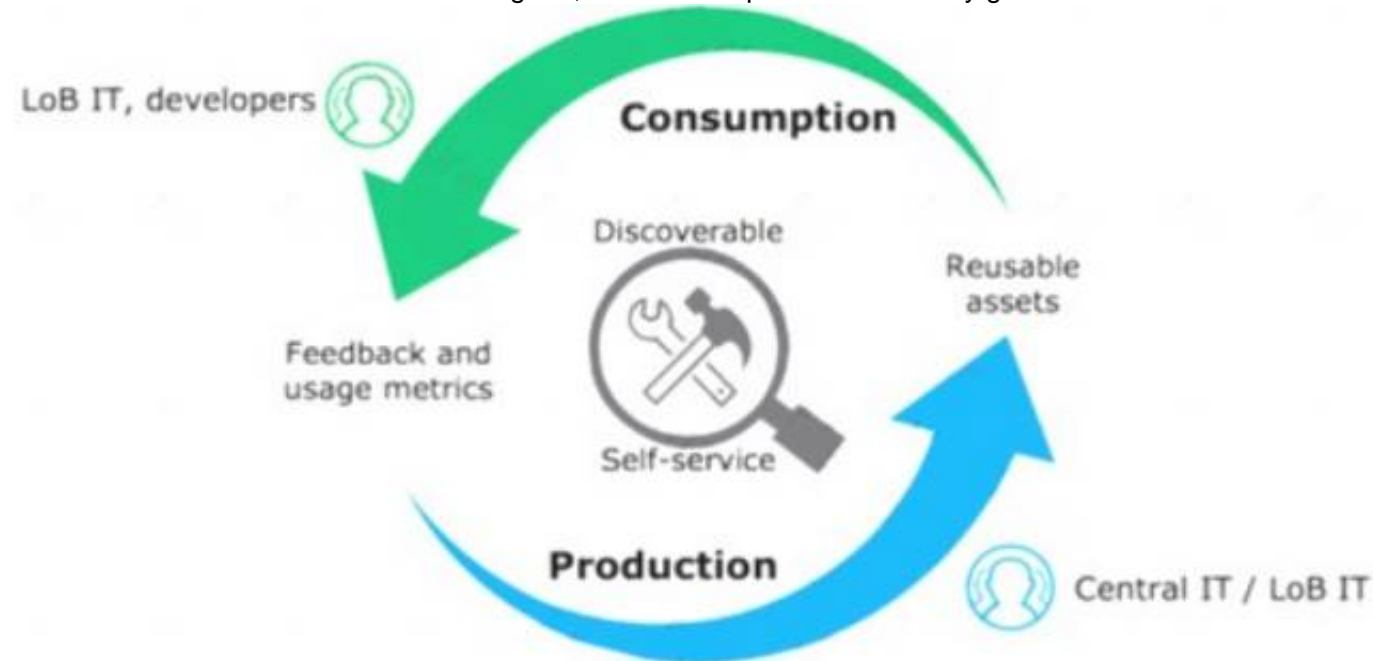
Answer: C

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 10

How can the application of a rate limiting API policy be accurately reflected in the RAML definition of an API?

- A. By refining the resource definitions by adding a description of the rate limiting policy behavior
- B. By refining the request definitions by adding a remaining Requests query parameter with description, type, and example
- C. By refining the response definitions by adding the out-of-the-box Anypoint Platform rate-limit-enforcement securityScheme with description, type, and example
- D. By refining the response definitions by adding the x-ratelimit-* response headers with description, type, and example

Answer: D

Explanation:

Correct Answer

By refining the response definitions by adding the x-ratelimit-* response headers with description, type, and example

Response Headers

The following access-limiting policies return headers having information about the current state of the request:

- X-Ratelimit-Remaining: The amount of available quota.
- X-Ratelimit-Limit: The maximum available requests per window.
- X-Ratelimit-Reset: The remaining time, in milliseconds, until a new window starts.

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.

References:

<https://docs.mulesoft.com/api-manager/2.x/rate-limiting-and-throttling#response-headers> <https://docs.mulesoft.com/api-manager/2.x/rate-limiting-and-throttling-sla-based-policies#response-headers>

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?

- From the Mule runtime or the API implementation, depending on the deployment model
- From various components of Anypoint Platform, such as the Shared Load Balancer, VPC, and Mule runtimes
- From the Mule runtime or the API Manager, depending on the type of data
- 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 seem 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 data required for monitoring and alerts are originated from Mule Runtimes only irrespective of whether the deployment model is MuleSoft-hosted or Customer-hosted or Hybrid.

NEW QUESTION 15

A Mule application exposes an HTTPS endpoint and is deployed to the CloudHub Shared Worker Cloud. All traffic to that Mule application must stay inside the AWS VPC.
 To what TCP port do API invocations to that Mule application need to be sent?

- 443
- 8081
- 8091
- 8082

Answer: D

Explanation:

Correct Answer 8082

>> 8091 and 8092 ports are to be used when keeping your HTTP and HTTPS app private to the LOCAL VPC respectively.
 >> Above TWO ports are not for Shared AWS VPC/ Shared Worker Cloud.
 >> 8081 is to be used when exposing your HTTP endpoint app to the internet through Shared LB
 >> 8082 is to be used when exposing your HTTPS endpoint app to the internet through Shared LB So, API invocations should be sent to port 8082 when calling this HTTPS based app.

References:

<https://docs.mulesoft.com/runtime-manager/cloudhub-networking-guide> <https://help.mulesoft.com/s/article/Configure-Cloudhub-Application-to-Send-a-HTTPS-Request-Directly-to-An>
<https://help.mulesoft.com/s/question/0D52T00004mXXULSA4/multiple-http-listeners-on-cloudhub-one-with-p>

NEW QUESTION 16

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 deployed on-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 20

What are 4 important Platform Capabilities offered by Anypoint Platform?

- A. API Versioning, API Runtime Execution and Hosting, API Invocation, API Consumer Engagement
- B. API Design and Development, API Runtime Execution and Hosting, API Versioning, API Deprecation
- C. API Design and Development, API Runtime Execution and Hosting, API Operations and Management, API Consumer Engagement
- D. API Design and Development, API Deprecation, API Versioning, API Consumer Engagement

Answer: C

Explanation:

Correct Answer

API Design and Development, API Runtime Execution and Hosting, API Operations and Management, API Consumer Engagement

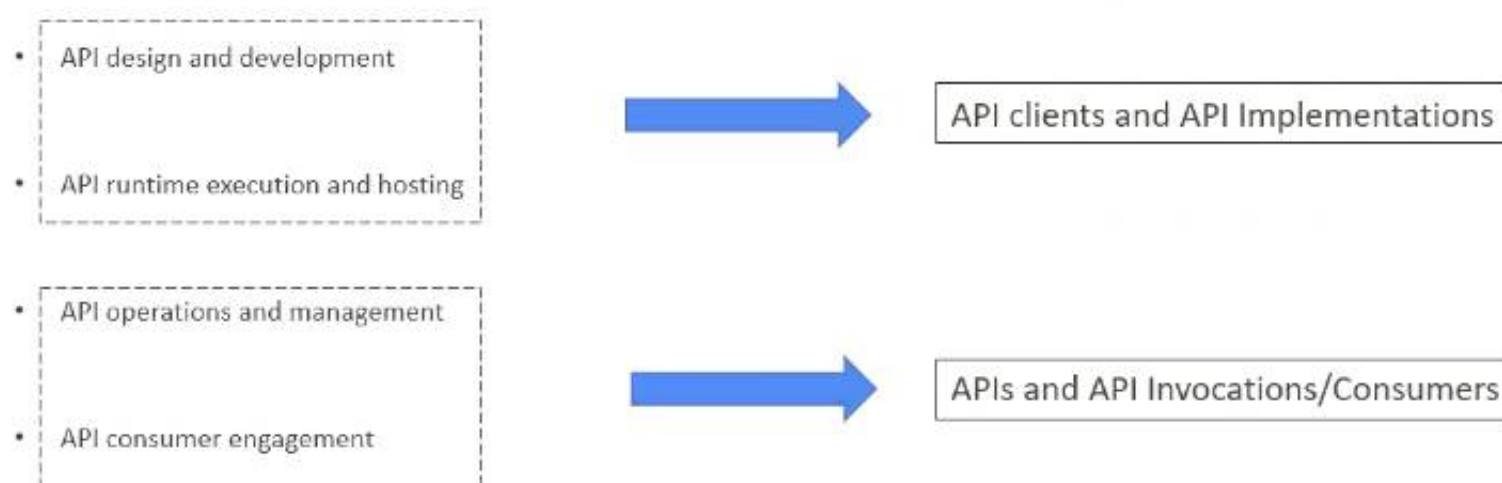
>> API Design and Development - Anypoint Studio, Anypoint Design Center, Anypoint Connectors

>> 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

Platform Capabilities



© Prasad Pokala

NEW QUESTION 22

What is true about the technology architecture of Anypoint VPCs?

- A. The private IP address range of an Anypoint VPC is automatically chosen by CloudHub
- B. Traffic between Mule applications deployed to an Anypoint VPC and on-premises systems can stay within a private network
- C. Each CloudHub environment requires a separate Anypoint VPC
- D. VPC peering can be used to link the underlying AWS VPC to an on-premises (non AWS) private network

Answer: B

Explanation:

Correct Answer

Traffic between Mule applications deployed to an Anypoint VPC and on-premises systems can stay within a private network

>> The private IP address range of an Anypoint VPC is NOT automatically chosen by CloudHub. It is chosen by us at the time of creating VPC using thr CIDR blocks.
 CIDR Block: The size of the Anypoint VPC in Classless Inter-Domain Routing (CIDR) notation.
 For example, if you set it to 10.111.0.0/24, the Anypoint VPC is granted 256 IP addresses from 10.111.0.0 to 10.111.0.255.
 Ideally, the CIDR Blocks you choose for the Anypoint VPC come from a private IP space, and should not overlap with any other Anypoint VPC's CIDR Blocks, or any CIDR Blocks in use in your corporate network.

← Create VPC

[Learn more about VPCs](#)

General Information

Name	vpc1	
Region	US East (N. Virginia)	▼
CIDR Block	10.0.0.0/16	
Environments	Design x	▼
	<input checked="" type="checkbox"/> Set as default VPC 	
Business Groups	MyBusinessGroup (MyOrg) ▲	

that each CloudHub environment requires a separate Anypoint VPC. Once an Anypoint VPC is created, we can choose a same VPC by multiple environments. However, it is generally a best and recommended practice to always have seperate Anypoint VPCs for Non-Prod and Prod environments.
 >> We use Anypoint VPN to link the underlying AWS VPC to an on-premises (non AWS) private network. NOT VPC Peering.

NEW QUESTION 23

An API experiences a high rate of client requests (TPS) vwth small message payloads. 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 24

When using CloudHub with the Shared Load Balancer, what is managed EXCLUSIVELY by the API implementation (the Mule application) and NOT by Anypoint Platform?

- A. The assignment of each HTTP request to a particular CloudHub worker
- B. The logging configuration that enables log entries to be visible in Runtime Manager
- C. The SSL certificates used by the API implementation to expose HTTPS endpoints
- D. The number of DNS entries allocated to the API implementation

Answer: C

Explanation:

Correct Answer

The SSL certificates used by the API implementation to expose HTTPS endpoints

>> The assignment of each HTTP request to a particular CloudHub worker is taken care by Anypoint Platform itself. We need not manage it explicitly in the API implementation and in fact we CANNOT manage it in the API implementation.

>> The logging configuration that enables log entries to be visible in Runtime Manager is ALWAYS managed in the API implementation and NOT just for SLB. So this is not something we do EXCLUSIVELY when using SLB.

>> We DO NOT manage the number of DNS entries allocated to the API implementation inside the code. Anypoint Platform takes care of this.

It is the SSL certificates used by the API implementation to expose HTTPS endpoints that is to be managed EXCLUSIVELY by the API implementation. Anypoint Platform does NOT do this when using SLBs.

NEW QUESTION 28

An API implementation is being designed that must invoke an Order API, which is known to repeatedly experience downtime. For this reason, a fallback API is to be called when the Order API is unavailable. What approach to designing the invocation of the fallback API provides the best resilience?

- A. Search Anypoint Exchange for a suitable existing fallback API, and then implement invocations to this fallback API in addition to the Order API
- B. Create a separate entry for the Order API in API Manager, and then invoke this API as a fallback API if the primary Order API is unavailable
- C. Redirect client requests through an HTTP 307 Temporary Redirect status code to the fallback API whenever the Order API is unavailable
- D. Set an option in the HTTP Requester component that invokes the Order API to instead invoke a fallback API whenever an HTTP 4xx or 5xx response status code is returned from the Order API

Answer: A

Explanation:

Correct Answer

Search Anypoint exchange for a suitable existing fallback API, and then implement invocations to this fallback API in addition to the order API

>> It is not ideal and good approach, until unless there is a pre-approved agreement with the API clients that they will receive a HTTP 3xx temporary redirect status code and they have to implement fallback logic their side to call another API.

>> Creating separate entry of same Order API in API manager would just create an another instance of it on top of same API implementation. So, it does NO GOOD by using clone of same API as a fallback API. Fallback API should be ideally a different API implementation that is not same as primary one.

>> There is NO option currently provided by Anypoint HTTP Connector that allows us to invoke a fallback API when we receive certain HTTP status codes in response.

The only statement TRUE in the given options is to Search Anypoint exchange for a suitable existing fallback API, and then implement invocations to this fallback API in addition to the order API.

NEW QUESTION 29

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 31

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 36

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 38

An API implementation is deployed on a single worker on CloudHub and invoked by external API clients (outside of CloudHub). How can an alert be set up that is guaranteed to trigger AS SOON AS that API implementation stops responding to API invocations?

- A. Implement a heartbeat/health check within the API and invoke it from outside the Anypoint Platform and alert when the heartbeat does not respond
- B. Configure a "worker not responding" alert in Anypoint Runtime Manager
- C. Handle API invocation exceptions within the calling API client and raise an alert from that API client when the API is unavailable
- D. Create an alert for when the API receives no requests within a specified time period

Answer: B

Explanation:

Correct Answer

Configure a "Worker not responding" alert in Anypoint Runtime Manager.

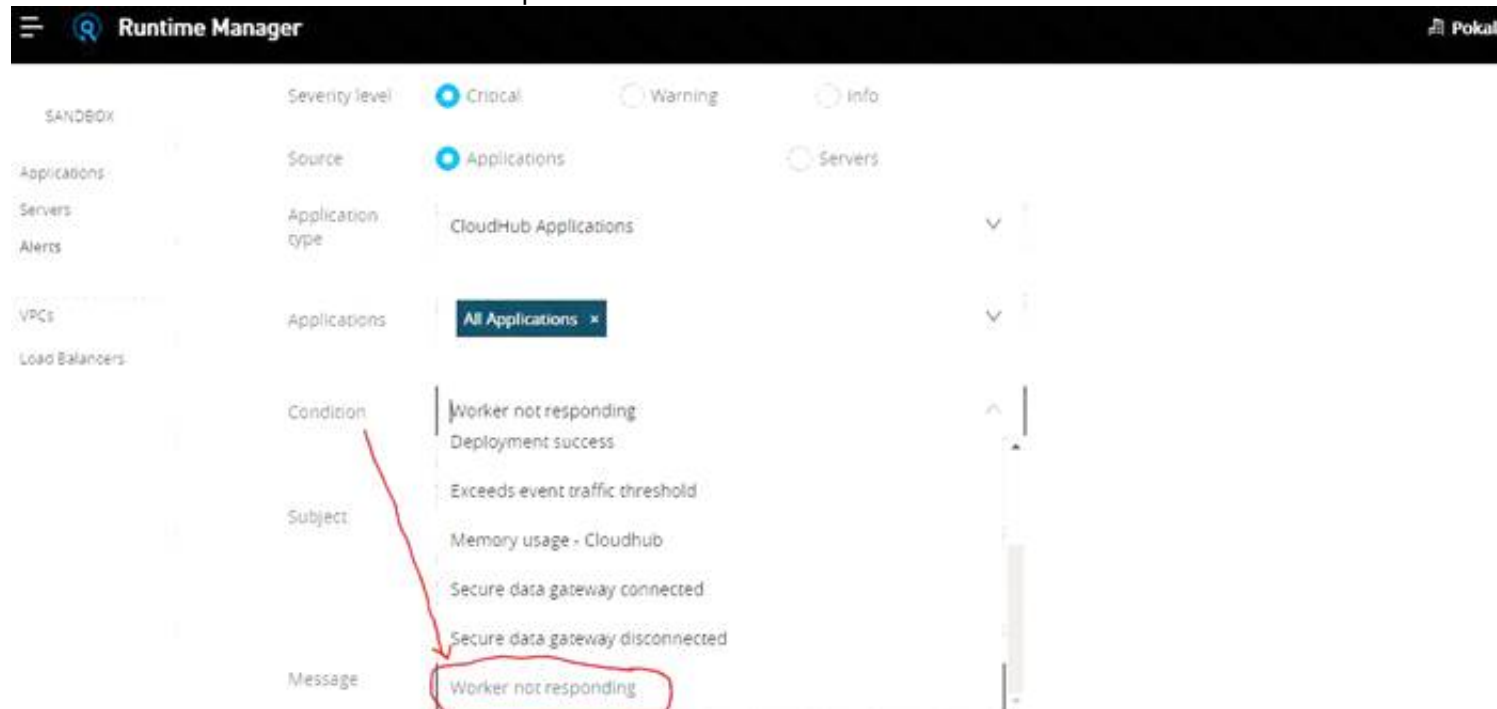
>> All the options eventually helps to generate the alert required when the application stops responding.

>> However, handling exceptions within calling API and then raising alert from API client is inappropriate and silly. There could be many API clients invoking the API implementation and it is not ideal to have this setup consistently in all of them. Not a realistic way to do.

>> Implementing a health check/ heartbeat with in the API and calling from outside to detmine the health sounds OK but needs extra setup for it and same time there are very good chances of generating false alarms when there are any intermittent network issues between external tool calling the health check API on API implementation. The API implementation itself may not have any issues but due to some other factors some false alarms may go out.

>> Creating an alert in API Manager when the API receives no requests within a specified time period would actually generate realistic alerts but even here some false alarms may go out when there are genuinely no requests from API clients.

The best and right way to achieve this requirement is to setup an alert on Runtime Manager with a condition "Worker not responding". This would generate an alert AS SOON AS the workers become unresponsive.



Bottom of Form Top of Form

NEW QUESTION 43

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

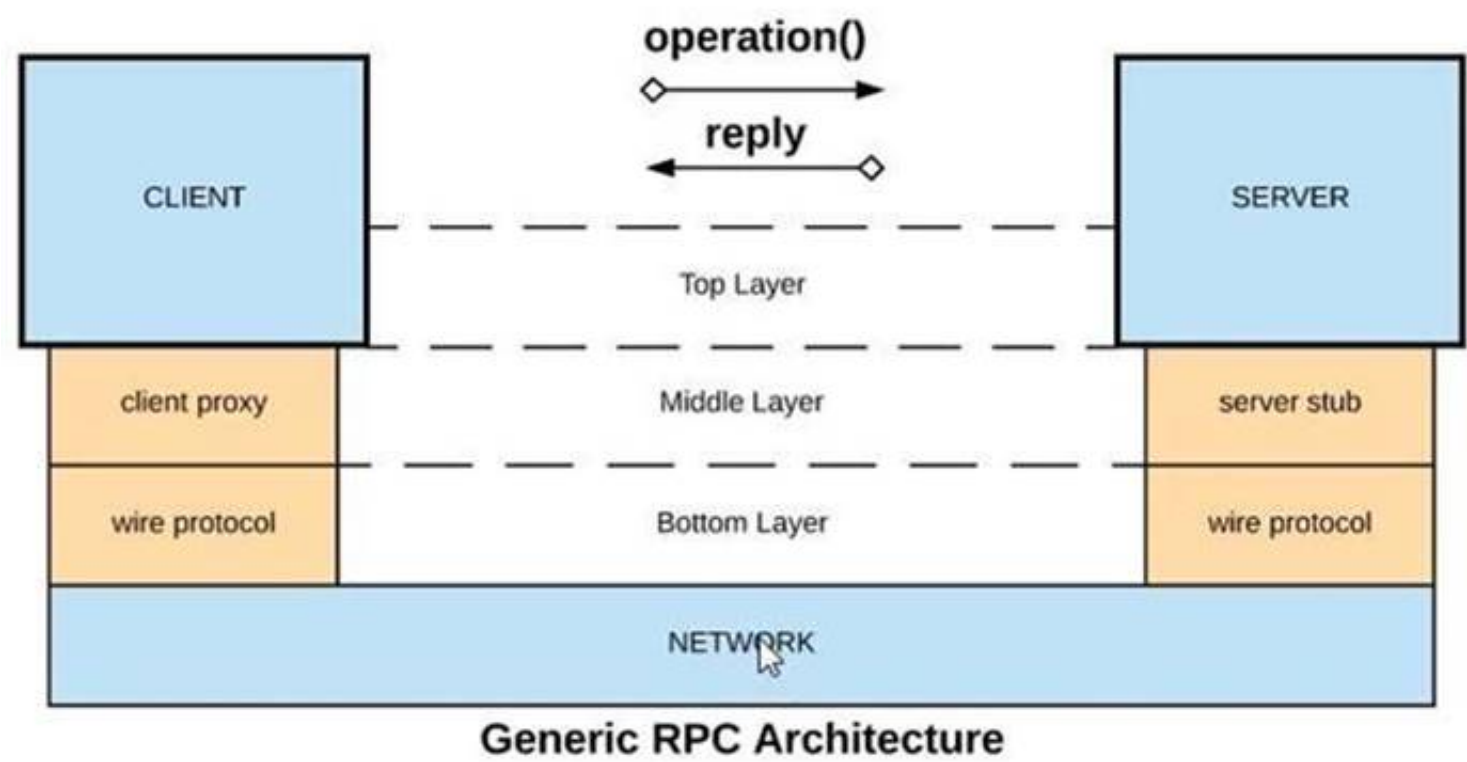
Explanation:

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.

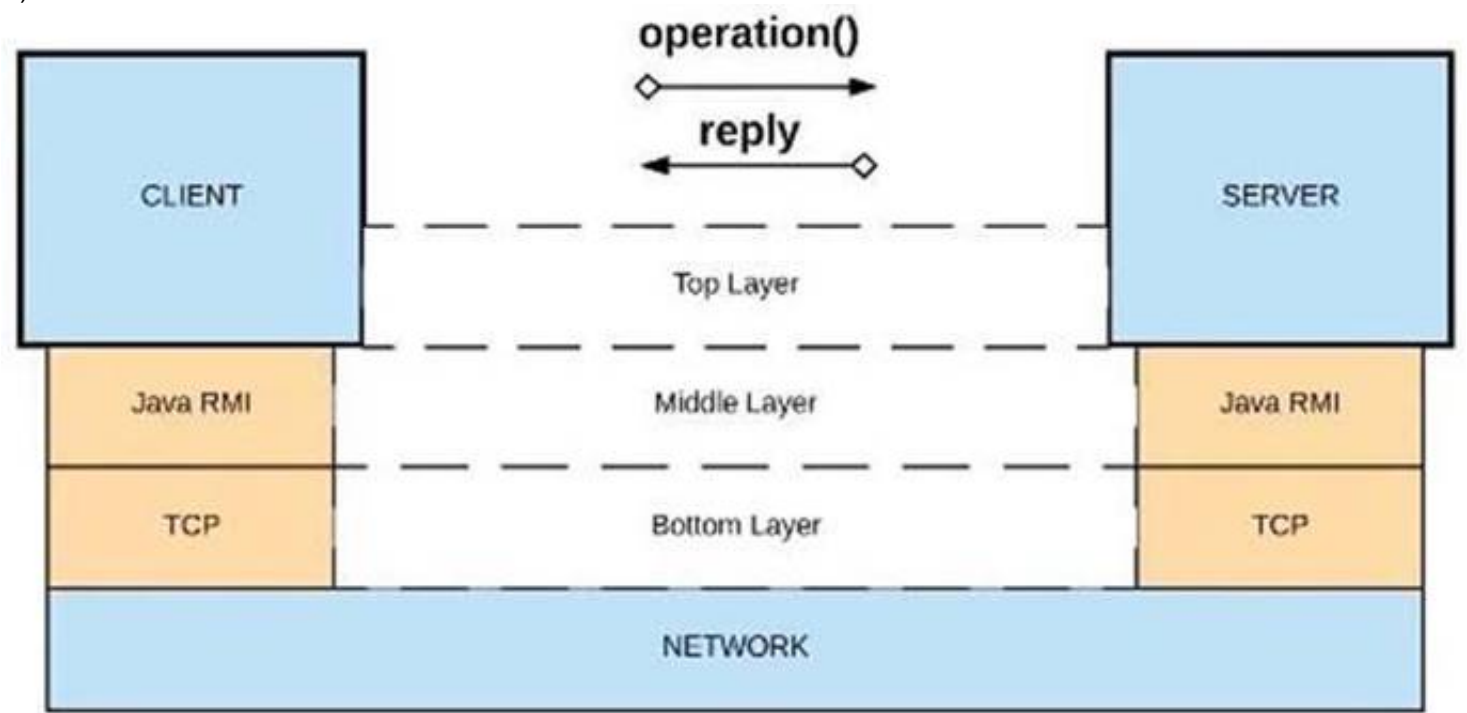
NEW QUESTION 45

Refer to the exhibit.

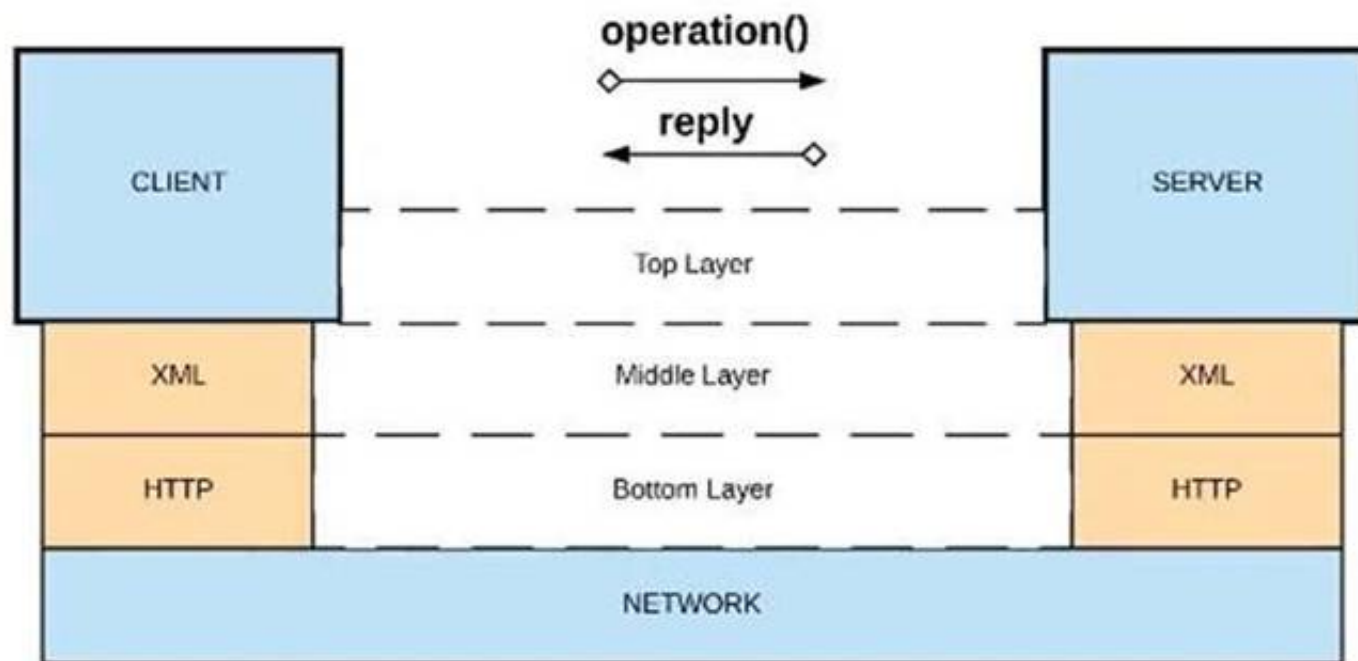


What is a valid API in the sense of API-led connectivity and application networks?

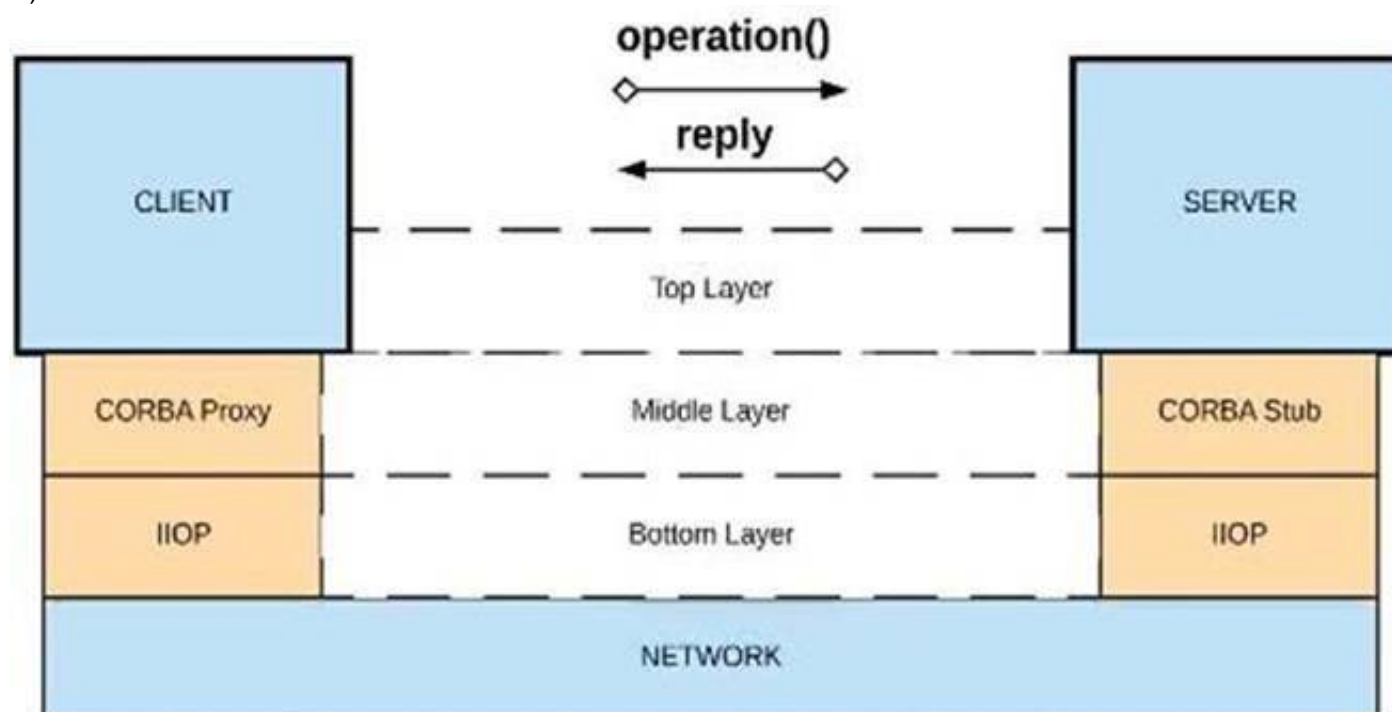
- A) Java RMI over TCP



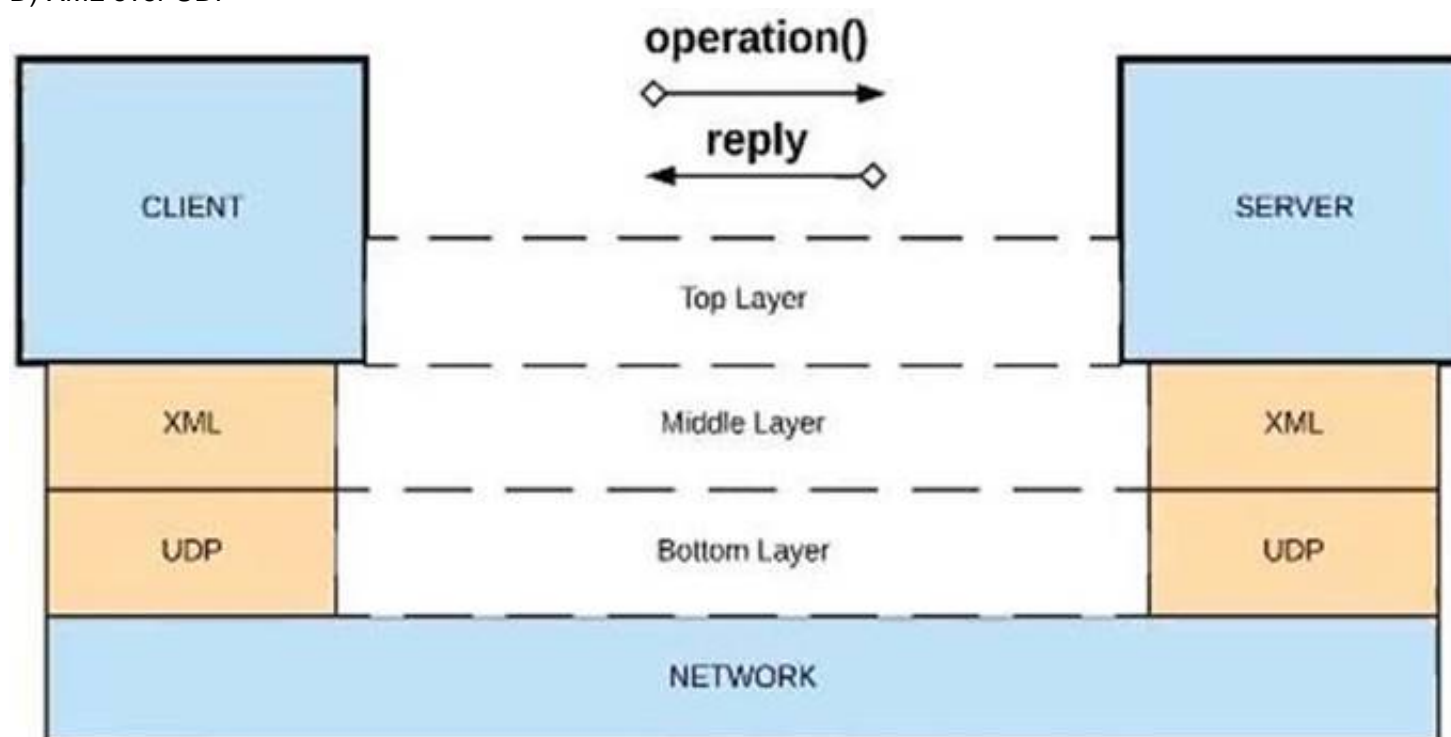
- B) Java RMI over TCP



C) CORBA over IIOP



D) XML over UDP



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

Answer: D

Explanation:

\Correct Answer
XML over HTTP

>> API-led connectivity and Application Networks urge to have the APIs on HTTP based protocols for building most effective APIs and networks on top of them.
>> The HTTP based APIs allow the platform to apply various varieties of policies to address many NFRs
>> The HTTP based APIs also allow to implement many standard and effective implementation patterns that adhere to HTTP based w3c rules.
Bottom of Form Top of Form

NEW QUESTION 48

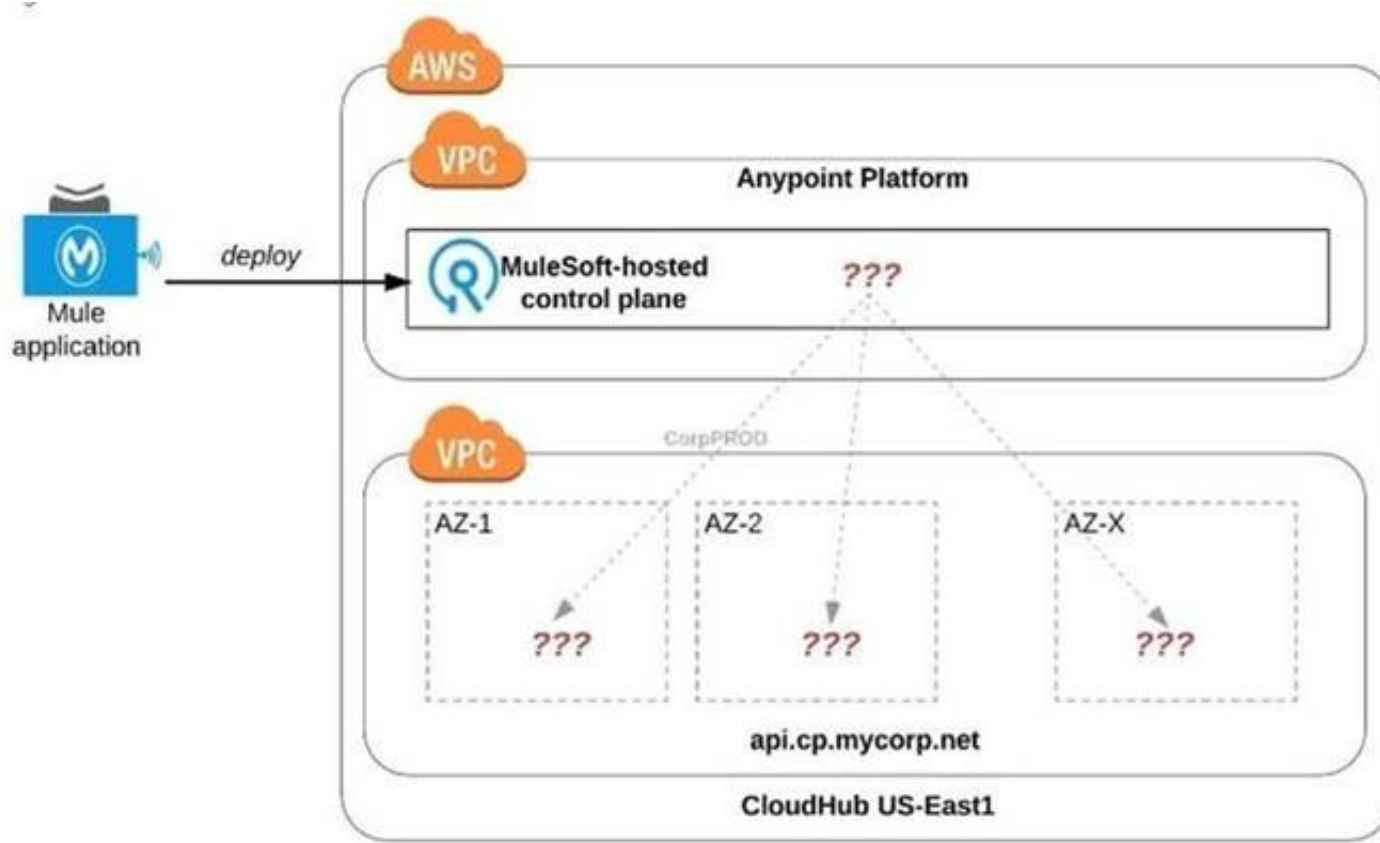
An API has been updated in Anypoint Exchange by its API producer from version 3.1.1 to 3.2.0 following accepted semantic versioning practices and the changes have been communicated via the API's public portal.
 The API endpoint does NOT change in the new version.
 How should the developer of an API client respond to this change?

- A. The update should be identified as a project risk and full regression testing of the functionality that uses this API should be run
- B. The API producer should be contacted to understand the change to existing functionality
- C. The API producer should be requested to run the old version in parallel with the new one
- D. The API client code ONLY needs to be changed if it needs to take advantage of new features

Answer: D

NEW QUESTION 50

Refer to the exhibit.



An organization uses one specific CloudHub (AWS) region for all CloudHub deployments.
 How are CloudHub workers assigned to availability zones (AZs) when the organization's Mule applications are deployed to CloudHub in that region?

- A. Workers belonging to a given environment are assigned to the same AZ within that region
- B. AZs are selected as part of the Mule application's deployment configuration
- C. Workers are randomly distributed across available AZs within that region
- D. An AZ is randomly selected for a Mule application, and all the Mule application's CloudHub workers are assigned to that one AZ

Answer: D

Explanation:

Correct Answer

Workers are randomly distributed across available AZs within that region.

>> Currently, we only have control to choose which AWS Region to choose but there is no control at all using any configurations or deployment options to decide what Availability Zone (AZ) to assign to what worker.

>> There are no

fixed or implicit rules on platform too w.r.t assignment of AZ to workers based on environment or application.

>> They are completely assigned in random. However, cloudhub definitely ensures that HA is achieved by assigning the workers to more than one AZ so that all workers are not assigned to same AZ for same application.

NEW QUESTION 53

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 56

An organization wants MuleSoft-hosted runtime plane features (such as HTTP load balancing, zero downtime, and horizontal and vertical scaling) in its Azure environment. What runtime plane minimizes the organization's effort to achieve these features?

- A. Anypoint Runtime Fabric
- B. Anypoint Platform for Pivotal Cloud Foundry
- C. CloudHub
- D. A hybrid combination of customer-hosted and MuleSoft-hosted Mule runtimes

Answer: A

Explanation:

Correct Answer

Anypoint Runtime Fabric

>> When a customer is already having an Azure environment, It is not at all an ideal approach to go with hybrid model having some Mule Runtimes hosted on Azure and some on MuleSoft. This is unnecessary and useless.
>> CloudHub is a Mulesoft-hosted Runtime plane and is on AWS. We cannot customize to point CloudHub to customer's Azure environment.
>> Anypoint Platform for Pivotal Cloud Foundry is specifically for infrastructure provided by Pivotal Cloud Foundry
>> Anypoint Runtime Fabric is right answer as it is a container service that automates the deployment and orchestration of Mule applications and API gateways. Runtime Fabric runs within a customer-managed infrastructure on AWS, Azure, virtual machines (VMs), and bare-metal servers.
-Some of the capabilities of Anypoint Runtime Fabric include:
-Isolation between applications by running a separate Mule runtime per application.
-Ability to run multiple versions of Mule runtime on the same set of resources.
-Scaling applications across multiple replicas.
-Automated application fail-over.
-Application management with Anypoint Runtime Manager.

NEW QUESTION 60

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 62

An organization wants to make sure only known partners can invoke the organization's APIs. To achieve this security goal, the organization wants to enforce a Client ID Enforcement policy in API Manager so that only registered partner applications can invoke the organization's APIs. In what type of API implementation does MuleSoft recommend adding an API proxy to enforce the Client ID Enforcement policy, rather than embedding the policy directly in the application's JVM?

- A. A Mule 3 application using APIkit
- B. A Mule 3 or Mule 4 application modified with custom Java code
- C. A Mule 4 application with an API specification
- D. A Non-Mule application

Answer: D

Explanation:

Correct Answer

A Non-Mule application

>> All type of Mule applications (Mule 3/ Mule 4/ with APIkit/ with Custom Java Code etc) running on Mule Runtimes support the Embedded Policy Enforcement on them.
>> The only option that cannot have or does not support embedded policy enforcement and must have API Proxy is for Non-Mule Applications.
So, Non-Mule application is the right answer.

NEW QUESTION 66

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 68

Once an API Implementation is ready and the API is registered on API Manager, who should request the access to the API on Anypoint Exchange?

- A. None
- B. Both
- C. API Client
- D. API Consumer

Answer: D

Explanation:

Correct Answer

API Consumer

>> API clients are piece of code or programs that use the client credentials of API consumer but does not directly interact with Anypoint Exchange to get the access

>> API consumer is the one who should get registered and request access to API and then API client needs to use those client credentials to hit the APIs
 So, API consumer is the one who needs to request access on the API from Anypoint Exchange

NEW QUESTION 70

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

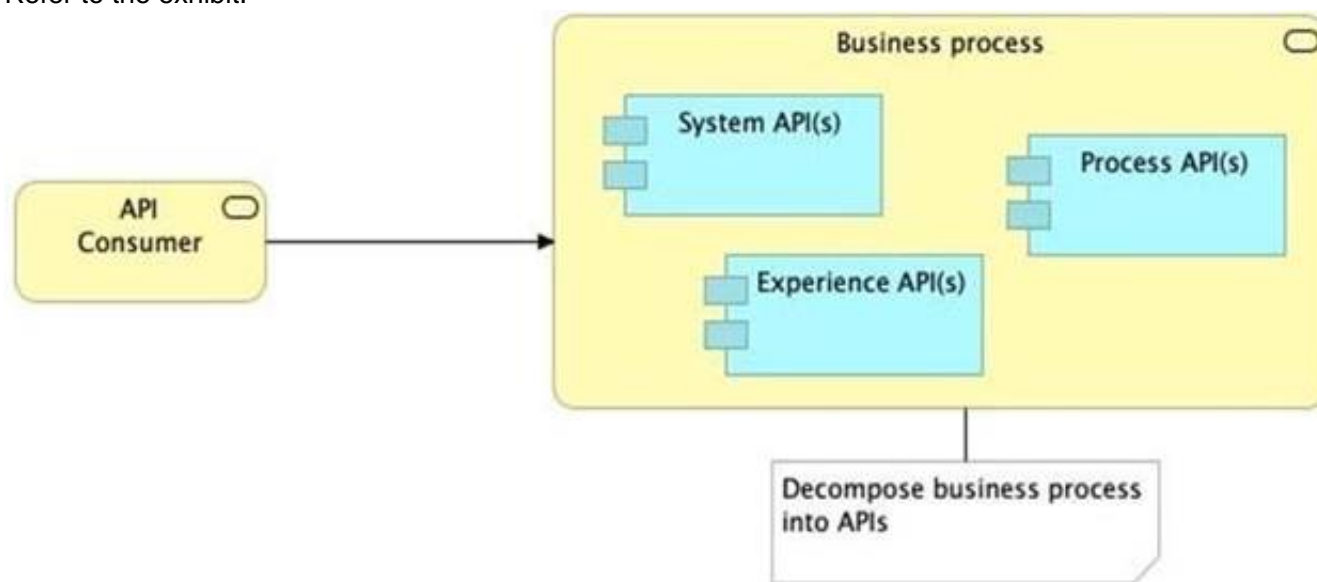
Explanation:



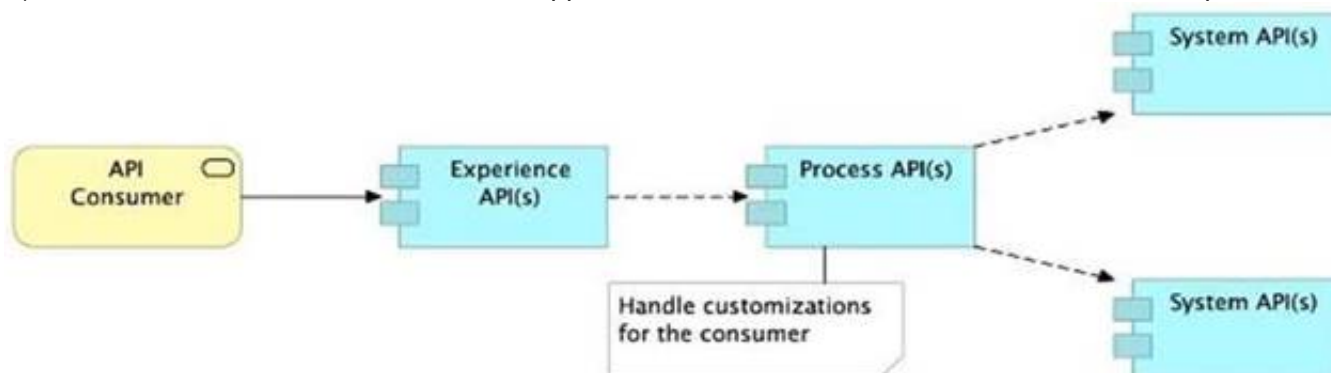
Correct Answer

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

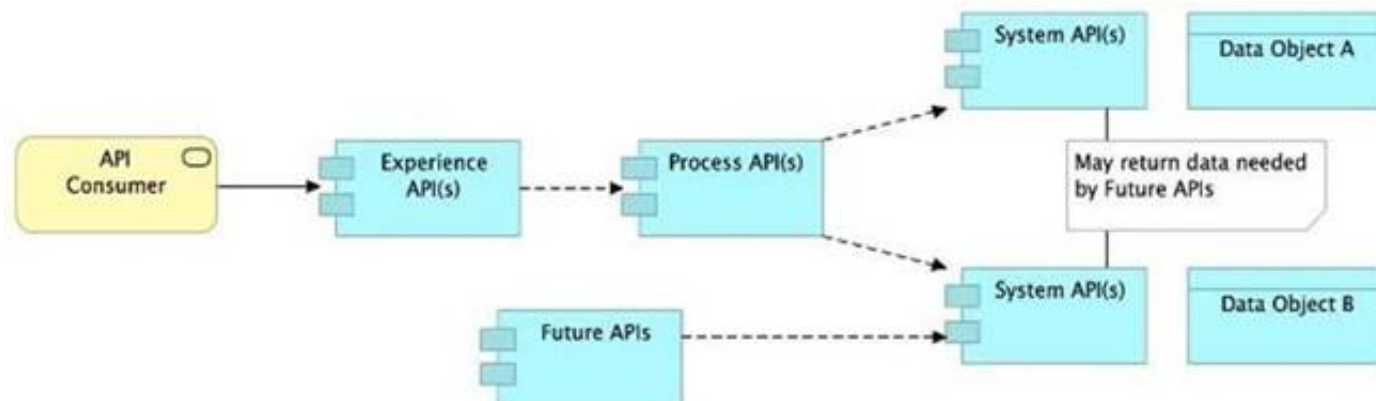
NEW QUESTION 72
 Refer to the exhibit.



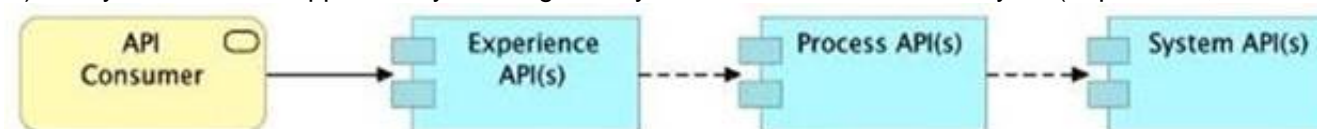
What is the best way to decompose one end-to-end business process into a collaboration of Experience, Process, and System APIs?
 A) Handle customizations for the end-user application at the Process API level rather than the Experience API level



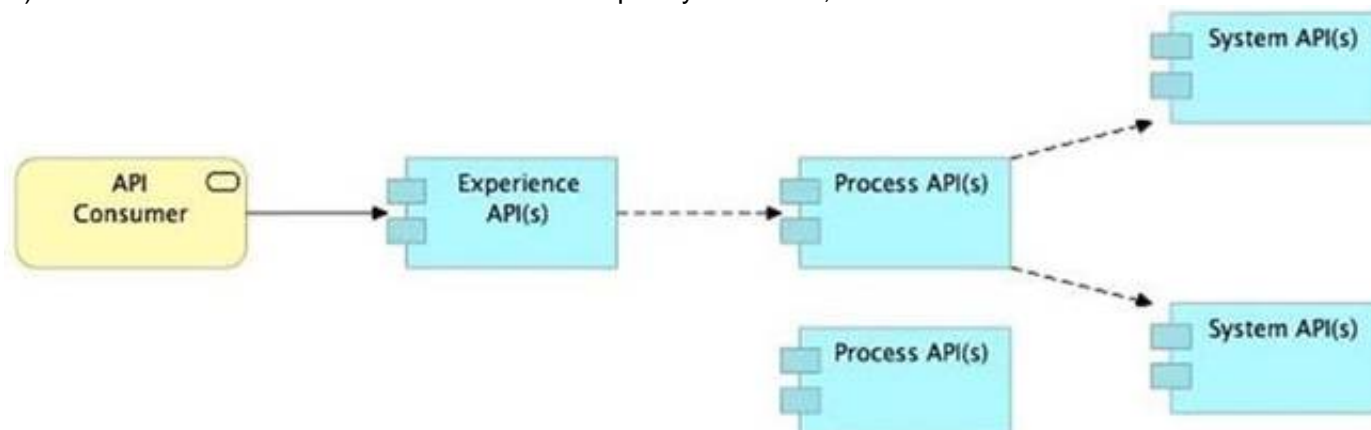
B) Allow System APIs to return data that is NOT currently required by the identified Process or Experience APIs



C) Always use a tiered approach by creating exactly one API for each of the 3 layers (Experience, Process and System APIs)



D) Use a Process API to orchestrate calls to multiple System APIs, but NOT to other Process APIs



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

Answer: B

Explanation:

Correct Answer

Allow System APIs to return data that is NOT currently required by the identified Process or Experience APIs.

>> All customizations for the end-user application should be handled in "Experience API" only. Not in Process API
>> We should use tiered approach but NOT always by creating exactly one API for each of the 3 layers. Experience APIs might be one but Process APIs and System APIs are often more than one. System APIs for sure will be more than one all the time as they are the smallest modular APIs built in front of end systems.
>> Process APIs can call System APIs as well as other Process APIs. There is no such anti-design pattern in API-Led connectivity saying Process APIs should not call other Process APIs.
So, the right answer in the given set of options that makes sense as per API-Led connectivity principles is to allow System APIs to return data that is NOT currently required by the identified Process or Experience APIs. This way, some future Process APIs can make use of that data from System APIs and we need NOT touch the System layer APIs again and again.

NEW QUESTION 77

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 80

An organization has several APIs that accept JSON data over HTTP POST. The APIs are all publicly available and are associated with several mobile applications and web applications.

The organization does NOT want to use any authentication or compliance policies for these APIs, but at the same time, is worried that some bad actor could send payloads that could somehow compromise the applications or servers running the API implementations.

What out-of-the-box Anypoint Platform policy can address exposure to this threat?

- A. Shut out bad actors by using HTTPS mutual authentication for all API invocations
- B. Apply an IP blacklist policy to all APIs; the blacklist will include all bad actors
- C. Apply a Header injection and removal policy that detects the malicious data before it is used
- D. Apply a JSON threat protection policy to all APIs to detect potential threat vectors

Answer: D

Explanation:

Correct Answer

Apply a JSON threat protection policy to all APIs to detect potential threat vectors

>> Usually, if the APIs are designed and developed for specific consumers (known consumers/customers) then we would IP Whitelist the same to ensure that traffic only comes from them.

>> However, as this scenario states that the APIs are publicly available and being used by so many mobile and web applications, it is NOT possible to identify and blacklist all possible bad actors.

>> So, JSON threat protection policy is the best chance to prevent any bad JSON payloads from such bad actors.

NEW QUESTION 82

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 85

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 90

The implementation of a Process API must change.

What is a valid approach that minimizes the impact of this change on API clients?

- A. Update the RAML definition of the current Process API and notify API client developers by sending them links to the updated RAML definition
- B. Postpone changes until API consumers acknowledge they are ready to migrate to a new Process API or API version
- C. Implement required changes to the Process API implementation so that whenever possible, the Process API's RAML definition remains unchanged
- D. Implement the Process API changes in a new API implementation, and have the old API implementation return an HTTP status code 301 - Moved Permanently to inform API clients they should be calling the new API implementation

Answer: C

Explanation:

Correct Answer

Implement required changes to the Process API implementation so that, whenever possible, the Process API's RAML definition remains unchanged.

***** Key requirement in the question is:

>> Approach that minimizes the impact of this change on API clients Based on above:

>> Updating the RAML definition would possibly impact the API clients if the changes require any thing mandatory from client side. So, one should try to avoid doing that until really necessary.

>> Implementing the changes as a completely different API and then redirectly the clients with 3xx status code is really upsetting design and heavily impacts the API clients.

>> Organisations and IT cannot simply postpone the changes required until all API consumers acknowledge they are ready to migrate to a new Process API or API version. This is unrealistic and not possible.

The best way to handle the changes always is to implement required changes to the API implementations so that, whenever possible, the API's RAML definition remains unchanged.

NEW QUESTION 93

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. se 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 94

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 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 97

What is true about where an API policy is defined in Anypoint Platform and how it is then applied to API instances?

A. The API policy is defined in Runtime Manager as part of the API deployment to a Mule runtime, and then ONLY applied to the specific API Instance

B. The API policy is defined in API Manager for a specific API Instance, and then ONLY applied to the specific API instance

C. The API policy is defined in API Manager and then automatically applied to ALL API instances

D. The API policy is defined in API Manager, and then applied to ALL API instances in the specified environment

Answer: B

Explanation:

Correct Answer

The API policy is defined in API Manager for a specific API instance, and then ONLY applied to the specific API instance.

>> Once our API specifications are ready and published to Exchange, we need to visit API Manager and register an API instance for each API.

>> API Manager is the place where management of API aspects takes place like addressing NFRs by enforcing policies on them.

>> We can create multiple instances for a same API and manage them differently for different purposes.

>> One instance can have a set of API policies applied and another instance of same API can have different set of policies applied for some other purpose.

>> These APIs and their instances are defined PER environment basis. So, one needs to manage them separately in each environment.

>> We can ensure that same configuration of API instances (SLAs, Policies etc..) gets promoted when promoting to higher environments using platform feature.

But this is optional only. Still one can change them per environment basis if they have to.

>> Runtime Manager is the place to manage API Implementations and their Mule Runtimes but NOT APIs itself. Though API policies get executed in Mule Runtimes, We CANNOT enforce API policies in Runtime Manager. We would need to do that via API Manager only for a cherry-picked instance in an environment. So, based on these facts, right statement in the given choices is - "The API policy is defined in API Manager for a specific API instance, and then ONLY applied to the specific API instance".

NEW QUESTION 100

A system API has a guaranteed SLA of 100 ms per request. The system API is deployed to a primary environment as well as to a disaster recovery (DR) environment, with different DNS names in each environment. An upstream process API invokes the system API and the main goal of this process API is to respond to client requests in the least possible time. In what order should the system APIs be invoked, and what changes should be made in order to speed up the response time for requests from the process API?

A. In parallel, invoke the system API deployed to the primary environment and the system API deployed to the DR environment, and ONLY use the first response

B. In parallel, invoke the system API deployed to the primary environment and the system API deployed to the DR environment using a scatter-gather configured with a timeout, and then merge the responses

C. Invoke the system API deployed to the primary environment, and if it fails, invoke the system API deployed to the DR environment

D. Invoke ONLY the system API deployed to the primary environment, and add timeout and retry logic to avoid intermittent failures

Answer: A

Explanation:

Correct Answer

In parallel, invoke the system API deployed to the primary environment and the system API deployed to the DR environment, and ONLY use the first response.

>> The API requirement in the given scenario is to respond in least possible time.

>> The option that is suggesting to first try the API in primary environment and then fallback to API in DR environment would result in successful response but NOT in least possible time. So, this is NOT a right choice of implementation for given requirement.

>> Another option that is suggesting to ONLY invoke API in primary environment and to add timeout and retries may also result in successful response upon retries but NOT in least possible time. So, this is also NOT a right choice of implementation for given requirement.

>> One more option that is suggesting to invoke API in primary environment and API in DR environment in parallel using Scatter-Gather would result in wrong API response as it would return merged results and moreover, Scatter-Gather does things in parallel which is true but still completes its scope only on finishing all routes inside it. So again, NOT a right choice of implementation for given requirement

The Correct choice is to invoke the API in primary environment and the API in DR environment parallelly, and using ONLY the first response received from one of them.

NEW QUESTION 103

A system API is deployed to a primary environment as well as to a disaster recovery (DR) environment, with different DNS names in each environment. A process API is a client to the system API and is being rate limited by the system API, with different limits in each of the environments. The system API's DR environment provides only 20% of the rate limiting offered by the primary environment. What is the best API fault-tolerant invocation strategy to reduce overall errors in the process API, given these conditions and constraints?

A. Invoke the system API deployed to the primary environment; add timeout and retry logic to the process API to avoid intermittent failures; if it still fails, invoke the system API deployed to the DR environment

- B. Invoke the system API deployed to the primary environment; add retry logic to the process API to handle intermittent failures by invoking the system API deployed to the DR environment
- C. In parallel, invoke the system API deployed to the primary environment and the system API deployed to the DR environment; add timeout and retry logic to the process API to avoid intermittent failures; add logic to the process API to combine the results
- D. Invoke the system API deployed to the primary environment; add timeout and retry logic to the process API to avoid intermittent failures; if it still fails, invoke a copy of the process API deployed to the DR environment

Answer: A

Explanation:

Correct Answer

Invoke the system API deployed to the primary environment; add timeout and retry logic to the process API to avoid intermittent failures; if it still fails, invoke the system API deployed to the DR environment

There is one important consideration to be noted in the question which is - System API in DR environment provides only 20% of the rate limiting offered by the primary environment. So, comparatively, very less calls will be allowed into the DR environment API opposed to its primary environment. With this in mind, let's analyse what is the right and best fault-tolerant invocation strategy.

* 1. Invoking both the system APIs in parallel is definitely NOT a feasible approach because of the 20% limitation we have on DR environment. Calling in parallel every time would easily and quickly exhaust the rate limits on DR environment and may not give chance to genuine intermittent error scenarios to let in during the time of need.

* 2. Another option given is suggesting to add timeout and retry logic to process API while invoking primary environment's system API. This is good so far. However, when all retries failed, the option is suggesting to invoke the copy of process API on DR environment which is not right or recommended. Only system API is the one to be considered for fallback and not the whole process API. Process APIs usually have lot of heavy orchestration calling many other APIs which we do not want to repeat again by calling DR's process API. So this option is NOT right.

* 3. One more option given is suggesting to add the retry (no timeout) logic to process API to directly retry on DR environment's system API instead of retrying the primary environment system API first. This is not at all a proper fallback. A proper fallback should occur only after all retries are performed and exhausted on Primary environment first. But here, the option is suggesting to directly retry fallback API on first failure itself without trying main API. So, this option is NOT right too.

This leaves us one option which is right and best fit.

- Invoke the system API deployed to the primary environment
- Add Timeout and Retry logic on it in process API
- If it fails even after all retries, then invoke the system API deployed to the DR environment.

NEW QUESTION 105

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 106

Which of the following sequence is correct?

- A. API Client implements logic to call an API >> API Consumer requests access to API >> API Implementation routes the request to >> API
- B. API Consumer requests access to API >> API Client implements logic to call an API >> API routes the request to >> API Implementation
- C. API Consumer implements logic to call an API >> API Client requests access to API >> API Implementation routes the request to >> API
- D. API Client implements logic to call an API >> API Consumer requests access to API >> API routes the request to >> API Implementation

Answer: B

Explanation:

Correct Answer

API Consumer requests access to API >> API Client implements logic to call an API >> API routes the request to >> API Implementation

>> API consumer does not implement any logic to invoke APIs. It is just a role. So, the option stating "API Consumer implements logic to call an API" is INVALID.

>> API Implementation does not route any requests. It is a final piece of logic where functionality of target systems is exposed. So, the requests should be routed to the API implementation by some other entity. So, the options stating "API Implementation routes the request to >> API" is INVALID

>> The statements in one of the options are correct but sequence is wrong. The sequence is given as "API Client implements logic to call an API >> API Consumer requests access to API >> API routes the request to

>> API Implementation". Here, the statements in the options are VALID but sequence is WRONG.

>> Right option and sequence is the one where API consumer first requests access to API on Anypoint Exchange and obtains client credentials. API client then

writes logic to call an API by using the access client credentials requested by API consumer and the requests will be routed to API implementation via the API which is managed by API Manager.

NEW QUESTION 107

.....

Thank You for Trying Our Product

We offer two products:

1st - We have Practice Tests Software with Actual Exam Questions

2nd - Questions and Answers in PDF Format

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

100% Actual & Verified — Instant Download, Please Click
[Order The MCPA-Level-1 Practice Test Here](#)